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**Livelihood adaptation of households in rural tourism  
destinations: disturbance identification, behavioral  
response and influential mechanism**

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## Abstract

Rural tourism not only effectively promotes the socio-economic development and industrial restructuring of traditional rural areas, but also significantly influences the transformation of households' livelihood strategies in rural tourism destinations. As the core stakeholders directly affected by rural tourism, households must adapt effectively to rural tourism development to achieve the transformation and sustainable development of their livelihoods. Although existing research has preliminarily explored households' livelihood adaptation in rural tourism destinations, there remains a lack of a systematic theoretical framework for analyzing this phenomenon. Key questions, such as what livelihood disturbances the development of rural tourism has brought to households, in what way households cope with the disturbances to their livelihoods caused by rural tourism development, what are the factors that influence the livelihood adaptive outcomes of households in rural tourism destinations, have yet to be fully addressed.

To bridge these gaps, this study constructs an analytical framework for households' livelihood adaptation in rural tourism destinations and conducts an in-depth investigation into the livelihood adaptation of households in villages surrounding the Huangling scenic area in Wuyuan county, Jiangxi province, a typical rural tourism destination in China. First, qualitative content analysis was employed to identify the new livelihood opportunities and risks brought about by rural tourism development to households. Second, thematic analysis was applied to explore the changing process and mechanisms of livelihood adaptive behaviors developed by households in response to rural tourism development. Finally, the "Opportunity-Risk-Capacity (O-R-C)" conceptual model was developed by integrating cognitive evaluation theory and self-efficacy theory, and PLS-SEM was used to analyze the factors influencing the livelihood adaptive outcomes of households in rural tourism destinations.

The key findings are as follows: First, the livelihood disturbances brought about by rural tourism development have both positive and negative aspects. On the positive side, rural tourism has created six types of livelihood opportunities for households: economic opportunities, employment opportunities, social opportunities, learning

opportunities, development opportunities, and identity opportunities. On the negative side, it has introduced five types of livelihood risks: environmental risks, economic risks, market risks, health risks, and social risks. Second, the livelihood adaptive behaviors of households in rural tourism destinations have evolved from being singular to becoming more diversified. The direction of this evolution is jointly determined by the type and structural configuration of the livelihood capital that households possess. Different types of livelihood capital play varying roles at different adaptive stages. Third, the livelihood adaptive outcomes of households in rural tourism destinations largely depend on their livelihood adaptive behaviors. The implementation of these adaptive behaviors is influenced by households' perceptions of external livelihood opportunities and risks, as well as their internal livelihood adaptive capacities.

The main theoretical contributions of this study are reflected in the following four aspects: First, the study constructs a framework for analyzing the livelihood adaptation of households based on the logic of “adaptive object-adaptive subject-adaptive process- adaptive outcomes”, providing a solid theoretical foundation for in-depth research on households' livelihood adaptation. Second, it identifies the livelihood opportunities and risks brought by rural tourism development to households, offering a valuable theoretical reference for evaluating and measuring livelihood opportunities and risks of households in rural tourism destinations. Third, the study explains the dynamic evolution mechanism of households' livelihood adaptive behaviors in rural tourism destinations, enhancing the theoretical understanding of the nature of behavioral change as households adapt to rural tourism development. Fourth, the study reveals the influential mechanisms behind livelihood adaptive outcomes by developing the “Opportunity-Risk-Capacity (O-R-C)” theoretical model, which serves as a guiding framework for analyzing the factors influencing livelihood adaptive outcomes of households in rural tourism destinations. Additionally, this research offers practical implications for managing households' livelihood adaptations in rural tourism destinations, considering the perspectives of local governments, tourism enterprises, and community households.

**Keywords:** rural tourism; livelihood adaptation; livelihood disturbance; adaptive behavior; adaptive outcome; households



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## **Author' s Declaration**

I declare that, except where explicit reference is made to the contribution of others, that this dissertation is the result of my own work and has not been submitted for any other degree at the University of Glasgow or any other institution (except for Nankai University).

Printed Name: Rong Wang

Signature:

## Abbreviations

AVE - Average Variance Extracted

CAT - Cognitive Appraisal Theory

CDTPs - Community-Driven Tourism Projects

CMV - Common Method Variance

CNTA - China National Tourism Administration

CR - Composite Reliabilities

FAO - Food and Agriculture Organization

FCDO - Foreign, Commonwealth & Development Office

GOF - Goodness of Fit

HTMT - Heterotrait-monotrait ratio

LABC model - Livelihood Adaptive Behavior Cycle Model

NDRC - National Development and Reform Commission

NGOs - Non-Governmental Organizations

ORC - Opportunity-Risk-Capacity

PLS-SEM - Partial Least Squares Structural Equation Modeling

QCA - Qualitative Content Analysis

SDGs - Sustainable Development Goals

SLF - Sustainable Livelihood Framework

STDEV - Standard Deviations

TA - Thematic Analysis

UNDP - United Nations Development Programme

UNWTO - World Tourism Organization

# Chapter 1 Introduction

## 1.1 Research context

### 1.1.1 Rural tourism as a development tool

Rural tourism is not a new concept. The generic concept of rural tourism refers to a new form of tourism characterized by its development outside urban centers, occurring on a small scale, utilizing natural, cultural, heritage, and accommodation resources in various ways, leveraging services inherent to the rural environment, and contributing to local development and enhances the diversity of tourism competitiveness (Blanco Herranz, 1996, pp. 27-28). While a consensus definition remains elusive, researchers approach it from various perspectives (Pina & Delfa, 2005; de Sousa & Kastenholtz, 2015; Silva & Leal, 2015). Rosalina et al. (2021) conducted a systematic review of journal articles on rural tourism definitions published between 1989 and 2020. They propose four key features: location in rural areas, focus on sustainable development, community-based operation, and offering a rural experience. Notably, sustainable development is considered a core value of rural tourism (Rosalina et al., 2021, pp. 137). Building upon this, they define rural tourism as:

A type of tourism located in areas within a destination characterized by rural functions (e.g., traditional, locally-based, authentic, remote, sparsely populated, and primarily agricultural). Here, tourists can physically, socially, or psychologically immerse themselves in the specific destination. This tourism aims to revitalize rural resources for local socio-economic benefits and environmental sustainability through active local community empowerment and involvement (Rosalina et al., 2021, pp. 137).

Numerous studies have shown that rural tourism is considered a potential tool for regional sustainable development, demonstrably aligning with the Sustainable Development Goals (SDGs) of the World Tourism Organization (UNWTO) (UNWTO, 2021). Specifically, rural tourism has the potential to contribute to poverty reduction (SDG 1) and decent work and economic growth (SDG 8) by creating more job opportunities, promoting quality employment, stimulating external investment in local economies, boosting rural economic development in a more sustainable manner (Mbaiwa & Stronza, 2010; Mitchell & Shannon, 2018; Scheyvens & Russell, 2012; Yang et al., 2021). Rural tourism can also

contribute to achieving the targets of SDG 3: good health and well-being, by improving the quality of life for community residents (Boukas, 2019; Pasanchay & Schott, 2021). Furthermore, rural tourism development can promote the advancement of women's social status (SDG 5: gender equality) (Anand et al., 2012; Khatiwada & Silva, 2015), residents' participation in benefit sharing and decision-making (SDG 10: reduced inequalities) (Carius & Job, 2019; Chiutsi & Saarinen, 2017), and the sale of agricultural products and handicrafts (SDG 12: responsible consumption and production) (Burbano & Meredith, 2021).

Rural tourism has emerged as a prominent tool for development in marginalized rural areas, featuring prominently in international strategies and policies (Mbaiwa, 2011; Nyaupane & Poudel, 2011). It serves as a promising supplement to a declining agricultural sector (Lane, 2009) and aims to promote nontraditional development, create business opportunities, and support related retail industries (Wilson et al., 2001), and help to transfer capital, employment, and income from urban areas to rural regions (Lane, 1994). Therefore, rural tourism can be an effective catalyst of the rural socio-economic regeneration in both developed and developing countries (Perales, 2002). The example of Spain demonstrates this in developed countries. Rural tourism has become a significant economic driver for remote and depopulated areas, lessening dependence on traditional activities like agriculture and livestock (Perales, 2002). Similar trends are observed in France, Finland, Austria, and the United Kingdom (Hakkarainen et al., 2008; Pevetz, 1991).

In developing countries, rural tourism is viewed as a new force for poverty alleviation in remote and underdeveloped areas with rich natural landscapes and/or cultural heritages (Manwa & Manwa, 2014), where household income falls well below the national standard (Bowden, 2005). For instance, rural tourism in China has become a key component of the "targeted poverty alleviation" campaign, a nationwide effort led by the central government (Liu et al., 2017c). Similarly, Malaysia's government introduced rural tourism during the Seventh Malaysia Plan period (1996-2000) and continues to emphasize it as part of the national rural development agenda, aiming to create employment opportunities, increase income levels, and reduce poverty (Nair et al., 2015).

In conclusion, rural tourism offers a multifaceted approach to rural development. On a macro level, it stimulates economic growth, improves essential infrastructure, and reduces out-migration (Rosalina et al., 2021). At the micro level, it serves as a crucial driver for households' livelihood diversification and improved living standards (Mbaiwa,

2011). Specifically, rural tourism expands households' livelihood opportunities, enhances skillsets (Bayrak, 2022), improves living conditions, and fosters diversification of livelihood activities (Kimbu et al., 2022). For example, the study by Iorio and Corsale (2010) on the Romanian countryside shows that rural tourism has been integrated with existing livelihood strategies and is seen as a potential activity to increase family income and enhance skills and knowledge. Su et al. (2019a), focusing on a rural community in China, also found that rural tourism has positive impacts on households' livelihoods, particularly by increasing livelihood assets, diversifying livelihood options, and enhancing livelihood sustainability. Overall, with its market advantages and industrial vitality, rural tourism has achieved remarkable results in promoting the diversification of livelihoods, increasing the income of rural residents, and improving their livelihood status as a whole.

### **1.1.2 Rural tourism, livelihood, and livelihood adaptation**

The development of rural tourism inevitably causes significant disturbances to the original livelihood systems of rural households (Iorio & Corsale, 2010; Tao & Wall, 2009). As rural tourism develops, traditional rural communities, once dominated by agricultural production, are gradually transforming into tourism-led destinations. This shift introduces various uncertainties to the livelihoods of rural households (Guo & Yang, 2020; Mbaiwa, 2011). On one hand, the development of rural tourism creates new livelihood opportunities for local households, broadening their income channels and effectively promoting the development of traditional livelihood strategies such as agricultural product production, processing, and handicrafts (Xue & Kerstetter, 2019; Zhang et al., 2017b; Cui & Yang, 2018). On the other hand, due to the seasonality and inherent instability of the tourism industry, excessive dependence on tourism can lead to the gradual replacement of traditional livelihood strategies, resulting in decreased livelihood diversity and increased vulnerability (Calgaro et al., 2014; Mbaiwa, 2011; Movono et al., 2018). Therefore, while rural tourism development profoundly affects the original livelihoods of households in destination communities and creates new livelihood opportunities, it also introduces new challenges in transforming livelihood strategies.

As the most basic production unit and decision-making body within the rural human-land relationship regional system, households are the primary actors in responding to and adapting to the disturbances caused by rural tourism development (Chen et al., 2018b; Gao et al., 2020). The success of poverty alleviation through rural tourism development is closely linked to the livelihood adaptation of rural households. Whether these



households can seize relevant livelihood opportunities and effectively manage associated risks is crucial for improving their living standards and achieving poverty reduction and prosperity (Spoon, 2012). Due to the instability of the external environment for rural tourism development and the limited capacity of households, they face numerous obstacles and challenges in transforming their livelihood strategies (Anand et al., 2012; Anderson, 2015; Xue & Kerstetter, 2019). These challenges include the iterative upgrading of tourist consumption demands, intense market competition, the unpredictability of tourism development policies, and limited cultural understanding and professional tourism skills of households (Zhang, 2011; Shi & Li, 2018; Liu & Sun, 2019).

Since the outbreak of COVID-19, the rural tourism market has experienced greater instability, such as a decline in the frequency of tourist travel and a decrease in the number of trips. This has led to a reduction in income for households in rural tourism destinations, especially those with high tourism participation, thereby significantly increasing livelihood uncertainty (Duro et al., 2021; Gabriel-Campos et al., 2021; Li et al., 2021; Vaishar & Štastná, 2022). Rural households need to leverage the favorable conditions brought by rural tourism development to promote the transformation and stable development of their original livelihood strategies (Mbaiwa, 2011). Simultaneously, to effectively cope with the uncertainties of the rural tourism development environment and mitigate negative effects such as land expropriation, ecological damage, and cultural shock, households must continually adjust their livelihood behaviors to adapt to the evolving tourism landscape (Bui et al., 2020; Xue & Kerstetter, 2019).

The combined effects of external, uncertain environmental factors associated with rural tourism development, coupled with limited livelihood adaptive capacity, knowledge, and skills among rural households, raise critical questions. Can these households effectively adapt to the development of rural tourism? Can they grasp livelihood opportunities and manage risks to achieve sustainable livelihoods? Livelihood adaptation offers a valuable framework to address these questions. It examines the dynamic interaction between tourism development and rural households. This interaction is a key indicator of households' ability to achieve sustainable livelihoods and guides their future development trajectory (Chen et al., 2020). Scholars have increasingly focused on understanding livelihood adaptation among households in rural tourism destinations. Nevertheless, current researches predominantly center on a static analysis of households' adaptive strategies and capacity (Yu et al., 2013; He et al., 2019; Li et al., 2020). Few scholars have delved into exploring how households' livelihood adaptive behaviors evolve under

the disturbances caused by rural tourism development and the underlying mechanisms shaping such adaptation.

Rural tourism development exhibits cyclical characteristics across various stages (Zhong et al., 2008), and the impacts on households' livelihoods varies accordingly. Consequently, households' adaptation to rural tourism development represents a dynamic process, potentially governed by phased evolutionary patterns. To address the limitations in current research on households' livelihood adaptation in rural tourism destinations, this study aims to construct an overarching theoretical framework for analyzing households' livelihood adaptation in rural tourism destinations based on existing literature. It investigates the specific livelihood opportunities and risks caused by rural tourism to households, analyzes variations in households' adaptive behaviors across different stages of tourism development, and identify factors influencing households' livelihood adaptive outcomes. These factors encompass both external livelihood environments (comprising opportunities and risks) and internal adaptive capacities. The study intends to advance theoretical understanding of households' livelihood adaptation in rural tourism destinations.

## **1.2 Rural tourism in China**

Unlike countries in Europe and North America, where rural tourism has a history of over 100 years, China did not start its rural tourism until the early 1980s (Gao et al., 2009). China has a large proportion of its population living in rural areas. According to statistic from Food and Agriculture Organization (FAO), China's rural population in 2021 was 0.54 billion, accounting for 37.07% of the country's total population (FAO, 2024). However, rural areas in China are abundant in natural landscapes, agricultural resources, and traditional folk customs, which offer much potential for rural tourism (Xie, 2015). Consequently, rural tourism has been regarded as an important channel for poverty alleviation in China and a key aspect of promoting the grand strategy of rural revitalization (Su, 2011; Gao & Wu, 2017; Rao et al., 2022).

The Chinese government has issued a series of policies to promote rural tourism over the past two decades. In 1998, "China Urban and Rural Tourism Year" was introduced by the China National Tourism Administration (CNTA), followed by "China Rural Tourism Year" and "Notice on Vigorously Promoting the Development of Rural Tourism in China" by the CNTA in 2006. Since then, various government departments have successively issued

policies and notices to promote the development of rural tourism. For instance, in 2009, the CNTA promulgated and implemented the “National Rural Tourism Development Outline”. In 2010, the Ministry of Agriculture issued the “National Leisure Agriculture and Rural Tourism Demonstration County Demonstration Site Creation”. In 2014, seven departments, including the National Development and Reform Commission (NDRC), jointly issued the “Notice on the Implementation of Rural Tourism Enrichment Projects”. In 2016, eleven departments, including the NDRC, jointly issued the “Action Plan for Rural Tourism Poverty Alleviation Projects”, and it was first proposed to establish a list of National Key Rural Tourism Villages in the “13th Five-Year Tourism Industry Development Plan” issued by the CNTA. In 2017, fourteen departments, including the NDRC, jointly issued the “Action Plan for Promoting and Upgrading Rural Tourism Development”, and the Ministry of Agriculture issued the “Notice on Promoting the Development of Leisure Agriculture and Rural Tourism”. In 2018, seventeen departments, including the NDRC, jointly issued the “Guiding Opinions on Promoting the Sustainable Development of Rural Tourism”. In 2019, the Ministry of Agriculture issued “About Launching Leisure Agriculture and Rural Tourism Boutique Promotion Activities in 2019”. In 2021, the Ministry of Culture and Tourism and the NDRC jointly launched 300 rural tourism learning and experience routes.

Over the past two years, the 2022 No. 1 Central Document, titled “Opinions of the Central Committee of the Communist Party of China and the State Council on Effectively Promoting Key Work in Comprehensive Rural Revitalization in 2022”, emphasized the need to implement a plan for enhancing rural leisure tourism and promoting its high-quality development. The 2023 No. 1 Central Document, titled “Opinions of the Central Committee of the Communist Party of China and the State Council on Effectively Promoting Key Work in Comprehensive Rural Revitalization in 2023”, further highlighted the necessity of implementing a project to create premium rural leisure tourism experiences and to upgrade rural homestays to improve their quality.

With the Chinese government’s financial support and policy encouragement for rural tourism over the past decades, successful cases of poverty alleviation and traditional village revitalization through rural tourism in China are unsurprising (Chi & Han, 2021). Some of these cases have even attracted global attention and have been listed as World Cultural Heritage sites, such as Hongcun village in Anhui province and Kaiping Diaolou in Guangdong province (Ramos-Tumanan & Ryan, 2019; Zhou et al., 2015). By 2023, the Ministry of Culture and Tourism had selected 198 Key Rural Tourism Towns and 1,399 Key Rural Tourism Villages. Especially in recent years, some villages have been selected as the

“World’s Best Tourist Villages” by the World Tourism Organization (UNWTO) due to their successful rural tourism development. For instance, in 2021, Yu village in Zhejiang province and Xidi village in Anhui province were selected as part of the first batch of “World’s Best Tourist Villages” by the UNWTO. In 2022, Dazhai village in Guangxi province and Jingzhu village in Chongqing were selected as “World’s Best Tourist Villages”. In 2023, Huangling village in Jiangxi province (the study case of this research), Xiajiang village Zhejiang province, Zhagana village in Gansu province and Zhujiawan village in Shanxi province were also selected as “World’s Best Tourist Villages” by the UNWTO.

According to the statistics from the Ministry of Agriculture and Rural Affairs, in 2019, China received 3.2 billion rural tourist arrivals, accounting for half of domestic tourist arrivals, and the rural tourism revenue exceeded 850 billion yuan (\$124.6 billion) (MARA, 2021). In 2020, although rural tourism in China has been greatly affected by the Covid-19 (Figure 1-1), most tourists still focus on short-distance rural tourism in the suburbs during the epidemic (Wang & Wu, 2022). In 2020, China received about 2.6 billion rural tourist arrivals with an operating income of 600 billion yuan (\$87.9 billion); the total number of rural tourism employment in the country reached 11 million, and more than 8 million rural households were engaged in rural tourism (MARA, 2021). In addition, according to the survey of the national rural tourism development status in 2021 by the research group of “Annual Report on the Development of Rural Tourism in China (2022)”, 88.2% of the respondents believe that rural tourism can increase farmers’ income, and 94.1% of the respondents believe that rural tourism is helpful for rural revitalization (Wang & Wu, 2022). Despite a decline in rural tourism numbers in 2021 and 2022 due to the Covid-19 pandemic, the sector experienced a significant rebound in 2023, surpassing pre-pandemic levels following the easing of COVID-19 restrictions at the end of 2022. Overall, rural tourism in China has effectively promoted the development of related industries such as catering and accommodation, transportation, agricultural product processing, traditional handicrafts, construction and culture (Muresan et al., 2016), and has become an important driving force for creating job opportunities, alleviating poverty, improving livelihood condition and promoting sustainable development in China (Dang, Ren, & Li, 2022; Cui et al., 2017; Li & Zhao, 2014).

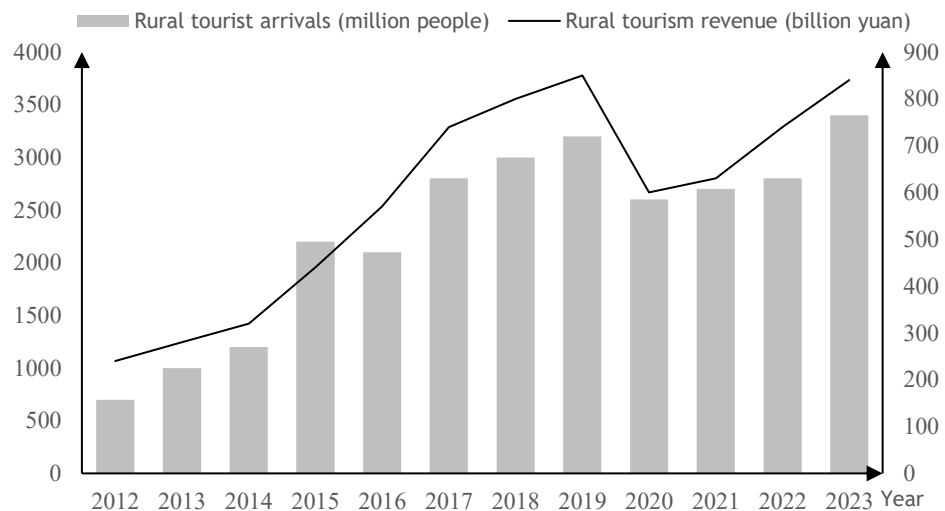


Figure 1-1 Number of rural tourist arrivals and rural tourism revenue in China (2012-2023)  
(Source: Author)

### 1.3 Research rationale

Based on the above research context analysis, it is evident that the livelihood systems of rural households in tourism destinations are undergoing constant transformation and restructuring under the combined influence of external development environments and internal development needs as the impact of rural tourism deepens. How to effectively manage and regulate households' adaptation to the development of rural tourism, thereby promoting the sustainable development of rural households' livelihood in tourism destinations, has become a critical issue that both academia and industry urgently need to address.

Rural households' perception of the disturbances caused by rural tourism is the foundation of their behavioral responses. The impact of rural tourism development on rural household livelihoods is dynamic, and the response process of households' livelihood adaptation is not static but evolves dynamically with changes in the rural tourism development environment. Moreover, the outcomes of households' livelihood adaptation to rural tourism development are simultaneously influenced by both external livelihood adaptation environmental factors and internal livelihood adaptation capacities. However, existing research has yet to systematically address questions such as "What disturbances does rural tourism development impose on the livelihoods of households in destination areas?", "What evolutionary characteristics and mechanisms are exhibited by the livelihood adaptive behaviors of households in rural tourism destinations?", and "What

factors influence the outcomes of households' livelihood adaptation in rural tourism destinations?". Therefore, this study selects the villages surrounding the typical rural tourism destination of Huangling scenic area in Wuyuan county, Jiangxi province, China, as a case study. By taking the rural households in the case study area as the research object, this study will analyze the disturbances of rural tourism development on households' livelihoods, delineate and restore the evolutionary process of rural households' livelihood adaptive behaviors under rural tourism disturbances, and summarize the influential mechanism of the livelihood adaptive outcomes of households in rural tourism destinations.

This study has the potential to theoretically enrich the understanding of livelihood adaptation among households in rural tourism destinations. It aims to break new ground by moving beyond existing frameworks focused on vulnerability or resilience. By placing livelihood adaptation at the center of analysis, the study proposes a theoretical framework based on the logical sequence of "adaptive object - adaptive subject - adaptive process - adaptive outcomes". This framework connects the internal livelihood adaptation processes of rural households with the disturbances caused by rural tourism development. The research first analyzes the impacts of rural tourism development on the livelihoods of destination households, identifying both the livelihood opportunities and risks introduced by rural tourism. Subsequently, the study examines the changes in adaptive behaviors developed by households in response to rural tourism development, explaining the underlying mechanisms of these evolving behaviors. Finally, the research explores the factors influencing the livelihood adaptive outcomes of households in rural tourism destinations, considering both the external livelihood environment and the internal adaptive capacity of households.

This research also holds significant practical implications for the management of livelihood adaptation and the sustainable development of households in rural tourism destinations. As the impacts of rural tourism continue to deepen, the livelihood systems of destination households are undergoing transformation and reconstruction due to the combined influences of the external development environment and their own needs. A critical challenge lies in effectively managing and regulating households' livelihood adaptation to promote sustainable livelihood development in these destinations. Building upon a thorough identification of livelihood opportunities and risks associated with rural tourism development, this research deeply analyzes the changes in livelihood adaptive behaviors developed by households and the factors influencing their livelihood adaptive

outcomes. The findings serve as a guide for local governments to formulate effective measures for managing livelihood adaptation among households in rural tourism destinations. Additionally, the research provides practical guidance and suggestions for destination households to enhance their livelihood adaptive capacity. Ultimately, this study aims to contribute to the transformation, upgrading, and sustainable development of households' livelihoods in rural tourism destinations.

## 1.4 Research aim and questions

By addressing the research context and rationale above, the overarching aim of this research is to understand the livelihood adaptation mechanism of households in rural tourism destinations. To achieve the research aim, this study is guided by the following three key research questions:

*RQ1 What livelihood disturbances the development of rural tourism has brought to households?*

*RQ2 In what way households cope with the disturbances to their livelihoods caused by rural tourism development?*

*RQ3 What are the factors that influence the livelihood adaptive outcomes of households in rural tourism destinations?*

In order to answer these questions, this research first establishes a theoretical framework for analyzing the livelihood adaptation of households within the context of rural tourism development. The Huangling scenic area in Wuyuan county, Jiangxi province—a typical rural tourism destination in China—was then selected as a case study. The study focuses on the livelihood adaptation of households in the villages surrounding the Huangling scenic area. It seeks to identify the livelihood disturbances caused by rural tourism development, reconstruct the process through which households adjust their livelihood strategies in response to these disturbances, and analyze the factors influencing the livelihood adaptive outcomes of households in the selected case study area. Accordingly, this study sets out the following three main objectives:

*RO1: to examine how households perceive the disturbances caused by rural tourism development to their livelihoods.*

*RO2: to map the livelihood adaptive strategies implemented by households in response to the development of rural tourism.*

*RO3: to explore the underlying mechanism influencing livelihood adaptive outcomes for households in rural tourism destinations.*

## 1.5 Thesis structure

This thesis consists of seven chapters:

**Chapter 1 Introduction.** This chapter introduces the research context, outlines the study's aim and rationale, presents the research questions, and provides a roadmap for the thesis structure.

**Chapter 2 A review of livelihood and livelihood adaptation in tourism studies.** This chapter provides clear definitions of key concepts, including livelihood, adaptation, and livelihood adaptation. The literature review includes both research on both "Impacts of tourism development on the livelihood of rural households" and "Livelihood adaptation of households in tourism destinations". Furthermore, the chapter identifies current research gaps and proposes the overall theoretical framework for this study.

**Chapter 3 Research methodology.** This chapter begins by outlining the research paradigm that guides this study. It then justifies the overall research design. Subsequently, the chapter details the case selection criteria, historical-geographical context, tourist attractions, and the history of rural tourism development in the chosen case study. Finally, the chapter outlines the data collection and analysis methods employed in this research.

**Chapter 4 Households' livelihood disturbances caused by rural tourism development.** This chapter utilizes semi-structured interviews to collect data on the impacts of rural tourism development on the livelihoods of households in the villages surrounding the Huangling scenic area. Subsequently, qualitative content analysis is employed to identify the livelihood disturbances caused by rural tourism development to these households, focusing on two dimensions: livelihood opportunities and livelihood risks.

**Chapter 5 Livelihood adaptive behaviors developed by households in response to rural tourism development.** Complementing the data collection on livelihood disturbances in Chapter 4, this chapter also utilizes semi-structured interviews to gather information on



the evolving livelihood adaptive behaviors developed by households in the villages surrounding the Huangling scenic area. Thematic analysis is then employed to reconstruct the dynamic process of these changing behaviors in response to rural tourism development. This analysis examines and summarizes the characteristics of distinct livelihood adaptive stages, ultimately leading to an explanation of the nature of these transformations in livelihood adaptive behaviors of households in rural tourism destinations.

**Chapter 6 Factors influencing the livelihood adaptative outcomes of households in rural tourism destination.** Drawing upon the “Opportunity-Risk-Capacity (O-R-C)” theoretical model, this chapter employs a quantitative approach to collect data on five key variables: perceived livelihood opportunities, perceived livelihood risks, perceived livelihood adaptive capacities, livelihood adaptive behaviors, and livelihood adaptive outcomes. A questionnaire survey is used to gather this data. Partial Least Squares Structural Equation Modeling (PLS-SEM) is applied to investigate the relationships between these variables. Specifically, the analysis explores how households’ perceived livelihood opportunities, perceived livelihood risks, and perceived livelihood adaptive capacities influence their adoption of livelihood adaptive behaviors. Furthermore, it also examines how these behaviors further affect their livelihood adaptive outcomes. Ultimately, this chapter synthesizes the findings to illuminate the influential mechanism of households’ livelihood adaptive outcomes in rural tourism destinations.

**Chapter 7 Conclusions, discussion and implication.** This chapter culminates by summarizing the key research findings of this study. It then engages in a critical discussion of the similarities and differences between these findings and those of previous studies. Subsequently, the chapter outlines the theoretical contributions and practical implications of this research. Finally, it addresses the main limitations of the study and proposes potential avenues for future research.

## **Chapter 2 A review of livelihood and livelihood adaptation in tourism studies**

### **2.1 Introduction**

This chapter is comprised of five key sections. The first section establishes a clear foundation by defining the core concepts of livelihood, adaptation, and livelihood adaptation relevant to this research. The second section provides a comprehensive review of the existing literature on the impacts of tourism development on households' livelihoods. Building upon this foundation, the third section systematically reviews studies focused on livelihood adaptation among households in tourism destinations. The fourth section then identifies critical research gaps in the current body of knowledge and explores how this study aims to address them. Finally, the fifth section critically examines existing frameworks for analyzing livelihood adaptation and proposes a novel theoretical framework for analyzing livelihood adaptation among households in rural tourism destinations.

### **2.2 Definitions**

#### **2.2.1 Livelihood**

Chambers and Conway (1992) defined livelihood as a way for human beings to obtain more food, income and assets by carrying out different livelihood activities based on their own abilities and assets (including tangible assets such as resources and savings and intangible assets such as power of claims and enjoyments). Sustainable livelihoods include both environmental sustainability and social sustainability: environmental sustainability refers to the ability to maintain or enhance the local and global assets on which livelihoods depend and generate net benefits for other livelihoods; while social sustainability refers to the ability to respond to and recover from external pressures and shocks and provide livelihood security for future generations (Chambers & Conway, 1992). This definition of livelihood has gained widespread acceptance among scholars and has been productively applied in studies of household vulnerability, rural poverty, and sustainable natural resource use of natural resources (Ashley & Carney, 1999; Soini, 2005; Reed et al., 2013).

With the deepening of scholars' understanding of rural poverty, scholars have further proposed a sustainable livelihood framework to conduct in-depth research and analysis on the livelihood of rural households. Organizations such as the Foreign, Commonwealth & Development Office (FCDO), the United Nations Development Programme (UNDP), and scholars such as Scoones, Bebbington, Ellis, etc. have developed their own focused sustainable livelihood analysis frameworks (Small, 2007). Among them, the sustainable livelihood frameworks (SLF) proposed by FCDO (1999) (Figure 2-1) and Scoones (1998) (Figure 2-2) are the most representative and have been widely used by scholars. These frameworks commonly identify five key components of sustainable livelihoods: livelihood context, livelihood assets, structure and process, livelihood strategy, and livelihood outcome, reflecting how the poor choose the right livelihood strategy to achieve livelihood goals based on their ability to combine different livelihood assets in a given context, with special emphasis on institutional processes affecting households' selection of livelihood strategies and the achievement of livelihood goals. Within this framework, livelihood context encompasses various shocks, trends, and seasonality. Livelihood capital comprises five types: natural capital, physical capital, financial capital, social capital, and human capital. Structure and process refer to the multi-level governance system and the diverse organizations and institutions involved. Livelihood strategies encompass the range and combination of activities and choices undertaken by households to achieve their livelihood goals. These strategies include production activities, investment strategies, and fertility choices. Livelihood outcomes refer to the results or products of livelihood strategies, including increased income, enhanced well-being, improved food security, and more sustainable natural resource utilization.

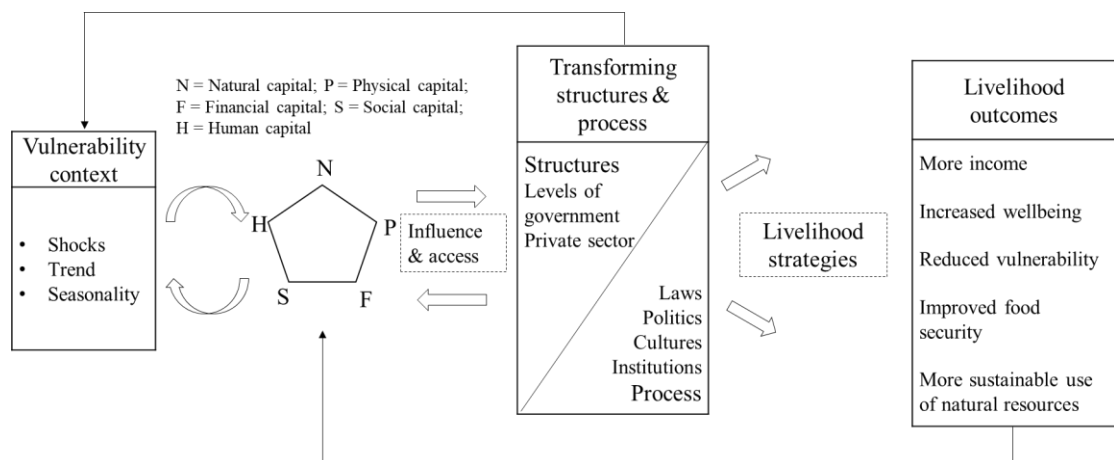


Figure 2-1 Sustainable livelihood framework (Adapted from FCDO (1999))

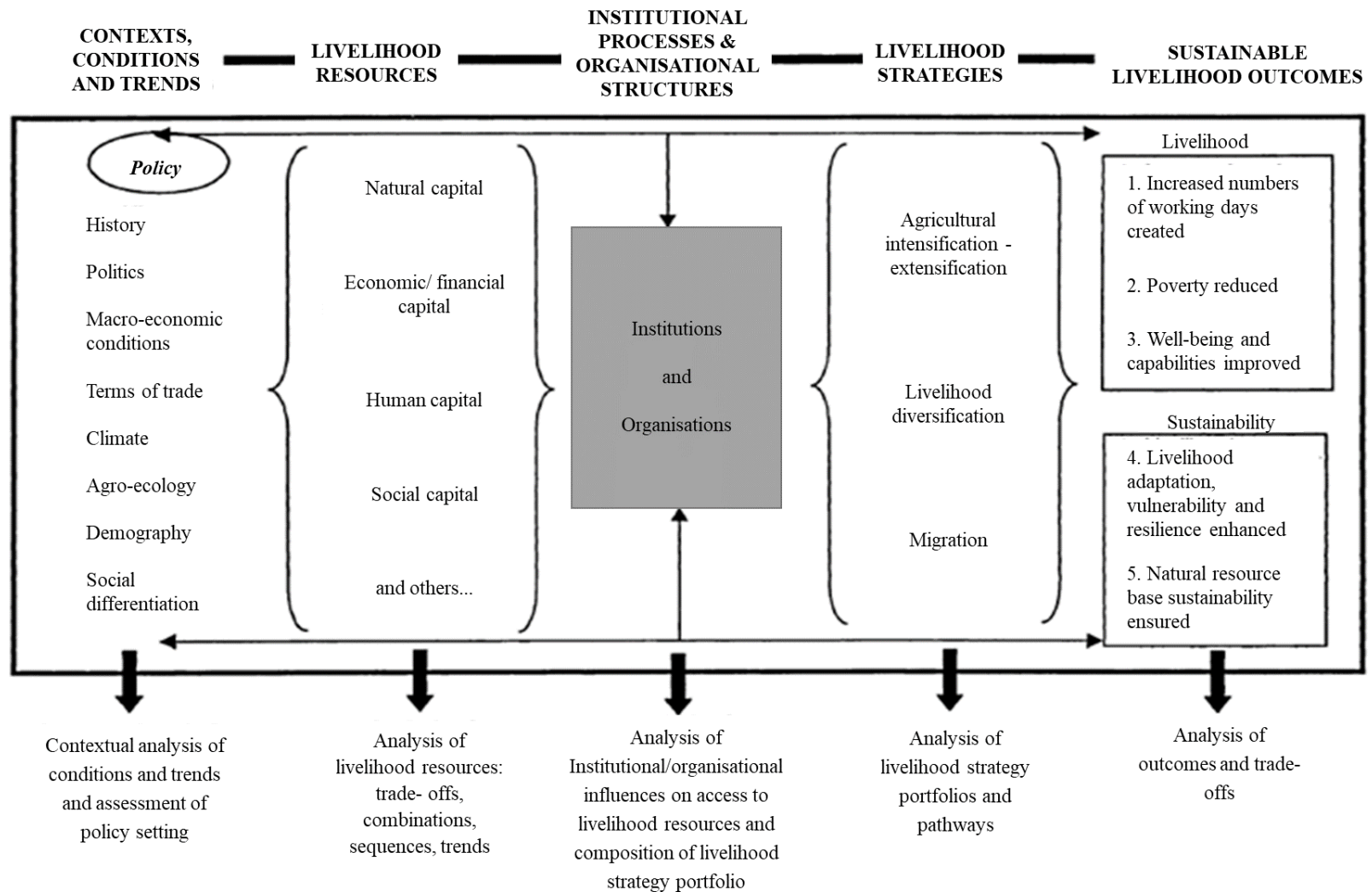


Figure 2-2 Sustainable rural livelihood: a framework for analysis (Adapted from Scoones (1998))

### 2.2.2 Adaptation

Adaptive thinking has evolved from early natural ecosystems and socio-economic systems to socio-ecological complex systems, and has found widespread application across various research domains such as disaster management, climate change, socioecology, and sustainable development. The concept of adaptation originated in evolutionary ecology within the natural sciences and has since been further developed across disciplines including biology, physics, sociology, anthropology, and geography (Kitano, 2002; Winterhalder, 1980). In the natural sciences, adaptation typically refers to individuals or systems enhancing their genetic or behavioral characteristics to better fit environmental changes, although the concept remains debated (Kitano, 2002; Winterhalder, 1980).

In the social sciences, scholars have approached adaptation from diverse perspectives such as cultural adaptation, natural disasters, political ecology, and climate change. Anthropologist and cultural ecologist Steward (1972) introduced adaptation to human systems, using “cultural cores” to describe how societies adjust their behavioral patterns to natural environments. O’Brien and Holland (1992) further assert that adaptation reflects cultural practices enabling societies to survive and flourish amidst change, involving the adjustment of behavioral and management patterns in response to perceived environmental conditions (Denevan, 1983). From the perspective of natural disasters, adaptation emphasizes the perception, regulation, and management of environmental risks (Burton et al., 1978). Political ecology views adaptation as adaptive management of risks (Walker, 2005), reflecting individuals or families responding to external disturbances based on available resources and coping abilities (Downing, 1991; Adger & Kelly, 1999; Adger, 2000).

With the burgeoning field of climate change adaptation research, the concept of adaptation has expanded (Cui et al., 2011). Pielke (1998) defines adaptation in climate change contexts as behavioral adjustments made by individuals, groups, or institutions to reduce society’s vulnerability (Pielke, 1998, p.159). Brooks (2003) argues that adaptation involves modifying behaviors and characteristics to enhance the system’s response to external disturbances. Smit and Wandel (2006) broaden adaptation to encompass various scales from households to nations, emphasizing the process by which systems respond, manage, or adapt to climate change, stress, disasters, risks, or opportunities (Smit & Wandel, 2006).

In conclusion, while adaptation varies across disciplines, it is understood as the process

whereby individuals or systems respond and adjust to changes in the external environment. It underscores two key aspects: first, adjusting the structural characteristics and behaviors of the system in response to external changes to mitigate negative impacts; and second, enhancing the system's capacity to effectively manage and regulate risks and pressures stemming from external disturbances.

### **2.2.3 Livelihood adaptation**

Conceptualization of livelihood adaptation primarily stems from the broader concept of adaptation. Antwi-Agyei et al. (2014) define livelihood adaptation in the context of climate change as the reduction of adverse effects on households' livelihoods through the utilization of adaptive capacities and various assets. Chen et al. (2018b) further elucidates that livelihood system adaptation involves households utilizing diverse resources to respond to external environmental risks and pressures, thereby maintaining their current livelihood conditions. Yu et al. (2013) argues that livelihood adaptation of households in tourism destinations entails them adjusting their use of land, labor, and other resources in response to tourism development to sustain or improve their living standards, with adaptive behaviors and capacities forming integral components.

Scholars often associate livelihood adaptation with concepts of livelihood vulnerability and livelihood resilience. Livelihood vulnerability, resilience, and adaptation are interconnected through the concept of adaptive capacity (Figure 2-3), which is pivotal in enhancing livelihood adaptation (Engle, 2011). It is important to note, however, that while there is a relationship between livelihood adaptation, vulnerability, and resilience, these concepts should not be conflated. Livelihood vulnerability refers to the likelihood of households' livelihoods being exposed to risks due to external disturbances and their ability to withstand these risks (Nikolic, 2018). On the other hand, livelihood resilience pertains to a family's capacity to cope with and adapt to socioeconomic and environmental changes, enabling them to sustain their livelihoods by recovering from disturbances, learning from changes, and reorganizing life and production (Li et al., 2022). Livelihood vulnerability emphasizes the exposure, sensitivity, and adaptive capacity of households or communities before external disturbances occur, while resilience focuses on their ability to manage and rebound from such disturbances (Kumar et al., 2020).

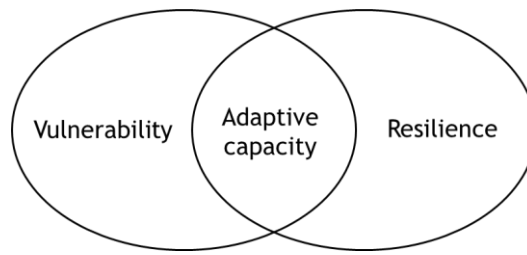


Figure 2-3 Vulnerability and resilience interconnected through the concept of adaptive capacity (Adapted from Engle (2011))

Based on the discussions by the aforementioned scholars regarding the concept of livelihood adaptation, this study posits that the livelihood adaptation of households in rural tourism destinations can be explained by households in rural tourism destinations adjust their adaptive behaviors and enhance their adaptive capacity in response to structural and functional changes in the rural human-land system caused by tourism development. This enables them to seize livelihood opportunities and mitigate risks associated with tourism disturbances, thereby achieving desirable livelihood outcomes during the process of tourism development. Adaptive behaviors encompass strategies, whether active or passive, adopted by households to cope with the transformations in the regional rural system induced by tourism (Hussain & Hanisch, 2014; Wens et al., 2021). These behaviors illustrate rural households' responses to tourism disturbances and their varying states of adaptation to the new livelihood environment. Adaptive capacity refers to households' ability to effectively manage uncertain disturbances from tourism by adjusting their own characteristics and behaviors based on available resources (Nelson et al., 2007). It constitutes a fundamental aspect of livelihood adaptation and is central to research on adaptation (Zhao et al., 2020). Adaptive outcomes denote the consequences of households' adaptive behavioral choices in response to tourism disturbances. These outcomes include objective indicators such as livelihood freedom (Su et al., 2016a; 2016b; Wu & Pearce, 2014) and livelihood diversification (Mbaiwa & Stronza, 2010; Su et al., 2016a; Su et al., 2019a), as well as subjective measures such as livelihood satisfaction (Su et al., 2016b; Su et al., 2022).

## 2.3 Impacts of tourism development on the livelihood of rural households

A comprehensive review of the literature reveals that scholars investigate the impacts of tourism development on the livelihoods of rural households through the lens of the five

key components of the sustainable livelihood framework. These components encompass: (1) the context of livelihood vulnerability, (2) livelihood capital assessment, (3) livelihood strategy transformation, (4) institutional and structural changes associated with tourism development, and (5) livelihood outcomes analysis.

### **2.3.1 Impacts on livelihood vulnerability**

Tourism is widely acknowledged as a significant avenue for enhancing the livelihoods of destination communities, bolstering the resilience of the impoverished, and mitigating livelihood fragility (Ashley, 2000; Leu et al., 2018; Lowe & Tejada, 2019; Chen et al., 2015). However, recent advancements in sustainable tourism livelihood research have underscored that tourism development introduces considerable uncertainties into destination livelihoods. Tourism growth often introduces numerous new stakeholders, fostering complex social networks that can exacerbate inequality among household livelihoods and provoke conflicts of interest (He et al., 2008; Cornet, 2015; Li et al., 2015). This manifests in several key aspects: (1) Local governments and tourism developers typically dominate tourism management and decision-making in destination communities, marginalizing community households and limiting their ability to advocate, negotiate, or compete effectively, thus hindering their potential benefits from tourism development (Scheyvens & Russell, 2012; Luo & Bao, 2019; Wang et al., 2017); (2) Community households often face low competitiveness against foreign operators, leading to limited participation in tourism activities and reduced economic gains (Pham, 2020); (3) Unequal distribution of tourism benefits among community households can strain intra-community relations, with tourism participants often accumulating more livelihood assets and reaping greater rewards, thereby widening the wealth gap (Su et al., 2019a; Su et al., 2016a).

As households increasingly shift from traditional livelihoods to tourism-related activities such as catering, accommodation, and tourism commodity sales, they become vulnerable to challenges such as limited market demand, serious product homogenization, and intense competition, potentially resulting in over-reliance on tourism and reduced livelihood flexibility and stability (Su et al., 2016b; Xue & Kerstetter, 2019). Moreover, fluctuations in tourism revenues and their adverse environmental impacts can heighten the vulnerability of livelihoods in tourism destinations (Bires & Raj, 2020; Wilson & Dashper, 2023; Hussain, Mandić & Fusté-Forné, 2024). For instance, Mbaiwa (2011) highlighted in a study of communities in Botswana's Okavango Delta that relying solely on



tourism as a livelihood source heightens vulnerability to natural and social factors such as economic downturns and disease outbreaks, thereby increasing livelihood risks and instability. Movono et al. (2018) argue that prolonged dependence on tourism may diminish the ability of community households to withstand sudden natural and political crises, such as hurricanes and political unrest, thereby compromising livelihood security. Additionally, Su et al. (2016c) observed that environmental degradation and water scarcity stemming from rapid tourism development exacerbate climate change impacts, accelerating the shift away from traditional agricultural practices and eroding agricultural skills, collectively heightening households' livelihood vulnerability.

### **2.3.2 Impacts on livelihood capitals**

Livelihood capital serves as both the foundation for individuals to select livelihood strategies and a crucial safeguard against livelihood risks (Scoones, 1998). Currently, most scholars utilize the five categories of livelihood capital (natural capital, physical capital, human capital, financial capital, and social capital) outlined in the FCDO sustainable livelihood analysis framework to assess the impact of tourism development on destination livelihoods (FCDO, 1999). Natural capital refers to the reserve of natural resources that provide resource flows and services essential for livelihoods, encompassing indicators such as arable land, forest land, water, and biological resources (Aazami & Shanazi, 2020; Açıksöz et al., 2016). Physical capital pertains to infrastructure and production means crucial for sustaining livelihoods, typically manifested in housing conditions, household assets, infrastructure, and production facilities (Huang et al., 2017; Qian et al., 2017; Su et al., 2019a). Human capital comprises skills, knowledge, work capacity, and good health enabling individuals to pursue various livelihood strategies and attain their goals, reflected in factors like family labor force, education, cognition and skills, health status (Açıksöz et al., 2016; Bennett et al., 2012; Huang et al., 2017; Kry et al., 2020). Financial capital encompasses the various financial resources individuals utilize to achieve livelihood objectives, including household savings, borrowing opportunities, and government subsidies (Aazami & Shanazi, 2020; Avila-Foucata & Rodríguez-Robayo, 2018; Qian et al., 2017). Social capital refers to the social resources (networks and connections, group memberships, trust, communication, reciprocity, etc.) individuals leverage to pursue livelihood objectives, including social support, community engagement, and organizational participation (Aazami & Shanazi, 2020; Avila-Foucata & Rodríguez-Robayo, 2018; Ma et al., 2021).

Additionally, scholars have extended this framework by including cultural capital, psychological capital, and political and institutional capital tailored to specific conditions in tourism destinations. Cultural capital involves utilizing traditional cultural resources to achieve livelihood objectives, reflected in cultural understanding, retention, inheritance, and the utilization of cultural resources for tourism purposes (Bennett et al., 2012; Li et al., 2020a; Ma et al., 2021). Psychological capital denotes the psychological state supporting households' efforts to maintain their livelihoods, measured through indices such as expectations for life improvement, self-confidence, resilience, and happiness (Ma et al., 2018). Political and institutional capital encompasses policies and systems ensuring the realization of livelihood goals, including policy support, management structures, and institutional guarantees (Bennett et al., 2012; Shen et al., 2008). Table 2 provides an overview of key literature detailing the classification of livelihood capital types and specific measurement indicators.

Table 2-1 Indicators for the measurement of livelihood capital and key literature

Type of capital	Measurement indicator	Indicator explained	Key literature
Natural capital	Land resources	The area and quality of arable land	Li et al. (2020a)
	Forest resources	The area of available forest resources	Yu et al. (2020)
	water resources	Availability and quality of water resources	Ma et al. (2018)
	Air quality	Whether the air quality has been improved and enhanced	Aazami & Shanazi (2020)
	Biodiversity	Whether biodiversity is being conserved	Qian et al. (2017)
	Environmental protection	Whether ecosystem functions are maintained	Qian et al. (2017)
	Natural attraction	The attractiveness of natural ecological resources to tourists	Açıksöz et al. (2016)
Physical capital	Housing conditions	Size and quality of family house	Su et al. (2019a)
	Durable consumer goods	The number of household durable goods such as air conditioners, washing machines, TVs, computers, refrigerators, bicycles, electric vehicles, motorcycles, cars, mobile phones, beds, tables and chairs, etc.	Huang et al. (2017)
	Number of livestock	The number of cattle, horses, sheep, pigs and other livestock owned by the households	Huang et al. (2017)
	Public infrastructure	Whether basic service facilities such as transportation, medical care, communications, and electricity have been improved	Su et al., (2016b)
	Tourist service facilities	Whether tourism service facilities such as catering, accommodation, and parking have been improved	Qian et al. (2017)
	Skills & knowledge	Whether skills and knowledge such as language, service, marketing, etc. have been improved	Su et al., (2016b); Kry et al. (2020)
Human capital	Educational attainment	The average educational level of family members	Bennett et al. (2012)
	Health status	The physical health of family members	Açıksöz et al. (2016)
	Labor force	The laboring capacity of family members	Huang et al. (2017)
	Tourism cognitive skills	Ability to identify tourism development opportunities	Kry et al. (2020)

Type of capital	Measurement indicator	Indicator explained	Key literature
Financial capital	Tourism skills training	Whether households have received tourism skills training from governments, communities, tourism companies and other organizations	Huang et al. (2017)
	Serving in government departments	Whether the family members serve on the village committee, township government, or scenic area management committee	Su et al. (2019a)
	Leadership potential	Whether the level of tourism services has been improved	Qian et al. (2017)
	Annual household income	The tourism-related and non-tourism-related income of family	Aazami & Shanazi (2020)
	Borrowing opportunities	Access to loans from friends and family and loans from institutions such as banks	Avila-Foucata & Rodríguez-Robayo (2018)
	Government subsidies	Access to government funding	Avila-Foucata & Rodríguez-Robayo (2018)
Social capital	Household savings	The amount of reserves of liquid assets such as household cash	Li et al. (2020a)
	Social support	Possibility of obtaining government funding and policy support, family and friend funding and manpower support	Huang et al. (2017); Ma et al. (2021)
	Social connectedness	The position of relatives and friends in government departments and scenic area management agencies	Ma et al. (2018)
	Location advantage	The distance between the home address and the core scenic areas and major traffic arteries	Ma et al. (2021)
	Community and organization involvement	Participation in community activities and tourism projects, participation in cooperatives, associations and local groups	Avila-Foucata & Rodríguez-Robayo (2018)
	Networks and partnerships	The possibility of exchanging information and establishing partnerships with outsiders such as tourists, tour guides, etc	Aazami & Shanazi (2020)
Cultural capital	Trust and reciprocity	Trust in government agencies and the level of trust and resource sharing among community members	Aazami & Shanazi (2020)
	Cultural recognition	The degree of knowledge and understanding of traditional culture such as folk customs and cultural heritage	Li et al. (2020a)
	Cultural utilization	The application of traditional culture such as folk customs and cultural heritage to tourism operation	Ma et al. (2021)
	Cultural Possession	Ownership of cultural assets such as ancient residential buildings, furniture, antiques and etc.	Ma et al. (2021)
	Cultural protection and inheritance	Recognize the role of tourism development in promoting cultural protection and inheritance	Bennett et al. (2012)
	Traditional manual skills	The willingness to learn and master traditional craft skills such as winemaking, weaving, carving and etc.	Li et al. (2020a)
Psychological capital	Life improvement expectations	The degree of expectation that tourism development will improve current living conditions	Ma et al. (2018)
	Self-confidence index	The level of confidence in tourism development to improve current living conditions	Ma et al. (2018)
	Resilience Index	The degree of influence of tourism development on psychological endurance	Ma et al. (2018)
	Happiness index	The extent to which tourism development affects the well-being of life	Ma et al. (2018)
	Positivity index	Degree of enthusiasm and initiative to participate in tourism development	Ma et al. (2018)
	Tourism support policy	Policies such as land and funding to support community participation in tourism development	Ma et al. (2018)

Type of capital	Measurement indicator	Indicator explained	Key literature
	Community participation guarantees	Channels and institutional guarantees for community participation in tourism management decision-making and revenue distribution	Shen et al. (2008)
	Institutions & Organizations	Formal and informal organizations that support tourism development	Bennett et al. (2012)

*Source: Author.*

Tourism development has altered the original structure and scale of household livelihood capital, promoting significant improvements in overall livelihood capital levels, particularly in physical, financial, and cultural capital (Chen et al., 2018a; Kry et al., 2020; Kunjuraman, 2023; Li et al., 2020a; Ma et al., 2018; Wang et al., 2021b; Shekari et al., 2022). Physical capital such as community infrastructure, material means of production, and durable goods has seen notable enhancements. Financial capital like household income levels, credit opportunities, and government subsidies has increased significantly due to tourism development. Cultural capital has also been substantially enhanced, with tourism deepening community residents' understanding and appreciation of traditional culture. This has led to better preservation and development of traditional culture, alongside its commercial utilization.

However, the impact of tourism development on natural capital is somewhat controversial. Yu et al. (2020) and Stone and Nyaupane (2016) argue that ecotourism has increased community attention to ecological protection, effectively boosting the natural capital stock of households. The study by Holland et al. (2022) further suggested that tourism development can boost households' economic income, thereby reducing their reliance on natural capital and promoting the conservation of biodiversity. Conversely, Mbaiwa (2011) and Li et al. (2016) found that tourism development reduced households' reliance on traditional land and other natural resources, resulting in the abandonment and idleness of significant cultivated land resources. Additionally, some cultivated land has been requisitioned by local governments and tourism developers for tourism-related construction, further depleting households' natural capital (Li et al., 2016; Mbaiwa, 2011; Liu, Wang, Dupre, & McIlwaine, 2022).

Tourism development has also led to the differentiation of livelihood capital among households in different geographical spaces and with varying livelihood strategies. Households closer to core scenic areas tend to have higher tourism participation and benefit more from tourism development, resulting in richer livelihood capital stocks. In contrast, those on the periphery of scenic areas typically have lower participation rates

and relatively limited livelihood capital (Huang et al., 2017; Yu et al., 2020; Li & Tian, 2020; Wang et al., 2022). The significance of different types of livelihood capital also varies considerably among households in tourism destinations. In ecotourism destinations centered around ecological natural landscapes, natural capital is the most crucial foundation for achieving sustainable livelihoods (Aazami & Shanazi, 2020). Conversely, in rural tourism destinations where cultural resources are the primary attraction, households' dependence on natural capital decreases significantly, and cultural and social capital play a more vital role in sustaining livelihoods (Ma et al., 2021).

### **2.3.3 Impacts on transformation and diversification of livelihood strategies**

Livelihood strategies encompass the range and mix of activities and options undertaken to achieve livelihood objectives (FCDO, 1999), largely dependent on the size and structure of livelihood capital. Among the various types of livelihood capital, physical capital, financial capital, and human capital are critical in influencing households' choices of tourism-based livelihood strategies. Households lacking support in these capitals are less competitive and often unable to participate in higher-return tourism activities such as catering and accommodation (Bennike & Nielsen, 2024; Huang, Yang, Tuyền, Colmekcioglu, & Liu, 2022; Li & Kuang, 2019; Liu et al., 2019; Su et al., 2019a). Additionally, some scholars have highlighted the importance of social capital—such as cooperation, exchange, sharing, and reciprocity—in the early stages of tourism development. This social capital is crucial for community households to identify tourism livelihood opportunities and participate in tourism-related activities (Diedrich et al., 2019; Luo et al., 2019; Wang, Li, & Yi, 2016). Furthermore, the geographic location of rural households significantly impacts their tourism-oriented livelihoods. Households situated in core scenic areas or along major transportation routes often find it easier to engage in tourism-based livelihood activities due to their locational advantages (Hoang et al., 2020; Liu et al., 2017a; Ma et al., 2018; He & Sun, 2016; Liu & Wang, 2018).

Livelihood diversification is the process by which a family increases the number of different livelihood activities to improve its well-being and livelihood opportunities (Avila-Foucat & Rodríguez-Robayo, 2018). Tourism development introduces new sources of livelihood for destination communities and promotes the transformation and diversification of livelihood strategies for community households (Bires & Raj, 2020; Snyder & Sulle, 2011; Gidebo, 2023; Zhang et al., 2024). Scholars widely agree that before

tourism development, community households typically relied on relatively simple and traditional livelihood strategies such as farming, animal husbandry, raw product collection, and migrant work. With the advent of tourism, destination households have gradually transformed and reconstructed their livelihood modes (Nguyen et al., 2023). New tourism-related activities such as catering, accommodation, and tourism product sales have emerged, leading to the formation of various livelihood strategies, including tourism franchise, tourism-led, work-oriented, agriculture-led, balanced, and part-time operations (Li et al., 2020b; Chen et al., 2017; He et al., 2014; Shang et al., 2018; Wang et al., 2015; Xi & Zhang, 2016; Zheng et al., 2022).

Households in tourism communities often engage in multiple livelihood strategies simultaneously, significantly increasing the level of livelihood diversification (Huang et al., 2017; Li et al., 2020a; Zhang et al., 2017b). However, some scholars argue that tourism development can also replace certain traditional livelihood activities. Particularly, when destination communities need to relocate due to tourism development, households may lose their arable land resources, resulting in the disappearance of traditional livelihood strategies such as agriculture and animal husbandry. This high dependence on tourism can further reduce their livelihood diversification (Su et al., 2016b; Zuo & Chen, 2016).

In general, scholars believe that tourism should supplement rather than completely replace the original livelihood activities of the destination community. Tourism development needs to be integrated with traditional sectors such as agriculture, forestry, fishery, and handicrafts to promote the diversification and sustainability of the destination community's livelihood (Iorio & Corsale, 2010; Rongna & Sun, 2020; Su et al., 2019b; Tao & Wall, 2009; Sun & Liu, 2015).

### **2.3.4 Impacts on livelihood related institutions**

In the sustainable livelihood framework, structures and institutions refer to the policy and institutional environment that supports multiple livelihood strategies and promotes equitable access to competitive markets for all (FCDO, 1999). The poor often have limited knowledge and skills, making a robust political system and effective management model crucial for balancing the power dynamics among multiple stakeholders in tourism development. Such a system can ensure that the poor truly benefit from tourism development and achieve their livelihood goals (Luo & Bao, 2019; Scheyvens, 2007; Wang, Cater, & Low, 2016).

Matiku et al. (2021) proposed a community-driven tourism projects (CDTPs) model after reviewing various tourism development management models, such as participatory planning model, adaptive collaborative management model, the protected area model, and institutional management model. This model is believed to maximize the sustainable livelihoods of communities. Snyder and Sulle (2011) argue that to achieve sustainable community livelihoods, local governments should decentralize management to communities, allowing them to dominate market forces. Additionally, establishing and improving community participation mechanisms ensures that community input is reflected in tourism development plans and strategies.

Lee (2008) found that industry associations, such as pick-your-own (PYO) farms in Taiwan, were established during the tourism development process. These associations effectively promote communication and exchange between grassroots households and the government, ensuring that policy formulation meets the needs of livelihood development. They also increase household participation in policy formulation and implementation, positively influencing the diversified development of their livelihoods. Other scholars have highlighted that the livelihoods of rural households are closely related to both formal and informal institutions at all levels. Formal organizations, such as village committees and Non-Governmental Organizations (NGOs), can help establish networks of trading relationships between local residents and tourists. Informal institutions, such as kinship networks in rural communities, can promote sharing and mutual assistance among residents, thereby jointly enhancing the livelihoods of households (Liu et al., 2017b; Liu, 2018).

Overall, tourism development has spawned numerous new regulatory bodies. Among these, a community-led and multi-stakeholder participatory tourism development management model is widely recognized as the most effective approach to achieving sustainable livelihoods for communities (Kry & Sasaki, 2020; Qian et al., 2016; Stone & Nyaupane, 2018; Stone & Stone, 2022; Zhang et al., 2017a). For instance, the establishment of community decision-making bodies has decentralized tourism management, enabling communities to participate in tourism development and enhancing community political capital (Stone & Nyaupane, 2018; Matiku et al., 2021). The creation of community-based nature reserve management systems and tourism protection enterprises effectively promotes community livelihood improvement and ecological protection (Nthiga et al., 2015). Tourism associations further standardize the tourism participation system of communities, promoting equity in community involvement (Bires & Raj, 2020).

While communities actively participate in the planning, operation, and management of tourism projects, they also need to coordinate and collaborate with governments, the private sector, and non-governmental organizations to ensure the sustainability of community livelihoods. A strong community-public-private partnership not only provides institutional guarantees for households to participate in tourism development but also enhances the tourism participation capacity of community households. Furthermore, it supports the protection and utilization of natural ecological resources with financial and technical assistance from the private sector (Lapeyre, 2013; Mbaiwa & Stronza, 2010).

### **2.3.5 Impacts on livelihood outcomes**

The effects of tourism development on destination livelihoods are reflected in reducing poverty, improving residents' well-being, decreasing livelihood vulnerability, increasing residents' empowerment and participation opportunities, and enhancing residents' life satisfaction (Ma et al., 2021; Su et al., 2019a; Sun et al., 2020; Wang et al., 2014). Households in tourism communities seek to improve local infrastructure, enhance personal capacity, and increase income through tourism development to achieve their livelihood goals (Akyeampong, 2011; Wu, 2016; Wu & Pearce, 2014; Nepal, Lai, & Nepal, 2022). Numerous studies have demonstrated that tourism development can indeed enhance household livelihoods and contribute to the achievement of livelihood goals for the poor by providing employment, skills training, and promoting tourism empowerment (Biddulph, 2015; Buckley et al., 2014; Gao & Wu, 2017; Lapeyre, 2013; Saayman et al., 2020; Teshome et al., 2023). For example, Mbaiwa and Strolza (2010), based on empirical studies of three tourism communities in Botswana, found that tourism development has significantly increased household income and employment opportunities, becoming a new source of livelihood for households. The study by Pujar and Mishra (2024) also suggested that tourism development increased community households' family income and improved their overall quality of life.

However, some scholars have pointed out that the role of tourism in promoting sustainable livelihoods varies by location, and tourism can effectively contribute to the achievement of household livelihood goals only if the economic benefits of tourism are significant enough and the poor in the community can truly benefit from tourism development (Coria & Calfucura, 2012; Hoefle, 2016; Kausar & Nishikawa, 2010). Lonn et al. (2018) found that the contribution of ecotourism to household livelihoods is relatively limited. Agriculture remains the main source of income and the primary livelihood strategy to ensure adequate



food, and the inequality of ecotourism income is greater than that of agricultural, non-agricultural, and non-forest products. Luo and Bao (2019), through empirical research on the impact of tourism at Yalongwan Resort in Hainan, China, found that the substantial income generated by tourism development did not significantly improve the livelihoods of local households. The construction of the resort expropriated a large amount of arable land from the poor population, leading to the loss of their original livelihood activities such as farming and fishing. Moreover, the poor often have limited knowledge and skills to secure high-paying jobs in resorts, resulting in only a small group of elites truly benefiting from tourism development. Therefore, effective tourism development and management models are required to truly improve the livelihoods of households in destination communities (Ramaano, 2023; Woyesa & Kumar, 2021).

The studies above demonstrate that tourism development significantly impacts the livelihoods of households. Tourism development not only reduces their livelihood vulnerability and promotes the increase of their livelihood capital and the transformation of livelihood strategies, but it also presents certain challenges to their livelihood sustainability. The uneven distribution of income during tourism development and differences in households' livelihood capacities are likely to further exacerbate livelihood differentiation. Additionally, due to the inherent uncertainty of tourism, a single tourism-led livelihood mode may lead to a decrease in livelihood diversity and stability. Therefore, the academic exploration of the disturbances that tourism brings to rural households' livelihoods, the patterns of change in livelihoods as households adapt to rural tourism development, and how households in tourism destinations can leverage the livelihood opportunities presented by rural tourism while mitigating risks to achieve sustainable livelihoods will become the primary focus of this study.

## **2.4 Livelihood adaptation of households in tourism destinations**

Existing research on livelihood adaptation among households in tourism destinations centers on three key areas: (1) analysis of livelihood adaptive behaviors and patterns, (2) evaluation of livelihood capacity and outcomes, and (3) examination of the factors influencing livelihood adaptation.

### **2.4.1 Households' livelihood adaptive behaviors and patterns**

Analyzing the livelihood adaptive behaviors or strategies of households in tourism destinations through typical case studies is one of the main focuses of livelihood adaptation research. Adaptive behavior effectively reflects the coping strategies households adopt in response to external disturbances, and different adaptive behaviors directly determine their livelihood adaptive outcomes (Rao et al., 2022; Wu et al., 2019; Yin et al., 2020). Studies have examined the livelihood adaptive behaviors and modes of households in numerous typical case areas, finding that tourism development disrupts the relatively simple livelihood strategies of farming or migrant work traditionally pursued by rural households (Bires & Raj, 2020; Snyder & Sulle, 2011).

In the process of rural tourism development, households choose different livelihood strategies based on the external tourism development environment and their internal survival and development needs and capabilities (Burbano & Meredith, 2021; Li et al., 2020b). The main livelihood adaptive behaviors of households in rural tourism destinations include tourism-led or year-round migrant work-led strategies, while seasonal migrant work, tourism operations, local odd jobs, and traditional agricultural production serve as auxiliary adaptive behaviors. Households form their final adaptive strategies and modes by considering their own situations and the external environment (Jing et al., 2024). These strategies include diversified livelihood combinations such as tourism-led, tourism-franchised, balanced and part-time operations, work-led, and agriculture-oriented modes (He et al., 2019; Huang et al., 2017; Li et al., 2020a; Yu et al., 2013).

Current studies on the strategies and patterns of households' livelihood adaptive behaviors in rural tourism destinations provide a robust theoretical basis for understanding the diachronic evolution and mechanisms of households' behavioral adjustments to rural tourism development. These studies make significant contributions to the research on households' livelihoods in rural tourism destinations.

### **2.4.2 Evaluation of rural households' livelihood adaptability and outcomes**

Households' livelihood adaptive capacity is central to adaptation research, as it significantly influences households' choices of adaptive behaviors, reduces livelihood vulnerability, and promotes the successful transformation of livelihood strategies (Dai et al., 2018; Li et al., 2020a). Existing studies have developed evaluation index systems for

assessing households' livelihood adaptive capacity from various theoretical perspectives. For instance, Li et al. (2020a) quantitatively evaluated livelihood adaptive capacity based on the five types of livelihood capital in sustainable livelihood framework: natural capacity, labor capacity, material capacity, economic capacity, and social capacity. He et al. (2019) and Jia et al. (2021) expanded this framework by adding three indicators: cognitive factors, local perception, and geographical location, to provide a more comprehensive measure of livelihood adaptive capacity. Chen et al. (2020) and Jing et al. (2024) approached the evaluation from the perspective of resilience, constructing an index system based on three dimensions: buffering capacity, self-organization capacity, and learning capacity. Meanwhile, Jiang et al. (2020) evaluated rural households' livelihood adaptive capacity using six dimensions: policy capacity, social capacity, ecological capacity, economic capacity, cultural capacity, and psychological capacity.

Livelihood adaptive outcomes refer to the subjective perceptions and evaluations of the results of households' adaptive behaviors (Rao et al., 2022). Scholars evaluating the adaptive outcomes of households in rural tourism destinations focus on changes in five types of livelihood capital: natural capital, physical capital, financial capital, human capital, and social capital (Wen et al., 2020). They also consider the level of annual household income and livelihood diversity (Burbano & Meredith, 2021; Yu et al., 2013), as well as overall life satisfaction (Li et al., 2020).

In summary, most scholars assess livelihood adaptive capacity and outcomes based on households' livelihood capital, viewing it as both fundamental to adaptive capacity and a direct manifestation of adaptive outcomes. While households' livelihood capital can reasonably reflect their adaptive capacity and outcomes, there exist fundamental distinctions among these three concepts. Hence, future research should aim to delineate more precisely the defining characteristics of rural households' livelihood adaptive capacity and outcomes, and develop a more refined evaluation index system accordingly. Moreover, constructing more accurate indicators is essential for the comprehensive assessment of households' livelihood adaptive capacity and outcomes in tourism destinations.

### **2.4.3 Factors influencing households' livelihood adaptation**

Scholars generally assert that household livelihood adaptation depends not only on their internal adaptive capacity but also on external environmental influences (Burbano & Meredith, 2021; Ding et al., 2019; Guan & Yu, 2020). Horn and Simmons (2002) examined

tourism adaptation among households in two New Zealand communities, highlighting the close relationship between household livelihood adaptation and their external environment, particularly noting the impact of community tourism development management models on adaptation strategies. Wu et al. (2018) studied adaptation in six traditional villages in China, identifying five primary factors—policy, society, ecology, economy, and psychology—that significantly influence household adaptation in rural tourism development. However, research by Wen et al. (2020) and Li et al. (2020c) underscores that household livelihood adaptation in rural tourism destinations is largely constrained by their available livelihood capital. Yu et al. (2013), Wu et al. (2017a), Dai et al. (2018), He et al. (2019), and Li et al. (2020a) further emphasize the critical roles of cognitive abilities in understanding tourism opportunities and policies, as well as the geographic location of households in shaping their livelihood adaptive strategies.

Overall, the sustainable livelihood analysis framework remains a foundational theory for scholars to comprehend the factors influencing households' livelihood adaptation in tourism destinations. Most researchers posit that the diverse types of livelihood capital owned by households are pivotal in shaping their adaptive strategies. However, existing research lacks a comprehensive discussion on the influence of external factors such as rural tourism development policies, social environments, and shifts in rural tourism market demands on livelihood adaptation. Thus, further research is needed to investigate the mechanisms through which households adopt their livelihood strategies in rural tourism destinations, considering both internal and external factors.

## **2.5 Research gaps**

Following the delineation of key concepts and a comprehensive review of the literature on the impact of tourism development on rural households' livelihoods and households' livelihood adaptation in tourism destinations, it is evident that while research on household livelihoods within the context of tourism development is becoming increasingly detailed, critical reflection remains inadequate. Existing studies still present the following gaps:

Firstly, there is a lack of comprehensive analysis regarding the disturbances caused by rural tourism development on households' livelihood systems. Most existing literatures that focus on the impact of tourism development on households' livelihoods utilize the sustainable livelihood framework. These studies predominantly analyze how tourism

development affects the context of livelihoods, livelihood capital, transformation of livelihood strategies, improvement of livelihood outcomes, and adjustments in relevant institutions and systems. However, these studies concentrate on the effects of tourism development on the livelihood outcomes of rural households, without fundamentally analyzing the disturbances caused by tourism development on the original livelihood system. Accurately identifying these disturbances caused by tourism development on households' livelihood systems is crucial for analyzing their livelihood adaptation. Moreover, households' perception of livelihood disturbances directly influences their adaptive behaviors and strategies (Dai et al., 2022; Qi et al., 2017; Wu et al., 2017b). Therefore, it is essential to effectively identify the types of disturbances faced by households and analyze their perceptions of how tourism impacts their livelihoods.

Secondly, there is a lack of attention to the dynamic evolution of households' livelihood adaptive behaviors in response to rural tourism development. Tourism development is not static but displays distinct patterns and characteristics across different stages (Butler, 1980). Existing research on households' livelihood adaptation in tourism destinations often focuses solely on adaptation during a single stage of tourism development, neglecting discussions on the longitudinal evolution of households' adaptive strategies amidst rural tourism development (Burbano & Meredith, 2021; Rao et al., 2022). This oversight makes it challenging to capture the dynamic evolution of households' livelihood adaptive behaviors. Rural tourism development is characterized by dynamic change, influencing the functional structure and components of households' livelihood systems across different phases of development. Therefore, there is a critical need to delineate and reconstruct the process of households' adaptation to rural tourism development, thereby identifying the phased characteristics and longitudinal evolution mechanisms of households' livelihood adaptive behaviors in tourism destinations.

Thirdly, there is a lack of deep analysis regarding the influencing factors and mechanisms of households' livelihood adaptive outcomes in rural tourism destinations. The sustainable livelihood framework remains a pivotal theoretical framework for scholars examining the factors influencing households' livelihood adaptive outcomes in tourism destinations. Some scholars directly utilize the five types of livelihood capital from this framework to denote households' adaptive capacity, positing that livelihood capital is the central factor affecting their livelihood adaptive outcomes (Chen et al., 2015). However, while livelihood adaptive capacity is somewhat linked to livelihood capital, these are distinct concepts, and it can be overly simplistic to exclusively employ livelihood capital

indicators to gauge livelihood adaptive capacity. Moreover, the development and manifestation of households' livelihood adaptive outcomes hinge not only on their livelihood adaptive capacity but also on the interactive and cumulative effects of their internal livelihood adaptive capacity and the external livelihood environment (Dai, Xu, Chen, & Wei, 2022). Therefore, there is a critical need to accurately assess household livelihood adaptive capacity and construct an influential mechanism for livelihood adaptive outcomes that integrates both internal livelihood adaptive capacity and external livelihood environment (including livelihood opportunities and risks).

To address the identified research gaps, this research will first construct an overarching theoretical framework for analyzing the livelihood adaptation of households in rural tourism destinations in the subsequent section. Secondly, it will utilize Huangling scenic area, a representative rural tourism destination in Wuyuan county, Jiangxi province, China, as a case study to conduct a detailed micro-level investigation into how rural households in surrounding villages adapt their livelihoods to rural tourism development. Through the case study, it will identify both the livelihood opportunities and risks introduced by rural tourism to local households, explore the temporal mechanisms underlying the evolution of households' livelihood adaptive behaviors in response to rural tourism development, and examine the factors influencing households' livelihood adaptive outcomes. Drawing upon the findings of this study, theoretical insights and practical implications will be proposed to offer scientifically effective guidance, along with policy suggestions, aimed at fostering livelihood adaptation management and sustainable development of households' livelihoods in rural tourism destinations.

## **2.6 Defining the research framework**

The field of adaptation research is a relatively recent development, with many scholars initially drawing upon concepts of vulnerability and resilience from ecological theory to explore adaptation, highlighting the close interconnection between these concepts (Smit & Wandel, 2006). Two primary theoretical frameworks guide the analysis of livelihood adaptation: the “vulnerability-adaptation” and “adaptation-resilience” perspectives. Vulnerability-focused adaptation research emphasizes the identification of risks and stressors a system may encounter. It aims to reduce the system's sensitivity to external disturbances and thereby enhance internal adaptation (Engle, 2011). When rural households' original livelihood systems are disrupted by tourism, changes in livelihood vulnerability can alter their adaptive capacity, leading to diverse adaptive behaviors

aimed at coping with external disturbances (Miller et al., 2010). On the other hand, resilience-focused adaptation research views adaptability as a core attribute of resilience. It asserts that the adaptive capacity of a system significantly influences its resilience, emphasizing a holistic approach to systems and the interconnectedness among various system elements (Nelson et al., 2007).

Many analytical frameworks for tourism destination adaptation are adoptions or extensions of the framework proposed by Smit et al. (1999) (Figure 2-4), which conceptualizes the adaptive process involving external disturbances (adaptive objects), adaptive entities (households, socio-ecological systems), adaptive behaviors (patterns, responses), and adaptive outcomes (livelihood diversity, livelihood satisfaction). For instance, Nelson et al. (2007) outlined three core components of system adaptation analysis from a resilience perspective: system characteristics, adaptation processes, and adaptation outcomes. Chen et al. (2018b) further developed a livelihood adaptation analysis framework based on the idea of Nelson et al. (2007), which integrates livelihoods and adaptation, advocating a logical analysis structure of “external pressures - adaptation processes - adaptation states”. This framework underscores the critical role of households’ adaptive capacities in responding to livelihood risks under varying livelihood strategies.

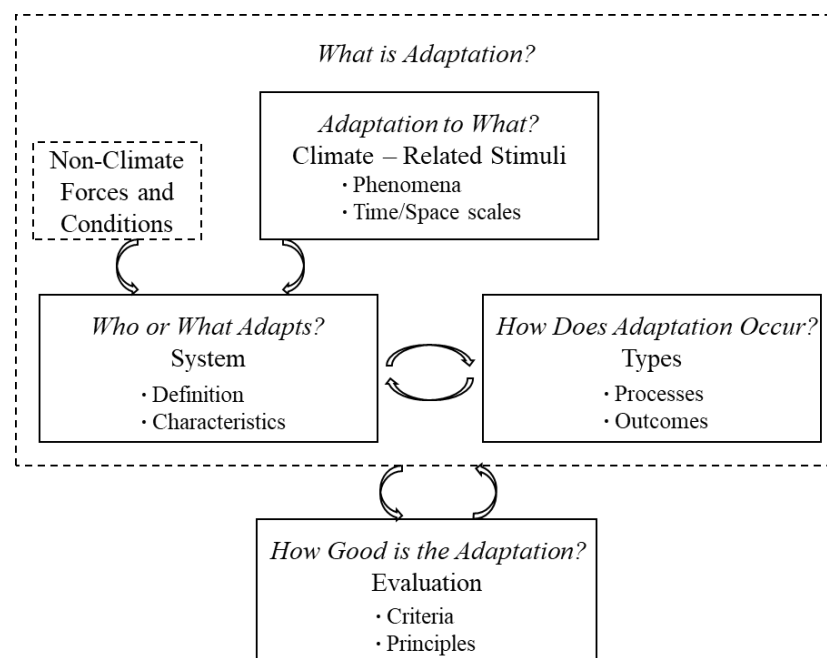


Figure 2- 4 Adaptation to climate change and variability (Adapted from Smit et al. (1999))

It is evident that while there has been significant exploration of analytical frameworks and conceptual ideas concerning households’ livelihood adaptation, the field remains in its nascent stages, with many frameworks borrowing heavily from the adaptive analysis

framework proposed by Smit et al. (1999). Particularly notable is the fact that existing livelihood adaptation frameworks predominantly originate from the realm of climate change research, with no distinct theoretical framework has been specifically developed for analyzing households' livelihood adaptation in the context of rural tourism. In contrast to natural environmental factors like climate change, which are difficult to regulate, tourism exerts a socio-environmental influence on destination communities' original livelihood systems, prompting households to display a more pronounced subjective initiative in adapting to rural tourism development. Therefore, there is a need for further exploration into how to center the adaptive subject (households) within rural tourism development and construct an independent theoretical framework for livelihood adaptation analysis. The impact of rural tourism development on households' livelihood systems is intricate and multifaceted, necessitating a clearer delineation of concepts such as adaptive object, adaptive subject, adaptive process, and adaptive outcome in the study of households' livelihood adaptation in the context of rural tourism.

For households in rural tourism destinations, tourism development serves as the adaptive object, while households themselves constitute the primary adaptive subject. The essence of household livelihood adaptation lies in human adaptation—specifically, the process through which households, as the main agents of adaptation, adjust their behaviors and strategies in response to rural tourism disturbances to achieve their livelihood adaptation goals. However, existing studies have yet to establish a mature analytical framework for understanding households' livelihood adaptation in the context of rural tourism, hindering systematic and comprehensive analyses of the formation, evolution, and influencing mechanisms of such adaptations.

Building upon the preceding discussion, this study aims to center on the adaptive subject (households), highlighting their behavioral processes amidst rural tourism development. It endeavors to construct a theoretical framework for analyzing households' livelihood adaptation in rural tourism destinations that integrates the examination of households' responses to external disturbances, elucidates the dynamic evolution mechanisms of livelihood adaptive behaviors, and discusses the mechanisms influencing livelihood adaptive outcomes (see Figure 2-5).



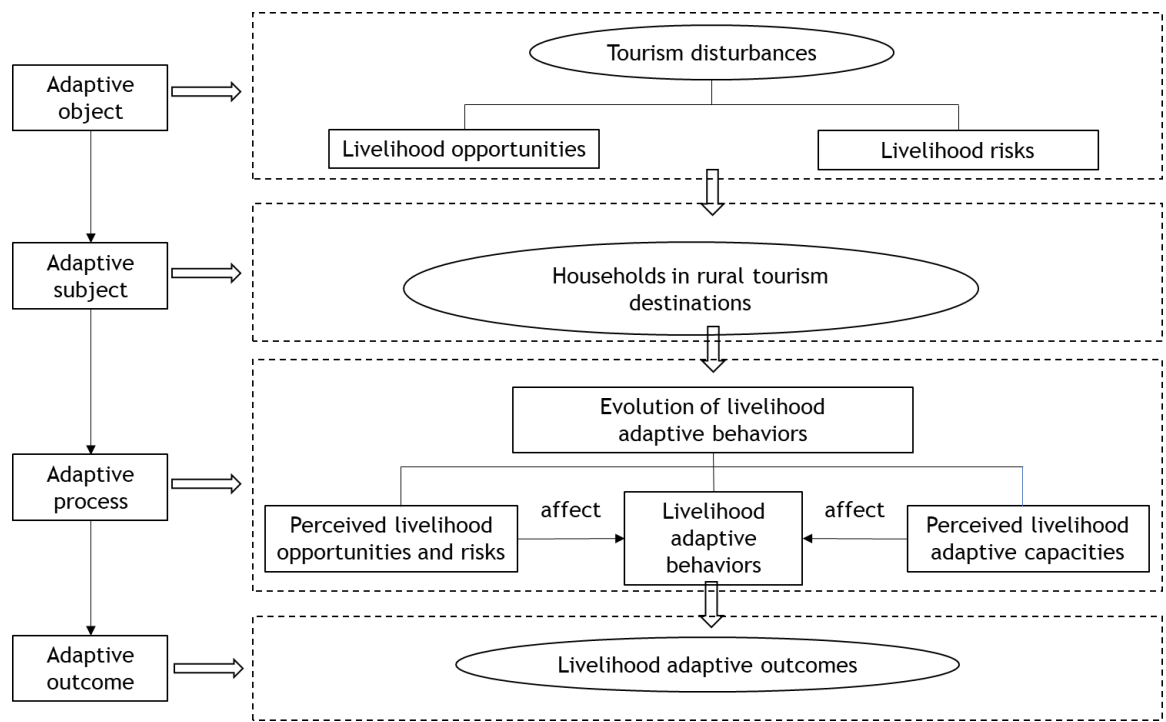


Figure 2-5 Livelihood adaptation analysis framework of households in rural tourism destinations

(Source: Author)

In this analytical framework, the adaptive objects encompass livelihood opportunities and risks introduced by rural tourism development. Households, being the most immediate recipients of the impacts of rural tourism development, constitute the central adaptive subjects affected by these disturbances. To cope with the livelihood disturbances brought by rural tourism development, households employ varying adaptive behaviors contingent upon their perception of external livelihood opportunities, risks, and their own adaptive capacities. These behaviors, in turn, lead to diverse livelihood adaptive outcomes. Moreover, households' adaptation process to rural tourism development is dynamic rather than static. They continuously evolve their perspectives, concepts, and enhance their adaptive capacities. At different stages of rural tourism development, households select different adaptive behaviors. Thus, the response process of households' livelihood adaptive behaviors in rural tourism destinations exhibits dynamic changes and phased evolutionary characteristics. Furthermore, households' responses in rural tourism destinations are shaped not only by their cognitive evaluations of tourism disturbances but also by their adaptive capacities. Put differently, households' perceptions of livelihood opportunities, risks, and adaptive capacities collectively influence their livelihood adaptive behaviors, thereby impacting their ultimate livelihood adaptive outcomes.

## Chapter 3 Research methodology

### 3.1 Introduction

This chapter delineates the methodological approach employed to address the research questions and objectives introduced in Chapter 1. The chapter is structured into five sections. Initially, it provides an overview of research paradigms, examining the ontological, epistemological, and methodological underpinnings of each to justify the subsequent adoption of a mixed-method single case study design.

Second, the justification for the mixed-methods single case study approach is elaborated, justifying the suitability of both the mixed-methods approach and the single case study design for this research. It demonstrates the alignment between the research methods and the research questions and objectives. This section provides a comprehensive overview of the methodologies employed and explicates their utility in addressing the research questions and achieving the research objectives.

Third, the chapter presents selection criteria and a detailed profile of the Huangling scenic area, a representative rural tourism destination in China. The case selection was informed by considerations of representativeness and feasibility. A comprehensive overview of the study area's historical-geographical context, tourist attractions, and rural tourism development is provided.

The fourth section provides a justification for the data collection methods employed. It explicates the rationale for utilizing semi-structured interviews to gather qualitative data on households' perceptions of livelihood disturbances caused by rural tourism development, as well as the changes of their livelihood adaptive behaviors in response to rural tourism development. Additionally, the section outlines the rationale for employing questionnaire surveys to collect quantitative data on the five variables of perceived livelihood opportunities, perceived livelihood risks, perceived livelihood adaptive capacities, livelihood adaptive behaviors, and livelihood adaptive outcomes.

The final section provides a rationale for the data analysis techniques employed in this study. Qualitative content analysis will be utilized to identify livelihood disturbances brought by rural tourism development to households. Thematic analysis will be applied to code and analyze the characteristics and changes in households' livelihood adaptive

behaviors in response to rural tourism development. Finally, partial least squares structural equation modeling (PLS-SEM) will be used to investigate the influence of households' perceived livelihood opportunities, livelihood risks and livelihood adaptive capacities on their livelihood adaptive behaviors, as well as the subsequent impact of these behaviors on their livelihood adaptive outcomes.

### 3.2 Research paradigm

A paradigm constitutes a fundamental worldview, underpinned by ontological, epistemological, and methodological assumptions (Guba & Lincoln, 1994). Within tourism studies, a diverse range of paradigms exist, including interpretivism, critical theory, feminism, positivism, and post-positivism (Tribe et al., 2015). This research adopts a post-positivist paradigm, a prevalent philosophical orientation in social sciences (Gamlen & McIntyre, 2018) and tourism research (Prayag, 2018). Evolving from positivism, post-positivism is characterized by its breadth, integration of theory and practice, emphasis on researcher subjectivity, and methodological pluralism (Ryan, 2006). Phillips (1983) describes post-positivism as a pluralistic philosophy with deep historical roots. The suitability of this paradigm for the current study will be elucidated through an examination of its ontological, epistemological, and methodological underpinnings.

Ontology is concerned with the nature of reality, or in other words, what constitutes reality (Killam, 2013). Within the post-positivist paradigm, reality is conceptualized as multifaceted, comprising both objectively existing facts and subjectively interpreted meanings (Denzin & Lincoln, 2018). Post-positivism is chosen for this study because the author believes that existing knowledge is insufficient to fully explain the livelihood adaptation of households in rural tourism destinations. As discussed in Chapter 2, there are still significant gaps in the existing literature. Although the impacts of tourism development on households' livelihoods, as well as households' adaptive strategies and the factors influencing these adaptations, have been studied, there are limited comprehensive analyses of the livelihood opportunities and risks for households. Furthermore, there is a lack of research investigating changes in households' livelihood adaptive behavior at different stages of tourism development and exploring the relationships between households' perceived opportunities, perceived livelihood risks, perceived adaptive capacities, and livelihood adaptive behaviors and adaptive outcomes. In accordance with the research aim, which is to understand the livelihood adaptation mechanism of households in rural tourism destinations, this study employs a mixed-

methods approach. Qualitative data are collected to identify specific types of livelihood opportunities and risks through qualitative content analysis. Additionally, thematic analysis is used to investigate the changes and evolution mechanisms of livelihood adaptive behaviors developed by households in response to rural tourism development. Quantitative data are also collected to test the relationships between households' perceived livelihood opportunities, perceived livelihood risks, perceived livelihood adaptive capacities, and their adaptive behaviors and outcomes through partial least squares structural equation modeling (PLS-SEM). Thus, this study aims to construct new knowledge while also verifying and explaining existing knowledge. Overall, this research aligns with post-positivism, which posits that there is no absolute truth and that all knowledge is socially constructed, emphasizing the importance of explanation (Henderson, 2011; Gamlen & McIntyre, 2018).

Epistemology is concerned with what can be known (Cohen et al., 2007). The epistemology within post-positivism, like positivism, values objectivity. However, unlike positivism, post-positivists view objectivity as an ideal situation that is largely unattainable because the background of the researcher can influence observations (Killam, 2013). Thus, from an epistemological perspective, post-positivism lies between objectivism and subjectivism, which aligns with this study for the following reasons: a) This study does not adhere to the extreme objectivity or subjectivity of reality within a social phenomenon. Although the livelihood opportunities and risks brought by rural tourism to households have an objective nature, households' perceptions of these opportunities and risks can be subjective. Additionally, the adaptive behaviors developed by households in response to rural tourism development are also subjective. The factors influencing households' livelihood adaptive outcomes analyzed in this study can have objective implications for other rural destinations. b) This study constructs new knowledge primarily through the subjective cognition of the researcher. While rural tourism has brought both livelihood opportunities and risks to households, the exact nature of these opportunities and risks has not been systematically analyzed in the existing literature. Therefore, this study identifies the specific types of livelihood opportunities and risks brought by rural tourism to households. Furthermore, this research analyzes the changing characteristics and summarizes the evolution mechanism of households' adaptive behaviors in response to rural tourism. The processes discussed above are essentially about the discovery of reality. c) This study also tests existing reality through objective quantitative data. According to Henderson (2011), post-positivism emphasizes the value of subjective reality but still adheres to some principles that are

close to positivism. Thus, this research uses quantitative data to explore the possible relationships between households' perceived livelihood opportunities, perceived livelihood risks, perceived livelihood adaptive capacities, and their livelihood adaptive behaviors and outcomes. Overall, the epistemological principles of post-positivism are presented in this study.

Methodology is concerned with the methods and procedures permissible within a paradigm, providing the philosophical foundation for these methods (Gunbayi, 2020). The post-positivist paradigm advocates a mixed-method approach to research methodology, integrating both quantitative and qualitative methods (Creswell & Clark, 2017). For this study, a post-positivistic paradigm is chosen because it legitimizes the use of mixed methods (Henderson, 2011), combining quantitative and qualitative approaches (Killam, 2013). To achieve the three research objectives of this study, a mixed-method approach will be employed for data collection and analysis. On the qualitative side, semi-structured interviews are used to gather data regarding households' views and perceptions of the livelihood opportunities and risks brought by rural tourism, as well as the changes in livelihood adaptive behaviors developed by households in response to rural tourism. Qualitative content analysis is used to identify the specific livelihood opportunities and risks, while thematic analysis is employed to investigate the changing characteristics of households' livelihood adaptive behavior. Quantitatively, this study proposes that households' livelihood adaptive behaviors depend not only on their perception of external livelihood opportunities and risks but also on their perception of their own adaptive capacity. Therefore, a questionnaire survey is used to collect quantitative data on households' perceived livelihood opportunities, perceived livelihood risks, perceived livelihood adaptive capacities, and their livelihood adaptive behaviors and outcomes. SPSS 22.0 and Smart PLS 4.0 software are used to analyze this quantitative data, employing partial least squares structural equation modeling (PLS-SEM) to verify the relationships between these variables. The combination of qualitative and quantitative methods in this study aligns with the post-positivistic methodology, which posits that knowledge existing in a social context can be better understood through a blend of quasi-experimental and interpretive research methods (Guba & Lincoln, 1994). This approach promotes the triangulation of qualitative and quantitative methods, exploring the diversity of facts researchable through various investigations and valuing all findings as essential components for the development of knowledge (Panhwar et al., 2017).

### 3.3 Justification for the mixed-methods single case study approach

Mason (2002) states that it is crucial for the methodology to be well-aligned with the research aims and objectives (Table 3-1) and the guiding epistemology and ontology. In this study, a mixed-method single case study approach was adopted to fulfill these requirements. This methodology integrates qualitative and quantitative methods, enabling a comprehensive understanding and corroboration of the research findings, as advocated by Onghena, Maes, and Heyvaert (2019). The research data collection and analysis methods adopted are detailed in sections 3.5 and 3.6, following the introduction of the study context in section 3.4.

Table 3-1 Alignment of research methods with research questions and objectives

Data collection method	Data source	Data analysis method	Contribution to RQ	Contribution to RO
Semi-structured interview	Qualitative data on households' views regarding the livelihood disturbances brought by rural tourism development	Qualitative content analysis	RQ1	RO1
	Qualitative data on households' views regarding the changes in their livelihood adaptive behaviors in response to rural tourism development	Thematic analysis	RQ2	RO2
Questionnaire survey	Quantitative questionnaire data on five variables: households' perceived livelihood opportunities, perceived livelihood risks, perceived livelihood adaptive capacities, livelihood adaptive behaviors and livelihood adaptive outcomes	PLS-SEM	RO3	RO3

Source: Author.

#### 3.3.1 Rationale for mixed-methods approach

A mixed-methods approach combines qualitative and quantitative research components within a single study. This integration is not only instrumental in addressing complex research questions and achieving broader insights (Onghena, Maes, & Heyvaert, 2019),

but also can address potential limitations of single-method designs by combining the strengths of qualitative and quantitative methodologies (Eisenhardt & Graebner, 2007; Gibbert et al., 2008; Yin, 2018). Among the two classic examples of mixed methods (explanatory sequential design and exploratory sequential design), an exploratory sequential design as defined by Creswell (2009; 2021) and his colleagues (Creswell & Plano Clark, 2018) was chosen for this study. This design prioritizes the collection and analysis of qualitative data to address the first two research objectives *RO1* and *RO2*, followed by the collection and analysis of quantitative data to further address *RO3*. The specific steps are as follows:

Firstly, this research begins by conducting semi-structured interviews with households to collect qualitative data. Qualitative content analysis is employed to analyze the data regarding households' perceptions of livelihood disturbances brought by rural tourism development to address *RO1*. Thematic analysis is then used to analyze the data concerning changes in livelihood adaptive behaviors developed by households in response to rural tourism development, addressing *RO2*. Both *RO1* and *RO2* are outlined in Chapter 1 and re-stated below:

***RO1: to examine how households perceive the disturbances caused by rural tourism development to their livelihoods.***

***RO2: to map the livelihood adaptive strategies implemented by households in response to the development of rural tourism.***

*RO1* and *RO2* are specifically addressed through the following methods:

Semi-structured interviews with households in villages around the Huangling scenic area are conducted to understand their perceptions of livelihood disturbances caused by rural tourism. Qualitative content analysis is used to identify the components of the two dimensions (livelihood opportunities and livelihood risks) of livelihood disturbances brought by rural tourism development to the households. The results will also contribute to the development of a purpose-designed questionnaire focusing on local households' perceived livelihood opportunities and risks brought by rural tourism development.

Semi-structured interviews also target issues related to changes in livelihood adaptive behaviors developed by households in response to rural tourism development. The changes in households' livelihood adaptive behaviors are divided into different stages

through thematic analysis. The typical characteristics of households' livelihood adaptive behaviors at different adaptive stages are further analyzed to summarize the nature of these changes in line with the various stages of rural tourism development.

Then, questionnaire surveys are carried out to collect quantitative data, and PLS-SEM is used to analyze the data to further address the third research objective outlined in Chapter 1, re-stated below:

**RO3: to explore the underlying mechanism influencing livelihood adaptive outcomes for households in rural tourism destinations.**

*RO3* is addressed as follows:

A questionnaire survey is used to collect quantitative data regarding the five variables: perceived livelihood opportunities, perceived livelihood risks, perceived livelihood adaptive capacities, livelihood adaptive behaviors, and livelihood adaptive outcomes. By using PLS-SEM, this study quantitatively analyzes how households' perceived livelihood opportunities, perceived livelihood risks, and perceived livelihood adaptive capacities affect their livelihood adaptive behaviors, and how these adaptive behaviors further influence their livelihood adaptive outcomes.

Additionally, semi-structured interviews are conducted with government officials and managers of the Huangling scenic area, complemented by the collection of secondary data. These secondary data encompass annual tourist arrivals, tourism projects and accolades associated with the Huangling scenic area, as well as the industrial composition and demographic profile of the study area. This data collection aims to develop a comprehensive understanding of the current state of rural tourism development in the Huangling scenic area, its impacts on the livelihoods of surrounding households, and the evolution of household adaptive behaviors in response to tourism development. Concurrent to data collection, field notes and photographs are generated to enhance the richness of the data. These supplementary materials are also employed to triangulate the interview data.

### **3.3.2 Justification for the single case study approach**

Case study is a research method widely used in social sciences, including anthropology, psychology, and management (Marrion et al., 2014). As a method for theory construction



and development, case studies also offer significant advantages in tourism studies (Çakar & Aykol, 2021). Case studies can be categorized into single-case studies and multi-case studies. Researchers can select the appropriate type of case study based on their research objectives (Yin, 2018). Although multi-case studies follow a replication rather than a sampling logic, single-case studies often create more complex theories and yield valuable insights (Mariotto et al., 2014; Yin, 2018). This is because single-case study researchers can align their theory with numerous details of a specific case, while multi-case study researchers typically focus on relationships that can be replicated across most or all cases (Eisenhardt & Graebner, 2007, p. 30). Thus, if the details of a case are seen as an opportunity to refine a clear understanding of reality, a single-case study may contribute more significantly to theoretical development (Tsoukas, 2009).

Despite being often questioned by positivists due to concerns about generalizability, single-case studies can be designed to be more rigorous and methodologically sound. This can be achieved through several approaches: firstly, by designing a clear theoretical framework based on existing research to guide the study and enhance external validity; secondly, by using multiple data sources to perform triangulation and correct for potential biases, thereby improving construct validity; thirdly, by subjecting the research findings to rival explanations to enhance internal validity; and finally, by providing a detailed account of the research procedures to ensure replicability and improve reliability (Eisenhardt & Graebner, 2007; Gibbert et al., 2008; Yin, 2018).

According to Yin (2018, p. 59), “Whether holistic or embedded, single-case studies can be invaluable when the single-case has any of five characteristics—being a critical, extreme or unusual, common, revelatory, or longitudinal case”. The case study of Huangling scenic area in Wuyuan County, Jiangxi Province, China primarily exemplifies the characteristic of being extreme or unusual. Specifically, Huangling scenic area serves as a model for improving households’ livelihood status through rural tourism development. Most households in the research area have adapted well to rural tourism and successfully achieved their livelihood goals, making this an extreme or unusual case. However, this unusual case study can also provide insights into normal processes (Corkin, 2013).

In other words, the representative case study in this research not only offers unique insights into the theory of livelihood adaptation but also has broader significance. It can provide valuable lessons for households in other rural tourism destinations on how to better adapt to rural tourism development and achieve their livelihood goals. This study

can enhance its generalizability through several measures: firstly, by systematically reviewing existing theories on livelihood adaptation, a theoretical framework is developed to guide the analysis of households' livelihood adaptation in rural tourism destinations, thereby enhancing the external validity of the study. Secondly, by employing a mixed-methods approach—combining qualitative and quantitative methods, including semi-structured interviews, questionnaire surveys, and secondary data collection—the study gathers multiple data sources to improve construct validity. Thirdly, by conducting a detailed and thorough analysis of the results and enhancing the persuasiveness of the research findings with original interview texts, the study improves its internal validity. Finally, by providing a comprehensive explanation of the procedures and methods used for data collection and analysis, the study ensures that other scholars can replicate the research, thereby enhancing its reliability.

### **3.4 Study context**

#### **3.4.1 Case selection criteria**

Case selection is a crucial foundation of case studies, enabling researchers to analyze one or multiple case sites according to their research aims (Gustafsson, 2017). This research selects the Huangling scenic area for single-case analysis based on the research questions and objectives, primarily due to its representativeness and feasibility.

##### **3.4.1.1 Representativeness of the study case**

This study focuses on the villages surrounding the Huangling scenic area in Wuyuan county, Jiangxi province. The primary research subjects are households within Huangling new village, Xiaorong village, and Lingjiao village, who are significantly affected by the development of rural tourism in Huangling scenic area. Huangling new village falls under the administrative jurisdiction of Limukeng village committee, comprising over 800 residents distributed across more than 200 households, according to official village records. Xiaorong and Lingjiao villages are situated within Xiaorong administrative village, with over 1100 residents in more than 250 households in Xiaorong village, and over 260 residents in more than 60 households in Lingjiao village, based on official village data.

Prior to the emergence of rural tourism, the livelihoods of residents in Huangling new village, Xiaorong village, and Lingjiao village were predominantly reliant on forestry, tea

cultivation, and grain production, supplemented by the harvesting, processing, and sale of mountain-grown specialty products such as tea oil, bamboo shoots, and chili peppers. However, as the traditional agrarian lifestyle became insufficient to meet rising material aspirations, migrant work emerged as an additional livelihood strategy. The rapid and vigorous development of rural tourism in the Huangling scenic area has facilitated a transition for households in these villages from traditional farming or labor-based livelihoods to tourism-oriented livelihoods. Households in the surrounding villages of the Huangling scenic area participate in rural tourism development through the following three primary methods:

Firstly, they participate in tourism revenue sharing through land and resource equity participation. Embracing the development concept of “ecological equity participation”, the Huangling scenic area has deviated from the traditional model of one-time purchase of rural tourism resource operating rights. Instead, it has established rural economic cooperatives with local households. Public resources such as village ancestral halls and ancient tree groves are included in the capital stock, while privately owned resources like mountains, orchards, and terraced fields are transferred. This arrangement allows local households to engage in the development, construction, and operation of rural tourism in the scenic area, creating a development model of joint investment, protection, development, and benefits between the scenic area and households. The tourism company operating in the Huangling scenic area recognizes that rural tourism development is intimately connected to the lives of local residents. While pursuing its own growth, the company aims to consider the interests of local residents and encourage their involvement in tourism development. This approach integrates households into the development process, allowing them to benefit alongside the company. For example, the tourism company leases thousands of mu of terraced fields from over 600 households. In addition to paying the villagers 400 kilograms of rice per mu per year, as stipulated by national regulations, households also receive dividends through equity participation in the resources. According to data provided during interviews with the secretaries of the Limukeng village committee and the Xiaorong village committee, the average resource fee dividend per capita for villagers in Huangling new village was approximately 500 yuan in 2023, while the average dividend per capita for villagers in Xiaorong village and Lingjiao village was slightly over 300 yuan in the same year.

Secondly, the Huangling scenic area facilitates tourism employment and sideline activities through the re-employment of relocated villagers. This initiative adheres to the standard

of “at least one person per household”, thereby providing employment opportunities for households in surrounding villages. This re-employment manifests in several ways: a) Re-employed villagers engage in various tasks such as flower planting, management, harvesting, and cleaning within the scenic area. This arrangement allows farmers from surrounding villages to earn income through their labor. b) New employment positions are established in response to the development needs of the scenic area, including roles in catering, accommodation reception, and specialized positions such as “Shaiqiu” experts and designers. A notable example is the employment of local elderly women, known as “Huangling Aunties”, by the tourism company for the “Shaiqiu” project. Under the management of the tourism company, these women have transitioned from traditional farming roles to positions as “office workers” and are recognized as “Shaiqiu experts” by tourists, with an average annual income exceeding 35,000 yuan per person. c) Villagers skilled in traditional handicrafts and snack-making are employed in the scenic area to operate stalls and shops, thereby preserving and promoting traditional crafts and folk customs. For instance, farmers adept in crafts such as straw sandal weaving, bamboo weaving, and popcorn making are re-employed by the Huangling scenic area. The appreciation of their craft skills has increased due to tourism development. According to interviews with the secretaries of the Limukeng and Xiaorong village committees, the development of rural tourism in Huangling scenic area has significantly improved the employment structure for local households. While the proportion of households employed in the scenic area is relatively low in Huangling new village and Lingjiao village due to their favorable geographical locations and economic conditions, Xiaorong village has seen substantial involvement. Over 300 villagers from Xiaorong village are engaged in flower and plant cultivation within the scenic area, and more than 100 villagers hold positions in restaurants, guest rooms, and scenic area management. Overall, local residents now make up approximately 70% of the scenic area’s workforce, earning between 2,000 and 8,000 yuan per month.

Thirdly, the development of rural homestays and tourist shops has facilitated independent entrepreneurship. Driven by the growth of rural tourism in the Huangling scenic area, many members of the surrounding villages have returned to their hometowns to establish independent businesses, including rural homestays, transportation services, and tourism product sales. The tourism company has supported this entrepreneurial shift by setting up various types of commercial establishments, such as snack bars, tea houses, taverns, photography studios, and academies, along the two commercial streets—Tianjie and Huaxi Water Street—within the scenic area. These establishments provide a foundational

infrastructure for villagers to return home and start their own businesses. Additionally, the company has constructed two farm markets under the two sightseeing cableways, each with 40 stalls allocated proportionally to local households, enabling them to engage in rural tourism entrepreneurship independently. A notable achievement is that by the end of 2023, Huangling new village, Xiaorong village, and Lingjiao village have collectively developed over 200 rural homestays, with annual incomes typically exceeding 300,000 yuan. Many villagers in Huangling now prefer operating rural homestays or selling agricultural products to working within the scenic area due to the higher income potential. More than half of the households in Huangling new village have established rural homestays. In Xiaorong village, over 60 households have started rural homestays, and the income for villagers who have returned to run these homestays has significantly increased, with the number of homestays continuing to grow. In Lingjiao village, rural homestay operations have become the main source of income, and the village is now recognized as Lingjiao Homestay Village due to the large number and concentration of high-end homestays. Lingjiao village's homestays have emerged as exemplary models of high-end accommodation in Wuyuan county, with well-managed homestays earning annual incomes exceeding 800,000 yuan.

Overall, the development of rural tourism in the Huangling scenic area has significantly improved the livelihoods of households in the surrounding villages. Consequently, the success of poverty alleviation through the rural tourism industry in Huangling has been recognized not only as a model for rural tourism and rural revitalization in China but has also been distinguished as a “World Tourism Alliance Tourism Poverty Alleviation Case”, as announced by the World Tourism Alliance in 2020. The Huangling scenic area has thus emerged as an exemplary model for transforming rural households' livelihoods through rural tourism.

#### **3.4.1.2 The feasibility of the study case**

The author possesses excellent accessibility to and availability of data for the study case. Prior to selecting the doctoral research topic, the author conducted four field investigations in the Huangling scenic area of Wuyuan county. These visits provided the researcher with a comprehensive understanding of rural tourism development within the study case and detailed insights into the livelihood conditions of households in Huangling new village, Xiaorong village, and Lingjiao village. These preliminary research experiences have established a solid foundation for this study.

Since March 2018, the author has concentrated on the development of rural tourism in Wuyuan county, Jiangxi province, conducting a series of studies with Wuyuan county as the case study. These researches include investigations into tourist experiences in rural areas, the sustainable livelihoods of rural tourism households, and the happiness of residents in rural tourism destinations. During these earlier studies, the author undertook nearly ten field surveys in Wuyuan county, encompassing specific villages such as Huangling, Likeng, Jiangwan, Xiaoqi, Wangkou, Jiangling, Yantian, Sixi Yancun, Hongguan, Changxi, and Xunjiansi. This extensive fieldwork has afforded the author a thorough and nuanced understanding of the overall development of rural tourism in Wuyuan county.

Furthermore, the author engaged in multiple discussions and exchanges with the tourism management departments of Wuyuan county, the village committees in Huangling scenic area, and the managers of the scenic area. These interactions have fostered a positive rapport, ensuring that the relevant government departments and scenic area managers will facilitate and support the field research and data collection for this study.

### **3.4.2 Historical-geographical context**

In this research, the villages surrounding the Huangling scenic area in Wuyuan county, Jiangxi province, China, were selected as the case study area. The Huangling scenic area is developed from Huangling ancient village, which belongs to Jiangwan town, Wuyuan county, Shangrao city, Jiangxi province (see Figure 3-1). It is situated approximately 39 kilometers from the center of Wuyuan county and about 7 kilometers from the center of Jiangwan town, covering a total area of approximately 7.8 square kilometers. Currently, provincial highways and township roads connect Wuyuan county to Huangling. Wuyuan county, renowned as the most beautiful village in China, began developing rural tourism in 1993. The area's ancient villages, such as Jiangwan, Xiaoqi, Wangkou, Likeng, Sixi, and Yancun, with their well-preserved village aesthetics and rich cultural heritage, provided the initial impetus for rural tourism development in Wuyuan. After nearly 40 years of development, Wuyuan is now the only national 3A tourist attraction named after the entire county in China. It boasts one national 5A-level tourist area and 13 4A-level tourist areas, making it the county with the most 4A-level and above tourist areas in China. Wuyuan has received more than 30 national honors, including titles such as National Leisure Agriculture and Rural Tourism Demonstration County, National "Green Water and Green Mountains are Golden Mountains and Silver Mountains" Practice Innovation Base, National Forest Tourism Demonstration County, National Rural Tourism Resort

Experimental Zone, Chinese Excellent International Rural Tourism Destination, and National Ecological Civilization Construction Demonstration County.

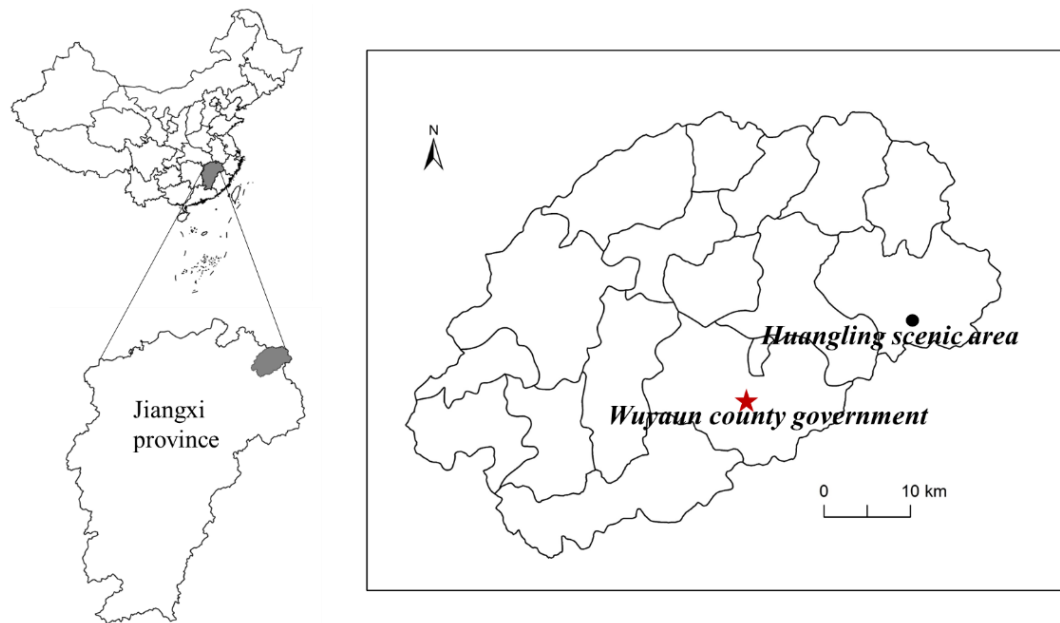


Figure 3-1 The location of the study case  
(Source: Author)

In 2019, Wuyuan welcomed 24.63 million tourists, generating tourism revenue of over 24 billion yuan (approximately \$3.39 billion). Despite a significant downturn in 2022 due to the pandemic, which led to the coldest tourist season for Wuyuan's famous rape flowers, the county still attracted 14.68 million tourists and earned tourism revenue of 14.39 billion yuan (about \$1.98 billion). In 2023, Wuyuan County received a total of 26.203 million tourists and achieved a record high in comprehensive revenue, amounting to 25.68 billion yuan (about \$3.53 billion). The county was honored with the titles of "Top 100 Counties in China for Comprehensive Tourism Strength in 2023" and "National Demonstration Zone for Integrated Development of Culture and Tourism Industries".

Although the Huangling scenic area, officially opened in 2014, began relatively late, it has carved out a unique path amidst the growing challenges faced by Wuyuan's ancient village tourism. Through more than a decade of development, it has effectively preserved endangered ancient villages, revived traditional agrarian civilization, and revitalized the economic, industrial, and cultural confidence of rural residents. It has addressed various practical issues, such as local urbanization of farmers and intensive transfer of land management rights, while creating the iconic "Huangling Shaiqiu" symbol. Huangling scenic area has emerged as a leading and representative rural tourism destination in Wuyuan's ongoing rural tourism development.

Huangling ancient village, originally named Huangli, was renamed Huangling during the late Ming dynasty. According to the Wuyuan County Chronicle from the Daoguang period: *This place was formerly known as Huangli, located ninety miles east of the county, with a height of one hundred ren, abundant bamboo, with the largest being a foot in diameter, hence the name.*<sup>1</sup> Huangling ancient village is a settlement of the Cao clan, founded during the Xuanzong period of the Ming dynasty (1426-1435). The village, whose inhabitants are all surnamed Cao, was established by ancestors who migrated from Anhui, Shexian, and Huangdun, resulting in a village history of over 600 years. It exemplifies a typical mountain fortress-style Hui-style ancient village.

Situated on the northern slope of the Yufeng branch of the Shier Mountain range at an altitude of 1260 meters, Huangling ancient village is surrounded by mountains on all sides. The village is located in a small hilly terrain with a natural slope ranging from 20 to 42 degrees from northeast to southwest. The climate is characterized by a subtropical temperate monsoon climate with distinct seasons, an average annual temperature of 14.3°C, and an average annual rainfall of 1820.2 mm. The frost-free period is approximately 246 days, with 66.7% of rainfall occurring in spring and summer. Approximately 1 kilometer northeast of Huangling ancient village lies the Limukeng river, while about 30 meters southwest of the village is the Xiaorongkeng river. The area benefits from year-round mountain spring water, providing abundant and high-quality water resources. Vegetation is robust, with a forest coverage rate of up to 94%, and the highest concentration of negative oxygen ions reaching 86,500 per cubic centimeter.

The village is built against the Shier Mountain, with limited construction land resulting in dense residential buildings primarily distributed along southwest-facing ravines. The overall terrain is relatively low, with the village cascading from the cliff edge to the halfway point, presenting a distinct tiered distribution. Hundreds of Hui-style ancient residences are scattered across the slope with an elevation difference of about one hundred meters, forming a unique Hui-style residential landscape, famously known as the “ancient village hanging on the cliff” (see Figure 3-2). Throughout its history, Huangling Ancient Village has retained a relatively pristine appearance. Due to its significant number of ancient residential buildings and its profound historical and cultural heritage, it was included in the third batch of China’s Traditional Village List by the Ministry of

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<sup>1</sup> Source: [Qing] Huang Yingyun, Zhu Yuanli, “Wuyuan County Chronicles”, engraved in the sixth year of Daoguang of the Qing Dynasty (1826).





Figure 3-2 Picture of the Huangling ancient village before the rural tourism development  
(Source: Provided by the villagers of Huangling new village)

### 3.4.3 Tourist attractions

Huangling possesses a wealth of natural and cultural tourism attractions, with its most distinctive features including the expansive terraced fields, the ancient trees, traditional architectural residences and dwellings, the “Shaiqiu” folk customs, wedding folk customs, clan culture, and various traditional handicrafts.

#### 3.4.3.1 Terraced landscape

Over its nearly 600-year history, the industrious and resourceful villagers of Huangling have transformed the steep foothills into layered terraced fields. Initially, the Huangling terraces were cultivated at the base of the mountain, where water was abundant and the slope gentle. As the Cao clan expanded and the population grew, the terraced fields gradually extended upwards along the mountain. Through centuries of rice cultivation, the people of Huangling adapted to the slope, repaired ponds to store water, dug canals for irrigation, and periodically expanded the terraced fields. This process has resulted in the current extensive network of terraced fields, which now forms a terraced landscape

embedded in the high mountains and deep valleys, akin to a “poetry of the earth” (see Figure 3-3).



Figure 3-3 Landscape of terraced fields in Huangling  
(Source: “Wuyuan Huangling Shaiqiu Renjia” WeChat public account)

The Huangling terraces have been recognized by many netizens as one of the “top ten most beautiful terraces in the world”. Each spring, after plowing, the water-filled terraced fields resemble mirrors, reflecting the sky and clouds. Following the transplantation of rice seedlings, the fields gradually change from light green to dark green as the plants grow, culminating in a golden harvest in autumn. One of the most captivating attractions for tourists is the early spring period, when the blooming rapeseed flowers in March complement the ancient architecture and residential buildings of the village, creating a particularly stunning landscape of a thousand-acre terraced sea of flowers.

#### **3.4.3.2 Ancient trees**

Huangling ancient village adheres to the Shuikou cultural tradition of Huizhou’s ancient villages, emphasizing the construction of the village’s “Shuikou”, which is considered crucial for harnessing wind and gathering energy. This belief is deeply connected to the village’s prosperity and fate. Huangling ancient village boasts rare ancient tree resources, and its water mouth area still retains lush ancient forests (Figure 3-4). Notable among



these are national first-class protected plants, including yews, ginkgoes, camphor trees, and red maples.



Figure 3-4 Ancient trees at the mouth of Huangling Shuikou  
(Source: Author)

Survey data indicate that Huangling ancient village is home to 52 ancient and notable trees (over 200 years old), including 17 yew trees, which are rare and endangered national-level protected species, with the oldest yew estimated to be over 1,200 years old. The village also features 17 camphor trees, 2 ginkgo trees, 4 privet trees, 5 sweetgum trees, 3 rough-leaved trees, 2 oak trees, and 2 cymbal trees. Additionally, under the ancient trees near Shuikou and the head of Buchan Bridge, there are rare patches of square bamboo forests.

The core elements of Huangling's feng shui include the verdant Lailong mountain, the dense yew forests at Shuikou, the quaint stone arch bridge, the Wuxian Temple, and the oval five-color fish pond. These features—Lailong mountain with its upright green pines, Xianghua tree enduring for centuries, Shuikou forest providing ample canopy, Wusetang symbolizing wealth and energy, Stone archway marking the village entrance, Buchan bridge controlling the water mouth, and Wuxian temple ensuring protection and peace—collectively underscore the feng shui characteristics that define Huangling.

#### **3.4.3.3 Ancient architectures**

Huangling ancient village retains a substantial number of ancient residential buildings. Currently, the village has 83 traditional structures, including Hui-style official residences, folk houses, ancestral halls, temples, academies, archways, and theaters. Among these, there are 7 county-level cultural relics protection units (Yixin Building, Zhongwu, Shende

Hall, Peide Hall, Shuhe Hall, Zhuxu Hall, and Yangyuan Hall), 5 public buildings, and 78 residential buildings. The total area of traditional construction amounts to 11,065.46 square meters.

The buildings in Huangling well-preserve the characteristics of ancient Hui-style architecture (see Figure 3-5). The overall spatial layout adheres to the traditional orientation, sitting north and facing south, with mountainous support, emphasizing spatial lighting. The construction materials used include bricks, wood, and stone. The harmonious combination of plastered walls, daiwa (roof ridges), horse-head walls, brick carvings, wood carvings, stone carvings, stacked courtyards, high ridge cornices, winding corridors, and various pavilions constitutes the essence of Hui-style architecture.



Figure 3-5 Interior and exterior decoration of the ancient buildings in Huangling  
(Source: Author)

The ancient dwellings in Huangling exhibit a well-thought-out structure, with coordinated layouts and a fresh, elegant style. Particularly notable are the intricate brick, wood, and stone carvings found on door covers, window lintels, beams, columns, and window sashes. These carvings are characterized by their exquisite craftsmanship, diverse forms, realistic modeling, and superb carving techniques, reflecting the industrious wisdom and exceptional skills of ancient Chinese artisans.

A typical feature of Huangling's architectural design is the inclusion of a central courtyard

within the main hall of the house. This feature serves both practical purposes, such as providing natural light, and symbolic purposes, as water represents wealth. Hui-style architecture emphasizes the concept of “unity of nature and man”, promoting harmony between people and their environment. Local villagers often incorporate natural landscapes into their building designs, reflecting the profound cultural values of the Huizhou people. Moreover, the Hui-style architecture includes typical structures such as ancestral halls and archways that symbolize loyalty, filial piety, and righteousness. The design of these buildings prominently reflects Confucian values.

#### **3.4.3.4 “Shaiqiu” folk culture**

“Shaiqiu”, also known as “Drying Crops in Autumn” (Figure 3-6), is a traditional agricultural practice. In mountainous regions where flat land is scarce and the terrain is complex, villagers utilize the front and back of their houses, window sills, and roofs to construct bamboo drying racks. This practice has evolved into a distinctive agricultural phenomenon. The unique lifestyle and the scene of villagers drying crops have become a source of inspiration for painters and photographers, thereby bestowing the poetic name “Shaiqiu” upon this tradition. “Shaiqiu” not only exhibits unique regional characteristics but also reflects traditional Chinese agricultural culture. In alignment with the natural cycles of the 24 solar terms, people dry crops according to specific seasonal rituals. In Huangling, “Shaiqiu” represents the local method for autumn harvesting and winter storage, playing an indispensable role in the daily life of villagers. To adapt to the natural terrain, where flat areas are minimal, the villagers of Huangling have constructed drying platforms on the roofs of their houses.

During harvest seasons, the roofs of Huangling houses or the drying poles extending from the windows are covered with bamboo drying racks of varying sizes. These racks, often long bamboo frames, hold the drying plaques that change in color with the seasons. In spring, bamboo shoots and bracken are dried; in summer, a variety of fruits and vegetables are preserved; in autumn, red peppers and chrysanthemums are dried; and in winter, bacon and sausages are cured. The scattered Hui-style residences in this small mountain village are adorned with colorful grains, fruits, vegetables, and meats, creating a unique rural aesthetic and symbolizing local culture. The “Shaiqiu” culture in Huangling is not merely a picturesque landscape but also a reflection of an agricultural folk tradition with distinct regional characteristics.





Figure 3-6 Huangling Shaiqiu landscape  
(Source: “Wuyuan Huangling Shaiqiu Renjia” WeChat public account)

#### 3.4.3.5 Wedding folk culture

Huangling, which was part of Huizhou in antiquity, has preserved the traditional Huizhou wedding customs (Figure 3-7). In Huangling, wedding activities typically include various rituals such as the intermediary, stepping on the house, carrying the bucket, the marriage ceremony, resigning, boarding the sedan chair, passing through the door, worshipping the hall, entering the bridal chamber, and inviting the uncle, as well as the bride’s return to her mother’s home on the third day of the wedding. From a content perspective, these activities can be categorized into three types: discussions about marriage, the marriage ceremony itself, and meeting relatives. The focus is primarily on the marriage ceremony, during which the groom wears a traditional festive long skirt and gown, while the bride dons a phoenix crown and a Xiuhe suit. The bride, holding a bronze mirror, sits on a sedan chair and is paraded along the ancient village street of Tianjie, accompanied by a guard

of honor and the sounds of suona gongs and drums. The traditional ceremonies, including the sedan chair procession and the bamboo plate ritual in front of the antique Hui-style Yixin building, are observed, culminating in the worship ceremony at the hall.



Figure 3-7 Wedding folk customs in Huangling

(Source: Author)

The worship ceremony adheres to traditional customs, which include the bridegroom lifting the bride's headscarf with a weighing pole, the couple worshipping heaven and earth, and newlyweds offering tea to their parents before proceeding to the bridal chamber. Despite some folk customs fading over time or becoming simplified, the enduring presence of traditional marriage culture in the local residents' practices highlights the ongoing inheritance and development of these customs.

#### 3.4.3.6 Clan culture

Clans are foundational to traditional Chinese rural society, and the practice of compiling genealogies and venerating ancestors in Huangling ancient village plays a pivotal role in the community's spiritual life. Residents' behavior is not solely governed by national laws but is profoundly influenced by clan principles, with clan traditions serving to regulate the thoughts and actions of the entire clan. Key elements of clan organization include genealogies, family temples, ancestral halls, clan fields, and single-surname settlements. Ancestral temples serve as symbols of village cohesion and identity, functioning as venues



for major clan activities such as sacrificial ceremonies. These temples are central to significant rituals during important events, including weddings, the welcoming of daughters, and funerals.

Huangling village is notable for its strong clan culture, where the solemnity, hierarchical structure, and clan-centric ethos of ancestral halls like the “Cao Clan Ancestral Hall” (Figure 3-8) and “Zhongwu” are palpable. The Cao Clan Ancestral Hall, situated at the entrance of Huangling village (currently known as the Wuyuan Folk Culture Exhibition Hall), was originally constructed during the Jiajing period of the Ming dynasty. The present structure is a reconstruction of the original hall and covers an area of approximately 360 square meters. It is designed in the central axis mountain style, featuring three entrances and five bays. The first entrance serves as the ceremonial gate, the second as the hall of enjoyment, and the third as the dormitory. The gate of the ancestral hall is an eight-character wall gate that broadens the scope of the “cultural gate”, emphasizing the prominence of the Cao family.



Figure 3-8 The Wuyuan Folk Culture Center rebuilt from the Cao Clan Ancestral Hall in Huangling  
(Source: Author)

The Cao Clan Ancestral Hall in Huangling embodies the formulation, management, and implementation of clan regulations and patriarchal precepts. It functions not only as a



tangible representation of Huangling's clan culture but also as a central showcase for Huizhou's traditional crafts, including stone carving, wood carving, and brick carving.

### 3.4.3.7 Traditional handicraft skills

Huangling ancient village retains a rich array of intangible cultural heritage handicrafts (Figure 3-9), including carving, inkstone production, paper umbrella making, Wu embroidery, ancient oil extraction, winemaking, and glaze crafting. Among these, the Wuyuan three carvings—brick carving, wood carving, and stone carving—are recognized as traditional Han carving arts in Wuyuan County, Jiangxi Province. The national intangible cultural heritage of inkstone production involves multiple processes centered around carving, including stone selection, design, carving, polishing, and the preparation of inkstone boxes.



a. Ancient Oil Extraction Workshop



b. Ancient Brewery



c. Exhibition of Glass Craft

Figure 3-9 Traditional handicrafts in Huangling  
(Source: Author)

The provincial intangible cultural heritage of Wuyuan Jialu paper umbrella production is renowned for its dexterous craftsmanship and unique style. Representative works include the big red oil paper umbrella, folk dragon and phoenix paper umbrella, and folk flower paper umbrella. With evolving trends, various new types such as blue and white umbrellas, silk umbrellas, and paper-cut flower umbrellas have also been developed.

Wu embroidery, a near-extinct intangible cultural heritage craft, combines techniques from Suzhou and Hui embroidery while showcasing its own distinctive elegance in color and design. The provincial intangible cultural heritage of traditional ancient oil extraction technology, which has been practiced for over 1,000 years, involves manually operating a stone hammer to press oil cakes and produce fresh, natural vegetable oil. The municipal intangible cultural heritage of Zha Ji liquor production is notable as Wuyuan's—and indeed Huizhou's—only continuously operating private winery. The production process, from making koji to final wine, involves unique family heirloom skills, methods, and materials.

Additionally, Huangling ancient village upholds the traditional production techniques for Huang chrysanthemum, which involves processes such as picking, arranging flowers, drying, and storage. This product is known for its aromatic sweetness and health benefits, including enhancing physical fitness and prolonging life. Moreover, Huangling ancient village also preserves the production skills for various traditional snacks, such as Qingming kueh, steamed cakes, and mochi.

### **3.4.4 The history of rural tourism development**

The development of rural tourism in Huangling has undergone four distinct stages, which can be categorized as follows: germination stage (before 2009), initial stage (2009-2013), expansion stage (2014-2019), and consolidation stage (2020-present).

#### **3.4.4.1 Germination stage: Early tourism development through photography (before 2009)**

Before 2009, the Huangling scenic area had not been formally developed for rural tourism, and the villagers had not been fully relocated. Consequently, the ancient village remained largely in its original ecological state, and its tourism functions were not yet fully realized. The tourist attractions within the village were relatively limited, primarily featuring the scenic terraced landscapes cultivated by generations of Huangling villagers, the numerous well-preserved ancient residential buildings, and the traditional agricultural practice of drying crops. Nevertheless, due to its exceptional natural conditions and rich cultural heritage, Huangling attracted backpackers, photography enthusiasts, and experts in ancient architecture who visited for sightseeing, photography, and mountain climbing experiences.

As early as the 1990s, Huangling's unique mountain villages, agricultural customs related

to drying crops, and terraced landscapes began to attract attention from visiting artists, gradually gaining recognition. Subsequently, numerous photographers and painters arrived to capture these scenes through photographs and sketches, with their works appearing regularly in exhibitions and publications. Among these artists, the local photographer Ren Chuncai is particularly notable. His photographic works “Shaiqiu” (2001) and “Spicy sky” (2008) received awards in various competitions and were widely published. The term “Shaiqiu” in these works vividly represents the distinctive agricultural practice of drying crops practiced by local residents. Many of Ren Chuncai’s photography collections prominently feature the term “Shaiqiu”, such as in titles like “The Black Tones Focus Attention on the Essence of Shaiqiu” and “The Red Peppers, Yellow Rice, Black Tiles, White Walls... What Kind of Shaiqiu Scene Will That Be”?

The “Shaiqiu” landscape, which has been refined and elevated by artists from the agricultural customs of drying crops observed during the villagers’ production labor, became the central tourist attraction of Huangling ancient village. This growing interest led to a continuous influx of independent travelers, gradually highlighting the tourism development potential of Huangling ancient village.

#### **3.4.4.2 Initial stage: Development of core tourist attractions through infrastructure enhancement (2009~2013)**

Between 2009 and 2013, the Huangling scenic area entered the initial phase of rural tourism development. Prior to 2009, the region faced significant challenges, including limited transportation access and severe water shortages during the autumn and winter seasons. Additionally, frequent local landslides and casualties during the rainy season, due to inadequate drainage in the streets and alleys, further exacerbated the difficulties. Most farmers’ livelihood resources were located downhill from Huangling ancient village. Encouraged by government initiatives, villagers underwent two large-scale relocations in 1993 and 2002. However, by the time rural tourism development began in 2009, over 330 villagers from more than 70 households still resided in the village. The population largely comprised the elderly and children, as many young adults had migrated for work, resulting in a semi-abandoned and desolate village environment. Furthermore, the village’s poor medical, educational, and transportation infrastructure prompted many of those who could afford to relocate downhill or to the county seat.

In response to the threat of the village’s potential disappearance, the Wuyuan county government decided to leverage social capital for the protective development of the

village through tourism-related poverty alleviation measures. In 2009, the Wuyuan county government signed a contract with Wuyuan Rural Culture Development Co., Ltd. (now known as “Wuyuan Huangling Cultural Tourism Co., Ltd.”, hereinafter referred to as “the tourism company”) to jointly facilitate the relocation of villagers to other areas. By 2011, the relocation was largely completed, resulting in the establishment of two distinct areas: the Huangling scenic area on the mountainside and the Huangling new village at the base of the mountain. The tourism company assumed responsibility for the development and operation of rural tourism in the Huangling scenic area, while the former residents of Huangling ancient village moved to Huangling new village.

In 2013, the tourism company acquired the right to use 33,000 square meters of construction land in Huangling ancient village through public bidding and auction. Following the elimination of geological hazards and significant improvements to the living environment and agricultural conditions for local households, ownership rights were clarified. This process facilitated the comprehensive revitalization of the ancient village’s tourism development and operation rights.

Upon acquiring the tourism operation rights for Huangling ancient village, the initial focus was on revitalizing the village’s appearance as a foundational step in its rural tourism development. Despite the preservation of numerous ancient residential buildings, which had stood for nearly 600 years, many were significantly damaged, impacting the village’s overall aesthetic. Consequently, alongside assisting villagers with relocation and the exchange of housing property rights, the tourism company engaged experts in ancient building restoration. A dedicated team was established to manually restore the village’s ancient buildings, guided by villagers’ memories to accurately reflect the village’s historical appearance. Adhering to the principle of “repairing the old as it was”, each traditional building was meticulously preserved to maintain the architectural style of the Ming and Qing dynasties typical of Huizhou. The tourism company invested over 300 million yuan in the relocation and restoration project, with an investment intensity of 10,000 yuan per square meter of construction land. Through these efforts in restoration, relocation, and reconstruction, Huangling ancient village has reclaimed its picturesque village appearance, with the densely clustered ancient residential buildings forming the core traditional architectural landscape of the scenic area (see Figure 3-10).



Figure 3-10 Comparison of old buildings and streets before and after renovation

(Source: Author)

For the long-term rural tourism development of Huangling ancient village, the tourism company engaged experts from Tongji university in Shanghai to prepare the “Wuyuan Huangling Folk Culture Village Development Plan” in 2010. This plan was subsequently designed and constructed by Wuyuan County Village Culture Media Co., Ltd. The initial phase of tourism planning and development focused on establishing Huangling as a national 4A-level tourist attraction. Efforts were directed towards enhancing tourism infrastructure, including roads, cable cars, parking lots, and visitor centers, and leveraging the village’s unique terraced landscapes and “Shaiqiu” scenery to create diverse themed tourism experiences. By the time of its official opening in 2014, Huangling scenic area had developed a relatively comprehensive tourism product system, setting a solid foundation for the subsequent evaluation as a national 4A-level tourist attraction.

#### **3.4.4.3 Expansion stage: Accelerated development of core tourist attractions to stimulate visitor growth (2014~2019)**

The period from 2014 to 2019 marked a phase of rapid development in rural tourism within the Huangling scenic area. The official opening of Huangling scenic area in 2014 signaled the beginning of this accelerated growth. Core attractions, including the Terraced Flower Sea, Shaiqiu Folk Culture, and Flower Town, were swiftly established, and tourism facilities such as dining and accommodation saw significant improvements. This



development led to a substantial increase in visitor numbers. During this period, the advancement of tourism in the Huangling scenic area was reflected in four key aspects:

Firstly, the establishment of the Thousand-Mu Terraced Flower Sea brand through the innovative use of “flowers” as a medium stands out. Huangling has maximized its existing thousand-mu terraced landscape by incorporating advanced technologies and collaborative research. This includes the use of helicopters and unmanned aerial vehicles (UAVs) equipped with VR goggles to provide visitors with panoramic views of the ancient Huizhou dwellings and expansive terraced rapeseed flower fields from a height of one hundred meters (Figure 3-11). Additionally, partnerships with agricultural research institutes have led to the optimization of traditional rapeseed flower varieties, effectively extending their flowering period and successfully cultivating new colored varieties. Huangling has also organized thematic events such as the “Flower Festival”, “Flower Sea Concert”, and “Flower Sea Hiking”, and introduced new attractions like the “Flower Sea Restaurant” and “Flower Field Tea House”. The Thousand-Mu Terraced Flower Sea has become a central feature of Huangling’s rural tourism brand. In 2019, during the peak rapeseed flower season, the Huangling Scenic Area attracted 556,000 visitors, constituting 40% of the total annual visitation. This season has thus become a primary revenue-generating period for the Huangling scenic area.



a. Helicopter flower viewing



b. VR flower viewing



Figure 3-11 Helicopter and VR flower viewing (left) and foreign media coverage of VR flower viewing (right)

(Source: “Wuyuan Huangling Shaiqiu Renjia” WeChat public account)

Secondly, a concerted effort was made to revitalize and elevate the “Shaiqiu” tradition in Huangling as a flagship cultural symbol for China. From the inception of the Huangling Scenic Area development, the tourism company initiated the reconstruction of the “Shaiqiu” folk custom and the creation of a “Shaiqiu” product line with the ambitious goal of establishing “Huangling Shaiqiu” as a national cultural icon. The revitalization strategy centered on two key components. On the one hand, it enhanced the design and content of “Shaiqiu”. Local farmer-photographers were hired to design daily and festival-themed “Shaiqiu” displays, while local villagers were re-employed as professional “Shaiqiu Aunties” to perform the traditional drying work. In 2014, these aunties created a gigantic “national flag” from chrysanthemums, rice grains, and white beans, measuring 5.76 meters long and 3.84 meters wide. This creation garnered significant media attention from outlets such as the Associated Press and Reuters, with headlines about the display persisting for over a week and generating more than 270 million clicks. Consequently, the “Shaiqiu” landscape in Huangling was recognized as one of the “Most Beautiful Symbols of China”, and the scenic area was designated a national 4A-level tourist attraction. Over the years, Huangling has created various “Shaiqiu” patterns to celebrate significant events, including the anniversaries of the People’s Liberation Army, the National Congress of the Communist Party of China, the reform and opening up, and the founding of the People’s Republic of China (Figure 3-12). These creative displays have significantly boosted the scenic area’s visibility and reputation.



Figure 3-12 The creative Shaiqiu patterns of Huangling in different periods  
(Source: “Wuyuan Huangling Shaiqiu Renjia” WeChat public account)

On the other hand, the tourism company integrated traditional festivals to enrich the cultural connotations of “Shaiqiu”. The traditional “Washing and Drying Festival” of the sixth day of the sixth lunar month was shifted to the beginning of autumn, creating the annual “Huangling Shaiqiu Festival”. This festival redefined the cultural significance of “Shaiqiu” through ceremonies and events. For instance, from August 6th to 8th, 2018, the Fourth China Huangling Shaiqiu Cultural Festival and the Seminar on the Culture of the Twenty-Four Solar Terms and Folk Customs were held under the theme “Our Festival · Beginning of Autumn”. Jointly organized by the China Folk Literature and Art Association, the Jiangxi Provincial Literary and Artistic Federation, the Jiangxi Provincial Folk Literature and Art Association, the Wuyuan County Committee Propaganda Department, and Huangling Cultural Tourism Co., Ltd., these events reinforced the festival’s identity among locals and tourists, enhancing the brand influence of the “Shaiqiu” cultural symbol.

Thirdly, aiming to comprehensively enhance the quality of tourism services with the goal of creating a national 5A-level tourist attraction. Between 2015 and 2016, Huangling scenic area established and launched the Tianjie Long Table Banquet, Tianjie Hotel, and Shaiqiu Boutique Inn (see Figure 3-13) to create unique dining and accommodation experiences for tourists, thereby significantly improving the quality of catering and accommodation services. In 2017, Huangling comprehensively launched the initiative to create a national 5A-level tourist attraction. In May of the same year, the landscape resource evaluation for creating a national 5A-level tourist attraction in Huangling passed the provincial-level preliminary evaluation. In 2018, it was designated as the “Year of Enhancing Tourism Service Quality” in Huangling. In April of that year, the “Huangling Scenic Area National 5A-Level Tourist Attraction Creation Enhancement Plan” passed expert review, leading to the upgrade and renovation of basic hardware facilities such as roads, parking lots, tourist toilets, and tourist shopping areas in accordance with the standards of national 5A-level tourist attractions. Through these efforts, Huangling has comprehensively improved tourism infrastructure with the goal of creating a national 5A-level tourist attraction, significantly enhancing the quality of tourism services.





Figure 3-13 Tianjie banquet (left) and Shaiqiu boutique inn (right)  
(Source: “Wuyuan Huangling Shaiqiu Renjia” WeChat public account)

Fourthly, continuously innovating to enrich the tourism product system. While enhancing the quality of tourism services, Huangling scenic area persistently explores and innovates, enriching its tourism product offerings. In 2017, after the rapeseed flower season, Huangling introduced the “Flower Town” (see Figure 3-14) concept for the first time, with the main flowering period from April to August. By planting flowers and plants such as peach blossoms, pear blossoms, cherry blossoms, pansies, roses, hydrangeas, bougainvillea, lavender, wisteria, and alpine plants, the entire Huangling ancient village was adorned with various flowers and greenery. Creative themes such as “Joyful Gate,” “Full Moon of Flowers,” and “Flower Piggy” were developed. That year, Huangling was rated as the “Most Beautiful Exterior Scene at Home and Abroad” by the Venice International Film Festival Organizing Committee. Since then, Huangling has introduced diverse “Flower Town” themed products annually, each receiving coverage from hundreds of renowned media outlets both domestically and internationally, including Yahoo, MarketWatch, One News Page, and The Wall Street Journal.



Figure 3-14 Landscape of the “flower town”

(Source: “Wuyuan Huangling Shaiqiu Renjia” WeChat public account)

In 2018, to attract the summer tourism market, Huangling scenic area added the “Rural Fairy Tale World” theme park section to the peripheral area of the scenic area. It hired the world’s top professional team from the American Adirondack Studios for planning and design. The park included the first Huizhou-style ice and snow hall, covering about 1200 square meters, with an average annual temperature maintained at minus 8 degrees Celsius. Pure natural transparent ice blocks were used to create top-notch indoor ice sculpture exhibitions and ice slides, offering a cool world of “Ice and Snow Wonderland” and “Snow Village Fairy Tale” for the hot southern summer. In 2019, to further enhance visitors’ touring experiences and extend their stay in the scenic area, Huangling constructed a new commercial street called Huaxi Shuijie, based on the existing core tour route of Tianjie (Figure 3-15). Huaxi Shuijie intersects Tianjie vertically and horizontally, connecting Shuikou, Tianjie, and the Terrace Flower Sea. This not only forms a bidirectional closed-loop tour route, effectively alleviating overcrowding during peak tourist seasons, but also enriches the content of tourists’ experiences. Overall, the number of visitors to Huangling exceeded 1.42 million in 2019, generating operating revenue exceeding 210 million yuan and tax revenue exceeding 40 million yuan. With these achievements, Huangling has been honored with a series of titles, including the Most Beautiful Leisure Village in China, National Demonstration Point for Characteristic Landscape Tourism Towns and Villages, Key Projects for Characteristic Cultural Industries, Demonstration Villages for Business Travel and Cultural Demonstration in China, Model



Villages for Rural Tourism in China, and National Demonstration Projects for Tourism Poverty Alleviation in “Scenic Areas Leading Villages”. Additionally, it won the Asian Tourism “Red Coral Award” twice, in 2017 and 2019.



Figure 3-15 Tianjie (left) and Huaxi water street (right)

(Source: Author)

#### **3.4.4.4 Consolidation stage: Iterative enhancement of core attractions and tourism infrastructure (2020~present)**

Since 2020, the Huangling scenic area has entered a consolidation phase of rural tourism development. While experiencing a temporary downturn in visitor numbers due to the COVID-19 pandemic, Huangling has maintained its developmental trajectory. This period has been characterized by a strategic focus on enhancing existing tourism offerings and introducing innovative experiential components. This is evident in three primary areas:

Firstly, there has been a significant expansion and improvement in food and accommodation facilities. To meet the post-pandemic needs of tourists and enhance their dining and lodging experiences, Huangling scenic area has further upgraded its catering and accommodation services. In terms of dining, the newly constructed Sky Garden Restaurant (Figure 3-16) offers a panoramic view of the terraced fields. This allows visitors to enjoy the scenic beauty of the ancient village while dining. Additionally, Huangling has introduced the Huangling Rural Feast Restaurant, which uses locally sourced ecological ingredients to prepare a variety of specialty snacks and delicacies. Tourists can choose from various packages designed for family gatherings, parties, and banquets

according to their dining needs. Regarding accommodation, the upscale Yishanju Boutique Residence (Figure 3-16) has been established to cater to high-end tourists. This boutique residence is housed in traditional Huizhou-style ancient village dwellings, retaining the original old walls and wooden structures. Each villa is detached and uniquely themed, equipped with business space and exclusive butler service, providing tourists with high-quality accommodation services.



Figure 3-16 Sky-garden restaurant (left) and Yishanju boutique residence (right)

(Source: “Huangling Shaiqiu Renjia” WeChat Official Account)

Secondly, upgrading the existing series of tourism products. Since 2020, Huangling has extended the flowering period of rapeseed flowers in high-altitude terraces by planting late-maturing rapeseed seeds, thereby forming the Phase II Terrace Rapeseed Flower Sea landscape in the Qixia Ancient Temple area. Tourists can experience and perceive the differences between the plains flower sea at the foot of the mountain, the low-altitude terrace flower sea, and the high-altitude ridge flower sea through cable cars, significantly expanding the original flower sea viewing area with excellent sightseeing views at high altitudes. Simultaneously, Huangling continues to update and launch the “Flower Town 4.0” tourism products, combining flowers with cultural creativity. This initiative includes the creation of cultural and creative products such as “rapeseed flower perfume, hand cream, and face masks,” as well as gourmet products like flower banquets and “Xianhuluanyun” flower-themed meals. Additionally, a series of flower-related activities have been held, including the “Flower Town” TikTok Creation Contest, Chinese Mother’s

Day celebrations, flower poetry recitals, and Hanfu tours. Furthermore, Huangling has upgraded the Snow Drift Republic Hall by adding a large-scale romantic snow drifting pool to replace static ice sculpture exhibitions, ice rinks, and slides, allowing tourists to experience romantic snow drifting. A nostalgic Republic Street has also been newly established, featuring shops such as newspapers, bookstores, banks, post offices, teahouses, and pawnshops, enabling tourists to immerse themselves in the street atmosphere of the Republic era.

Thirdly, innovating and developing night tourism experience projects. To provide tourists with a broader array of experiences and enhance the richness of their visits, Huangling officially launched the “Wonderful Night in the Countryside” night tour project (see Figure 3-17) in April 2021. This initiative offers a highly immersive lantern-lit night tour experience. The project leverages the natural landscape of “Shuikou Forest” in Huangling ancient village and integrates local cultural elements, including feng shui and traditional customs, into its design and planning. Utilizing advanced audio-visual technology, Huangling presents its natural scenery and folk culture to tourists, while offering interactive and immersive experiences. The “Wonderful Night in the Countryside” has become a notable highlight of Huangling’s tourism offerings. In September 2021, Huangling Cultural Tourism Co., Ltd. was appointed as the Executive Director Unit of the Cultural Tourism Night Tourism Committee of the National Federation of Industry and Commerce Tourism Industry Chamber and received the 2021 Italia Award for Best Night Tourism Project. Subsequently, Huangling introduced the “Wonderful Night in the Countryside 2.0”, “Wonderful Night in the Countryside 3.0” night tour projects in 2022 and 2023, respectively, further enriching the immersive experiences for tourists and extending their length of stay.





Figure 3-17 Night view of “Wonderful Night in the Countryside 3.0”

(Source: Author)

Overall, the Huangling scenic area, initially established with core attractions such as terraced fields adorned with flowers and “Shaiqiu” folk customs, has consistently innovated. Through the development of a range of tourism projects, including the Flower Town, themed restaurants and inns, and rural night tours (Table 3-2), the area has continuously enhanced its tourism facilities and diversified its product offerings. These advancements have established Huangling as a destination for rural tourism characterized by rich content and diverse experiences. In terms of tourist arrivals (Figure 3-18), the Huangling scenic area officially opened in 2014, attracting 230,000 visitors that year and generating ticket revenue of 19 million yuan. The following year, visitor numbers nearly doubled to 450,000, with tourism revenue surpassing 58 million yuan. By 2016, the area had received 780,000 visitors and generated ticket revenue exceeding 70 million yuan. In 2017, Huangling welcomed over 1.12 million visitors, achieving tourism revenue of 150 million yuan (Liu & Yu, 2019). The trend continued in 2018, with the area receiving 1.3 million visitors, and in 2019, it surpassed 1.42 million visitors, with annual operating income exceeding 210 million yuan. During the National Day Golden Week in 2020, the number of visitors exceeded 100,000 (Chen & Li, 2021). Similarly, in the 2021 National Day Golden Week, visitor numbers exceeded 100,000 again, with a single-day peak surpassing 27,000 on October 4. By 2023, the number of visitors to the Huangling scenic area reached a record high of over 2.7 million, nearly doubling the pre-pandemic figures

from 2019, with the highest single-day visitor volume exceeding 35,000.

Table 3-2 Overview of tourism projects in Huangling scenic area (2009-2023)

Year	Tourism projects
2009	Investment and development of Huangling Folk Culture Village
2013	Establishment of sightseeing cable cars, terraced rice fields, suspension bridges, and Tianjie restaurants; hosting the “Wuyuan Huangling · First Jiangxi Microfilm Festival”
2014	Huangling Ancient Village homestays (partial), zip lines, launching the “Sun Autumn Cultural Festival”
2015	Huangling Tianjie Hotel, Adventure Forest, Leixin Bridge, Tianjie Long Table Banquet
2016	Huangling Sun Autumn Beauty Accommodation (themed rooms, sun-drying rooms, flower street rooms), Sakura Corridor, popular persimmon trees
2017	First launch of “Huangling Flower Town”, Shaiqiu-drying at local homes to enjoy red maple leaves
2018	Introduction of Huangling Ice and Snow Museum, construction of the second terraced cableway
2019	Huaqi Water Street, floating houses, upgrade of Huangling Ice and Snow Museum, slide drifting
2020	Second-phase terraced flower sea, upgrade of zip lines, second upgrade of Ice and Snow Museum, TianTai Garden Restaurant, Flower Town 4.0
2021	Creating Shuikou Rainforest, launching “Huangling Mountain Village Magical Night”
2022	Creating Rhododendron Garden, swimming pool/hot spring, launching “Huangling Village Magical Night 2.0”
2023	Completion of Yishanju Boutique Homestay, Huangling Rural Banquet (restaurant), launching “Huangling Village Magical Night 3.0”

*Source: Provided by Huangling Cultural Tourism Co., Ltd.*

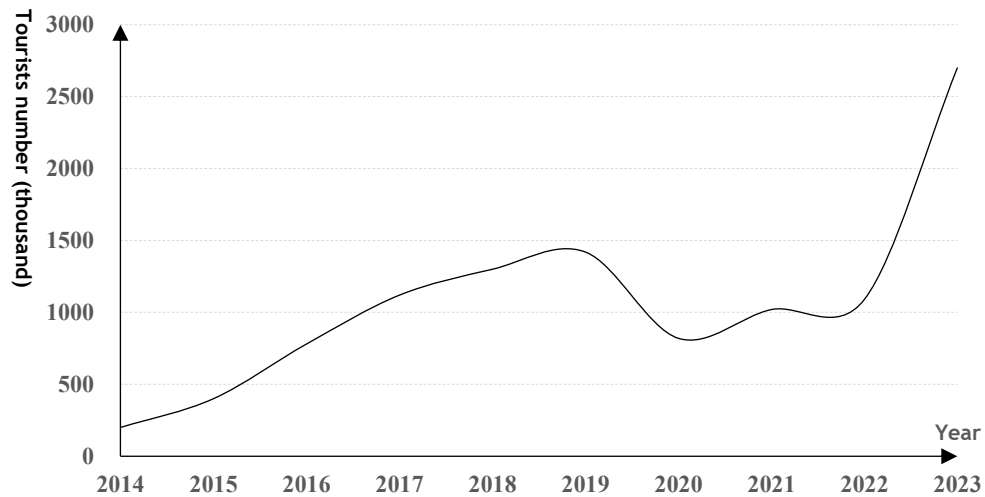


Figure 3-18 Annual tourist arrivals at Huangling scenic area (2014-2023)

(Data source: Provided by Wuyuan Huangling Tourism Co., Ltd.)

After more than a decade of rural tourism development, the Huangling scenic area has been honored with numerous awards, including National 5A-level Tourist Attraction, China's Most Beautiful Leisure Village, National Demonstration Point for Characteristic Landscape Tourism Towns and Villages, Model Village for Rural Tourism in China, Key Projects for Characteristic Cultural Industries, National "Scenic Area with Village" Tourism Poverty Alleviation Demonstration Project, and National Key Village for Rural Tourism. In 2019, Huangling was recognized as a poverty alleviation case study by the World Tourism Alliance, and in 2023, it was awarded the title of "Best Tourism Village" by the United Nations World Tourism Organization (Table 3-3).

Table 3-3 List of honors awarded to Huangling scenic area (2014-2023)

Year	Honors
2014	China's Most Beautiful Leisure Village, China's Most Beautiful Symbol
2015	China's Rural Tourism Model Village
2016	China's "Scenic Area with Village" Rural Tourism Poverty Alleviation Demonstration Project, China's Rural Tourism Maker Demonstration Base
2017	National Rural Tourism Super IP Village, National Tourism Service Quality Benchmark Cultivation Pilot Unit, China's Featured Commercial Street (Huangling Tianjie)
2019	National Key Village for Rural Tourism; Asia Tourism Red Coral Award (Best Rural Tourism Project), World Tourism Alliance Tourism Poverty Alleviation Case
2021	National Typical Case for Tourism Promotion and Publicity
2023	United Nations World Tourism Organization "Best Tourism Village"

Data source: Provided by Huangling Cultural Tourism Co., Ltd.



## **3.5 Data collection methods**

### **3.5.1 Semi-structured interview**

The interview method is a crucial approach for obtaining first-hand qualitative data through verbal communication with participants (Chen, 2017). This method encompasses four main types: structured, semi-structured, unstructured, and focus group interviews. Researchers can select from these formats based on their specific research needs and interview contexts to gather relevant data and information (Alshenqeeti, 2014). Semi-structured interviews, in particular, are advantageous as they allow for open-ended questions and responses while retaining a necessary structure to address key research questions and topics (Ritchie et al., 2013). In this study, semi-structured interviews were employed to ensure that questions remained broad and unbiased, thereby avoiding leading questions or unfamiliar terminology that might confuse interviewees (Nixon et al., 2022). The author conducted face-to-face semi-structured interviews with households to gather qualitative data on their perceptions of livelihood disturbances caused by rural tourism development. These interviews also aimed to explore how households discuss changes in their livelihoods before and after the development of rural tourism, differences between peak and off-peak seasons, and reasons for their current livelihood strategies. This kind of data is intended to provide a foundation for identifying the livelihood disturbances brought by rural tourism development to households and analyzing the changes of households' livelihood adaptive behaviors in response to these disturbances. Additionally, semi-structured interviews were conducted with government officials and scenic area managers to further supplement the data on the history of rural tourism development in Huangling scenic area and its impacts on local households' livelihoods.

### **3.5.2 Questionnaire survey**

The questionnaire survey is a widely utilized quantitative data collection method in social research. Compared to interviews and observations, questionnaires are typically more detailed, comprehensive, and easier to manage (Babbie, 2009). To gain an in-depth understanding of the households' perceived characteristics of livelihood disturbances caused by rural tourism development and the influencing factors affecting households' livelihood adaptive outcomes, this research employed face-to-face questionnaire surveys. These surveys aim to investigate households' perceived livelihood opportunities,

perceived livelihood risks, perceived livelihood adaptive capacities, livelihood adaptive behaviors, and livelihood adaptive outcomes. The goal is to quantitatively analyze the impacts of rural tourism development on households' livelihoods and examine the factors influencing households' livelihood adaptive outcomes. The questionnaire consists of six sections: perceived livelihood opportunities, perceived livelihood risks, perceived livelihood adaptive capacity, livelihood adaptive behaviors, livelihood adaptive outcomes, and demographic characteristics of the respondent households.

### **3.5.3 Secondary data**

Secondary data collection involves gathering, organizing, and classifying various pre-existing data sources, including both published and unpublished government and non-government reports, academic publications, and online sources, according to the researcher's specific objectives (Qi, Faisal, & Ka, 2021). This approach complements and corroborates the data obtained from field research methods such as interviews, observations, and surveys (Qi, Faisal, & Ka, 2021). In addition to utilizing these primary data collection methods, the author also gathered relevant secondary data by reviewing academic publications related to Huangling village and consulting the official websites of the Wuyuan county government and the Huangling scenic area management department. This includes obtaining statistical reports on tourism development in Wuyuan county and Huangling scenic area, as well as historical development records and documentation on changes in households' livelihoods. This secondary data supports the author in understanding the political, economic, social, and cultural context of tourism development and its impact on local households in the case area.

## **3.6 Data analysis approach**

### **3.6.1 Qualitative content analysis (QCA)**

This research employs qualitative content analysis (QCA) to examine qualitative data from in-depth interviews regarding households' perceptions of livelihood opportunities and risks brought by rural tourism development. QCA is a research method used to analyze text data, aiming to uncover, discover, and interpret text content, encode and summarize data, and elucidate the underlying structural meaning and logical patterns within the text (Hsieh & Shannon, 2005; Bos & Tarnai, 1999; Stemler, 2001). According to Mayring (2014), QCA encompasses two major approaches: inductive (data-driven) and deductive (theory-

driven). The inductive approach is particularly suited for cases where little is known about the topics or themes that may emerge from the data, whereas the deductive approach is more appropriate when the goal is to test a pre-existing theory (Elo & Kyngäs, 2008). QCA has been widely employed in tourism studies. For instance, Abd Mutalib et al. (2017) utilized QCA to explore written online narratives about medical tourism. Zhu, Wang, and Hu (2023), as well as Soltani-Nejad et al. (2024), applied QCA to code the constituent elements of tourist experiences based on online reviews. Moreover, Meng et al. (2023) adopted QCA to identify the dimensions of tourists' perceived rurality.

Given the absence of established theories concerning livelihood opportunities and risks in tourism studies, this research employs the inductive QCA to identify and categorize the types and indicators of livelihood opportunities and risks associated with rural tourism. The data analysis process involves four steps. The first step is to extract key utterances related to the impacts of rural tourism on livelihoods as expressed by the households (Polit & Beck, 2004). In the second step, the text data are conceptualized by summarizing the content into specific initial concepts (Juvani et al., 2005). The third step involves grouping related concepts into sub-categories (Tyni-Lenné, 2004). Finally, the sub-categories are further aggregated into main categories (Miles & Huberman, 1994) representing the livelihood opportunities and risks associated with rural tourism.

### **3.6.2 Thematic analysis (TA)**

Thematic analysis (TA) is a systematic method for identifying, analyzing, interpreting, and generating themes through inductive summaries (Clarke & Braun, 2017). This process consists of six steps: familiarization, initial coding, generating themes, reviewing themes, defining and naming themes, and writing the report (Creswell, 2021). Step one involves transcribing data, reading and re-reading it, and noting down initial ideas. Step two requires systematically coding features of the data across the entire dataset and collating data relevant to each code. In Step three, codes are organized into potential themes, gathering all relevant data for each potential theme. Step four involves checking if the themes fit with the coded extracts and the entire dataset, leading to the creation of a thematic map. Step five focuses on refining the specifics of each theme and the overall narrative of the analysis, defining and naming each theme clearly. The final step includes selecting vivid and compelling extract examples, performing a final analysis of these extracts, relating the analysis back to the research question and literature, and producing a comprehensive report of the analysis (Braun & Clarke, 2006, p. 87).

In recent years, thematic analysis has been extensively employed as a qualitative research method to explore and understand various aspects of tourism phenomena. For example, Rosalina et al. (2023) utilized thematic analysis to examine rural tourism resource management strategies. Similarly, Wang et al. (2023) applied thematic analysis to develop a nature-based, philosophy-oriented tourism development model based on interview data. Rongna and Sun (2022) also adopted thematic analysis to qualitatively investigate the impacts of tourism on households' livelihood transitions. Given that the analysis of the evolution of households' livelihood adaptive behaviors is based on semi-interview data, this research uses thematic analysis to examine and code the qualitative data related to changes in livelihood adaptive behaviors developed by households in response to rural tourism development.

### **3.6.3 PLS structural equation modelling (PLS-SEM)**

Structural equation modeling (SEM) is a widely used multivariate data analysis tool in social science research (Ali et al., 2018). SEM encompasses two primary statistical techniques: covariance-based structural equation modeling (CB-SEM) and variance-based structural equation modeling (Hair Jr et al., 2017; Rigdon et al., 2017). Partial least squares structural equation modeling (PLS-SEM) is a representative method of the latter, integrating principal component analysis with multiple regression through an iterative estimation process (Hair et al., 2011). A comprehensive PLS-SEM model comprises two main components: the measurement model and the structural model. The measurement model elucidates the relationship between observed variables and latent variables, while the structural model represents the relationships between exogenous latent variables and endogenous latent variables (Wong, 2013).

Compared to CB-SEM, PLS-SEM not only accommodates complex structural models with a large number of constructs (Sarstedt et al., 2019) but is also well-suited for theory testing, exploration, and development (Hair et al., 2011, 2019; Shmueli et al., 2019). Its applicability in tourism studies is well-documented, with numerous instances of its use for testing, predicting, and developing theoretical models (do Valle & Assaker, 2016; Kock, 2018; Usakli & Kucukergin, 2018). For example, PLS-SEM has been employed to predict and test theoretical models concerning the influence of individual and organizational resilience on the subjective well-being of tourism enterprises (Prayag et al., 2020), to explore and test the effects of social capital on adaptive resilience and business performance in tourism enterprises (Prayag & Dassanayake, 2022), and to examine the

impact of tourists' image cognition on memorable tourism experiences and revisit intentions (Zhang et al., 2018). Additionally, it has been used to test theoretical models of how employee self-efficacy affects organizational resilience and economic performance in tourism enterprises based on social cognition theory (Chowdhury et al., 2019), and how tourists' risk perception influences brand participation and revisit intentions according to the theory of protection motivation (Rather, 2021).

Considering that this study emphasizes exploring new theoretical models rather than verifying existing ones—focusing more on theoretical exploration and development—PLS-SEM is employed due to its suitability for theory development and predictive modeling. PLS-SEM is particularly advantageous when dealing with complex models that involve multiple latent constructs and indirect effects. Additionally, it is well-suited for handling relatively small sample sizes and non-normal data distributions, making it an appropriate choice for this study. Using PLS-SEM, this research investigates the effects of households' perceptions of livelihood opportunities, livelihood risks, and livelihood adaptive capacities on their livelihood adaptive behaviors, as well as the impact of these adaptive behaviors on their livelihood adaptive outcomes.

## **Chapter 4 Households' livelihood disturbances caused by rural tourism development**

### **4.1 Introduction**

This chapter addresses the first research objective and presents the initial segment of the qualitative findings. The purpose of this chapter is to map the livelihood disturbances caused by rural tourism development to households in the study area. It is organized into five sections.

First, the chapter defines the two primary dimensions of livelihood disturbance: positive livelihood disturbance (characterized by livelihood opportunity) and negative livelihood disturbance (manifested as livelihood risk). Following this, it provides an overview of the characteristics of the interview participants and details the data analysis procedure used to identify livelihood disturbances resulting from rural tourism development, based on the dimensions of livelihood opportunity and livelihood risk. Subsequently, the chapter offers a detailed interpretation of the specific types of livelihood opportunities and risks brought by rural tourism development to households in the case area.

The qualitative findings presented in this chapter regarding the types of livelihood opportunities and risks will inform the questionnaire design for assessing households' perceived livelihood opportunities and perceived livelihood risks in Chapter 6.

### **4.2 Theoretical rationale**

The term “disturbance” originates from natural science fields such as ecology and environmental science and is typically synonymous with disruption (Rykiel, 1985). Scholars still lack a clear and unified definition of disturbance. Rykiel (1985) and Pickett et al. (1989) conducted in-depth analyses of disturbance within ecological and environmental science research, positing that disturbance primarily refers to the impact of natural disasters, such as floods, fires, and earthquakes, on ecological levels, environmental components, and biological tissues. In contrast, the term ‘disturbance’ has received relatively little attention in the social sciences.

The concept of livelihood disturbance in social science originated from studies on

households' livelihood adaptation to climate change, suggesting that various disturbances caused by climate change are significant prerequisites for adaptive behavior (Papa et al., 2020; Ahmad et al., 2022). Most scholars agree that households' livelihood systems are influenced by various natural and socio-cultural factors, meaning that external environmental factors can disrupt these systems. Current discussions on livelihood disturbance predominantly focus on the effects of natural environmental factors, such as climate change and disasters, on households' livelihoods. In the context of climate change or natural disasters, household livelihood disturbance typically refers to the impact of external disruptions like floods, droughts, and earthquakes on household livelihood systems (Osbah et al., 2008; Ahmad et al., 2022).

Unlike natural factors such as climate change and geological disasters, rural tourism acts as a social and cultural element that enters rural communities as an external force, causing significant disturbances to the natural environment, economic development, and cultural changes, thereby affecting households' livelihoods (Chen et al., 2020). As research into tourism's impacts intensifies, the disruptive consequences of tourism development on household livelihoods have increasingly captured the attention of scholars. Households, as the owners of rural tourism destinations, are the direct recipients of these disturbances. Understanding the disturbances caused by rural tourism development is crucial for households to adopt effective behavioral strategies to cope and achieve their livelihood goals. Identifying these disturbances is a fundamental prerequisite for the emergence of adaptive behavior among households. Therefore, this study draws on the concept of livelihood disturbance from climate change research and posits that the livelihood disturbance of households in rural tourism destinations refers to the impact of the introduction and development of rural tourism on the original livelihood systems of households.

In research on climate change and natural disasters, factors such as floods, droughts, earthquakes, and diseases predominantly have negative impacts on the livelihoods of households. However, unlike natural environmental factors, which are difficult for humans to control, rural tourism, as a social and cultural element, often has dual impacts on households' livelihood systems. On one hand, the development of rural tourism can create new livelihood opportunities for destination households, not only increasing their original sources of livelihood but also effectively driving the development of traditional livelihood methods such as agricultural production and handicrafts. On the other hand, while tourism development generates new livelihood opportunities, the seasonality and

instability inherent in the tourism industry introduce uncertainties for households who rely on tourism-based livelihoods. Thus, the tourism industry inevitably brings new livelihood risks to households.

This study categorizes the disturbances caused by rural tourism development on households' livelihoods into two aspects: positive livelihood disturbance and negative livelihood disturbance. Positive livelihood disturbance is characterized by livelihood opportunity, while negative livelihood disturbance is reflected by livelihood risk (Figure 4-1). There is currently no common definition of the concepts of livelihood opportunity and livelihood risk in the academic literature. A review of existing literature revealed that only Zeng et al. (2021) clearly defined livelihood risks for rural households as adverse conditions affecting households' livelihood capital accumulation and changes in living conditions. However, this definition lacks consideration of tourism scenarios, making it insufficient for accurately reflecting the new livelihood risks that rural tourism development introduces to households.

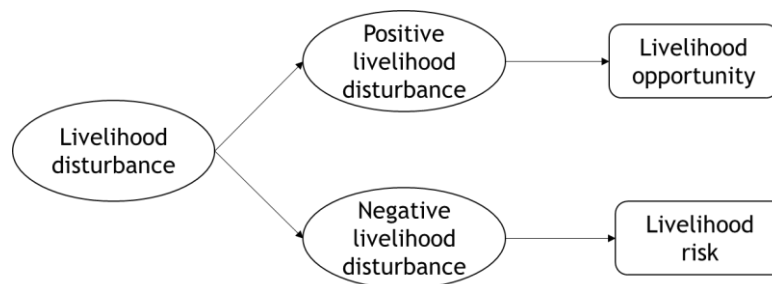


Figure 4-1 Two main dimensions of the livelihood disturbances  
(Source: Author)

As research into the impacts of tourism development on households' livelihoods intensifies, scholars have increasingly acknowledged that while it can generate novel livelihood opportunities, it also poses certain livelihood risks. Nonetheless, research examining the livelihood opportunities and risks experienced by households within tourism contexts remains in its early stages. Moreover, few studies have endeavored to elucidate the conceptual underpinnings of livelihood opportunities and risks for households in the specific context of rural tourism. Therefore, in order to effectively identify the disturbances brought by rural tourism development to the livelihoods of households, this study attempts to draw on the definition of livelihood risk by Zeng et al. (2021), fully considering the particularity of rural tourism scenarios, and defining the livelihood risks of households in rural tourism destinations as the impact and uncertainty factors that households face due to the development of rural tourism, which have an adverse impact



on their livelihood improvement and achievement of livelihood goals. On the contrary, livelihood opportunities refer to the favorable conditions created by the development of rural tourism for improving the livelihood standards and achieving the livelihood goals of households in rural tourism destinations.

In the following, this study will delineate the livelihoods disturbances brought by rural tourism development to households based on the concepts of livelihood opportunities and livelihood risks defined above. Specifically, the research will identify the livelihood disturbances brought by rural tourism development to households from two aspects: livelihood opportunities and livelihood risks, to elucidate the typologies and dimensions of livelihood opportunities and risks experienced by households within rural tourism destinations.

### **4.3 Characteristics of interview participants**

As stated in the methodology chapter, semi-structured interviews were conducted first to collect qualitative data. The author's attention to the rural tourism development in Huangling scenic area began with a research project led by the master's supervisor in 2018, titled "Decision Consultation Report on the Intelligent Transportation System for Tourism Logistics in Wuyuan, Jiangxi Province". The unique rural tourism development model of Huangling scenic area and its profound impact on households' livelihoods motivated the author to continue monitoring the rural tourism development in Huangling and its effects on the local households. After the initial on-site fieldwork with the master's supervisor in March 2018, the author made several subsequent visits to Huangling scenic area during the master's thesis research and later studies at Nankai university. These visits took place on August 1-2, 2019; November 1-2, 2020; August 20-22, 2021; October 25 to December 1, 2022; and July 23 to August 10, 2023. Nearly two months of previous on-site fieldwork in Huangling scenic area and the surrounding villages not only provided a solid reference for determining the doctoral dissertation topic but also established a strong foundation of interpersonal relationships essential for data collection in this study.

The author conducted a formal investigation in the case area from November 25th to December 17th, 2023. During this fieldwork, semi-structured interviews were conducted with households in the surrounding villages of Huangling scenic area, as well as with government officials and scenic spot managers. For the household interviews, the author initially used purposive sampling to select households willing to participate in the

research based on their involvement in rural tourism development. Subsequently, through snowball sampling and following the recommendations of the interviewed households, other willing participants were selected for in-depth interviews. The in-depth interviews focused on three main aspects: 1) the development of rural tourism in Huangling scenic area; 2) households' opinions on the impacts of rural tourism development on their livelihoods; and 3) households' experiences engaging in rural tourism employment. The interview questions included: "In your opinion, how did rural tourism in the Huangling scenic spot develop and when? How do you think rural tourism development has affected the community in which you live? What were your family's livelihood activities before the development of rural tourism in the scenic area? Does your family income depend on rural tourism? When did your family start working in the rural tourism sector? What are the main reasons that motivated your family to be involved in the rural tourism sector? What kinds of rural tourism employments have your family participated in? What kind of livelihood opportunities do you think rural tourism development has brought to your family? What livelihood risks do you think rural tourism development has brought to your family? What difficulties did your family encounter in the process of participating in rural tourism employment? Would your family consider to quit rural tourism employment in the future? Why did your family decide not to be involved in the rural tourism sector? Would your family consider to work in the rural tourism sector in the future?" etc. These questions aimed to capture a comprehensive understanding of the impacts of rural tourism development on local households, their participation in tourism-related activities, and their perceptions of the benefits and challenges associated with rural tourism.

On the other hand, the author conducted semi-structured interviews with government officials from the Wuyuan County Culture and Tourism Bureau and Jiangwan town, where the Huangling scenic area is located. Interviews were also conducted with the village committee secretaries and other staff from Huangling new village and Xiaorong village, as well as with the managers of the Huangling scenic area. These interviews focused on two main aspects: 1) the development of rural tourism in the Huangling scenic area, and 2) the government officials' or scenic area managers' opinions on the impacts of rural tourism development on the livelihoods of community households. The interview questions for government officials and scenic area managers included: Can you describe the history of rural tourism development about Huangling scenic spot? How do you think rural tourism development has affected/changed the life of the local community? What impact do you think the development of rural tourism has had on the livelihood of rural households? What measures do you think can be taken to increase households' benefits

from rural tourism industry? What do you think are the main factors that could facilitate or hinder the development of rural tourism of Huangling scenic spot?” etc. These questions aimed to gather comprehensive insights into the historical development of rural tourism in Huangling scenic area, its effects on local communities, and potential strategies for enhancing the benefits of rural tourism for local households.

Overall, during this formal investigation, the author conducted semi-structured interviews with 49 local households (H1-H49), 5 foreign operators (F1-F5), 6 government officials (G1-G6), and 2 tourism company managers (E1-E2), totaling 62 interviewees. The basic information of the interviewees is presented in Table 4-1. Among the local households interviewed, male and female respondents accounted for 46.9% and 53.1%, respectively. In terms of age, the highest proportion of respondents were in the 56-65 age group, representing 28.6%; followed by those aged 46-55, who made up 24.5%. Respondents aged 35 and under and those aged 36-45 both represented 18.4% of the sample. The smallest proportion, 10.2%, was from respondents aged 66 and above. Regarding employment type, the highest proportion (67.3%) were engaged in the hospitality or agritourism industry, while the lowest proportion (8.2%) were migrant workers.

Additionally, with the assistance of government officials and scenic spot managers, the author obtained secondary data related to the historical background, industrial characteristics, demographic status, and rural tourism participations of households in Huangling new village, Xiaorong village, and Lingjiao village. This secondary data also included information on the development process of rural tourism in Huangling scenic area, tourism project development and construction, annual visitor numbers, and the functional zoning of Huangling scenic area. During the field research, the author further enriched the necessary research data through photographs and field notes.

Table 4-1 Demographic information of interviewees

Number	Gender	Age	Occupation	Note
H1	Female	61	Supermarket owner	Huangling new village
H2	Female	64	Villager	Huangling new village
H3	Male	71	Villager	Huangling new village
H4	Male	68	Farmhouse owner	Huangling new village
H5	Male	60	Security guard in Huangling scenic area	Huangling new village
H6	Male	71	Farmhouse owner	Huangling new village

Number	Gender	Age	Occupation	Note
H7	Female	37	Migrant worker	Huangling new village
H8	Male	32	Farmhouse owner	Xiaorong village
H9	Female	57	Farmhouse owner	Xiaorong village
H10	Female	43	Restaurant owner	Xiaorong village
H11	Male	54	Migrant worker	Xiaorong village
H12	Male	49	Migrant worker	Xiaorong village
H13	Male	41	Farmhouse owner	Xiaorong village
H14	Male	27	Farmhouse owner	Xiaorong village
H15	Female	19	Daughter of the farmhouse owner	Huangling new village
H16	Female	52	Farmhouse owner	Huangling new village
H17	Female	54	Farmhouse owner	Huangling new village
H18	Female	53	Farmhouse owner	Huangling new village
H19	Male	56	Farmhouse owner	Huangling new village
H20	Male	66	Farmhouse owner	Huangling new village
H21	Male	23	Farmhouse owner	Huangling new village
H22	Female	45	Farmhouse owner	Lingjiao village
H23	Male	37	Farmhouse owner	Lingjiao village
H24	Female	33	Farmhouse owner	Lingjiao village
H25	Female	58	Farmhouse and sugar cane juice stall owner	Xinjian village
H26	Female	43	Restaurant owner	Huangling new village
H27	Female	57	Farmhouse and restaurant owner	Huangling new village
H28	Female	62	Farmhouse owner	Huangling new village
H29	Male	39	Farmhouse owner	Huangling new village
H30	Female	46	Farmhouse owner	Huangling new village
H31	Female	48	Sticky rice ball stall owner	Huangling new village
H32	Male	39	Restaurant owner	Huangling new village
H33	Female	55	Restaurant owner and	Huangling new village
H34	Female	45	Farmhouse owner	Huangling new village
H35	Male	51	Farmhouse owner	Huangling new village
H36	Male	52	Farmhouse owner landlord	Huangling new village
H37	Female	29	Huangling market stall owner	Huangling new village
H38	Female	34	Farmhouse owner	Lingjiao village
H39	Male	58	Farmhouse owner	Lingjiao village
H40	Male	50	Farmhouse owner	Lingjiao village
H41	Male	35	Farmhouse owner	Lingjiao village

Number	Gender	Age	Occupation	Note
H42	Female	47	Farmhouse owner	Huangling new village
H43	Male	66	Farmhouse owner landlord	Huangling new village
H44	Female	55	Housekeeping staff in Huangling scenic area	Xiaorong village
H45	Male	63	Popcorn maker in Huangling scenic area	Xiaorong village
H46	Female	61	Shaiqiu staff in Huangling scenic area	Huangling new village
H47	Male	73	Straw sandal weaving staff in Huangling scenic area	Xiaorong village
H48	Female	57	Huangling market stall owner	Xiaorong village
H49	Female	45	Huangling market stall owner	Huangling new village
F1	Male	36	Restaurant owner	Foreign operator
F2	Male	33	Farmhouse owner	Foreign operator
F3	Male	38	Restaurant owner	Foreign operator
F4	Male	52	Farmhouse owner	Foreign operator
F5	Male	45	Huangling market stall owner	Foreign operator
G1	Male	37	Official of Wuyuan County Culture and Tourism Bureau	Wuyuan county
G2	Male	31	Official of Jiangwan Town	Wuyuan county
G3	Male	56	Staff of the Limukeng Village Committee	Huangling new village
G4	Male	29	Staff of the Limukeng Village Committee	Huangling new village
G5	Male	59	Staff of Xiaorong Village Committee	Xiaorong village
G6	Male	60	Staff of Xiaorong Village Committee	Xiaorong village
E1	Male	55	Management personnel of Huangling scenic area	Tourism company
E2	Male	37	Management personnel of Huangling scenic area	Tourism company

*Source: Author.*

## 4.4 Data analysis procedure

For both qualitative content analysis and thematic analysis, as introduced in Chapter 3, the first step is to transcribe the digital audio data. Consequently, the author transcribed all the recordings into written form promptly after each interview to ensure greater accuracy. All recordings were initially transcribed in Chinese and then translated into English. Although transcribing data is time-consuming, frustrating, and often monotonous, it is “a key phase of data analysis within interpretive qualitative methodology” (Braun & Clarke, 2006, p. 87). Considering the prevalence of slang and dialect in the conversations, both the transcription and translation were performed by the author to ensure better

accuracy and consistency.

Given the advantages of the inductive qualitative content analysis approach outlined in Chapter 3, it is particularly well-suited to contexts where knowledge of potential themes or topics emerging from the data is limited (Elo & Kyngäs, 2008). This study adopted an inductive approach to identify livelihood disturbances caused by rural tourism development among households in the villages surrounding the Huangling scenic area. As detailed above, livelihood disturbances arising from rural tourism development encompass two dimensions: livelihood opportunities and livelihood risks. Accordingly, livelihood opportunities and livelihood risks were established as a priori themes for the analytical process. Since the interview sample size in this study was relatively small, all interview data were analyzed manually, rather than using analysis software such as NVivo. The data analysis process was specifically conducted through the following four steps (Figure 4-2).

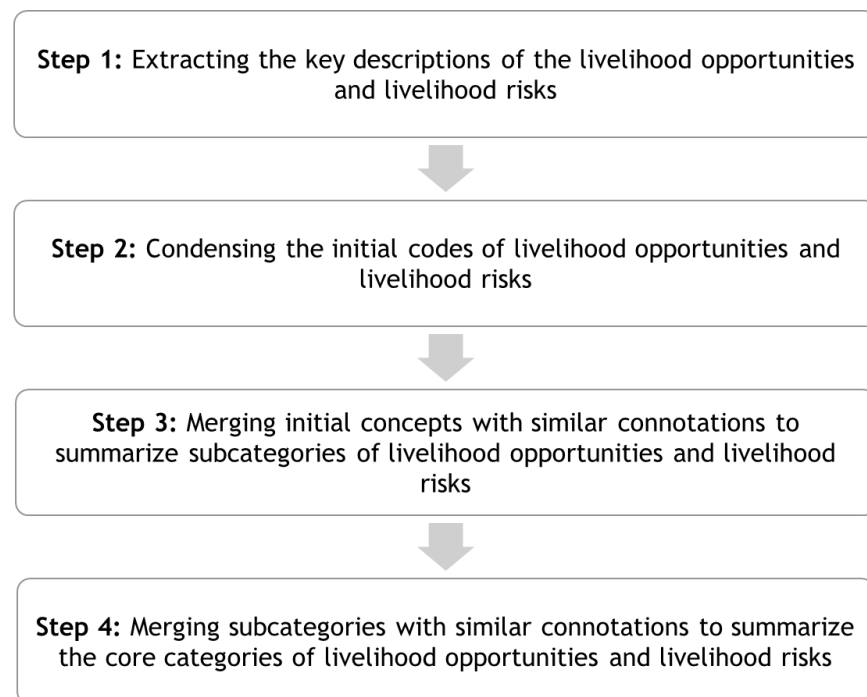


Figure 4-2 The data analysis steps of the identification of livelihood opportunities and risks  
(Source: Author)

The first step is to extract key descriptions of livelihood opportunities and livelihood risks. This is done through repeated readings of the qualitative data gathered from semi-structured household interviews, identifying key descriptions of livelihood disturbances experienced by households in the villages surrounding the Huangling scenic area. Based on qualitative interview data from 49 households in these villages, a total of 632 key

descriptions of livelihood opportunities generated by rural tourism development were identified. These extracted key descriptions were numbered as Hi-j, where i represents the interviewee number and j denotes the specific key description of livelihood opportunities for interviewee i. The interviewee H23 provided the most key descriptions related to livelihood opportunities. Several examples of such descriptions extracted from H23 are presented in Table 4-2.

Table 4-2 Examples of the key descriptions of livelihood opportunities illustrated by H23

Interviewee	Number of descriptions	Raw data
H23	H23-1	If there were no tourism, our living standards would be at the bottom, and now our family income is definitely increase because of the development of tourism.
	H23-2	In the past, those elderly people used to pick up the tea seeds in the mountain, or farming and raising pigs at home while young people would go out to work. Now, as long as you are in good health, you can still work in the scenic spot at the age of 70 or 80, and young people can also do some business such as tourism catering and accommodation.
	H23-3	We also have a resource fee, which is not very much, about 300 yuan per person per year.
	H23-23	Like my aunt, who is in her seventies and works as a Shaiqiu aunt in the scenic spot. It is really an easy work for her, and she can earn 80 yuan one day, which is over 2000 in a month, so it's much better than before.
	H23-5	Think about it, there are so many people and cars during the national day holiday, all of which are the money. Think of it as flowing money. There are so many people eating, drinking, and shopping, including in the scenic spot, all of which are consumption and money, so there is no doubt that there are more economic opportunities.
	H23-6	There is definitely a lot of communication between us households, mainly because we often have some business contacts now, and we learn and communicate with each other quite a lot. If there is any news, everyone will also share it with each other.
	H23-7	As for the Internet, my family also does it. I hire others to do it and also learn it myself. Nowadays, young people are accustomed to using mobile phones. You must learn it too, so there is definitely an increase in knowledge.
	H23-8	Training, how should I say this? There are some, but not many. I have never participated in it. I heard that there are cooking trainings before. Some people have attended it to improve cooking skills.
	H23-9	There is protection for traditional culture, such as the old buildings. If it weren't for this tourism, the old buildings in Huangling would have slowly disappeared, collapsed, and demolished. Nowadays, these old buildings have been preserved because tourists love to see them.

Source: Author.

Similar to the process of extracting key descriptions for livelihood opportunities, a total of 593 key descriptions of livelihood risks induced by rural tourism development were identified. These extracted key descriptions of livelihood risks were numbered as Hi-k, where i represents the interviewee number and k denotes the specific key description of livelihood risks for interviewee i. The interviewee H14 provided the most key descriptions related to livelihood risks. Some of these key descriptions extracted from H14 are presented in Table 4-3.

Table 4-3 Examples of the key descriptions about livelihood risks of H14

Interviewee	Number of descriptions	Raw data
H14	H14-1	Huangling is not like some scenic spots. There are people all year round. The peak seasons are the rapeseed flowers in spring and Shaiqiu in autumn. It only lasts a few months in the peak season, and there will not be many tourists then. Without many tourists, you just cannot make much money, which is no different from migrant work.
	H14-2	Our house is located in the middle, with houses in front and behind, so we can't see the scenery outside. If someone wants to see the scenery, they won't like the room.
	H14-3	Anyway, the investment in this B&B is relatively large, and it was updated very quickly. We just renovated it in 2019, but because of the epidemic for three years, we didn't do it after the renovation, and now it's outdated again, so it's not easy.
	H14-4	Another thing is that besides the cost of decoration, operating this B&B also comes with costs for air conditioning, television, and electricity. In hot summers and cold winters, the electricity bill is also quite high.
	H14-5	It's not easy for young people to go out and find a job after the peak season. Next year, there will be so many B&Bs, it will definitely be hard to operate. The competition is too fierce, and we also have some pressure.
	H14-6	It's not convenient to park here, so it's inconvenient for people to drive here. Some tourists also need the pick-up and drop-off service from the tourists' service center. If you do not provide the pick-up and drop-off service for them, they will check out. If they drive too here, you must arrange a parking space for them. If they do not have one, they will also check out. If you don't return their money, they will give you a negative review. It would be troublesome for us if they give a negative review.
	H14-7	There are many situations where we would explain it online and make arrangements in advance, but some tourists still pick and choose after they come. For example, there is no breakfast. It clearly states that breakfast is not included, but they say that why other farmhouses have breakfast and why you don't? The internet is not easy to operate now, it's hard to get rid of a negative review.



Interviewee	Number of descriptions	Raw data
	H14-8	It's still tiring to do this. Some tourists come late at night and wake up early in the morning. Some guests wake up about 5am to watch the sunrise, while others come at 11 or 12pm and may ask for this or that. However, we don't have any streetlights here at night. If they arrive late, we have to wait for them and even pick them up. It's impossible for us to go to bed ourselves and let them come over on their own.
	H14-9	It seems like running the B&B gives you a lot of freedom, but you'll be extremely busy, especially when you have guests. It can be pretty restrictive because as long as there's one tourist around, you can't really do any outside work. Plus, some tourists don't pick up the phone, mostly because they get so many scams calls these days. I've tried calling them, but if they don't answer, I can't get in touch. Sometimes I've waited all day, and they still don't show up. Some guests have complained that I didn't inform them in advance about parking issues. Actually, I do try to reach out to all the customers early in the morning to find out their plans and whether they're driving. Those who come by car need to be picked up at the base of the mountain, and I need to reserve parking spaces in advance for those who drive.

*Source: Author.*

The second step focuses on deriving initial codes for livelihood opportunities and risks through an in-depth analysis of key descriptions provided by households on the impacts of rural tourism development. This process involved condensing and generating codes from the data collected in step one. The creation of initial codes necessitated a meticulous examination of the original data, combined with a contextual understanding of the research to refine and label these codes. Based on households' key descriptions of livelihood opportunities arising from rural tourism development, a total of 51 initial codes were identified. Table 4-4 presents the process of generating these initial codes for livelihood opportunities.

Table 4-4 Examples of the generation process of initial codes for livelihood opportunities

Initial codes	Raw data
A1 Revenue increase	Nowadays, with tourism, family income is definitely increasing. It's much better to make money by doing some business. (H23)
A2 Resource dividend income	The benefit is that they (referring to the tourism company) give us a resource fee every year, which is a few hundred yuan per year. This is pretty, without this tourism, it would definitely not have this. (H3)

Initial codes	Raw data
A3 Wage income	I am very grateful for the tourism, not to mention doing this (referring to farmhouse operating) at home, if I don't do this, I can also earn more than 2,000 yuan a month working in a scenic spot, so I always have pocket money. Otherwise, I have nothing to do at home to take care of my husband. (H16)
A4 Tourism business income	Nowadays, with this tourism, it is much better for everyone to do some small business and make money. My family is mainly engaged in catering. For those engage in accommodation, as long as there are tourists, and there are so many tourists this year, they can earn over 100000 yuan just during the peak season, which is better than migrant work. (H33)
A5 Rental income	The house in front can be rented out by her (referring to her granddaughter) father to earn some money. It is rented out for 50000 yuan per year. We moved out to live here, and the conditions here are poor, no one will want this. (H2)
.....	.....
A18 Information sharing	Before, everyone used to work outside and didn't see each other many times a year, so we had very little contact. Now, we all come back and engage in tourism business, we definitely need to communicate a lot more. We often share some information, and we also have WeChat groups. If there is any news, we will send it to the group. For example, if the tourists need to carpool, we will send it in the WeChat groups, and others will reply when they see it. (H41)
A19 Customer sharing	Yesterday, more than a dozen guests came to my house. They were not booking online, they came by themselves. However, my house only has three rooms. It is not enough. So, I took the other few to the household who is behind. This is also a way for everyone to help each other. (H16)
A20 Daily communication	Nowadays, everyone is doing business at home and there is definitely a lot of communication for each other. You know, at the pavilion at the intersection, they solicit customers and often sit there and chat. Some people also play cards to kill time when they have nothing to do. (H31)
A21 Interaction during travel	Now engaging in this tourism business, we must contact with customers, and some customers are also very good. There was a young girl who was also a college student. She stayed at my house for several days. She chatted with me every day and talked about everything. (H9)
A22 Interaction after travel	I have a lot of friends who are tourists. For example, on my mobile phone, my WeChat account is full. Some of them will contact me when their friends come over after they go back. Some of them will even contact me during the festivals and holidays. (H1)
.....	.....
A39 Farmer turns into scenic spot staff	There are many benefits with the tourism. Without this scenic spot, we would not be able to go out to work since we are old, so we can just farm the land at home. Now, I work in the scenic spot, it is much better than farming. (H46)
A40 Farmer turns into Artist	It is good to have the tourism. I was invited by the scenic spot to do this (making popcorn) for 80 yuan a day. If there was no such scenic spot, I would just farm at home now, because I cannot go out to work since I am old and no one will accept you. (H45)

Initial codes	Raw data
A41 Farmer turn into boss/proprietress	There was no such tourism before. We either farmed at home or went to work outside. Now everyone can do some business at home. We do the business ourselves and others just call us petty bosses. (H23)
A42 Self-role identity	Doing this tourism business, how should I put it, is definitely better in comparison, because when working for others, you must listen to the boss. Doing this is equivalent to being your own boss, which is definitely better than being an employee, right? (H40)
A43 Self-value identity	I can help others wash vegetables and dishes, and can earn 50 yuan a morning. It's good to earn a little pocket money by myself. Without this tourism before, I could only farm and had nothing to do. Now I can earn a little bit, and I can also take care of her (referring to her granddaughter), so it's better than before. (H2)

*Source: Author.*

Similar to the generation of initial codes for livelihood opportunities, initial codes for livelihood risks were derived from households' key descriptions of the negative impacts of rural tourism development. A total of 38 initial codes were generated for livelihood risks. The process of generating these initial codes is detailed in Table 4-5.

Table 4-5 Examples of generation process of initial codes for livelihood risks

Initial codes	Raw data
B1 Decreased cultivated land area	The land is gone now. Our family has no land. It has been expropriated. It's the enclosed area where planting rapeseed. Originally, they (referring to the tourism company) planned to build a parking lot, but they didn't do it. Those are all our land resources. (H31)
B2 Declined cultivated land quality	The ridges of some terraced fields have collapsed. They (referring to the tourism company) use too many pesticides and fertilizers. If they don't use these fields properly, these fields cannot be planted again in the future. (H13)
.....	.....
B5 Increase in garbage	There is really a lot more garbage there. We just have one bucket, and there are more than three buckets for those who run restaurants. (H1)
B6 Increase in sewage	The water in our river used to be very good, even for bathing and washing vegetables. However, now there is too much sewage, especially for those who operating farmhouses. The water used for cooking and flushing toilets has been discharged into the river, so the water quality is not good now. (H43)
B7 Catering preferences	More and more people are participating in the catering now, and customers are also very concerned about the environment when they come to eat. Therefore, not only do you need to cook delicious food, but you also need to improve the environment inside. My home is currently being renovated. If your environment is not good, tourists are also unwilling to come and have meal. (H32)

Initial codes	Raw data
B8 Accommodation preferences	The updates for homestays are too fast. Our house has been renovated twice. At first, we painted it, and then we reinstalled it with wood. At that time, wooden houses were popular, but now the wood is outdated, but I just don't want to renovate again. (H16)
B9 Commodity purchase preferences	It's getting harder and harder to do tourism business now. These wooden combs used to sell well. There have been many tourists this year, but many of them just don't buy anything. The main reason is that Taobao is too convenient now. They can send them directly to their homes when they buy these products on Taobao. So, it's not easy for us to satisfy tourists' demands. (H37)
.....	.....
B26 Working hours	The day before yesterday, I waited for just over 1am just to wait for that guest, and I couldn't go to bed either. The next day, some guests had to check out very early at around 5am and I also had to clean up the room. I just sleep for a few hours. So, I also felt very tired. (H14)
B27 Working intensity	It is extremely busy to operate this B&B during the peak season. With too many guests, some arrive late at night and I need to stay up late. The next day, some guests rush to check out early and I also have to clean up the room after checking out. Sometimes it's not done here yet, and new guests are coming. And we also need to pick them up. When it comes to rapeseed flowers season, the whole family is often too busy and exhausted. (H8)
B28 Mental burden	Running a B&B is also becoming increasingly difficult and requires a lot of effort. For example, my parents are not very familiar with some operating skills, and I am basically the one doing it. I also need to learn regularly and figure out how to do it well, because there are more and more people doing it, and if you don't do it well, you will easily be eliminated. (H21)
B29 Psychological gap	Households like my family don't engage in tourism business may not have a common language with many people in the village. Because most of the households engage in tourism just talk about business and earn hundreds of thousands of yuan a year. We only earn a little money while working, so the difference is definitely huge. Before, all of us are used to be migrant workers, there is not much difference between each other. Now, the gap is too big, so I usually don't go out after I come back home, because you have nothing to talk with others. (H7)

*Source: Author.*

The third step is to merge and classify initial codes exhibiting apparent semantic similarities in order to generate subcategories of livelihood opportunities and risks. Given the initially unstructured and dispersed nature of the codes, which hindered inductive identification of livelihood opportunities, the author conducted multiple readings and analyses of the interview data and initial codes. By examining the relationships between initial codes and consulting relevant literature, a hierarchical categorization process was employed. Through this systematic summarization and classification of initial codes for

livelihood opportunities, 18 subcategories were identified (see Table 4-6).

Table 4-6 The subcategories and initial codes of livelihood opportunities

Subcategories	Initial codes
O1 Family income level	A1 Revenue increase
O2 Family income sources	A2 Resource dividend income, A3 Wage income, A4 Tourism business income, A5 Rental income
O3 Family financing opportunities	A6 Borrowing from family and friends, A7 Government financial support, A8 Commercial credit
O4 Employment choices	A9 Working in scenic spot, A10 Migrant work, A11 Seasonal tourism employment, A12 Self-employed entrepreneurs
O5 Vocational skills training	A13 Government training, A14 Company training, A15 Informal organization training
O6 Work Freedom	A16 Independently arrange work content A17 Independently arrange work hours
O7 Interactions between farmers	A18 Information sharing, A19 Customer sharing, A20 Daily communication
O8 Interaction between hosts and guests	A21 Interaction during travel, A22 Interaction after travel
O9 Interaction among residents- enterprise- government	A23 Interaction between farmers and tourism company personnel, A24 Interaction between farmers and government officials
O10 Learning atmosphere	A25 Independent learning, A26 Competitive learning
O11 Learning channels	A27 Online learning, A28 Learning from other farmers, A29 learning from tourism company, A30 participating in relevant skills training
O12 Learning Costs	A31 Time cost, A32 Monetary cost
O13 Skill enhancement	A33 Social skills, A34 Marketing skills, A35 Network skills, A36 Special vocational skills
O14 Knowledge increase	A37 Local cultural knowledge, A38 Tourism operating knowledge
O15 Identity transformation	A39 Farmer turns into scenic spot staff, A40 Farmer turns into Artist, A41 Farmer turn into boss/proprietress
O16 Self-identity	A42 Self-role identity, A43 Self-value identity
O17 Community identity	A44 Sense of community dependence, A45 Sense of community belonging, A46 Sense of community integration, A47 Clan consciousness
O18 Cultural identity	A48 Cultural value appreciation, A49 Cultural preservation consciousness, A50 Cultural inheritance practices, A51 Cultural pride

Source: Author

Similar to the process of summarizing and categorizing initial codes for livelihood opportunities, 15 subcategories of livelihood risks were identified (see Table 4-7).

Table 4-7 The subcategories and initial codes of livelihood risks

Subcategories	Initial codes
R1 Cultivated land status	B1 Decreased cultivated land area, B2 Declined cultivated land quality
R2 Water resources conditions	B3 Polluted production water, B4 Declined domestic water quality
R3 Domestic waste	B5 Increase in garbage, B6 Increase in sewage
R4 Tourist consumption preferences	B7 Catering preferences, B8 Accommodation preferences, B9 Commodity purchase preferences
R5 Tourist consumption level	B10 Catering consumption level, B11 Accommodation consumption level, B12 Commodity purchase consumption level
R6 Tourist consumption frequency	B13 Catering consumption frequency, B14 Accommodation consumption frequency, B15 Commodity purchase quantity
R7 Family living expenses	B16 Rising price, B17 Increase in types of daily consumption
R8 Tourism operating costs	B18 B&B decoration cost, B19 Food and facility purchase cost, B20 Commodity purchase cost, B21 Labor employment cost, B22 Network operation cost
R9 Market price fluctuations	B23 Catering price fluctuations, B24 Accommodation price fluctuations, B25 Commodity price fluctuations
R10 Physical fatigue level	B26 Working hours, B27 Working intensity
R11 Psychological stress	B28 Mental burden, B29 Psychological gap
R12 Pace of life	B30 Irregular daily routine B31 Unhealthy diet
R13 Social relationship maintenance	B32 Relationship between farmers, B33 Relationship between farmers and Tourism company, B34 Relationship between farmers and foreign operators, B35 Relationship between farmers and local government
R14 Common development vision	B36 Values, B37 Development goals
R15 The gap between the rich and poor	B38 Income gap among households

Source: Author.

The final step involves subjecting the subcategories of livelihood opportunities and risks, established in step three, to further analysis by examining the internal logical relationships between the categories and merging those with similar connotations. This process culminated in the identification of core categories representing the distinct dimensions of livelihood opportunities and risks engendered by rural tourism development within households. Subsequent to determining the subcategories of livelihood opportunities derived from rural tourism, a renewed examination of the original interview data was undertaken to deepen comprehension of the nuances associated with initial

codes and subcategories. Concurrently, the interrelationships between subcategories were repeatedly considered, leading to the refinement of the 18 subcategories of livelihood opportunities extracted in step three. Ultimately, 6 core categories of livelihood opportunities were established (see Table 4-8).

Table 4-8 Core categories of livelihood opportunities

Core categories	Subcategories
Economic opportunities	O1 Family income level, O2 Family income sources, O3 Family financing opportunities
Employment opportunities	O4 Employment choices, O5 Vocational skills training, O6 Work Freedom
Social opportunities	O7 Interactions between farmers, O8 Interaction between hosts and guests, O9 Interaction among residents-enterprise- government
Learning opportunities	O10 Learning atmosphere, O11 Learning channels, O12 Learning Costs
Development opportunities	O13 Skill enhancement, O14 Knowledge increase, O15 Identity transformation
Identity opportunities	O16 Self-identity, O17 Community identity, O18 Cultural identity

*Source: Author.*

Following a similar process of summarization and refinement applied to livelihood opportunities, the 15 subcategories of livelihood risks extracted in step three were consolidated into 5 core categories (see Table 4-9).

Table 4-9 Core categories of livelihood risks

Core categories	Subcategories
Environment risks	R1 Cultivated land status, R2 Water resources conditions, R3 Domestic waste
Market risks	R4 Tourist consumption preferences, R5 Tourist consumption level, R6 Tourist consumption frequency
Economic risks	R7 Family living expenses, R8 Tourism operating costs, R9 Market price fluctuations,
Health risks	R10 Physical fatigue level, R11 Psychological pressure, R12 Pace of life
Social risks	R13 Social relationship maintenance, R14 Common development vision, R15 Wealth disparity

*Source: Author.*

## 4.5 Households' livelihood opportunities

As presented in Table 4-7, the six dimensions of livelihood opportunities afforded to households by rural tourism are economic, employment, social, learning, development, and identity opportunities. Economic opportunities pertain to the potential for households to enhance family economic circumstances through increased income levels

and diversified revenue streams facilitated by rural tourism development. Employment opportunities encompass the range of employment options available to households following the emergence of rural tourism. Social opportunities refer to the avenues for households to engage in social interactions and communication during their participation in rural tourism activities. Learning opportunities describe the access to enriched learning environments and channels enabled by rural tourism development. Development opportunities signify the means of households to expand knowledge, refine skills, and foster identity transformation through rural tourism. Finally, identity opportunities relate to the prospects for households to strengthen their sense of self, community cohesion, and belonging through involvement in rural tourism.

#### **4.5.1 Economic opportunities**

The tourism industry has emerged as a significant driving force for promoting rural economic development. One of the most direct positive impacts of rural tourism on the livelihoods of destination households is the enhancement of their economic opportunities. In this study, the economic opportunities provided by rural tourism to destination households are primarily reflected in three aspects: increased family income levels, diversified family income sources, and expanded family financing opportunities. Firstly, households can participate in rural tourism development either directly or indirectly to boost their economic income levels. Households in villages surrounding the Huangling scenic area can engage in rural tourism development directly by providing catering and accommodation services, and selling tourism commodities, thereby supplementing their household income. Alternatively, they can also indirectly engage in rural tourism through means such as tourism profit-sharing arrangements or leasing out stalls and properties. Both approaches are equally effective in enhancing household income levels.

“Most of us in Huangling are involved in different aspects of the tourism business. In addition to setting up stalls, running restaurants, or making money from accommodations, we also receive tourism profit-sharing from the tourism company, which is about 500 yuan per person per year. For a family, this adds up to around 2,000 yuan, which is a significant boost compared to before. (Household H30)”

Secondly, the development of rural tourism has diversified the original income sources for local households. The principal sources of income for households in the villages surrounding the Huangling scenic area include resource dividend income, wage income,



tourism business income, and rental income. Resource dividend income primarily stems from economic compensation provided by the tourism company to villagers for the use of public resources—such as ancestral halls and forests—that are utilized for rural tourism development. Wage income encompasses earnings from employment as migrant workers, positions within scenic spots, or seasonal tourism-related work. Tourism business income refers to revenue generated by households through activities such as catering, accommodation, and the sale of tourism commodities. Rental income consists of earnings from leasing personal properties and stalls to external operators.

“Residents of Huangling new village receive an annual resource fee dividend, thanks to a contract between the tourism company and the village committee from the beginning. During that time, I was the leader of the village representative group, which negotiated with the tourism company on behalf of the villagers. Initially, the fee was set at 450,000 yuan per year, with an additional 50,000 yuan added every five years. It’s currently at 550,000 yuan per year, and in 2022, each villager received about 500 yuan... Not many villagers from Huangling new village work outside the area; mainly it’s the young people who look for higher-paying jobs elsewhere and are less inclined to return. Some come back for peak tourist seasons but work outside during the off-seasons to earn extra income. There are also elderly residents who work at the scenic spots as Shaiqiu staff, restaurant waiters, or hotel housekeepers...Generally, working in tourism accommodation can be quite profitable because villagers use their own houses and have minimal costs. Water expenses are low since much of it comes from the mountain, and electricity bills are manageable. They usually handle cleaning themselves. Catering can also be profitable, though it can be demanding...In the past two years, some families have chosen not to run tourism businesses themselves. Having already made a significant amount of money, they now rent out their houses to others and take on easier jobs outside, which adds up to a good income. (Government official G3)”

Finally, the development of rural tourism also provides additional financing opportunities for households. To encourage participation in the bed-and-breakfast (B&B) industry, the Wuyuan county government has introduced rural housing mortgage loan pilots and “B&B loan” programs to reduce financing costs for households. Additionally, households that upgrade or renovate their farmhouses to meet B&B star rating standards are eligible for

differential rewards based on the level of the rating. Moreover, in response to the burgeoning rural tourism industry in the Huangling scenic area, some banks have proactively offered loan facilities to households in surrounding villages to facilitate better business opportunities.

“These days, it’s relatively easy for people to borrow money. On one hand, with the growth of rural tourism, villagers are wealthier than before and have more funds available. So, borrowing tens of thousands of yuan from relatives and friends isn’t that hard. On the other hand, for those looking to invest in tourism ventures, like setting up homestays, the government offers support through loan policies, such as “homestay loans”, and some banks also provide loan discounts. (Household H14)”

#### **4.5.2 Employment opportunities**

The development of rural tourism has generated additional employment opportunities for households, evidenced by increased employment options, vocational skills training opportunities, and enhanced work freedom. Prior to the advent of rural tourism, households in the villages surrounding the Huangling scenic area primarily engaged in employment through two means: local short-term migrant work or long-term migrant work. With the advancement of rural tourism, the range of employment opportunities has significantly expanded. Older villagers with lower levels of formal education can now find employment in roles such as cleaning, flower planting, security, and seasonal staff positions. Conversely, younger individuals with higher educational attainment can pursue roles such as tour guides, homestay receptionists, and ticket sellers at the scenic spot. Households with a solid economic foundation and business acumen can engage in self-employment by establishing stalls, opening restaurants, or operating farmhouses.

“The tourism development in the Huangling scenic area has greatly changed the employment structure for our village households. In the past, nearly everyone worked outside the village in addition to farming at home. But with the rise of tourism, many people have returned. In Xiaorong village, while fewer residents are involved in tourism accommodations compared to Huangling new village, a large number still work at the scenic spot. Older residents mostly handle planting flowers and grass at the scenic spot, earning about 100-120 yuan a day for men and 80-100 yuan for women. During peak times, around 300 people are employed for these tasks. Meanwhile, younger

folks mostly work in restaurants and homestays. Right now, there are about 100 room attendants and scenic area managers. (Government official G5)”

“Households living near the Huangling scenic area now find it fairly easy to get jobs. A lot of the positions within the scenic spot are taken by residents from the surrounding villages. Actually, many people in Huangling new village are reluctant to work at the scenic spot because they make more money managing their own catering or accommodations business. (Household H19)”

Secondly, the Wuyuan county government has organized relevant vocational skills training for local households to encourage their participation in rural tourism operations, thereby increasing their opportunities for skill development. The development of the Huangling scenic area has consistently emphasized the involvement of local households in the scenic spot construction, ensuring a shared benefit between the scenic spot and the residents. Consequently, the scenic spot has also provided targeted vocational skills training to local households throughout the rural tourism development process, which has facilitated the enhancement of their tourism-related skills. Notably, households with family members working within the scenic spot are more likely to benefit from the vocational skills training opportunities offered by the tourism company.

“Previously, the government set up a free chef training program for stir-frying. They brought in professional chefs to give lectures, and people could choose to attend based on their needs. (Household H32)”

“Working at the scenic spot, training like this is pretty common. The company regularly sets up sessions to help us improve our housekeeping skills because they want to maintain high service quality and a good reputation. Particularly, some homestays in Huangling cater to mid to high-end tourists and offer personalized services like private butlers. Without specialized training, we definitely wouldn’t be able to provide these kinds of services. (Household H44)”

In addition, the overall work freedom of households in the villages surrounding the Huangling scenic area has improved. This enhancement is primarily due to the shift from previous migrant labor to self-employment opportunities in the rural tourism sector, including catering, accommodation, and commodity sales. Households now have the autonomy to determine how they host tourists, independently organizing their work content and hours without external constraints.

“Operating this agritourism business offers a significant degree of freedom compared to traditional employment. Unlike my previous job, where strict adherence to the boss’s rules and punctuality were crucial, here we have much more freedom. We organize everything ourselves. The main job is to make sure guests’ rooms are cleaned after they check out, and beyond that, there aren’t many other obligations. Plus, if we have personal matters to handle, we don’t need to get permission from the employer. Basically, we manage everything on our own and make our own arrangements. (Household H32)”

### **4.5.3 Social opportunities**

The development of rural tourism has engendered the influx of tourists from diverse regions, the entry of foreign industry actors, and the return of local labor, thereby creating more social opportunities for households. Firstly, due to the development of rural tourism in Huangling scenic area, many laborers in the surrounding villages have returned to their hometowns to find jobs and start businesses. Consequently, interpersonal interactions and exchanges among households have intensified.

“In the past, it was rare to see young people in the village since most of them sought work elsewhere. However, many have now returned to get involved in tourism activities, leading to more frequent social gatherings and interactions. As a result, there are naturally more opportunities for communication. (Household H37)”

Households frequently engage in daily communication through face-to-face interactions or social media platforms such as WeChat, sharing information related to tourism development and tourism business with one another. They also cooperate and interact with each other. For instance, farmhouse operators often share customers during peak tourism seasons, and both farmhouse operators and tour charter drivers occasionally transport customers for one another.

“Nowadays, with the advent of the internet, interpersonal communication has greatly increased compared to the past. Since everyone has mobile phones, physical meetings are less necessary. WeChat messaging, in particular, offers significant convenience. If needed, people can easily make video or voice calls, and most people are part of WeChat groups. Personally, I’m in several tourism-

related groups. Typically, group members discuss various matters in these forums. For example, if a customer needs a ride to the high-speed rail station, they might ask about carpooling in the group, and other members can respond accordingly. (Household H13)”

Secondly, due to the influx of tourists, households not only have more opportunities to communicate and interact with them while providing catering, accommodation, and other tourism services, but some households also maintain interactions with tourists after their trips, forming lasting friendships.

“I used to work as a teacher, but now I’m retired. Our area is renowned for its autumn scenery. In the past, many visitors came here to capture photographs, some even receiving awards for their work. As word spread, our locality gradually gained popularity. During that period, many guests stayed in my home, and as tourism flourished, their numbers increased. Some individuals, seeing our financial struggles, generously donated to us. For instance, on occasions like International Children’s Day or during the Spring Festival, they would purchase items to distribute to students... Many of my visitors became friends; they hailed from cities such as Beijing, Shanghai, and Jiangsu. Once, when I visited Beijing, I informed them via WeChat, and they promptly came to my hotel to meet me, bringing along numerous gifts. (Household H20)”

Finally, rural tourism development has cultivated closer ties among households, the tourism company, and local government bodies. The development and construction of the Huangling scenic area have been contingent upon the support of local residents. Consequently, the tourism company has consistently sought input and recommendations from households regarding tourism development through village committees or villager representative bodies. In particular, recent years have witnessed concerted efforts to enhance infrastructure and service quality within the Huangling scenic area to attain the status of a national 5A tourist attraction. Simultaneously, the tourism company has engaged in continuous communication and coordination with the Limukeng and Xiaorong village committees, actively soliciting villager feedback, and fostering cooperation to expedite the realization of a national 5A tourist attraction.

“Many of their tasks in the scenic area rely on the support of our residents. Currently, there is a proposal from the Wuyuan county government that the entire county should contribute to assist Huangling in achieving a national 5A

rating scenic spot. Consequently, the county has tasked us with actively collaborating with the efforts of the tourism company and facilitating communication and coordination with the villagers. For instance, if the scenic area requires land for construction purposes, we are responsible for assisting them in negotiating with the villagers to obtain their consent for land acquisition. Additionally, maintaining environmental sanitation in the village, a crucial aspect for achieving a national 5A rating scenic spot, must be meticulously executed. However, villagers may not always be fully aware of the importance of these initiatives, necessitating extensive communication and dialogue. (Government official G3)”

#### **4.5.4 Learning opportunities**

Households have gained more learning opportunities through the development of rural tourism, which is reflected in three aspects: an enhanced community learning atmosphere, increased learning channels, and reduced learning costs. Regarding the learning atmosphere, households’ initiative to learn has significantly increased due to the need to participate in rural tourism operations. For instance, to cater to tourists’ consumption preferences, households actively learn to speak Mandarin and spontaneously learn to operate online tourism platforms such as Meituan, Ctrip, and Dianping. Additionally, for the convenience of picking up and dropping off guests, households actively learn to drive and obtain driver’s licenses. Moreover, households often compare themselves with others, reflecting on why some are more successful, and then imitate and learn from each other.

“Nowadays, many individuals proactively seek to acquire new skills, primarily driven by business considerations. For instance, as homestay proprietors like us, our tastes evolve rapidly, necessitating renovations every two or three years. Failure to update our décor renders it outdated, deterring tourists. Initially, our home was constructed using wooden boards, reflecting the prevailing trend at that time. However, this kind of style is no longer viable. Therefore, last year, I undertook the dismantling and renovation of the wooden boards, highlighting the necessity of continuous learning. Moreover, there is a need for online proficiency, as an increasing number of young people make reservations online. Consequently, we must familiarize ourselves with operating platforms such as Ctrip and Meituan. Even those handle the cooking, and it seems they also need to manage reviews on sites like Dianping.

Nowadays, many guests check online reviews before deciding where to eat. They usually choose the places with the most positive reviews. (Household H14)”

An expansion of learning channels for households is evident in the diversification of knowledge acquisition methods. Households now benefit from not only peer-to-peer learning but also from accessing tourism management information through internet research, experiential learning opportunities offered by the tourism company, and participation in relevant vocational training programs. These combined approaches have significantly enhanced household capacity in tourism operations.

“There are actually many ways to learn about running a guesthouse. First, the internet is very convenient these days. Young people like us can use our phones to study successful examples from other places, like the guesthouses in Anji or Mogan Mountain in Zhejiang, which are doing really well. I also follow some WeChat public accounts and regularly read their articles to learn about good decorating styles. This helps me set up rooms to meet the needs of our guests, as young people today are all about ambiance, and we need to cater to that if we want people to stay. Additionally, there are some outsiders who come here to rent properties specifically to run farmhouses. They often use more advanced methods, and we learn by observing and imitating what they do. (Household H23)”

The reduction in learning costs can be reflected through the decrease in both time and economic expenses. Specifically, the use of the Internet and social media allows households to learn various aspects of tourism management during their leisure time without leaving home. Additionally, households with family members working in the scenic area can benefit from free vocational skills training provided by the tourism company, further enhancing their knowledge and skills.

“Given that the company (referring to the Huangling Scenic Area) also offers accommodation services, like the Shaiqiu Beautiful Inn, which has been renovated from old houses in Huangling, the exterior has seen minimal changes, but the interior has been updated to meet homestay standards and style. With their ample financial resources and business expertise, the company is definitely better at handling business operations than we are. Additionally, many people from our village work in the hospitality sector,

where they gain valuable insights into managing guesthouses and learn about effective accommodation practices through company training sessions. Regular exchanges and learning opportunities among peers also help improve our knowledge in everyday life. (Household H8)”

#### **4.5.5 Development opportunities**

The development of rural tourism has created more opportunities for households, primarily in three areas: skill enhancement, knowledge acquisition, and identity transformation. As previously mentioned, households can engage in increased communication and interaction with others, particularly tourists, during the development of rural tourism, which significantly improves their social skills. Households are not only proficient in using Mandarin to communicate with tourists but also adept at understanding and quickly responding to tourists’ service needs. To increase tourism business income, households continually learn to improve their marketing and networking skills. Additionally, some households have acquired specialized vocational skills such as cooking, brewing, and chrysanthemum crafting.

“Right now, everyone’s tourism skills have generally improved. To make a living, you need these skills; without them, it’s hard to earn money. A basic requirement is the ability to interact with tourists, which means you need to speak Mandarin well since dialects can be confusing for tourists. Also, in Xiaorong village, which is on a mountain compared to the Huangling (new village) location, they can attract visitors right at the scenic area’s entrance. Here, most of our guests book online, so if you’re not good with online operations, it’s tough to succeed. That’s why people like us, who work in accommodation services here, are skilled in online platforms like Meituan and Ctrip. (Household H13)”

Knowledge acquisition among households is primarily manifested in two domains: local cultural knowledge and tourism management expertise. Through their involvement in tourism development, households have revalued local traditional culture, leading to a deepened appreciation and understanding of their heritage.

“If it weren’t for tourism, we wouldn’t have realized how many people used to enjoy watching the Shaiqiu. In the past, drying corn and chili peppers was just a daily routine for us, but now it has become an important part of our



folk culture. The company even hosts a special event every year, like the Farmers' Harvest Festival at the Huangling scenic area, where experts come in to design different patterns for us to display while we sun them. (Household H46)"

Through ongoing involvement in tourism management, households have acquired and mastered sophisticated tourism management knowledge and service paradigms, thereby expanding their perspectives and intellectual horizons.

"As the saying goes, 'seeing is believing'. Many villagers used to spend their whole lives in the countryside and rarely met outsiders. Now, with tourism, people come and go all the time. We interact with customers every day in our business, and we deal with all sorts of people with different needs. Over time, our knowledge and understanding of tourism services are definitely getting better. (Household H33)"

Furthermore, the development of rural tourism has catalyzed a transformation of household identities. Historically, rural households predominantly comprised farmers or migrant workers. However, the emergence of rural tourism has presented households within the Huangling scenic area with opportunities to engage in tourism-related vocations, facilitating a transition from traditional roles to those of scenic area employees, artisanal producers, and even restaurateurs or farmhouse owners. This metamorphosis has significantly elevated the social standing of local households.

"In the past, our area was a poverty-stricken valley, and we were just ordinary households who didn't get much respect. Now, with tourism development, we not only have the chance to work in the scenic area but also to become entrepreneurs. Our status has really improved, and other villages are envious of us. To be honest, this has had a big impact on marriage. Before, because we were so remote, many girls were hesitant to marry us. Now, it's much easier to get married because we, the people of Huangling, have financial resources and can run local businesses, no longer limited to just farming or working outside like before. (Household H19)"

#### **4.5.6 Identity opportunities**

The identity opportunities afforded by tourism development to households encompass

self-identity, community identity, and cultural identity. Self-identity is predominantly manifested in two dimensions: self-role identity and self-value identity. Interview data revealed that most households expressed a stronger inclination towards tourism-related enterprises compared to traditional agriculture or migrant labor, particularly among middle-aged, elderly, and female demographics. These groups perceived their current occupations as garnering greater societal respect than previous roles. Prior to the emergence of rural tourism, many individuals within these demographics were constrained by physical limitations or familial responsibilities. Conversely, the subsequent development of rural tourism has enabled middle-aged and elderly individuals to generate wage income through scenic spot employment, while women have been empowered to operate restaurants or farmhouses, collectively contributing to enhanced self-role and self-value identities.

“In the past, our rural community was heavily influenced by patriarchal views, where men were seen as the main earners and had the final say in household matters. But with the rise of rural tourism, women have shown incredible skills and, in some cases, even outshine men. Why is that? Women often communicate more gently and handle guests more effectively. Many are involved in catering or managing accommodations and earn just as much as men. As a result, some households now rely on women’s decisions. (Household H17)”

Community identity is manifested in four key dimensions: sense of community dependence, sense of community belonging, sense of community integration, and clan consciousness. The development of rural tourism has intensified both the material reliance and emotional connection of local households to their residential communities. Notably, households who relocated from Huangling ancient village exhibited a pronounced sense of pride in their Huangling heritage. Furthermore, rural tourism development has amplified clan consciousness among households, fostering a deeper appreciation and comprehension of traditional clan history.

“Historically, Xiaoyong village (also known as Xiaorong village) and Huangling were sibling villages. At one point, even Huangling moved from our Xiaorong village. We share a common ancestry and originally migrated from Shandong. While the main focus of tourism development is in Huangling, a lot of the land used by the tourism company actually belongs to Xiaorong. As the company’s

development progresses, they're mainly using our Xiaorong land, so our two villages are closely connected. (Household H45)"

Cultural identity is manifested in cultural value appreciation, cultural preservation consciousness, cultural inheritance practices, and cultural pride among households. The development of rural tourism has fully realized the potential of local traditional culture. Households in the surrounding villages of the Huangling scenic area have cultivated a deeper comprehension and recognition of their cultural assets, such as ancient architecture, the Shaiqiu custom, and traditional handicrafts. This has not only amplified their awareness of preserving traditional culture but also stimulated the enactment of cultural heritage practices and fostered heightened cultural pride.

"Honestly, in the past, most ordinary people didn't have much cultural exposure. How could they know about folk customs and traditional culture? With the rise in popularity of this scenic spot, everyone's realized that Shaiqiu is also a form of culture. Nowadays, besides the rapeseed flowers, Huangling is famous for its Shaiqiu. The scenic spot hosts various Shaiqiu events every year, attracting lots of tourists who come to see, photograph, and check in. They also organize festival ceremonies for us to join in, like dragon dances, pig slaughtering during the Mid-Autumn Festival, and other rituals. Thanks to rural tourism development, these events have become even more elaborate. Many tourists love these experiences because they come from cities, so it's a completely different encounter from city life. (Household H42)"

## 4.6 Households' livelihood risks

As presented in Table 4-8, five dimensions of livelihood risks emerge for households engaged in rural tourism: environmental, market, economic, health, and social risks. Environmental risks encompass the potential negative impacts of rural tourism development on the natural ecological environment, including alterations to cultivated land, water quality, and community sanitation. Market risks pertain to the uncertainties inherent in the tourism consumption market faced by households participating in rural tourism business. Economic risks refer to the adverse consequences of rural tourism development on households, such as increased living expenses and the uncertain recovery of operational costs. Health risks encompass the physical and psychological burdens imposed on households due to their involvement in rural tourism activities. Social risks

pertain to the unpredictable factors, including disparities in geographical conditions and challenges in maintaining social relationships, encountered by households during the development of rural tourism.

#### **4.6.1 Environment risks**

The development of rural tourism has inevitably resulted in negative impacts on the natural ecological environment of the local community. These impacts are evident in the reduction of cultivated land area, deterioration in water quality, and an increase in domestic waste. As tourism development has intensified and tourist numbers within the Huangling scenic area have surged, the demand for land to build tourism infrastructure has also increased. Consequently, the cultivated land resources of local households are being continuously transferred and expropriated by tourism companies for the construction of projects such as terraced flower seascapes, tourist service centers, parking lots, and cableways. This has significantly diminished the amount of cultivated land available to households.

“We have very little available land remaining. Initially, the terraced fields on the mountain were allocated to the tourism company for flower cultivation, and a substantial portion of the farmland below the mountain was acquired to establish the tourist center and parking lots. Last year, even the land adjacent to the parking lot was taken. This is all prime land, and many of us (referring to the local households) are reluctant to part with it. However, there is little we can do, and we remain uncertain about the company’s development plans. If we choose not to cultivate this land in the future, it will be manageable. However, if we decide to cultivate it, we will have no land left. (Household H27)”

To improve tourism reception services for visitors, households have also converted their farmland into parking lots (see Figure 4-3), further diminishing the already limited cultivated land resources.

“This is quite evident. Nowadays, many guests prefer to travel by self-driving. Before their arrival, they often inquire in advance about parking arrangements. Who wouldn’t want to park directly at the hotel entrance? However, given the high influx of tourists to Huangling, parking spaces are limited, especially during holidays. The existing parking lots are often insufficient, leading many

households to create their own parking spaces. Currently, households that successfully operate homestays have typically designated their own parking lots. Some households with ample space have constructed parking lots directly in front of their homestays, while others, lacking sufficient space, either use their own land or rent land from other households to build parking lots. (Household H41)”



Figure 4-3 Private parking lots converted from vegetable fields or farmland by the households  
(Source: Author)

Moreover, the substantial transfer of local households' terraced land within the Huangling scenic area to establish a terraced flower seascape has necessitated the extensive application of pesticides, herbicides, and other chemicals by the tourism company during cultivation. This practice has inadvertently contributed to the collapse of certain terraced fields, consequently diminishing the quality of farmland for households. The development of rural tourism has also exerted a notable impact on the daily living environment of households in surrounding villages. The discharge of sewage from catering and accommodation establishments within the mountainside Huangling scenic area has resulted in a degree of pollution to fish ponds and other water sources utilized by households in the valley, disrupting their traditional production methods. Furthermore, to meet the catering and accommodation needs of tourists, households engaged in these

sectors have experienced a significant increase in domestic waste and sewage, exerting a substantial negative influence on the local ecological environment.

“The ecological environment remains generally favorable; however, there has been a noticeable increase in the generation of garbage and sewage. In the past, when the area was less populated, waste production was minimal. However, with the influx of tourists requiring food and accommodation, the volume of garbage has surged. Additionally, sewage discharge has become a pressing issue, particularly from toilets. Unfortunately, our village’s sewage pipeline remains unrepaired. During the hot summer months, water scarcity exacerbates the problem, leading to foul-smelling water in nearby ditches. These environmental impacts are unmistakable. (Household H12)”

#### **4.6.2 Market risks**

The dynamic nature of the tourism consumption market has directly elevated market risks for households within rural tourism destinations. Households in the villages surrounding the Huangling scenic area are primarily exposed to three key market risks: tourist consumption preferences, tourist consumption levels, and tourist consumption frequency. The diverse demographic characteristics of tourists, including geographical origin, age, and personality, inevitably result in varying preferences for dining, accommodation, and purchasing. However, rural households often possess limited knowledge and skills, hindering their ability to accurately anticipate tourist demands and consequently introducing uncertainty into household profitability.

“Despite our years of experience in the homestay industry, tourist preferences evolve rapidly. The decor becomes outdated within two to three years, necessitating costly renovations each time. Although we invest hundreds of thousands of dollars, the returns are not immediate. (Household H41)”

Moreover, variations in tourist demographics contribute to fluctuations in consumption levels. According to the majority of household respondents, younger consumers prioritize service quality and exhibit a greater propensity for high-priced catering, accommodation, and tourism products. Conversely, middle-aged and elderly consumers tend to be more conservative and opt for lower-priced tourism services.

“Presently, young individuals prioritize lifestyle indulgence. If they possess

disposable income today, they readily expend it; if not, they contemplate the matter tomorrow. Platforms such as Ctrip and Meituan facilitate microloans like Huabei. Numerous young individuals leverage Huabei to reserve accommodations, a privilege not accessible to the elderly. The latter cohort exhibits thriftiness, typically opting for more economical lodging. (Household H21)”

Additionally, variations in tourists’ demands for tourism products and their length of stay contribute to the instability of consumption frequency. For instance, young and middle-aged family tourists, due to the presence of underage children, often have higher demands for tourism products and tend to stay longer. Consequently, they exhibit a higher frequency of consumption for catering and accommodation services.

“Typically, parents who accompany their children for leisure activities tend to spend more time and are more willing to spend money. This makes sense, as they prioritize their children’s needs. For instance, when it comes to dining, adults might be more frugal, but ensuring children have nutritious meals is paramount. Nowadays, with the trend of nuclear families having one or two children, youngsters are the main focus. Parents who can afford to take their children on outings generally don’t worry much about the costs. (Household H29)”

#### **4.6.3 Economic risks**

While households improve their livelihoods by engaging in rural tourism operations, they also face increased economic risks. The economic risks encountered by households in villages surrounding the Huangling scenic area are reflected in three aspects: rising household living expenses, high tourism operating costs, and market price fluctuations. Firstly, the development of rural tourism in Huangling has substantially raised the local price level, significantly increasing the cost of daily necessities and public transportation. Simultaneously, households, due to their involvement in rural tourism businesses, have less time to engage in traditional agricultural production and thus must purchase a greater variety of daily necessities such as grains and vegetables, further exacerbating their living expenses.

“In the past, I didn’t engage in tourism activities. Instead, I grew my own rice and vegetables, and occasionally bought meat. Nowadays, my schedule

doesn't allow me to tend to crops, so I rely on external sources for food. As a result, I buy a lot of vegetables from vendors. Rising prices are a concern, with vegetables costing around 10 yuan per kilogram. For instance, while I grow chili peppers myself, I have to buy Malantou (a wild vegetable) at a steep price of 20 yuan per kilogram. (Household H26)”

Secondly, as households participate in the development of rural tourism, they also incur increased tourism operating costs. These costs include expenditures for raw food materials, accommodation facilities, tourism commodities, and the rental of houses and stalls. Additionally, households face labor and employment costs, as well as expenses related to operating on online tourism platforms such as Meituan and Ctrip.

“The risk associated with establishing a homestay remains notably high, discouraging many from investing due to the substantial costs involved. For instance, our own household incurred expenses exceeding one million yuan, covering construction, renovation, and the acquisition of various household appliances and amenities. Additionally, during peak seasons, hiring extra personnel further inflates operational costs. There are also ongoing network-related expenses, including costs on platforms such as Ctrip and Meituan, amounting to 10,000, 20,000, 30,000, or even 50,000 yuan annually. (Household H21)”

Finally, due to the seasonal variations in tourism at the Huangling scenic area, there are significant fluctuations in the prices of catering, accommodation, and tourism commodities. During peak seasons, such as spring (March to April) and autumn (October to November), the number of tourists in Huangling increases markedly. This leads to shortages in catering and accommodation services, causing prices for these services and tourism commodities to rise significantly. Conversely, during the off-season, prices tend to decrease accordingly.

“The pricing dynamics of accommodations have undergone significant fluctuations. Currently, with reduced foot traffic and outside peak seasons, prices are relatively moderate. For instance, in Huangling new village, rates typically range from approximately 80 to 100 yuan per night for standard lodgings, while more upscale accommodations may command around 200 to 300 yuan in Lingjiao. Even the most luxurious options are priced modestly, hovering between 400 to 500 yuan. However, during peak periods, such as the



blooming season of rapeseed flowers, prices escalate substantially. Premium accommodations can exceed 1,000 yuan, while budget-friendly alternatives average around 400 to 500 yuan. Similarly, in Huangling, peak season rates surge to approximately 300 to 500 yuan per night, often leading to limited availability. (Household H23)”

#### **4.6.4 Health risks**

Engaging in rural tourism employment often requires high physical and mental resilience from the labor force, and households may face certain health risks as a result of participating in rural tourism operations. Households involved in rural tourism sometimes experience longer working hours and greater work intensity. For households in the villages surrounding the Huangling scenic area, while some villagers working directly within the scenic area have relatively fixed working hours and intensity, most households engaged in catering, accommodation, and commodity sales face significant uncertainty in their working hours and intensity due to the unpredictable demands of tourists.

“Currently, managing meal preparation is quite manageable, especially during off-peak times when customer flow is low. I’m moderately busy and not overly tired. However, during the peak tourism season, the workload becomes overwhelming. We start our day before 7 in the morning and stay busy until 10 or 11 at night. After customers leave, there are still chores like washing dishes, sweeping floors, and cleaning tables, which means working late into the night. In the past, even after finishing farm work in the evening, the exhaustion wasn’t as pronounced. (Household H32)”

Furthermore, according to the majority of households engaged in rural tourism management, they experience greater psychological pressure compared to traditional livelihood strategies such as agriculture and migrant work, which manifests in increased mental burden and psychological disparity. The mental burden is particularly pronounced for self-employed households, as they must continuously consider ways to enhance their services and attract more customers. The psychological disparity arises from relative comparisons among households. In traditional rural settings, where households primarily relied on agriculture and migrant work, the income gap between the rich and poor was relatively small. However, with the development of rural tourism, the income gap between households has widened. Households involved in catering or accommodation often enjoy higher tourism income, while those engaged in commodity sales or working

within the scenic area tend to have lower income levels. Even among households engaged in the same type of tourism business, significant income disparities exist, leading to psychological gaps among households.

“Previously, poverty was pervasive, and even with diligent work, substantial earnings were challenging to achieve. Now, success in tourism ventures varies significantly. Some individuals flourish, investing hundreds of thousands of yuan annually, while others find running homestays financially out of reach and resort to operating stalls or seeking external employment, resulting in diminished income. Disparities in performance lead to noticeable differences in individual circumstances. (Household H7)”

Additionally, traditional livelihood strategies such as agriculture and migrant work typically involve fixed working hours. In contrast, households engaged in catering, accommodation, and commodity sales must frequently adjust their working hours based on tourist demand. Furthermore, because tourism businesses like catering, accommodation, and commodity sales often require substantial upfront investments, households are compelled to continue operations to recover costs and maximize tourism revenue, even amidst uncertainty regarding tourist numbers and demand.

“This job lacks flexibility entirely. You’re required to be present from before 8 in the morning until 8 in the evening. Regardless of tourist footfall, you can’t leave casually because the arrival of tourists is unpredictable. If you’re absent when tourists arrive, it results in losses, so you need to be there constantly. (Household H37)”

#### **4.6.5 Social risks**

The social risks encountered by households in rural tourism destinations are manifested in three areas: the maintenance of social relationships, the absence of a common vision, and the widening wealth disparity. Within the villages surrounding the Huangling scenic area, competition for resources among various stakeholders has exacerbated social tensions, encompassing conflicts among households, between households and the tourism company, between households and foreign operators, and between households and local government entities.

According to interviews with some households, conflicts often arise among those engaged

in catering, accommodation, or commodity sales due to competition for customers. During fieldwork, the author found that the phenomenon of tourist solicitation among households in Huangling new village is particularly pronounced. Although a scheduling system was spontaneously organized over time to manage the solicitation process, with households alternating in providing catering and accommodation services, conflicts and contradictions occasionally arise due to competition.

“This conflict is sometimes inevitable since everyone is involved in the tourism industry. Some households thrive and earn more, while others attract fewer customers. This leads to comparisons and feelings of envy. It’s a common occurrence. (Household H18)”

Moreover, there is significant competition between households and the tourism company. For instance, tickets for Huangling scenic area are valid only for the same day, which leads some tourists to choose accommodations within the scenic area for extended stays. Households argue that the tourism company’s ticket policy is unreasonable and advocate for allowing tourists to use local household accommodations to visit the scenic area multiple times within a certain period. This creates an inevitable conflict of interests between the two parties. Furthermore, foreign operators, who often possess advanced business concepts and greater economic capital, also present a competitive challenge to local households.

“I think it’s unreasonable that the scenic spot ticket is only valid for the same day. For example, some tourists arrive in the afternoon and want to enjoy more time, but if they choose to stay at the base and come back the next day, they’d have to buy a new ticket. This might lead tourists to book accommodations within the scenic spot instead, which isn’t great for us. Don’t you agree? (Household H35)”

Households and local governments also experience conflicts. For instance, households may privately convert ecological farmland into parking lots to accommodate tourists, which often leads to resistance when faced with the government’s stringent law enforcement. The tension between households and other stakeholders is partly due to the lack of a unified community vision. According to feedback from interviewed households, there is currently no coordinated planning or guidance for household participation in tourism development. The values and development goals among households vary significantly. For instance, elderly individuals tend to be conservative and are often

reluctant to invest heavily in running B&B establishments, while middle-aged and younger groups, with their greater innovative capabilities, seek to move beyond traditional development models. This divergence in development goals makes it challenging to reach consensus, leading to a degree of vicious competition among households.

“To be honest, the management of this farmhouse is still pretty chaotic. In theory, the homestays at Lingjiao should be doing well because the government should have planned more uniformly a while ago. But right now, everyone is doing their own thing, and a lot of things aren’t standardized. For example, the parking lots are scattered all over the place, and it doesn’t look good when tourists come, does it? (Household H41)”

Additionally, the absence of a collective vision for common development among households has contributed to the widening gap between the rich and poor. The level of tourism participation varies among households, resulting in differing benefits from tourism development. Households that are more actively involved in tourism generally achieve greater financial success.

“Nowadays, in the village, those with money are really well-off, and those without it are struggling. Why is that? It’s because some families have great locations and lots of customers, so they earn a lot. Meanwhile, others are lagging behind and don’t know how to handle online marketing. As a result, they don’t get many visitors and can’t make much money. (Household H14)”

## 4.7 Conclusions

This chapter employs qualitative content analysis to identify the livelihood disturbances brought by rural tourism development to households, focusing on both opportunities and risks. The analysis yielded a total of 632 key descriptions from households in the Huangling scenic area concerning livelihood opportunities generated by rural tourism, resulting in the identification of 51 initial concepts, 18 subcategories, and 6 core categories. Conversely, 593 key descriptions pertaining to livelihood risks were extracted, leading to the formulation of 38 initial codes, 15 subcategories, and 5 core categories. The main conclusions are as follows:

Firstly, rural tourism development generates six types of livelihood opportunities for local

households: economic opportunities, employment opportunities, social opportunities, learning opportunities, development opportunities, and identity opportunities. Economic opportunities are manifested in three key areas: increased household income levels, diversified sources of household income, and enhanced household financing opportunities. Employment opportunities are characterized by expanded employment pathways, increased vocational skills training opportunities, and greater work freedom. Social opportunities include enhanced interactions among households within the community, increased exchanges between households and tourists, and more frequent interactions between households, local governments, and the tourism company. Learning opportunities are reflected in an improved daily learning atmosphere, expanded learning channels, and reduced learning costs. Development opportunities encompass the enhancement of households' tourism-related vocational skills, an increase in knowledge, and the transformation of households' identities. Finally, identity opportunities are evident in the strengthening of households' self-identity, community identity, and cultural identity.

Secondly, the development of rural tourism has introduced five types of livelihood risks for local households: environmental risks, market risks, economic risks, health risks, and social risks. Environmental risks encompass deteriorating conditions of cultivated land, declining quality of water resources, and increased household waste, including community garbage and sewage. Market risks are primarily evident in three areas: fluctuations in tourism consumption preferences, variations in tourist expenditure levels, and unpredictability in the frequency of tourism consumption. Economic risks are reflected in increased household living expenses, rising tourism operating costs, and price volatility in the tourism consumption market. Health risks include increased physical fatigue, heightened psychological pressure, and decreased flexibility in tourism-related employment. Social risks involve unstable social relationships, a lack of common visions and goals among households, and an expanding gap between the rich and poor.

In summary, this chapter identifies the livelihood opportunities and risks associated with rural tourism development for households in the villages surrounding the Huangling scenic area and establishes specific measurement indicators for each type of livelihood opportunity and risk. This provides a foundation for the subsequent exploration of households' perceptions regarding these livelihood opportunities and risks in Chapter 6.

# **Chapter 5 Livelihood adaptive behaviors developed by households in response to rural tourism development**

## **5.1 Introduction**

This chapter presents the second part of the qualitative findings of this research, focusing on research objective two. It aims to examine the livelihood adaptive behaviors developed by households in response to rural tourism development. Data on household livelihood adaptive behaviors in villages surrounding the Huangling scenic area were collected through semi-structured interviews. Thematic analysis was subsequently employed to investigate changes in these behaviors over time.

This chapter is structured into four sections. The first section outlines the Livelihood Adaptive Behavior Cycle (LABC) model, serving as a theoretical framework to comprehend the phased evolution of household livelihood adaptive behaviors. The second section details the data analysis methodology, providing a comprehensive account of the coding process for themes and concepts. The third section identifies five phases in the evolution of households' livelihood adaptive behaviors and explores the distinct characteristics of each phase. Finally, the fourth section discusses the interplay between the changing process of households' livelihood adaptive behaviors and the LABC model. It interprets the dynamic nature of these behaviors within rural tourism contexts, investigating the underlying principles that motivate households to continually adjust their adaptive strategies in response to evolving tourism landscapes.

## **5.2 Theoretical rationale**

The concept of the adaptive cycle, proposed by Holling (1986), was originally intended to describe how ecosystems self-organize and respond to environmental changes. It gradually evolved into a theory for interpreting the dynamics of ecosystems and human-terrestrial systems (Angeler et al., 2015; Burkhard et al., 2011; Sundstrom & Allen, 2019; Randle et al., 2015). This theory builds on traditional ecological succession models by adding two stages: release and reorganization (Figure 5-1). It captures the dynamic processes of complex systems through four stages: exploitation (r), conservation (K),

release ( $\Omega$ ), and reorganization ( $\alpha$ ) (Holling, 2001; Holling & Gunderson, 2002). The transitions between these stages are driven by three attributes: potential, connectedness, and adaptive capacity. Potential refers to the inherent resources or wealth within the system, which determine the range of possible future outcomes. Connectedness represents the degree of connection between internal control variables and processes, indicating the system's sensitivity to external disturbances. Adaptive capacity is the ability of a system to withstand and recover from external shocks, serving as the antithesis of vulnerability (Holling, 2001).

Holling (2001) describes the stages of the adaptive cycle as follows. In the exploitation ( $r$ ) stage, systems experience resource availability and slow growth. During the conservation ( $K$ ) stage, systems undergo rapid growth, accumulating ecological, economic, social, and cultural capital, while connectivity and stability increase. The release ( $\Omega$ ) stage occurs when excessive connectivity and stability lead to rigidity, potentially causing collapse due to external disturbances, which releases bound resources and transitions the system to the reorganization stage. During the reorganization ( $\alpha$ ) stage, changes, innovations, and accumulated capital are reclassified and recombined, creating new opportunities for development and initiating a new cycle.

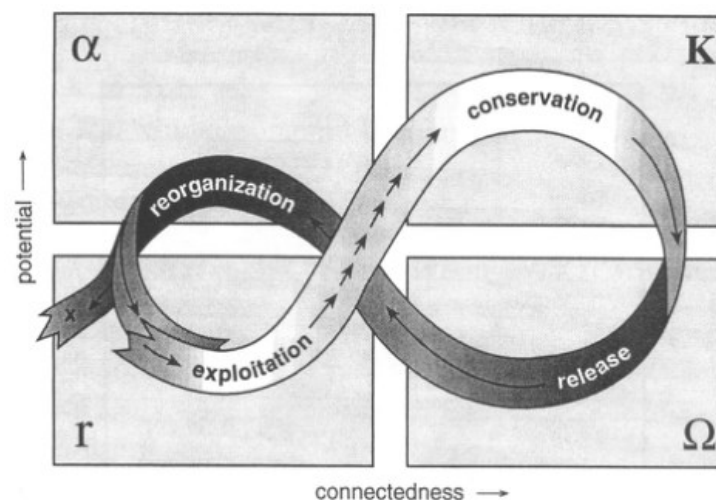


Figure 5-1 Adaptive cycle model (Adapted from Holling (2001))

Note: The x-axis represents potential, while the y-axis represents connectedness. The arrows illustrate the rate of change within the cycle; short and dense arrows indicate slower changes, whereas long arrows indicate rapid changes (Holling, 1986).

In recent years, the theory of the adaptive cycle has increasingly found applications in tourism research. Based on Holling's adaptive cycle model, Tsao and Ni (2016) proposed that dynamic changes in a system's vulnerability and resilience could drive its

development over time. They introduced a new adaptive cycle model from a temporal perspective, with vulnerability representing the connectedness of the tourism destination system and resilience representing its inherent potential. Using a tourist destination community as a case study, they analyzed the evolution of the tourism destination system over time. Shen and Quan (2022) examined the development process of rural tourism at a destination using the adaptive cycle model. They also analyzed the challenges faced by rural households at different stages of rural tourism development. Similarly, Dai et al. (2022) constructed an analytical framework for the evolution of tourist destinations based on the adaptive cycle theory. In this framework, the system's inherent potential is reflected in its resources or capital, while connectedness is characterized by its capital structure. They analyzed the evolution and development process of tourism destination systems from a chronological perspective.

These above studies suggest that the adaptive cycle theory is a useful tool for analyzing the changing characteristics of a system at different stages from a temporal perspective. Building on this foundation, this study leverages the adaptive cycle theory to develop a theoretical model for the evolution of households' livelihood adaptive behavior in rural tourism destinations (Figure 5-2). This model aims to explain the process of households' adaptation to rural tourism development through changes in their livelihood adaptive behavior choices, based on different types and structures of livelihood capital. In this theoretical model, the evolutionary direction of households' livelihood adaptive behavior in rural tourism destinations is determined by the inherent potential and connectedness of their livelihoods. Since the type of livelihood capital and its structural distribution largely influence households' adaptive behavior choices (Li et al., 2020a; Wakil et al., 2021; Wei, Xu, & Wall, 2024), inherent potential can be represented by the various types of livelihood capital possessed by households (Fath et al., 2015; Pelling & Manuel-Navarrete, 2011; Dai et al., 2022). These include natural capital, physical capital, financial capital, human capital, social capital, cultural capital, and psychological capital (Wang et al., 2022).



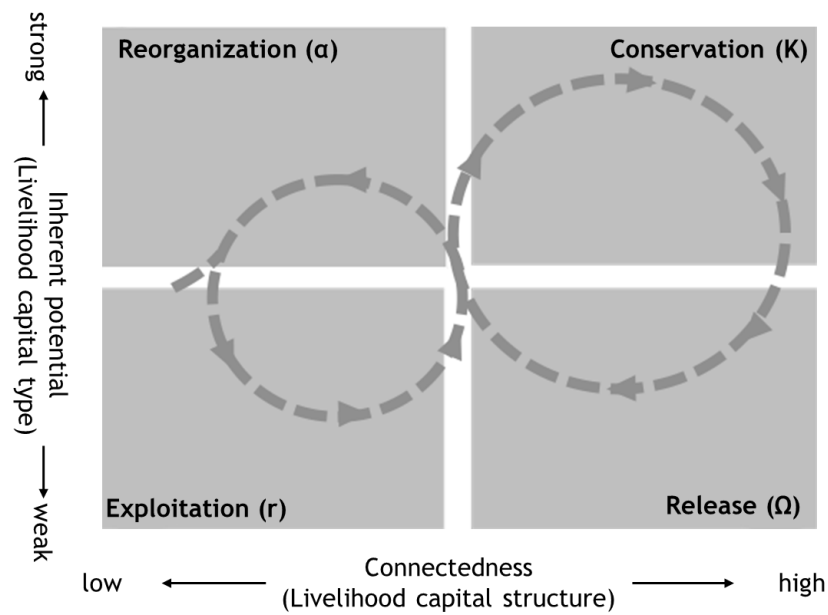


Figure 5-2 Livelihood adaptive behavior cycle model of households  
(Source: Author)

Natural capital refers to resources like land and forests that provide resource flows and services for livelihoods. Physical capital encompasses material resources such as housing and durable goods that households require to sustain their livelihoods. Human capital includes the skills, knowledge, and labor capacity that enable households to pursue different livelihood strategies and achieve their livelihood goals. Social capital consists of the social networks and relationships that households rely on in pursuit of their livelihood goals. Financial capital comprises various financial resources used by households to achieve their livelihood goals. Cultural capital refers to the ways households utilize traditional cultural resources to reach their livelihood goals. Psychological capital pertains to the psychological states that support households in maintaining their livelihoods.

Connectedness, in this context, refers to how households in rural tourism destinations combine and utilize various types of livelihood capital (Fath et al., 2015; Dai et al., 2022). It is important to note that the same type of livelihood capital can lead to different livelihood adaptive strategies and outcomes depending on its structural (Calgaro et al., 2014).

Overall, this chapter will employ the Livelihood Adaptive Behavior Cycle (LABC) model as a theoretical framework to understand how changes in households' adaptive behavior choices are influenced by different types and structural allocations of livelihood capital. Through this lens, the chapter will explore the evolutionary nature of livelihood adaptive

behaviors developed by households in response to rural tourism development.

### 5.3 Data analysis procedure

This study adopted thematic analysis to analyze qualitative data derived from household interviews regarding changes in their adaptive behaviors in response to livelihood disturbances brought by rural tourism development. In alignment with the qualitative data analysis of households' perspectives on the livelihood disturbances caused by rural tourism development presented in Chapter 4, the interview data pertaining to changes in livelihood adaptive behaviors were manually analyzed to ensure greater accuracy and coherence. The data analysis process followed a systematic, step-by-step approach, grounded in thematic analysis as outlined by Braun and Clarke (2006). Each stage of the analysis allowed the researcher to iteratively engage with the data, ensuring a thorough understanding and clear conceptualization of the emerging themes. The specific stages of the analysis are as follows:

*Stage 1: Data familiarization.* The initial stage involved thorough familiarization with the interview data. The researcher carefully read and re-read the interview transcripts multiple times to gain an in-depth understanding of the content. This iterative reading process allowed the researcher to become deeply immersed in the participants' perspectives and discussions, particularly their experiences and reflections on changes in livelihood adaptive behaviors. The goal was not only to identify key ideas but also to understand the nuances of these changes in the context of rural tourism development. During this stage, notes were made regarding initial impressions. This laid a strong foundation for the subsequent stages of analysis, particularly coding, by helping the researcher grasp the broad themes and concepts that would later be explored.

*Stage 2: Generating initial codes.* In the second stage, the researcher moved from a general overview to a more focused engagement with the data, identifying initial codes. Through iterative readings and a meticulous examination of the data, the researcher sought to identify underlying meanings and patterns (Braun and Clarke, 2006: 87). The goal was to generate a comprehensive list of open codes—short, descriptive labels that encapsulate key elements of the interviewees' responses. Using a combination of deductive and inductive approaches, the researcher looked for both anticipated themes and unanticipated patterns that emerged directly from the data. Examples of initial codes included adaptive behaviors such as providing simple meals and accommodation to

tourists, earning compensation from land leases, and selling local specialties. These codes reflected the concrete actions and strategies employed by households in response to the evolving demands of rural tourism. The initial coding list was continuously refined and expanded throughout this phase to ensure all relevant data were captured.

*Stage 3: Searching for theoretical concepts.* Once the initial codes were established, the third stage involved grouping these codes into broader categories or subthemes. At this point, the researcher began searching for underlying theoretical concepts that could explain the patterns in the data. This step was guided by a careful examination of how different codes related to one another, with an emphasis on identifying higher-order themes that could offer more generalizable insights into the adaptive processes. The researcher examined connections between codes and looked for recurring ideas that transcended individual cases, allowing for the emergence of key subthemes. These subthemes were then grouped under more comprehensive theoretical concepts. For example, related codes such as providing paid services for independent travelers, obtaining compensation through resource transfer, and working as construction workers within the scenic spot were categorized under the broader concept of economic adaptation through rural tourism activities. This process of theme clustering helped the researcher identify overarching patterns that captured the essence of the adaptive behaviors being studied.

*Stage 4: Reviewing and refining themes.* The fourth stage involved a critical review and refinement of the theoretical concepts into more coherent and refined main themes. The researcher re-examined the subthemes and their underlying codes to ensure that they accurately represented the data and effectively addressed the research objectives. At this point, the researcher also ensured that the themes were distinct, internally coherent, and supported by sufficient data. After refining the subthemes, the researcher consolidated them into five main themes that reflected different phases of livelihood adaptive behavior developed by households in response to rural tourism development. These phases were as follows: phase I (before 2014), phase II (2014-2017), phase III (2018-2020), phase IV (2021-2022) phase V (2023-present). Each theme encapsulated a distinct period in the evolving relationship between rural households and tourism, providing a clear framework for understanding how livelihood adaptive behaviors have shifted over time.

*Stage 5: Detailed narration of themes.* The fifth stage involved an in-depth exploration

and detailed narration of each main theme. The researcher provided comprehensive descriptions of the livelihood adaptive behaviors associated with each phase, highlighting the different strategies households employed in response to changes in the rural tourism environment. This stage aimed to offer a rich, nuanced account of the lived experiences of the interviewees, explaining not only what changes occurred but also the underlying reasons for these adaptations.

*Stage 6: Interpretation of findings.* In the final stage, the researcher interpreted the findings in relation to the broader context of rural tourism development and livelihood adaptation. This stage involved drawing conclusions about the nature and characteristics of the changes in livelihood adaptive behaviors that emerged throughout the different phases. The detailed coding process provided a clear framework for understanding the evolution of livelihood adaptive behaviors in response to rural tourism, which is summarized in Table 5-1.

Table 5-1 The coding process of the themes

Raw data code	Concept	Theme
Carrying things for backpackers to earn money rewards; providing simple meals/accommodation and charge a small fee	Providing paid services for independent travelers	Phase I: households' livelihood adaptive behaviors before 2014
Gaining economic compensation from private terraced fields transfer; gaining resource fee from the transfer of public forests, public old buildings and folk customs; gaining economic compensation or exchange for new houses through the transfer of private old buildings	Obtaining compensation through resources transfer	
Working as old building restoration workers, porters, road and house construction workers, renovation workers within the scenic spot	Working as the construction workers within the scenic spot	
Working as receptionists, working as tour guide, working as logistics support staff, working as traditional craftsmen	Rehired for employment by the tourism company	Phase II: households' livelihood adaptive behaviors from 2014 to 2017
Selling local specialties, selling local handcrafted souvenirs, selling premium cultural and creative products	Engaging in the sale of tourism commodities	
Running home-based restaurants, running snack stalls, operating restaurants within the scenic spot	Offering tourism catering services	
Utilizing spare bedrooms for tourist accommodation, Operating homestays and farmhouses	Providing tourism accommodation services	

Raw data code	Concept	Theme
Stalls rentals, properties rentals	Indirect participation in tourism business	Phase III: households' livelihood adaptive behaviors
Seasonal engage in tourism catering business, seasonal engage in tourism accommodation business, seasonal working in tourism restaurants or homestays	Seasonal participation in tourism business	from 2018 to 2020
Complying with land use rules, obeying housing construction stipulations	Adhering to tourism related rules and regulations	Phase IV: households' livelihood adaptive behaviors
Renovating the style of homestays, expanding homestay rooms, building private parking lots	Upgrading the quality of homestays	from 2021 to 2022
Guiding tourists to write positive online reviews, enhancing online search visibility and influence of restaurants or homestays	Learning to strengthen network operation skills	Phase V: households' livelihood adaptive behaviors
Forming unified scheduling system for orderly customer reception, joining the homestays association	Participation in tourism-related organization and association	from 2023 to present
Providing suggestions concerning the collection and treatment of kitchen and household waste, the enhancement of sewage discharge and treatment infrastructure, and the amelioration of road networks	Providing tourism-related recommendation and suggestion	
Upgrading dining environment, improving catering services quality, upgrading homestays quality, improving accommodation services quality	Continues enhancing the quality of tourism catering and accommodation services	

Source: Author.

## 5.4 Time-based analysis of households' livelihood adaptive behaviors

Drawing upon interview data from households in villages surrounding the Huangling scenic area, this study investigates the evolving trajectory of households' livelihood adaptive behaviors. Findings indicate that the adaptive process of households in rural tourism destinations is a dynamic and ongoing phenomenon, influenced by the interplay of livelihood opportunities, risks encountered during rural tourism development, and the composition of household livelihood capital. As tourism within the Huangling scenic area expanded and tourist influx increased, households continually adjusted their livelihood

strategies to optimize opportunities while mitigating associated risks. The temporal evolution of households' livelihood adaptive behaviors in the study area can be categorized into five distinct phases: Phase I (before 2014), Phase II (2014-2017), Phase III (2018-2020), Phase IV (2021-2022), and Phase V (2023-present) (See Table 5-1).

#### **5.4.1 Phase I: households' livelihood adaptive behaviors before 2014**

Prior to the official opening of the Huangling scenic area in 2014, households in surrounding villages were in the initial stage of adapting to rural tourism development. During this phase, households within the ancient village of Huangling capitalized on existing natural and cultural capital to attract backpackers, photographers, and tourism enterprises. Nevertheless, the majority of households had yet to fully comprehend the novel livelihood opportunities presented by rural tourism. Only a limited number of households implemented preliminary and discrete adaptations in response to the influx of backpackers and photographers, as well as the engagement of the tourism company. Changes in household livelihood capital were primarily manifested through the deployment of human capital to provide remunerated services to backpackers and photographers, resulting in a gradual accretion of economic capital. Moreover, by leasing natural and cultural assets such as terraced fields, ancient trees, and historical buildings to the tourism company, households generated additional income. Furthermore, the utilization of human capital in the development and construction of the scenic area contributed to economic capital accumulation. The adaptive behaviors of households during this phase were specifically characterized by the following: providing paid services for independent travelers, obtaining compensation through resources transfer, working as construction workers within the scenic spot.

##### **5.4.1.1 Providing paid services for independent travelers**

Prior to the formal development of rural tourism within the Huangling scenic area, the ancient village of Huangling had already attracted independent travelers, including photographers and backpackers, through its distinctive "Shaiqiu (Crops Drying)" folk customs, terraced fields, red maple trees, and ethereal landscapes. Initially, villagers possessed a limited understanding of the tourism economy. Interest in tourism emerged as a consequence of Huangling's geographic isolation within a mountainous region characterized by rugged terrain and inadequate transportation infrastructure, which presented significant challenges for visitors. In response to these difficulties, villagers

initiated the provision of paid backpacking services and basic catering. These offerings were primarily motivated by a practical desire to assist visitors rather than a deliberate pursuit of economic opportunities within the tourism sector.

“We’ve had photographers visiting this area for a long time. Every year in March and April, they come to photograph the terraced fields, particularly when the rapeseed flowers are in bloom. Then, in autumn—around October and November—they come to capture our “Shaiqiu” harvest traditions, red maple leaves, red yew trees, and the morning clouds and mist. The clouds and mist usually form when people are cooking over an open fire. Photographers generally have a lot of equipment. I recall one instance when a busload of about forty to fifty people arrived. They called me as soon as they got here, asking me to prepare food for them. You know, they had various camera equipment, from large cameras to shorter lenses, and needed assistance. They asked us to carry things for them one person with one person. At that time, the rate was ours to set, and people sometimes shared their personal difficulties, hoping for a little extra. Most of us could earn about 100 yuan a day, while some made even two to three hundred yuan. A few of the kids were charming and befriended the photographers, with some even adopting them as godfathers and godmothers. Later on, some of these photographers took the kids with them to work elsewhere. (Households H1)”

The growing interest in Huangling was largely influenced by photographers, particularly the local photographer Ren Chuncai from Wuyuan, whose award-winning photographs “Shaiqiu” in 2001 and “Spicy Sky” in 2008 brought significant attention to the ancient village of Huangling. This newfound recognition attracted tourists, who began to visit the village spontaneously. However, the hollowing out and aging of the village were also significant concerns due to the migration of most young people in search of work, resulting in limited human capital within the village. Consequently, the local households could only engage in limited tourism operations, including offering basic catering and accommodation services to meet the needs of visiting tourists.

“At that time, there weren’t many people left in the village; most were older, and no one really understood tourism. Visitors would come, look around, and take pictures, mostly of the spring rapeseed flowers and the autumn scenery. Some of them stayed for extended periods. Moreover, the roads hadn’t been

improved yet, and the mountain paths were difficult to navigate. It took a lot of time to go up and down. Occasionally, some visitors asked if we could provide catering services. When they asked, we would prepare a simple meal for them and charge a small fee. (Household H20)”

It is evident that long before the official tourism development of the Huangling scenic area, households in the ancient village of Huangling were already attracting tourists with their unique natural capital, including terraced fields and ancient trees, as well as their cultural capital, which included Shaiqiu folk customs and ancient buildings. Some households had begun leveraging their human capital to offer paid tourism services to visitors, contributing to a gradual increase in their economic capital.

#### **5.4.1.2 Obtaining compensation through resources transfer**

In 2009, the ancient village of Huangling successfully attracted the tourism company to develop rural tourism, leveraging its unique terraced rapeseed flowers and Shaiqiu folk custom. To facilitate rural tourism development, the company began negotiations with households for resources transfer including natural resources such as land and forests transfer and cultural resources such as old buildings and folk customs. Regarding natural resources transfer, households primarily relied on their existing terraced fields and forests, to secure a certain amount of economic capital.

Although Huangling ancient village is the core development area of the scenic spot, the terraced resources are not unique to Huangling alone; they are jointly owned by Huangling and its neighboring village, Xiaorong. The development of the Huangling scenic area involved not only the utilization of terraced fields and forests in Huangling but also the terraced fields and forests in Xiaorong village. Consequently, the tourism company arranged to transfer the terraced resources from both Huangling and Xiaorong, offering economic compensation of 400 kilograms of rice per mu of terraced fields annually, based on market prices. The transfer of forests, public old buildings and folk customs was compensated to households through resource fees. The tourism company signed agreements with the two village committees, initially for 450,000 yuan per year, with an increase of 50,000 yuan every five years. The current agreement is 550,000 yuan per year. According to interviews with households, villagers in the Huangling new village currently receive over 500 yuan per person per year in resource fees, while those in Xiaorong village receive over 300 yuan per person per year.



“They don’t have much land in Huangling (the ancient village). Many areas of the Huangling scenic spot are actually our Xiaorong’s land. Our Xiaorong’s land has been transferred twice to the tourism company so far. The first phase was more than 300 mu, and the second phase was about 400 mu. The terraces under the Leixin Bridge belong to us, Xiaorong. The land is leased based on 200 kilograms of rice per acre per year, which is converted to the market price and then supplied to us. The forest has also been transferred to the tourism company. You can walk up from that (Leixin) bridge, and the mountains above also belong to Xiaorong. They pay resource fees for this every year. (Government official G5)”

Regarding the replacement of private old buildings, households in the ancient village of Huangling primarily use their cultural resources, such as historic residential structures, to obtain economic compensation or to exchange them for new houses, depending on their needs. This process substantially increases the households’ economic and physical capital. The specific replacement process is as follows: For the original ancient residential buildings of households in Huangling, the tourism company hired experts to measure and evaluate these properties according to the *“Compensation Plan for Villager Relocation and Resettlement of the Huangling Folk Culture Village Construction Project in Wuyuan County”*. This evaluation determined the asset value of the original houses. Meanwhile, the company built 68 Hui-style resettlement houses, each with a living area of 200 square meters, and 24 apartments designed for the elderly and single residents. These new constructions are located at the base of Huangling ancient village, adjacent to the road from Jiangwan to Xiaorong, offering convenient transportation. Most households that have relocated before the development of rural tourism opted for direct economic compensation, while those who didn’t relocate generally chose to exchange their houses for the new ones. The price for each new 200-square-meter house was set at 96,000 yuan, with households required to pay the difference if the compensation didn’t cover the full amount or receive a refund if they had excess compensation.

“The old buildings on the mountain were replaced at one time by the tourism company. The compensation rates ranged from about 300 to 500 yuan per square meter. Some households that had already moved down the mountain before were in good condition and preferred not to take new houses, opting instead for cash compensation. For some households, the compensation for their old buildings amounted to over 300,000 yuan. If the conditions were not

as favorable and a household couldn't afford to build a new house on their own, they could exchange their old building for a new one through the company's program. If the value of the old building was less than the cost of the new house, the household could pay the difference. However, in most cases, the exchange value was sufficient, with only a small additional payment required. (Government official G3)"

Overall, the arrival of the tourism company has facilitated an increase in both economic and physical capital for households in Huangling new village and Xiaorong village through the leverage of their existing natural and cultural assets. This phenomenon is particularly pronounced for households in Huangling new village, where their physical and economic capital has seen significant growth.



Figure 5-3 The appearance of Huangling new village after rural tourism development  
(Source: Author)

#### **5.4.1.3 Working as construction workers within the scenic spot**

While the formal initiation of rural tourism development within the Huangling scenic area did not commence, a substantial demand for labor persisted as the tourism company undertook the restoration of ancient structures and the construction of tourism infrastructure during the early developmental stage. As a result, households in

surrounding villages, including Huangling new village, Xiaorong village, and Lingjiao village, capitalized on their inherent human capital by assuming roles as migrant laborers in various capacities, such as restoring ancient buildings, serving as porters, and contributing to road and house construction and renovation projects within the scenic area. This involvement facilitated the acquisition of corresponding income, thereby stimulating the accumulation of household economic capital.

At that time, our company invested over 300 million yuan in the replacement and repair of old buildings in Huangling. These tasks were primarily outsourced to villagers from nearby settlements, such as Huangling new village, Xiaorong, Lingjiao, and other surrounding villages. Particularly during 2009 and 2010, the daily wage for labor in optical engineering projects ranged from 30,000 to 40,000 yuan. (Scenic spot manager E2)”

“Well, at first, a bunch of us were up there at Huangling scenic area on the mountain every day, you know, moving stuff around, putting up houses, building roads, fixing up buildings, and all that jazz. But now that the spot’s all done up, we’re not doing that kind of work anymore, right? (Household H1)”

“Back then, when the scenic spot was freshly developed, there was heaps of stuff to be done, you know? So, loads of us villagers got jobs there. And it wasn’t just villagers from Huangling, but also from Xiaorong and Lingjiao, who were working up there. The pay varied, like from 100 to 200 yuan a day, depending on what kind of work you do. Usually, guys got a bit more than the ladies. (Household H6)”

At this juncture, while the economic advantages of rural tourism development have not yet come to the forefront, the investment and endeavors of the tourism company have engendered fresh employment opportunities for local households. Households in the villages surrounding the Huangling scenic area engage in the advancement and erection of the scenic locale by optimally harnessing their human capital. Particularly, artisans proficient in carpentry, house construction, and other specialized skills can command augmented wages in the progression and erection of the scenic site, thus substantially augmenting their familial economic capital.

#### 5.4.1.4 Summary of households' livelihood adaptive behaviors at phase I

Before 2014, rural tourism development in the Huangling scenic area has not yet commenced officially, resulting in a limited influx of tourists and a lack of emphasis on households' subjective agency. The livelihood adaptive behaviors of households primarily reflect a tentative stance in response to the presence of backpackers, photographers, individual tourists, and the intervention of the tourism company. Households mainly engage in activities such as providing paid services to backpackers and photographers, obtaining compensation through resources transfer, and working as construction workers within the scenic spot (Figure 5-4).

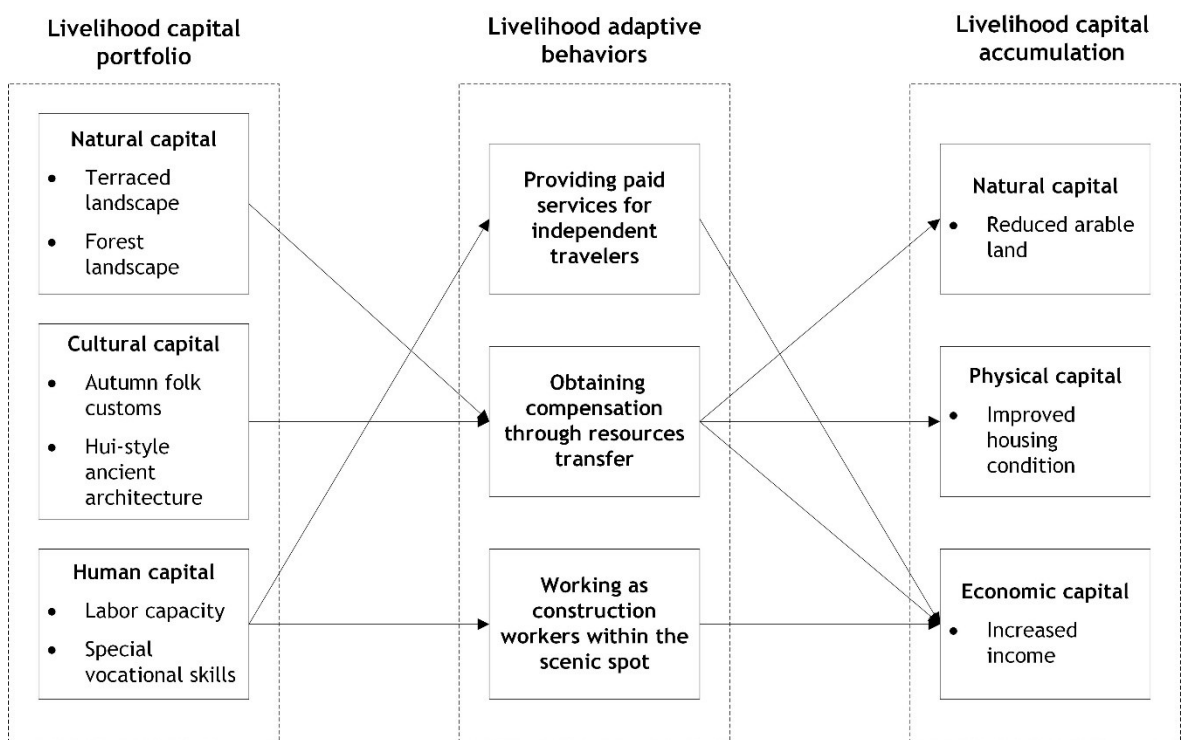


Figure 5-4 Livelihood adaptive behaviors developed by households at phase I

(Source: Author)

Prior to the formal initiation of rural tourism in the Huangling scenic area, households attracted independent travelers such as backpackers and photographers while simultaneously garnering the attention of the tourism company. They capitalized on their natural capital, including terraced fields and forests, as well as cultural assets such as Shaiqiu folklore and ancient Hui-style architecture. Although a gradual decline in traditional agricultural practices occurred due to resource reallocation towards tourism development, resulting in a partial depletion of natural capital, households exhibited a growing cognizance of the economic potential within the tourism sector during this phase.

Beyond deriving income from fundamental tourism services, they collaborated with the tourism company in the construction of the Huangling scenic spot. With support from the tourism company and local government, households underwent relocation to enhance their overall living standards and housing infrastructure. Concurrently, they contributed to the scenic spot's development through the transfer of natural and cultural resources, as well as employment within the spot area, thereby augmenting household income. Consequently, family economic capital gradually accumulated. At this juncture, the natural, cultural, and human capital possessed by households exerted a significant influence on their decisions regarding livelihood adaptive behaviors within the context of rural tourism development.

#### **5.4.2 Phase II: households' livelihood adaptive behaviors from 2014 to 2017**

Since the official inauguration of the Huangling scenic area in 2014, facilitated by the effective management of the tourism company, the site experienced a rapid surge in popularity, leading to a substantial increase in visitor numbers. In its inaugural year, the scenic area welcomed 200,000 visitors. Subsequently, a dramatic escalation in visitor numbers occurred in 2015 and 2016, culminating in a figure exceeding one million in 2017, reaching 1.12 million. Concurrently, a burgeoning consumer demand among tourists became evident. The operational requirements of the scenic area necessitated a significant expansion of staff to ensure the smooth functioning of daily operations. Local households also encountered a plethora of opportunities to engage in rural tourism enterprises. Residents of Huangling new village, Xiaorong village, and Lingjiao village progressively recognized the emerging livelihood opportunities presented by rural tourism development. Consequently, households in the surrounding villages of the Huangling scenic area entered a phase of rapid collective adaptation to rural tourism development from 2014 onwards. Primarily relying on their inherent human and physical capital, supplemented by the initial exploitation of their social capital advantages, households ventured into rural tourism employment, thereby accumulating increased economic capital. During this phase, households' livelihood adaptive behaviors displayed a higher degree of diversification, encompassing: rehired for employment by the tourism company, engaging in the sale of tourism commodities, running tourism catering business, operating tourism accommodation business.

#### **5.4.2.1 Rehired for employment by the tourism company**

As a consequence of the tourism development requirements of the Huangling scenic area, households in the surrounding villages have the opportunity to apply for various job positions within the scenic locale, contingent upon their disparities in human capital, chiefly delineated by factors such as age, gender, educational attainment, and specialized vocational skills. Predominantly, individuals in the younger and middle-aged demographic, characterized by a relatively elevated level of education, typically falling within the age bracket of 25 to 40 years, are primarily engaged in roles such as ticket sales, tour guide, and front desk reception at bed-and-breakfast establishments within the scenic area. Their remuneration typically averages around 3,500 yuan per month, exclusive of insurance and housing fund contributions.

“I used to work at the Huangling scenic area, mainly handling ticketing. I’ve been there for eight years, ever since the spot opened up. The pay isn’t too shabby if you work at the scenic spot. The tourism company throws in insurance and housing fund benefits as well. Your actual pay depends on how good you are and what position you hold. For me, it’s around 4,000 yuan because I’ve been there a while. Overall, I’d say the pay is decent, but the hours can be a bit grueling. It’s better now, though. Back then, I used to do night shifts, from 4:30 in the morning till 7:30 in the evening. Now it’s improved; usually starting at 8:00 in the morning and finishing at 5:30 in the afternoon. (Household H24)”

Middle-aged and elderly individuals with comparatively lower levels of cultural literacy, typically ranging between 50 and 65 years old, predominantly occupy positions such as Shaiqiu workers, flower planters, cleaners, and security personnel within the scenic spot. Their monthly remuneration typically hovers around 2,000 yuan, exclusive of insurance and housing fund contributions.

“This year, I turned 60, and I’ve been with the scenic spot for 8 years. I used to be a fire administrator up there. Just this year, they moved me down to the lower part of the mountain. The tourism company has this rule that you switch to the second line when you hit 60 and retire at 65. I get about 2,200 to 2,300 yuan per month. They provide insurances and a housing fund, but there’s no salary after retirement. My wife also works there. She mainly takes care of the rapeseed flowers, and she earns about 2,000 yuan a month. (Household

H5)”

Furthermore, certain households possessing expertise in traditional culinary delicacies and artisanal crafts, such as the production of glutinous rice cakes, weaving, popcorn making, and steam cake preparation, have been reintegrated into the workforce by the tourism company to serve within the scenic spot (Figure 5-5). This demographic typically comprises older individuals, predominantly exceeding 65 years of age.

“I was employed by the tourism company to work here. These shoes I’ve made (referring to the straw sandals) are crafted from straw. We used to wear these for work. Nowadays, I don’t wear them anymore, but I can showcase them to tourists. I’m 70 years old now. Aside from farming at home, I can’t go out to earn a living. Doing this isn’t exhausting. I take my time with it and pass the time. Plus, I can earn some pocket money and lighten the load on my children. It’s pretty good. (Household H47)”



a. Straw sandals weaving staff



b. Popcorn maker staff



c. Sun drying workshop staff



d. Cake shop staff



e. Palm shop staff

Figure 5-5 Photos of households employed in Huangling scenic area  
(Source: Author)



It is evident that employment within the scenic spot constitutes one of the principal livelihood adaptive behaviors adopted by households in response to the progression of rural tourism at this stage. Through this engagement, households are able to leverage their inherent human capital advantages to facilitate the accumulation and enhancement of familial economic capital.

#### **5.4.2.2 Engaging in the sale of tourism commodities**

Owing to the discernible demand from tourists and the relatively low barriers to entry, the sale of tourism commodities has swiftly emerged as a primary mode of independent engagement in tourism entrepreneurship by rural households in the surrounding villages of the Huangling scenic area. Following the official opening of the Huangling scenic area, there was a gradual uptick in tourist numbers. Some households in Huangling new village took the lead in leveraging their existing physical and human capital to sell tourism commodities as mobile vendors, capitalizing on their geographical advantages. Initially, the range of commodities offered by households was relatively modest, encompassing essential items such as raincoats and umbrellas for inclement weather, bottled water for long-distance travel, and local delicacies like Huangling sweet potatoes, corn, and sugar cane.

“When we initially set up our stall, it was situated right over there in the parking lot, although the parking lot hadn’t been constructed at that time. Back then, this area was all our fields, and villagers weren’t as affluent as they are nowadays. With limited funds, most villagers simply constructed their own sheds and stalls to sell raincoats and umbrellas. Since rain was common, tourists had to purchase umbrellas, and we also sold water, along with some of our own produce like sweet potatoes and sugar cane. (Household H49)”

As the economic advantages of selling tourism commodities become more pronounced, households’ cognizance of tourism-oriented businesses continues to grow. Notably, certain households in Xiaorong village and Lingjiao village have also initiated their involvement in the retailing of tourism commodities. With the progressive augmentation of human and economic capital among participating households, the array of tourism commodities they offer is no longer confined to locally produced specialties. Gradually, some households have diversified their offerings by investing in bulk acquisitions of Xiaoqi crown chrysanthemum tea and camphor wood products, encompassing items such as wooden combs, swords, bead bracelets, necklaces, and small pendants, alongside regional



delicacies like honey and camellia oil for retail purposes. This strategic diversification aims at augmenting their economic capital.

“As our customer base grew, our sales expanded too. For instance, we started wholesaling items like crown chrysanthemums, camphor wood combs and wooden swords. Plus, the crown chrysanthemums we sold weren’t cultivated by us; they mainly came from Xiaoqi village. Xiaoqi is famous for its crown chrysanthemum tea in Wuyuan, so villagers there grow plenty of these flowers. (Household H48)”

Furthermore, certain households endowed with elevated levels of human capital, robust economic capital, and substantial social capital (characterized by extensive social networks) opt to lease shops within the Huangling scenic area to sell tourism commodities. Primarily composed of young and middle-aged individuals who have returned to their hometowns to embark on tourism entrepreneurial ventures, these households exhibit heightened business acumen and possess proficient tourism management skills. The merchandise available in these shops within the scenic spot not only boasts a greater diversity of offerings but also exhibits superior quality, enabling households to accrue enhanced economic returns. Specifically, households operating tourism-oriented establishments within the scenic spot retail not only local specialties and camphor wood products but also draw inspiration from tourist souvenirs prevalent in other regions. This includes items such as postcards and keychains emblazoned with Wuyuan or Huangling insignias, as well as hairpins, jewelry, and other assorted tourism-centric commodities.

“Those who run shops up there in the Huangling scenic area on the mountain, they’re making a good amount of money. But it’s not something just anyone can do. Firstly, the rent for storefronts in the scenic area is steep, usually out of reach for many. Plus, you need connections. Most of the folks up there are relatives of the scenic managers. If you’re not connected through friends or family, the company won’t lease a shop to you. Still, the items they sell in the scenic area are of higher quality compared to ours, but they come with a higher price tag for sure. (Household H49)”

Overall, involvement in the sale of tourism commodities (Figure 5-6) stands out as a primary adaptive livelihood behavior among households in the surrounding villages of the Huangling scenic area during this stage. Participating households not only augment their economic capital through tourism business but also progressively refine their tourism

management competencies, thereby enhancing their human capital as they engage in the retailing of tourism commodities.



Figure 5-6 Households engaged in the sale of tourism commodities

(Source: Author)

#### 5.4.2.3 Running tourism catering business

With the ongoing development and expansion of the Huangling scenic area, there has been a marked surge in tourist influx, accompanied by prolonged durations of stay. Furthermore, the demand for dining options among tourists has become increasingly conspicuous, with inquiries arising regarding the provision of catering services by villagers in Huangling new village. In response to tourist preferences, two households situated along the forefront of Huangling new village, in close proximity to the main road, have commenced the operation of farmhouse restaurants (Figure 5-7), leveraging their pre-existing human and physical capital. Initially, the culinary offerings were relatively modest, primarily comprising locally sourced farmhouse cuisine. The dining facilities were rudimentary, with villagers relocating their existing furniture to the entrance for tourist utilization.

“My family was the first to start catering here...When the Huangling scenic area became popular shortly after it opened, a lot of tourists started coming here to visit and play. Some of them asked if we could provide catering

services. So, I decided to give opening a restaurant a shot. In the beginning, we kept things pretty simple, just cooking up what we grew at home. We didn't have any formal cooking training, just basic farm food. But the tourists seemed to enjoy it. We didn't have great facilities back then, so we just moved our own tables and stools to the door for the tourists to dine. (Household H1)”



Figure 5-7 Households engaged in tourism catering business  
(Source: Author)

Due to the continuous surge in tourist arrivals at the Huangling scenic area, the awareness of tourism commercial economy among villagers in the surrounding villages has been steadily reinforced. Moreover, there has been a notable uptick in the number of villagers venturing into tourism catering operations. Particularly, around 2014 and 2015, a majority of households situated in the first row of Huangling new village became involved in tourism catering activities. Likewise, residents of Xiaorong village have also commenced experimental forays into tourism catering services, under the guidance of the village committee.

“It was probably around 2014 or 2015. Most people in the first row here have started doing tourism catering reception. One reason is there are more and more customers, and another is that catering reception is definitely better than just setting up a stall. It's our own house, and we can cook almost all the farm dishes ourselves, so the cost is a bit lower (Household H1).

Some households with high levels of human and economic capital, coupled with robust social capital, have ventured into the restaurant and snack stall business by leasing shops within the scenic spot.

“The daughter-in-law of XX from our village opened a shop up on that

mountain (referring to the Huangling scenic area). They mainly sell snacks, soup noodles, and tofu. They make a lot of money each year, hundreds of thousands of yuan. ...It's true, because they don't have much cost to make this kind of noodles. For tofu, they just buy beans. A pound of beans only costs a few yuan, but hey can earn more than ten yuan for a small bowl of tofu they make, it's very profitable. (Government official G6)"

As households accrue increasing experience in the tourism catering sector, there has been a continual enhancement in both the variety of dishes offered and the quality of catering service facilities. Focusing on the utilization of local specialty food materials, households have developed distinctive dishes, including farm-raised chicken, bagged red carp, bacon stir-fried with dried bamboo shoots, wild river fish, pork with Meigancai, steamed pork with flour, as well as unique snacks like steamed cakes, Qingming rice cakes, seed cakes, fried lanterns, and Meigancai oven cakes. Concurrently, throughout their engagement in tourism catering reception, households actively strive to augment their human capital. Notably, the rapid proliferation of the Internet has empowered many tourists, particularly young and middle-aged visitors, to readily access information pertaining to food varieties, service standards, hygiene conditions, and other catering details of various restaurants beforehand through online platforms such as Meituan and Dianping, before making their dining selections. Generally, restaurants receiving high ratings and prominently ranking on these online platforms tend to attract more tourists. Consequently, in order to cater to the consumption preferences of tourists effectively, households involved in tourism catering business are progressively acquiring operational skills related to online tourism platforms such as Meituan and Dianping to efficiently manage their restaurant operations.

Overall, operating a tourism catering business emerged as a significant livelihood adaptive behavior among households in the surrounding villages of the Huangling scenic area during this phase. Engaging in tourism catering primarily involved households utilizing local farmhouse cuisine within their residences, requiring minimal financial investment and operational costs. However, this activity exerts certain demands on family location conditions, necessitating a high level of labor capacity and associated business skills. Typically, households situated in close proximity to the main road and the tourist hub of the scenic spot can attract a larger number of tourists. Furthermore, as the quality of tourist consumption demands continues to evolve, households are compelled not only to provide excellent dining environments and services but also to continuously enhance their marketing skills to attract more tourists and thereby accrue greater economic benefits.

from tourism. Consequently, it is evident that households in the surrounding villages of the Huangling scenic area not only engage in tourism catering reception utilizing their original physical, human, and economic capital but also continually augment their human capital. Additionally, they effectively leverage the advantages of social capital in the process of participating in tourism catering operations, thereby fostering the continual augmentation of economic capital.

#### **5.4.2.4 Operating tourism accommodation business**

The ongoing enhancement of the Huangling scenic area and the prolongation of tourists' visits have intensified the demand for accommodation among visitors. Similar to their catering requirements, tourists frequently take the initiative to inquire with households in Huangling new village regarding the availability of accommodation reception services. In response to these demands, some households have begun to explore the provision of tourist accommodation reception services (Figure 5-8). Initially, the accommodation facilities were relatively basic, with households predominantly utilizing spare bedrooms for guest accommodation. These bedrooms were furnished with only essential amenities such as beds and tables, lacking independent bathroom facilities.

“At the beginning, the tourists asked us if we could provide accommodation service. At that time, we were not well-educated and the houses built for us by the company were relatively small. We just vacated our own rooms for tourists with a few tens of yuan per night. At that time, there were no bathrooms in the rooms, and no one expected to build a bathroom in the bedroom. (Household H4)”

As the consumption demands and standards of tourists continue to rise, some households are progressively upgrading their residences. This involves the installation of amenities such as air conditioning, televisions, water heaters, and other household appliances in guest bedrooms, as well as the construction of independent bathroom facilities to better meet the needs of tourists.

“Because most of the guests come from big cities, they are more particular about whether they have this or that in the bedroom, especially the bathroom. Guests generally want to take a shower and use the toilet in the bedroom, so we started to renovate the bedrooms, install air conditioners, water heaters, and add toilets, and then the conditions became better and better. (Household



H16)”

Furthermore, some households have gone as far as constructing new residences with the primary intention of operating homestays and inns. This strategic approach allows them to enhance their involvement in tourism accommodation reception while simultaneously addressing their own housing requirements.

“This house of ours was built for tourism accommodation. We’ve been doing this for many years. The original house was small, but this one was rebuilt later mainly for tourism accommodation. The first floor is mostly the living room, and my parents live in this small bedroom. There are two bedrooms on the second floor where my brother, sister-in-law, and I live, and the rest are basically guest bedrooms. We have a total of 12 guest bedrooms, all with private bathrooms. (Household H15)”



Figure 5-8 Households in Huangling new village engaged in tourist accommodation business  
(Source: Author)

In addition, with the continuous expansion of the tourist market in the Huangling scenic area, accommodation options in Huangling new village are gradually becoming insufficient to meet the escalating demand from tourists. Consequently, self-driving tourists have begun seeking accommodation reception services in Lingjiao village and Xiaorong village, which are situated at a distance from the tourist hub of the Huangling scenic area.

“To be honest, our Lingjiao is a bit far from the tourist service center of Huangling scenic area, and the location is definitely not as good as Huangling (new village). However, the reputation of that Huangling scenic area is indeed great, and there are too many tourists, especially during the peak season of rapeseed flowers. Huangling (new village) cannot accommodate them at all, so some guests decided to drive forward and ask us if we have accommodation. Then we gradually started operating homestays here. (Household H39)”

As a result, since 2017, tourism accommodation reception services have gradually emerged as pivotal sources of livelihood for households in Lingjiao village and Xiaorong village. In the course of ongoing development, both villages have surpassed Huangling new village. This shift can be attributed to several key factors. Firstly, despite lacking geographical advantages compared to Huangling new village, households in Lingjiao village and Xiaorong village have demonstrated notably superior service attitudes and quality towards tourists, aiming to enhance their appeal to visitors. Additionally, owing to the relatively recent commencement of homestay operations in Lingjiao village and Xiaorong village, accommodations are primarily newly constructed by households in response to the demands of tourists. In contrast to some households in Huangling new village who have relocated to resettlement houses provided by the tourism company, the accommodations in Lingjiao village and Xiaorong village not only offer larger living spaces but also boast superior interior decoration styles and facilities compared to those in Huangling new village.

“The service attitude here (Lingjiao) is much better than that in Huangling, because they have more guests in Huangling, so they won’t be so attentive when there are so many guests. Also, the bedrooms in Lingjiao homestays are better and larger because they are all newly built for the main purpose of tourism accommodation reception. Moreover, unlike that in Huangling, many of the homestays are renovated, the decoration in Lingjiao also looks better. (Household 24)”



Figure 5-9 Households in Lingjiao village engaged in tourist accommodation business  
(Source: Author)

However, despite the fact that households in Huangling new village, Lingjiao village, and Xiaorong village are all engaging in homestay operations, there are significant differences in their customer bases. A substantial portion of customers for households in Huangling new village primarily originate from on-site customer solicitation, wherein households inquire if visitors require accommodation at the parking lot located at the entrance of the Huangling scenic area. This phenomenon can be attributed to the advantageous geographical location of households in Huangling new village, situated at the scenic area entrance. Moreover, many households engaged in homestay management within Huangling new village are relatively older and possess lower levels of education. They often prioritize the notion of 'owning their own homes, keeping costs low, and earning modestly or considerably'. Consequently, they exhibit reluctance to invest significant sums in homestay management. As a result, households have developed a form of accommodation reception by vying for customers through prolonged competition with each other. In contrast, the primary source of customers for households in Lingjiao village and Xiaorong village stems from online reservations, facilitated by tourists through online tourism platforms such as Meituan and Ctrip. This is partly due to the relatively remote location of Lingjiao village and Xiaorong village from the entrance of the scenic area, making it challenging to directly attract visitors to the entrance. Additionally, households engaged



in homestay operations within Lingjiao village and Xiaorong village are predominantly middle-aged and young individuals who have returned to their hometowns to establish businesses, possessing relatively higher levels of education. They demonstrate a willingness to invest in homestay facilities to a certain extent and actively respond to tourists' needs through online networking. The transparency and accessibility afforded by online platforms have further facilitated the enhancement of management services and the quality of homestays for households in Lingjiao village and Xiaorong village.

“We (Lingjiao) don't solicit customers like Huangling (new village). Most of them are ladies and grannies who are relatively older. 80 or 100 (yuan) per night per bedroom is ok for them. They just thought that you can earn some money by owning their own house. It doesn't matter how much they earn. However, most of our customers in Lingjiao come online. Nowadays, young people read reviews online and make reservations. They stay with whomever they want. (Household H41)”

It is evident that during phase II, tourism accommodation reception has progressively emerged as one of primary options for households in the surrounding villages of the Huangling scenic area to adapt their behaviors. At this stage, owing to the rapid growth trajectory of rural tourism development in the Huangling scenic area, there exists a heightened demand for tourist accommodation, while the overall investment by households in tourism accommodation reception remains relatively modest. Nevertheless, the economic benefits of tourism are notably apparent, as most households are capable of enhancing their family's economic capital through their existing human and physical capital in the process of operating tourism accommodations. However, during this phase, as the quality of tourist demand steadily improves and the number of households engaged in tourism accommodation continues to rise, competition among households for customer sources becomes increasingly pronounced. Households are thus compelled not only to gradually enhance their accommodation service facilities in accordance with tourist preferences but also to further augment their levels of human capital to more effectively bolster the increase of economic capital.

#### **5.4.2.5 Summary of households' livelihood adaptive behaviors at phase II**

During phase II, rural tourism development in the Huangling scenic area has experienced swift progress, characterized by a noticeable surge in tourist numbers. Consequently, commercial and economic awareness among households in the surrounding villages of the

Huangling scenic area has escalated rapidly, propelling them into the collective rapid adaptive phase of rural tourism development. Employment within the scenic area, sales of tourism merchandise, hospitality services in tourism catering, and accommodation reception have emerged as primary adaptive behaviors for households during this phase, as depicted in Figure 5-10. Leveraging physical capital, such as tourism-operated housing and stalls, economic capital including funds allocated for tourism investment, human capital like labor capabilities and education levels, and social capital such as locational advantages, households seize livelihood opportunities spawned by rural tourism development and select the most suitable rural tourism adaptive mode for their sustenance and advancement.

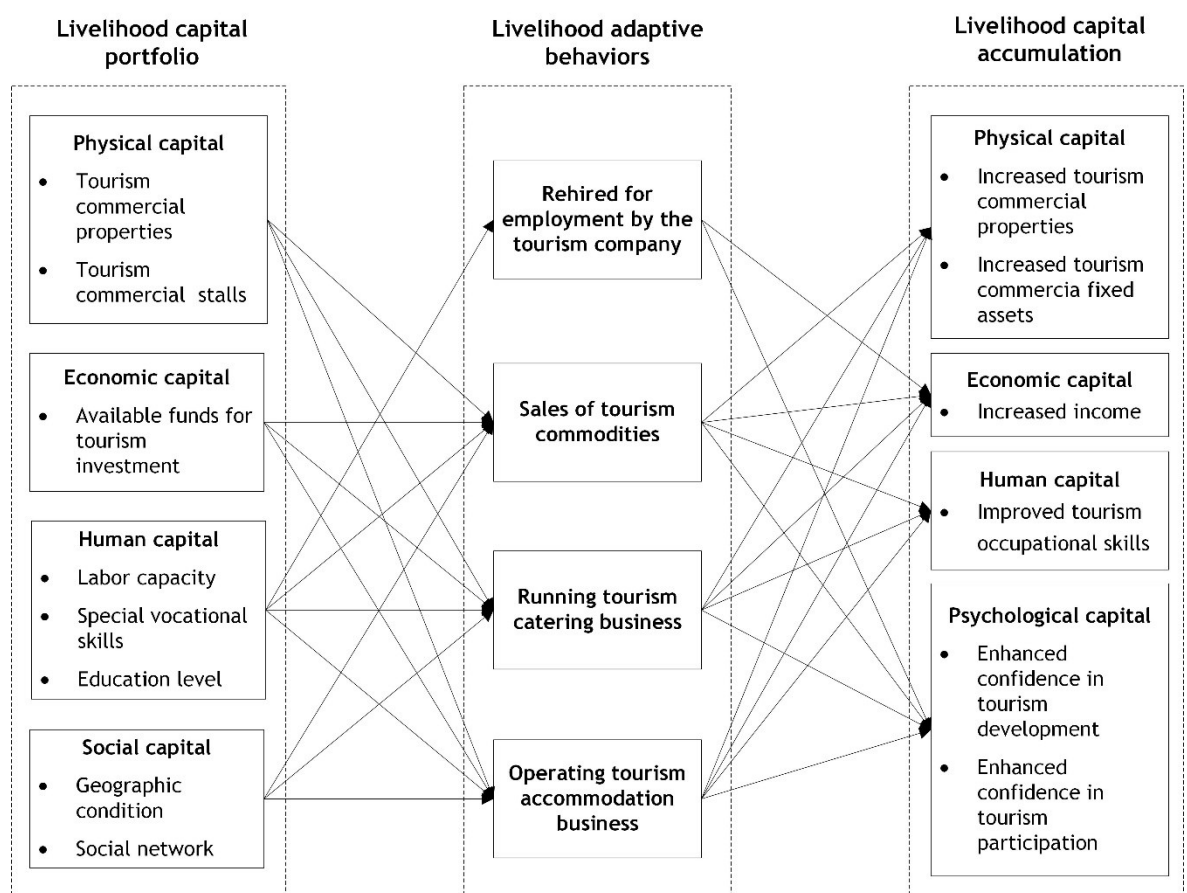


Figure 5-10 Livelihood adaptive behaviors developed by households at phase II

(Source: Author)

Moreover, they continually refine their tourism skills to better align with tourists' needs, responding to market demand. Some households adeptly utilize their social networks to grasp livelihood opportunities arising from rural tourism development. Through engagement in tourism merchandise sales and hospitality services, households witness growth in physical capital, manifested in tourism-operated housing and fixed assets. Concurrently, to meet tourists' consumption demands, their tourism skills, including

language proficiency, social adeptness, and online marketing prowess, experience notable enhancement. Additionally, their participation in rural tourism development augments their economic capital, thereby reinforcing their confidence in rural tourism endeavors and bolstering their psychological capital, such as confidence in family involvement in tourism operations. Although the seasonal nature of rural tourism development in the Huangling scenic area amplifies livelihood vulnerability for households heavily reliant on such development, households in the case area exhibit heightened subjective initiative during this phase. They markedly augment their physical, economic, human, and psychological capital through active participation in rural tourism development. At this phase, the physical, economic, human, and social capital possessed by households emerge as the predominant factors influencing their choices in livelihood adaptive behaviors.

### **5.4.3 Phase III: households' livelihood adaptive behaviors from 2018 to 2020**

With the continuous enhancement of the tourism popularity of the Huangling scenic area, foreign operators have gradually started to enter since 2018, and the number of households participating in rural tourism operations has rapidly increased, especially those engaged in tourism accommodation business. According to the statistical data provided by the Jiangwan town government regarding the status of farmhouse accommodation operations among households in the surrounding villages of the Huangling scenic area, nearly 100 new homestays commenced operations in 2018 (49 new homestays) and 2019 (46 new homestays). However, the growth rate of tourists in the Huangling scenic area experienced a gradual slowdown in 2018 (an increase of 180,000) and 2019 (an increase of 120,000), resulting in heightened competition among households in the surrounding villages engaged in tourism business. Amidst the intense competition in tourism business, households encounter bottlenecks due to their limited human and economic capital. Moreover, customer competition exacerbates strained social relationships among households, leading to the gradual depletion of their accumulated livelihood capital and a transition of their livelihood adaptive behaviors into a wavering stage. Additionally, the impact of the Covid-19 pandemic in 2020 has significantly reduced the number of tourists in the Huangling scenic area, accelerating the transformation process of households' livelihood adaptive behaviors. At this stage, the new livelihood adaptive behaviors of households primarily manifest in three aspects: indirect participation in tourism operations, seasonal engagement in tourism operations, and adhering to tourism-related rules and regulations.

#### 5.4.3.1 Indirect participation in tourism operations

Households in Huangling new village, capitalizing on their resource and location advantages, have taken the initiative to engage in rural tourism operation, thereby significantly enhancing their economic capital within the context of rural tourism development. However, owing to the substantial labor demand associated with rural tourism activities such as stall setup, catering, and accommodation, particularly during peak tourism seasons, households often endure long working hours, high work intensity, and limited freedom. Consequently, some households with considerable economic capital have opted to disengage from direct participation in rural tourism operations, instead transitioning to renting out stalls and properties to fellow households from neighboring villages or foreign merchants. This allows them to indirectly participate in rural tourism operations while generating rental income. The specific practice of stall rental is exemplified as follows. To effectively regulate the disorderly operation of stalls among households in the surrounding villages, the tourism company established the Huangling Agricultural Trade Market and Xiaorong Agricultural Trade Market at the exits of two scenic cableways in 2018. These markets were evenly distributed among local households based on the specific number of households in Huangling new village and Xiaorong village, facilitating the engagement of households from both villages in the sale of tourism commodities. For instance, stalls in Huangling new village were allocated based on the principle of one stall for every seven households, with the order of stalls determined through a random drawing by households. However, the majority of households in Huangling new village are reluctant to utilize their stalls for selling tourism products due to the labor-intensive nature of stall setup, inadequate income compared to catering and accommodation, or extensive outdoor work. Consequently, they opt to rent out their stalls to households from nearby villages such as Jiangwan, Wangkou, and Wucun, receiving corresponding stall rental fees. According to the statistics from the fieldwork, as of November 2023, approximately 80% of the 40 stalls in the Huangling Agricultural Trade Market have been rented out to households from other villages for operation.

“These stalls originally belonged to us Huangling villagers, but to be honest, now, most of them are villagers from other villages doing business here. There are 40 stalls. There may be less than 10 stalls operated by villagers in Huangling. Some operators come from other villages can even rent two or three stalls here. Anyway, because operating stalls doesn’t make much money, and it’s tiring. Those who have the ability have gone out to earn money. Those

like me who don't have the ability can only stay here. (Household H49)"

"I'm a local from Wuyuan, but not from Huangling. I'm from Jiangwan. I rented three stalls here. The Huangling villages have been engaging in tourism for many years and made a lot of money. Not only are there stalls here, their family still has a house for catering or accommodation reception, so many people no longer do this themselves, and they rent it to us from other villages. (Foreign operator F5)"

The specific manifestation of property rentals involves some young households in Huangling new village (aged between 25 and 35) who, due to the evident seasonality of tourism catering and accommodation reception, alongside their lack of proficient tourism management skills and social network relationships, are disinclined to engage in rural tourism operations for prolonged periods. Consequently, they gradually opt to rent out their houses to households from other villages possessing certain management skills and a broad social network for operation, and choose to purchase a house in Wuyuan county or other areas to facilitate their children's education. This approach enables them to not only secure fixed rental income from the property but also earn supplementary wage income through alternative employment opportunities, such as working in Wuyuan county or elsewhere. According to the statistics for the fieldwork, as of November 2023, nearly 80% of the first row of households in Huangling new village have leased their houses to neighboring villagers for tourism catering and accommodation reception. The rental contracts typically span 3-5 years, with rents ranging from 30,000 to 100,000 yuan per year depending on the proximity of the house to the scenic area. Furthermore, the annual rent may be adjusted based on the prevailing conditions of the tourism market. Additionally, aside from Huangling new village, in recent years, some households in Xiaorong village and Lingjiao village have also commenced renting out newly constructed houses to foreign operators for homestay operation.

"I rent this one for 40000 yuan per year because its location is relatively far from the tourist center, so it is a bit cheaper. My landlord used to run a restaurant, and in the past few years including 2015, 2016, and 2017, there were a lot of tourists and it was easy for them to run a business. They have made a lot of money. Now, they buy a flat in the Wuyuan county and do some casual work, and their overall family income will also be quite high. (Foreign operator F3)"

“I started renting here in 2020, and the rental here ranges from 70000 to 100000 yuan per year. I signed a three-year contract with the landlord, and the rental is paid for two years first, followed by the second year paid for the third year. We usually hope that the contract period can be longer because these tables, chairs, and tableware are purchased by ourselves, which is not cost-effective for a short period of time. However, the landlord also has his own considerations, and they also consider the tourist market to adjust their further plan. (Foreign operator F1)”

Overall, the rental of stalls and houses has emerged as a new kind of livelihood adaptive behavior among households in the surrounding villages of the Huangling scenic area during the long-term evolution of rural tourism. The primary drivers behind the adoption of this adaptive behavior are multifaceted. On the one hand, the sustained growth of the tourism industry, characterized by consistently high tourist demand, has incentivized households to pursue increased economic returns through rural tourism operations. On the other hand, the transformation of ideological perspectives and limited knowledge among households in the surrounding villages has also been influential. A segment of the young and middle-aged population has acclimatized to urban lifestyles and expressed a preference for urban residency. Additionally, some households have exhibited skepticism regarding their entrepreneurial capacity to meet escalating tourist demands. As the number of rural tourism operators has expanded, intensifying competition and compounded by the repercussions of the Covid-19 pandemic, operators have encountered significant uncertainties. Consequently, the social and psychological capital of households has, to some extent, eroded. As a result, indirect involvement in rural tourism through stall or house rentals has emerged as a means of achieving relatively stable tourism-related economic returns.

#### **5.4.3.2 Seasonal engagement in tourism operations**

As previously discussed, the Huangling scenic area is renowned for its spring terraced rapeseed flower fields and autumn Shaiqiu folk customs, endowing its tourism development with pronounced seasonal characteristics. Despite continuous efforts by the tourism company to diversify the tourism product offerings within the Huangling scenic area since its inception, these seasonal tourism traits persist. Consequently, some households undergo ongoing adjustments to their engagement timing throughout the protracted process of tourism participation, resulting in seasonal involvement in tourism

operation during peak tourism seasons. The seasonal engagement of households in surrounding villages of the Huangling scenic area in tourism operation takes two distinct forms. Firstly, households utilize their own residences to conduct seasonal catering and accommodation businesses, specifically operating tourism catering and accommodation receptions at home during the peak seasons of spring rapeseed flower blooming and autumn Shaiqiu, while pursuing alternative employment opportunities during other periods. This demographic predominantly comprises middle-aged and young households.

“Some of them only engage in tourism business during the peak seasons such as the spring rapeseed flowers and autumn Shaiqiu, which is in March and April of the first half of the year and October and November of the second half of the year. Some families may also engage in tourism business during summer vacations in July and August because there are many customers in these months. If they do well, they can earn over 100000 to 200000 yuan just by doing these months, and then work outside during the off seasons. In that case, their family income is enough. (Foreign operator F1)”

Another form of seasonal participation manifests as temporary employment within the tourism sector, entailing work in restaurants or homestays during peak tourism seasons, with engagement in household chores during off-peak periods. This demographic consists of middle-aged and elderly households, earning an average daily wage of around 120-150 yuan.

“Like me, I’m quite old and can’t run my own catering or accommodation business. I also can’t go out to find a job, so I just come to do some work in the restaurant during the peak tourist season. Anyway, I can earn some money and work for a few months a year, which is enough for me to make a living and doesn’t burden my children. (Household H2)”

As is widely acknowledged, the seasonal nature of tourism development poses challenges that are inherently difficult to mitigate. Despite ongoing efforts by the tourism company to innovate and diversify offerings beyond the traditional attractions of spring rapeseed flowers and autumn Shaiqiu folk experiences, introducing new projects such as Flower Town, Huaxi Water Street, Ice and Snow Museum, Maple Garden, and Rural Wonderful Night, which have substantially prolonged the peak tourism season of the Huangling scenic area, the seasonal peak characteristics of tourism persist. Consequently, households residing in the surrounding villages of the Huangling scenic area have adapted their

approach to rural tourism operation from year-round engagement to seasonal participation over the course of their long-term adaptation to rural tourism. By adopting this approach, households seek to maximize their tourism-related income by focusing on tourism catering or accommodation reception during peak tourism seasons, while diversifying their sources of income during off-peak periods through household chores or alternative employment opportunities. This strategy aims to bolster the overall livelihoods of their families amid the uncertainties associated with external tourism development dynamics.

#### **5.4.3.3 Adhering to tourism-related rules and regulations**

With the persistent emphasis on the economic advantages of rural tourism, there has been a notable surge in the involvement of households in rural tourism operations in the surrounding villages of the Huangling scenic area. Consequently, this surge has triggered an augmented demand for land among households. Numerous households have initiated the refurbishment and enlargement of their existing residences, or alternatively, have resorted to the utilization of available land resources for the construction of new structures intended for tourism catering and accommodation reception purposes. Nonetheless, the lack of initially established unified planning and management for housing construction has resulted in a certain degree of detriment to the overall environmental quality of the villages, attributable to the rapid expansion and proliferation of rural housing units.

“In 2018 and 2019, there were a lot of families in our village who operated homestays. Some of them were renovated from their old houses, while others were built on new land. At that time, the management regulations were not as strict as it were now. Some of the households who were rich even had built two or three houses. (Household H36)”

Hence, to foster the sustainable advancement of rural tourism, the local government has delineated precise management protocols governing land utilization and housing construction for households residing in the surrounding villages of the Huangling scenic area. Specifically, concerning land use, households are mandated to adhere rigorously to ecological red lines, precluding the unauthorized conversion of arable land for personal construction endeavors. With regard to housing construction, households are obliged to adhere strictly to the stipulation of one household, one dwelling for both the renovation of existing structures and the erection of novel residences. Additionally, comprehensive



directives have been established dictating the permissible number of floors and land footprint of the housing construction.

“At that time, the most of the villagers saw that making homestays was very profitable, so they all wanted to build homestays. They built a lot of new ones all at once, and they didn’t care about any planning. They built them whenever there was vacant land, and it was a bit chaotic at that time. We didn’t expect it to develop so quickly, but if this continued for a long time, it would definitely not good for the sustainable development. Later, relevant management regulations were introduced, requiring them not to use farmland privately and strictly follow the regulations of ‘one household, one house’ to build houses. Each household can only build one house, and if there are too many, it won’t be allowed. (Government Official G3)”

Under stringent regulatory oversight by local governments, certain households initially exhibited hesitancy towards governmental directives owing to their limited education level, thereby precipitating a somewhat strained social relationship between the government and households. However, with the increasing recognition among households themselves regarding the nuanced facets of rural tourism development, they have progressively acknowledged the imperative of adhering to pertinent rural tourism development schemes and regulations. Consequently, in subsequent housing endeavors, households residing in the surrounding villages of the Huangling scenic area have abided by relevant protocols governing land utilization and housing construction. This emerging adoption of livelihood adaptive behavior has engendered a relative deceleration in the trajectory of both physical and economic capital accumulation among households.

#### **5.4.3.4 Summary of households’ livelihood adaptive behaviors at phase III**

During phase III, the pace of rural tourism development in the Huangling scenic area has decelerated, leading to a relatively sluggish increase in tourist numbers. Nonetheless, there has been a rapid surge in households’ participation in tourism catering and accommodation ventures, accompanied by the entry of foreign operators, thereby intensifying customer competition among households. Furthermore, exacerbated by the impact of the Covid-19 pandemic in 2020, the short-term tourist influx to the Huangling scenic area witnessed a sharp downturn, accelerating the release of households’ livelihood capital and prompting adjustments in their livelihood adaptive behaviors. At this juncture, shifts in households’ livelihood adaptive behaviors primarily manifest in

three domains: indirect participation in tourism operations, seasonal participation in tourism operations, and adhering to tourism-related rules and regulations (Figure 5-11).

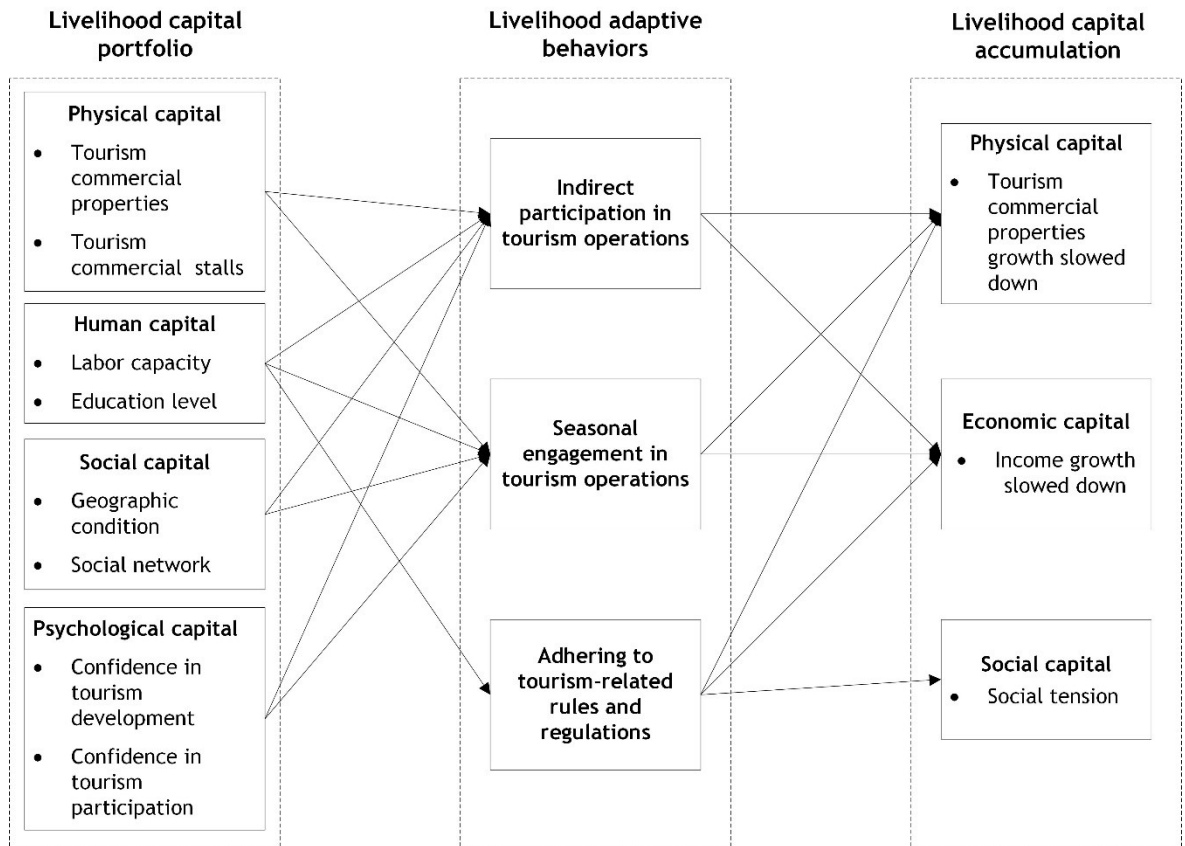


Figure 5-11 Livelihood adaptive behaviors developed by households at phase III

(Source: Author)

Despite escalating consumer demand from tourists, the majority of households exhibit relatively limited levels of human capital. Moreover, influenced by the pandemic, households have demonstrated wavering confidence in rural tourism development and their own involvement in tourism operations. Consequently, some households with advantageous location conditions have commenced renting out their tourism commercial properties and stalls, leading to a gradual deceleration or even regression in the accumulation of economic capital among households engaged in rural tourism endeavors. Furthermore, due to the implementation of stringent rural tourism development plans and management regulations by local governments and the fierce competition among households, not only has the growth rate of physical capital, such as tourism commercial properties, slowed down, but also the social relationships among local governments and households, as well as among households themselves, have become relatively strained, significantly impacting the social capital levels of households. During this phase, faced with an externally uncertain tourism development environment and intense competition

in tourism operations, households further refine their livelihood adaptive behaviors predicated on their respective livelihood capital structures. The physical capital, human capital, social capital, and psychological capital of households predominantly dictate their choices in livelihood adaptive behaviors during this stage.

#### **5.4.4 Phase IV: households' livelihood adaptive behaviors from 2021 to 2022**

In 2020, the tourist influx to the Huangling scenic area experienced a transient decline attributable to the Covid-19 pandemic. This not only expedited the depletion of households' livelihood capital in the surrounding villages of Huangling scenic area but also catalyzed a transition to the transformation and reorganization stage in households' livelihood adaptive behaviors. During this stage, households gradually recognize the imperative to enhance the quality of tourism services amid an increasingly competitive market environment and rising tourist demand. Consequently, impelled by both survival rationality and economic pragmatism, households in the surrounding villages of the Huangling scenic area embark on further adjustments to their livelihood adaptive strategies to better capitalize on the opportunities engendered by rural tourism development and mitigate associated livelihood risks. Households have initiated heightened investment in economic capital within the tourism operation domain, concurrently bolstering their levels of human and social capital. These shifts in livelihood adaptive behaviors entail assimilating insights from foreign operators to upgrade the quality of homestays, augmenting economic capital investment to fortify networking proficiency, active engagement in organizations and associations pertinent to rural tourism development, and contributing suggestions and perspectives towards local rural tourism advancement.

##### **5.4.4.1 Upgrading the quality of homestays**

Although the involvement of foreign operators has introduced a degree of customer competition to households in the surrounding villages of the Huangling scenic area, the advanced management concepts brought forth by these foreign operators have gradually propelled the improvement and upgrading of homestay operations among households, particularly noticeable in Lingjiao village. Influenced by foreign operators, households returning to engage in homestay operations in Lingjiao village have utilized the pandemic-induced hiatus to renovate or expand their homestays, thereby effectively enhancing the

overall quality of homestay operations. Most of the operators within this cohort are predominantly middle-aged and young individuals who have returned to their hometowns to embark on entrepreneurial endeavors, typically falling within the age bracket of 25 to 45 years old. These homestay operators exhibit distinctive characteristics, possessing relatively high levels of education, strong adaptability, open-mindedness, and a degree of foresight and innovation. During the peak tourism season, the accommodation prices of such homestays can reach over three thousand yuan per night at maximum, with the minimum typically exceeding five hundred yuan, and during the off-peak tourist season, prices generally remain above three hundred yuan. This category of households has acquired proficient skills in operating online tourism platforms, and their customer base primarily originates from network bookings on platforms such as Meituan and Ctrip. Despite existing competition among households, the operational order among them is relatively harmonious.

“Our operation of homestays is different from that in Huangling new village. Most of us are young people who dare to think, act, and invest. We need to spend one or two million yuan to build and decorate a homestay, and the update is very fast. Basically, it needs to be renovated every two or three years. Of course, the homestay prices here are also high, certainly not like those in Huangling (new village), which cost 80 (yuan), 100 (yuan), our bedrooms should be big, and we also pay attention to public spaces. Each one has its own characteristics... Tourists basically book online. We will never solicit tourists. Generally, customers come to our homestays, and then we will take the initiative to ask if they need catering and accommodation. Unlike those in Huangling (new village), where they often solicit tourists, sometimes even quarrel and fall into chaos due to tourist solicitation. We definitely have competition among each other, but there will never be such thing as you arguing with me. (Household H41)”

Presently, Lingjiao village's homestay sector has evolved into a quintessential exemplar of the high-end homestay category within Wuyuan, being directly recognized as Lingjiao Homestay Village.



Figure 5-12 Photos of high-end homestays  
(Source: Author)

Moreover, a significant proportion of tourists visiting the Huangling scenic area are self-driving tourists, exacerbating the issue of limited parking spaces, particularly evident during peak tourist seasons. This scarcity of parking spaces has become a critical concern for tourists seeking accommodation. Consequently, this category of households, while operating homestays, also specifically sets up small parking lots for tourists at the entrance of the homestays or utilizes their own cultivated land for parking. This strategic provision not only addresses the parking needs of tourists but also enhances the attractiveness of their homestay establishments through the augmentation of supporting service facilities, thereby further enticing more customers to stay.

“Basically, we have several parking spaces in front of the homestay, because many tourists are self-driving and want to drive directly to the doorstep. When they arrive, they will ask if they can park. If you can’t provide parking service, tourists may not be willing to stay. If there is land at our doorstep, we will set it up at the entrance. If not, we will use our own land or rent someone else’s land to build a parking lot nearby. (Household H39)”

In summary, with the escalating demand and purchasing power of tourists, coupled with the demonstrative impact of foreign operators, the tourism management ethos among

households in the surrounding villages of the Huangling scenic area has gradually evolved, accompanied by a qualitative improvement in their managerial prowess. In contrast to the tourism accommodation reception during the phase II, which primarily focuses on meeting immediate demands, the tourism accommodation reception during the phase IV often necessitates greater capital investment and elevated business acumen. However, certain households have amassed a certain level of economic capital during the initial stages of rural tourism operations, enabling them to bear the operational costs associated with transitioning homestays. Furthermore, given that middle-aged and young returning households often possess prior work experience in urban settings, their educational attainment and foresight tend to be relatively high. Consequently, they are inclined to continually enhance the quality of homestays in accordance with the demands of the tourism consumer market. Additionally, they autonomously engage in learning and refining rural tourism management skills, thereby facilitating a more effective transition and adaptation in tourism accommodation reception practices.

#### **5.4.4.2 Learning to strengthen network operation skills**

With the rapid proliferation of the Internet, online reviews have emerged as a pivotal determinant influencing tourists' choices regarding tourism catering and accommodation consumption. In the confluence of tourist demand and the impact of foreign operators, households engaged in tourism catering and accommodation services are placing greater emphasis on enhancing and fortifying their online marketing capabilities. This emphasis is notably evident in two dimensions: firstly, by fostering robust interactive relationships with tourists throughout the provision of catering and accommodation services, and incentivizing positive online reviews through the provision of rewards for exemplary tourism services, thereby consciously guiding tourists to generate favorable online feedbacks.

“To be honest, the internet is also very important now. You can't just rely on good services because most of the tourists come from big cities. They are used to watching online reviews, just looking at the ratings of Meituan and Dianping. The higher your rating and ranking are, the more customers you will definitely have... Our family didn't operate Dianping, we just used the Meituan because it not only takes time but also money... It's true. I don't lie to you, like that XXX, and that XXX. These two restaurants were good at operating online platforms, with a rating of 4.9, but they both bought it with money, costing

ten to twenty thousand yuan a year. Look at our restaurant, the rating is 4.8, and my family managed to achieve it without spending any money. That's quite good, isn't it? Our rating is written by tourists themselves. We usually provide better services to tourists and ask them to help write it when come across someone who is willing to help us write a good online review, and then we give them a dish as a gift for return. (Household H32)"

"We really care about these positive reviews because most of our guests come online (i.e. booked through the internet). They usually choose which one to stay at based on the positive review rate, and a negative review will lower the rating. You need to use multiple positive reviews to make up for it. Sometimes, due to hygiene or noise issues, we will give tourists free room upgrades to avoid negative reviews. (Household H21)"

Secondly, in a bid to bolster the reputation and visibility of their catering or homestay establishments, some households deliberately escalate their economic capital investment, leveraging internet platforms to enhance their online search visibility and influence.

"This network has a lot of depth. If you are willing to spend money and know how to do it, you can do it very well. As long as your accommodation conditions are not too poor, the room is larger, the decoration is cozy, and the facilities and equipment used are branded, which doesn't need to be so high-end. Taking toilets as an example, you can choose a relatively low-priced brand toilet because customers feel comfortable when they see it is branded, but they will not care about how much it is. Then, if the website is done well, your room price can be sold higher. (Household H21)"

"We definitely don't know how to operate the online platforms ourselves. Usually, we hire people to do it. If you join that brand of homestay, they can increase your traffic, give you a gold medal (homestay), label you, or hang a red thumb, and they can greet the backend directly. This way, the exposure of our homestays will increase, and the number of reserved customers will definitely increase. Nowadays, the internet is very important. If you don't have an online platform to expose you, no matter how good your service is, it won't be useful for others to know, right? (Household H41)"

Overall, amidst the burgeoning consumer demand and escalating competition in tourism

operations, households are compelled not only to proactively address demand and enhance the quality of tourism services but also to augment economic capital investment and bolster tourism operation competencies. This strategic adaptation is crucial for better aligning with rural tourism development, thereby fostering the accumulation of livelihood capital and overarching improvement of their livelihood standards.

#### **5.4.4.3 Participating in tourism-related organization and association**

The increasing participation of households in rural tourism development within the villages surrounding the Huangling scenic area, coupled with effective local government guidance, has fostered a nascent sense of community among residents. Intensifying competition for tourists has strained inter-household relationships, prompting reflection on the interplay of cooperation and competition. In response, local governments have facilitated the establishment of informal household organizations aimed at promoting collaboration and mutual support. These organizations have mitigated, to some extent, the tense competitive environment and encouraged standardized tourism management practices. In Huangling new village, the persistence of traditional customer solicitation methods among certain households has led to conflicts arising from competitive pressures. To address this issue and prevent disorderly competition, the village's households have spontaneously implemented a unified scheduling system, enabling orderly customer reception.

“The scheduling is like this. It turns out that many families in Huangling are soliciting visitors at the entrance of the scenic spot, and people often argue and have conflicts because of this competition. Later, in order for everyone to do business harmoniously, we discussed taking turns to receive tourists. We have a notebook, and whoever wants to go, they can register themselves. The order is different every day, and whoever arrives earliest will be ranked first, and then in this order. (Household 28)”

Moreover, as the number of households engaging in homestay operations continues to rise, under the proactive leadership of local governments, households have initiated the organization and establishment of homestays associations. These associations serve as informal platforms wherein households involved in tourism accommodation reception can convene. This development not only mitigates the intensity of competition among households to some degree but also facilitates communication, mutual assistance, and the expansion of their social network.



“In recent years, more and more households in the villages surrounding the Huangling scenic area have started offering accommodations. To make management easier and to enhance communication and cooperation among these households, we organized them into a homestay association. Now, most of the households involved in the homestay business have joined this association and created WeChat groups, where they share and exchange news and information. (Government official G3)”

It is evident that participation in informal organizations pertaining to rural tourism development, such as homestays associations, has become a significant livelihood adaptive behavior for households during the phase IV. The emergence of this livelihood adaptive behavior not only effectively mitigates intense competition among households and broadens their social connections but also enhances their tourism occupational skills through mutual sharing and communication.

#### **5.4.4.4 Providing tourism-related recommendation and suggestion**

Amid continual updates and upgrades in the development of rural tourism within the Huangling scenic area, the awareness of subjectivity among households involved in rural tourism development is steadily increasing. This is particularly notable among middle-aged and young individuals who have returned to their hometowns to pursue entrepreneurial endeavors in rural tourism. These individuals exhibit relatively high levels of education and have developed a deep understanding and awareness of local rural tourism development. In alignment with local rural tourism development planning and management frameworks, they have proactively offered suggestions and viewpoints for the advancement of rural tourism.

As the demand for tourism consumption surges within the Huangling scenic area, local households, while providing catering and accommodation services to tourists, have concurrently faced challenges related to village environmental sanitation, sewage treatment, and traffic congestion. Over an extended period of engagement in rural tourism, households have increasingly recognized that these issues exert a significant influence on the sustainable development of local rural tourism. Consequently, certain households have taken the initiative to offer recommendations and perspectives to the village committee concerning the collection and treatment of kitchen and household waste, the enhancement of sewage discharge and treatment infrastructure, and the improvement of road networks.

“There’s a lot of garbage in the village now, especially from those who provide catering services near the entrance of the scenic spot. We only have one trash bin here, and during peak seasons like the spring rapeseed flower period, they need more than three bins a day. I suggested to the village committee that they hire two people: one to sweep from the top down and the other from the bottom up, and then switch them the next day so that neither of them gets overwhelmed. (Household H1)”

“Our village has a big sewage problem, especially in the summer when there’s no water and the smell is really bad. We’ve reported it many times, and we’re all willing to pitch in some money to clean up the river channel. We could plant flowers and grass on both sides to make it look better. (Household H13)”

“Our road and parking issues are quite significant here. It turns out that the road is really bad. After digging and repairing, it becomes congested during peak season. We have reported this issue many times, and we have also provided suggestions for the tourism company to solve it. In this way, we don’t have to build parking lots by ourselves, with blocks in the east and west, which also affects the village appearance, right? (Household H41)”

It is apparent that, with the growing consciousness concerning rural tourism development and their own agency, households have commenced a proactive examination of the issues present in the local rural tourism development process. They endeavor to leverage their own actions to facilitate the management and resolution of associated challenges, thus advancing the amelioration and fortification of the collective environmental sanitation and infrastructure within the community.

#### **5.4.4.5 Summary of households’ livelihood adaptive behaviors at phase IV**

During phase IV, despite the lingering impact of the Covid-19 pandemic resulting in tourist numbers in the Huangling scenic area not fully rebounding to pre-pandemic levels, the development trajectory of the scenic spot remains dynamic. Rather than stagnating, it strategically utilizes this interim period to bolster and refine tourism offerings and infrastructure, positioning itself to better align with post-pandemic tourism consumption demands. At this juncture, facilitated by the effective operations of the tourism company, households residing in the surrounding villages of the Huangling scenic area have gradually augmented their confidence in engaging with rural tourism employment. Notable shifts

in their livelihood adaptive behaviors are discernible across four aspects: assimilating insights from foreign operators to elevate the quality and sophistication of homestay operations, increasing economic capital investment to acquire and fortify network operation competencies, engaging with organizations and associations pertinent to rural tourism development, and offering recommendations and suggestions for local rural tourism advancement. (Figure 5-13).

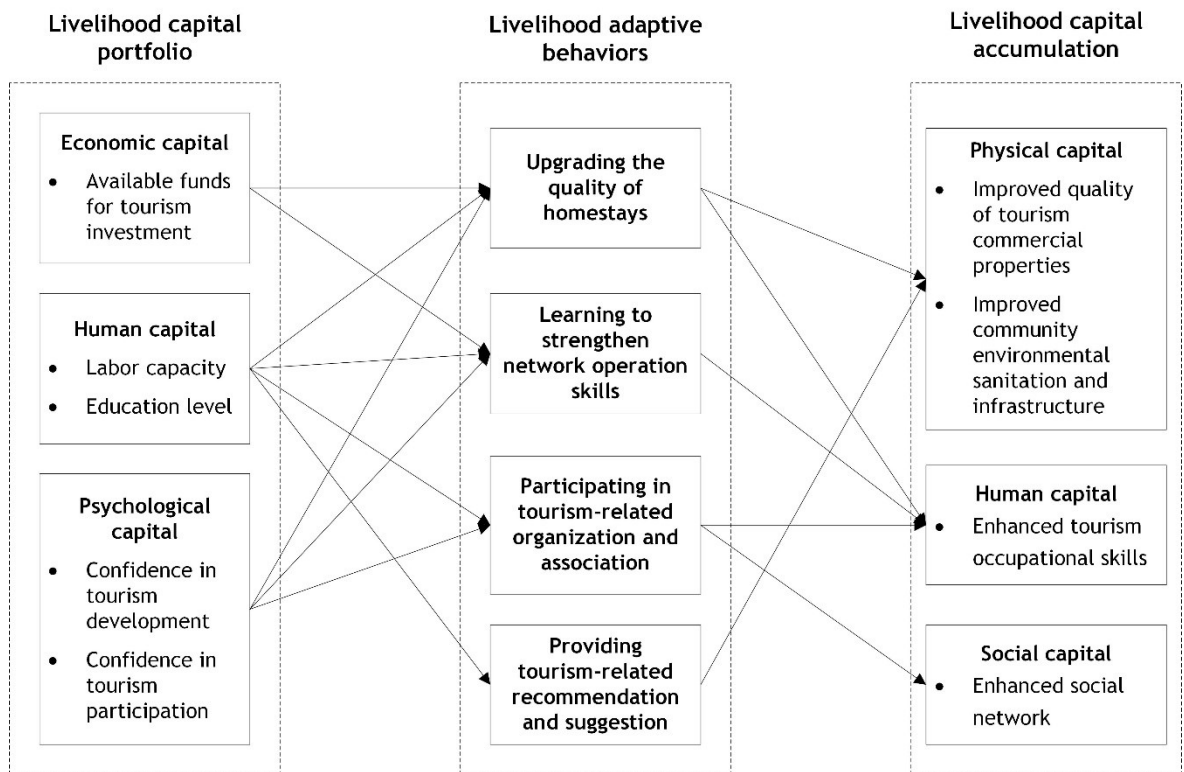


Figure 5-13 Livelihood adaptive behaviors developed by households at phase IV

(Source: Author)

Certain households, endowed with substantial human capital proficiency, are progressively discerning shifts in tourist consumption preferences and are increasingly investing economic capital in rural tourism management. Concurrently, they are intensifying efforts to enhance their network operation competencies, thereby improving the quality of homestay operations to meet evolving tourist expectations. To mitigate cutthroat competition in tourism operations, these households are affiliating themselves with informal entities such as rural tourism associations, under the auspices of local governance. This engagement not only effectively reduces competitive pressures among households and expands their social networks but also fosters enhanced tourism competencies through knowledge sharing and mutual communication.

Moreover, as households' consciousness and autonomy regarding rural tourism

development burgeon, they are proactively advocating for bespoke suggestions and remedial measures to address local rural tourism challenges, thereby catalyzing advancements in community environmental sanitation and infrastructure. At this juncture, households' intrinsic subjective agency is fully unleashed, marking a pivotal phase of transformation and reorganization in their livelihood adaptive behaviors. The aggregation of economic capital amassed by households, coupled with the continual enhancement of human and psychological capital, emerges as a pivotal determinant guiding shift in their livelihood adaptive behaviors during this phase.

#### **5.4.5 Phase V: households' livelihood adaptive behaviors from 2023 to present**

Following the cessation of Covid-19 control measures in December 2022 and the effective operation of the tourism company, the Huangling scenic area is poised to experience a resurgence in tourist numbers in 2023, characterized by a remarkable surge in visitation. This swift recuperation and escalation in tourist influx are anticipated to catalyze a fresh wave of development in the livelihood adaptive behaviors of households residing in the surrounding villages of the Huangling scenic area, albeit without complete reorganization. Particularly noteworthy is the robust support extended by the Wuyuan county government, which has spearheaded concerted efforts to propel the establishment and realization of a national 5A-level tourist destination. Commencing in 2023, infrastructural enhancements such as tourist service centers and parking facilities have been systematically expanded and refined. The sustained progression of rural tourism within the Huangling scenic area has engendered a deepened sense of assurance among households regarding their engagement in rural tourism employment.

Consequently, during this phase, households' livelihood adaptive behaviors exhibit a multifaceted developmental trajectory. This encompasses employment opportunities within the scenic area, the sale of tourism commodities, the provision of tourism catering and accommodation services, stalls and properties rentals, and seasonal involvement in tourism operation initiatives. Furthermore, households engaging in rural tourism employment stand to effectively augment their economic capital. Based on feedback obtained through fieldwork, households widely attested to a substantial increase in tourist numbers to the Huangling scenic area in 2023 compared to pre-epidemic levels, with a concomitant enhancement in their tourism-related income.

“This year’s business is definitely better than it was before the epidemic, with much more customers. Huangling is the best scenic spot in Wuyuan, and most tourists who come to Wuyuan visit here. The boss of the scenic spot has a great vision and is very skilled at running things. If the Huangling scenic area can successfully achieve a national 5A rating, there will definitely be even more tourists. (Government Official G3)”

However, a notable disparity exists in the pace of livelihood capital accumulation between households who have completed reorganization and those who have not. Households who have concluded the reorganization process have capitalized on emerging opportunities within rural tourism development, enabling their service infrastructure and quality to better align with the consumption preferences of post-epidemic tourists, consequently fostering a swift upsurge in family economic capital. Conversely, for households yet to finalize reorganization efforts, the pace of economic capital accumulation is markedly subdued. This discrepancy is particularly pronounced among households engaged in tourism catering, and accommodation provision. Notably, the pricing differentials between homestays that have undergone quality upgrades during the phase IV and traditional homestays are stark. During peak periods such as the rapeseed flower season, National Day Golden Week, and autumn Shaiqiu, the rates for upscale homestays can exceed 3000 yuan per night, while those for standard homestays, even amidst peak tourism seasons, hover around 500 yuan per night.

“There are a lot of tourists this year, even more than that before the epidemic. Compared to the previous two years, everyone’s business is indeed much better this year, especially when it comes to the accommodation reception. Those who done a good job in Lingjiao, in the first half of this year alone, during the period of rapeseed flowers, earned four to five hundred thousand yuan, with at least 800 yuan per room per night. They are fully booked every day. (Government official G6)”

“My homestay is the old-fashioned decoration. The house was exchanged with the tourism company at that time, and it is relatively small, with only three bedrooms on the second floor. The conditions are definitely not comparable to them (referring to households who have renovated or built new homestays), but overall, it is still good this year. It was fully booked during the period of spring rapeseed flowers and autumn Shaiqiu. (Household H16)”

Although the livelihood adaptive behaviors of households in the surrounding villages of Huangling scenic area demonstrates a diversified developmental trend at this juncture, households also manifest distinct traits in their livelihood adaptive behavior changes owing to variations in the composition of livelihood capital. Those endowed with ample financial resources for tourism investment, robust labor capabilities, adept tourism skills, and a high level of confidence in family engagement in rural tourism operation prioritize augmenting tourism investments, enhancing the quality of tourism catering and accommodation services, and facilitating the expeditious accumulation of economic capital.

“This year’s business has been much better than the previous two years. Overall, our area is more upscale, and the prices are also higher. Many of them were renovated last year or two years ago...This year, wealthy families with good conditions are also renovating. As soon as you renovate, the conditions and environment have improved, the price naturally increases. The newly renovated XXX here this year is very high-end, and you can check it online for yourself. The price is particularly high, and it is often full booking. Not long after opening, it has earned a lot of money. (Household H24)”

Conversely, households with limited financial resources for tourism investment, diminished labor and tourism proficiencies, and reduced confidence in family involvement in rural tourism management opt to enhance the quality of tourism services. This strategic approach aims to bolster positive ratings and foster a subsequent uptick in economic capital accumulation.

“Our homestay is mainly aimed at middle and low-end tourists, and the price is not very expensive because our house was built a few years ago, and the decoration cannot compare to those new or renovated ones. My brother originally planned to demolish this house and rebuild it into a high-end one, but our whole family rejected it because it was too stressful. We calculated that rebuilding it would cost at least one or two million yuan. Even if the business is good, it will take two to three years to recover the cost. So, it’s better to just do it like now. Although the price is lower, if there are many tourists, we can also earn a lot of money in a year... I think the most important thing about homestays is service. My mother is very enthusiastic and often brings dishes or fruits such as a plate of watermelon to customers for free. If

you provide better service, there will naturally be someone coming.  
(Household H15)”

In essence, the end of the Covid-19 pandemic has precipitated a fresh surge in tourist arrivals to the Huangling scenic area, marking the advent of a new discrete adaptive stage in the livelihood adaptive behavior of households residing in the vicinity, albeit without complete restructuring. Consequently, there has been a collective elevation in the livelihood capital level of households.

During this phase, notable shifts in households’ livelihood adaptive behaviors primarily entail enhancements in the catering environment and service quality during tourism catering provision, alongside upgrades in the quality of homestays and service standards during tourism accommodation arrangements (Figure 5-14).

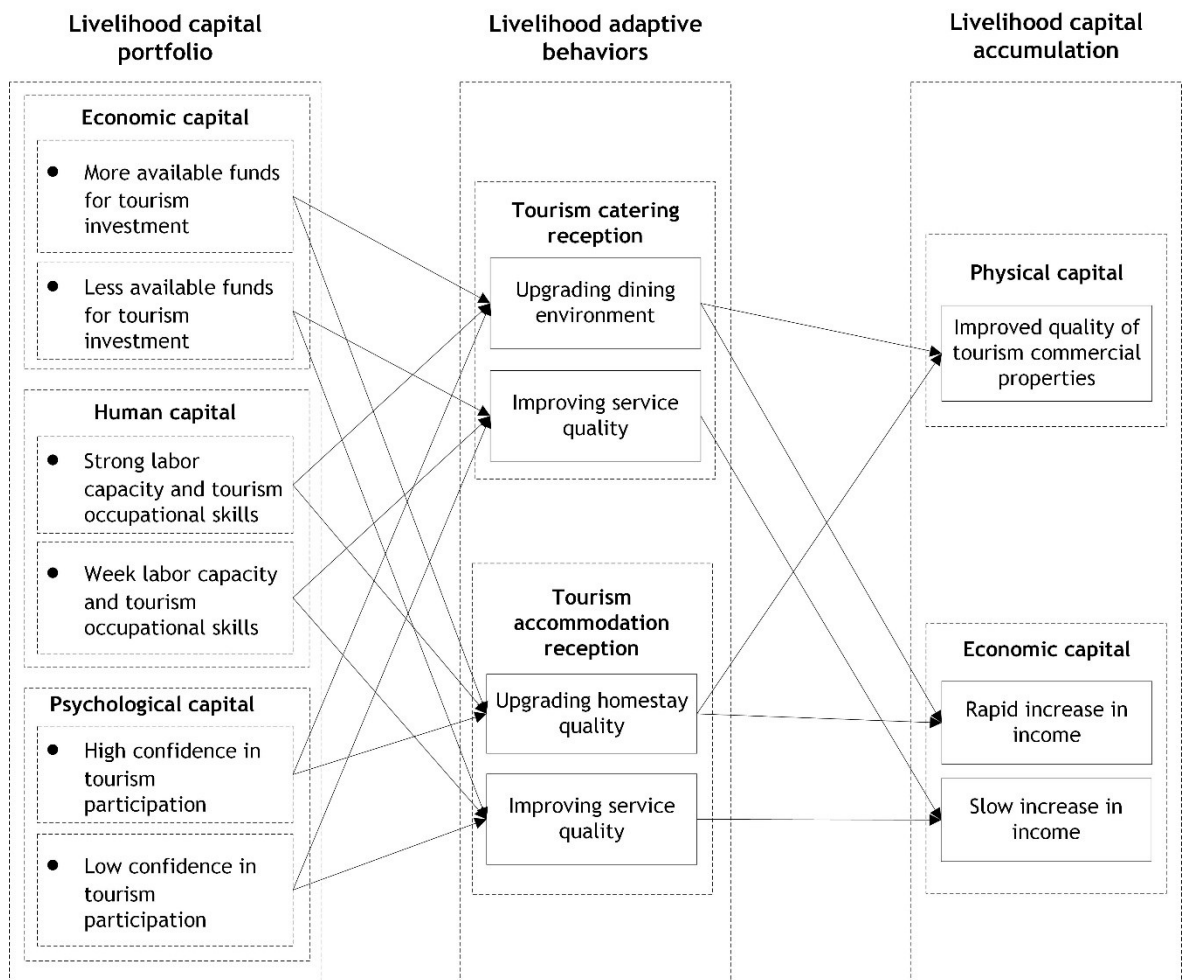


Figure 5-14 Livelihood adaptive behaviors developed by households at phase V

(Source: Author)

Households in the surrounding villages of the Huangling scenic area have rekindled their

confidence in engaging with rural tourism, with a general augmentation observed in their psychological capital. Over the protracted trajectory of tourism adaptation, households have progressively delineated the most suitable livelihood behavior for themselves. Those endowed with robust psychological and human capital, coupled with solid economic capital, persist in augmenting investments in rural tourism operation while concurrently refining the quality of tourism services and management proficiencies to cater to the needs of mid to high-end tourists, thereby bolstering economic capital accumulation. Conversely, households with comparatively lower levels of psychological, economic, and human capital concentrate on enhancing the quality of tourism services to cater to the consumption preferences of budget-conscious tourists, a strategy that also fosters family economic capital growth.

At this phase, amid the burgeoning opportunities within tourism development, households can adopt tailored livelihood adaptive behaviors contingent upon their unique survival and developmental imperatives. The augmentation of households' psychological capital emerges as the primary determinant influencing their selection of livelihood adaptive behaviors, while the initial accrual of economic and human capital among households assumes pivotal significance in determining whether they opt for further adjustments in their livelihood adaptive strategies.

## **5.5 The dialogue between the evolution of households' livelihood adaptive behaviors and the LABC model**

Examining the adaptation process of households in the surrounding villages of the Huangling scenic area to rural tourism development, it becomes evident that these households have transitioned from simplicity to complexity and from singularity to diversification in their engagement with rural tourism. As rural tourism development intensifies in the Huangling scenic area, accompanied by a rise in both tourist numbers and demands, households are continually refining their livelihood adaptive behaviors to optimize the opportunities presented by rural tourism while mitigating associated risks. Influenced by rural tourism, the livelihood adaptive behaviors of households in the surrounding villages of the Huangling scenic area have traversed five distinct phases (Figure 5-15).



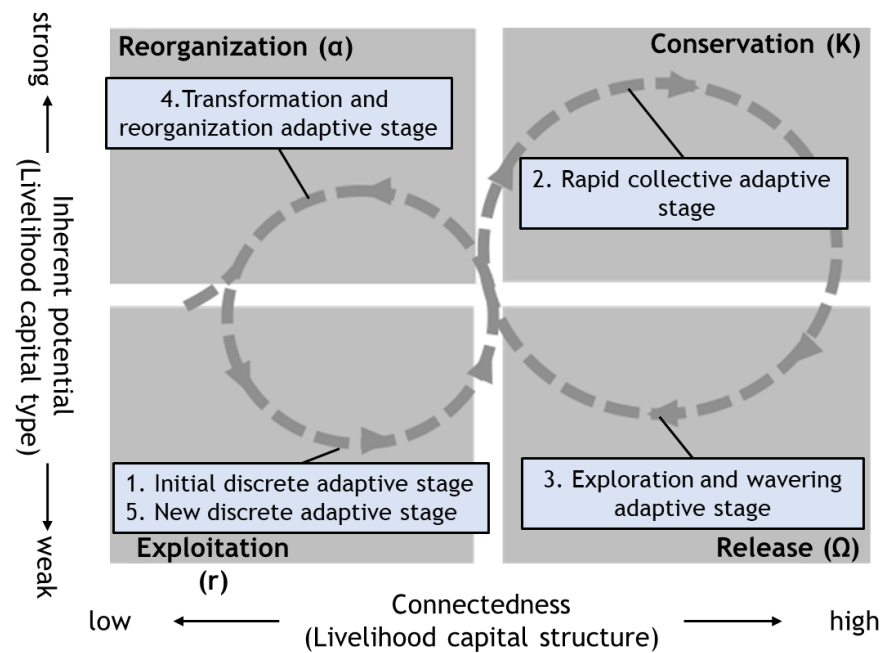


Figure 5-15 Cycle of households' livelihood adaptive behavior stages in the study area  
(Source: Author)

Phase I is before 2014, which corresponds to the exploitation phase in the Livelihood Adaptive Behavior Cycle Model (LABC model) and can be called as the initial discrete adaptive stage. At this point, rural tourism in the Huangling scenic area had not yet officially begun, leaving households uncertain about the livelihood opportunities and risks associated with tourism. Their livelihood adaptive behaviors were largely passive, as they were in the early stages of rural tourism development. Phase II spans from 2014 to 2017, which aligns with the protection phase in the LABC model and can be called as the collective rapid adaptive stage. During this period, rural tourism in the Huangling scenic area experienced rapid growth, with a significant increase in tourist numbers. Households became more aware of the livelihood opportunities and began to actively pursue different livelihood adaptive behaviors, resulting in rapid accumulation of livelihood capital. Phase III, from 2018 to 2020, coincides with the release phase in the LABC model and can be called as the exploration and wavering adaptive stage. During this stage, the growth rate of tourists slowed, while the number of households participating in rural tourism development increased significantly, intensifying competition among households. This resulted in heightened awareness of livelihood risks, a slowdown in the accumulation of livelihood capital, and increased instability in livelihood adaptive behavior. Phase IV spans from 2021 to 2022, which correlates with the reorganization stage in the LABC model and can be called as the transformation and reorganization adaptive stage. The Covid-19 pandemic in 2020 caused a short-term sharp decline in tourist numbers, further increasing households' awareness of livelihood risks. Households began readjusting their livelihood

adaptive behaviors, utilizing accumulated livelihood capital to navigate the changing landscape. Phase V, from 2023 to the present, aligns with the re-exploitation stage in the LABC model and can be called as the new discrete adaptive stage. The ongoing evolution and upgrading of rural tourism in the Huangling scenic area, along with the post-pandemic surge in rural tourism demand, provided new development opportunities. Households in surrounding villages were entering a new round of discrete adaptation.

The livelihood adaptive behaviors of households in rural tourism destinations does not transpire abruptly; rather, it undergoes continuous refinement and reorganization, contingent upon the external progression of rural tourism development and the inherent potential and connectedness of households. This is encapsulated by the type and structural configuration of livelihood capital (Figure 5-16).

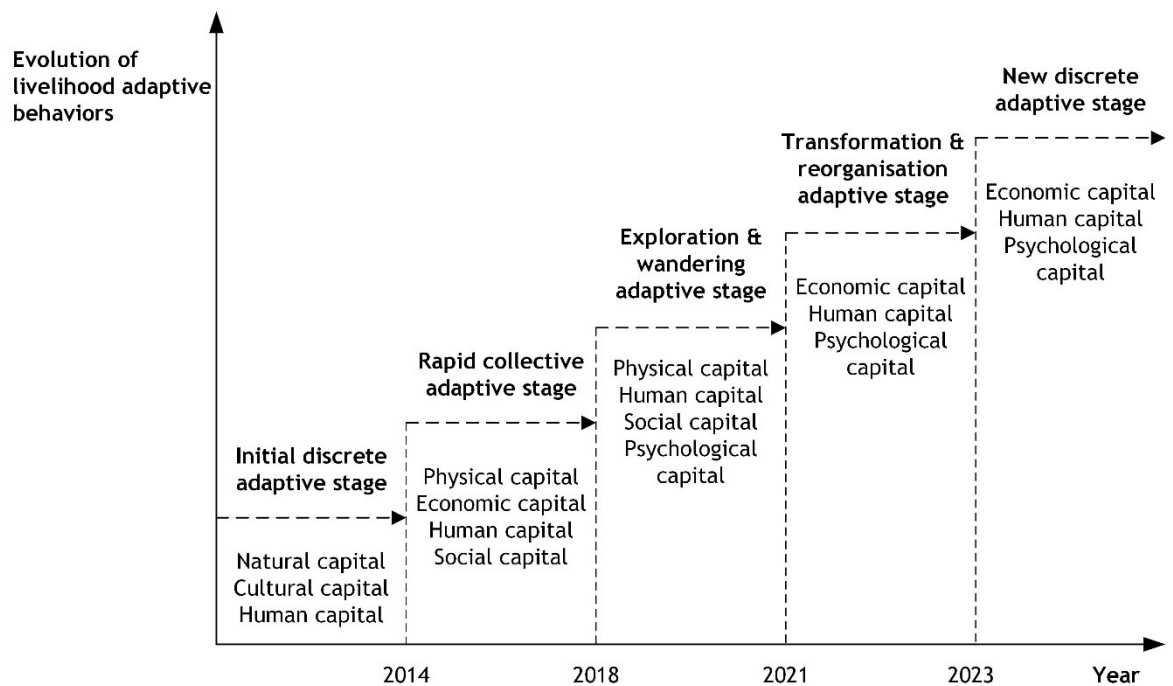


Figure 5-16 Types and structural configuration of livelihood capital at different adaptive stages

(Source: Author)

In the initial discrete adaptive stage, households typically exhibit relatively weak subjective awareness of tourism participation. This is primarily characterized by a status of discrete adaptation, which includes the provision of basic paid tourism services prompted by the arrival of independent travelers such as photographers and backpackers. Additionally, households engage in the circulation of natural and cultural resources, as well as participate in the development and construction of the scenic spot under the influence of the tourism company. The possession of natural capital, cultural capital, and

human capital by households during this stage constitutes key factors underpinning their adaptation to rural tourism development.

During the rapid collective adaptive stage, the role of rural tourism development in elevating households' livelihoods becomes increasingly pronounced, concurrently bolstering households' subjective initiative. Consequently, households progressively engage in rural tourism development endeavors autonomously, gradually transitioning rural tourism into a primary livelihood source. While this growing dependence on rural tourism development heightens households' livelihood vulnerability to some extent, it also fosters the accumulation of livelihood capital throughout their participation in rural tourism ventures. Physical capital, economic capital, human capital, and social capital inherent to households themselves emerge as predominant factors shaping their selection of livelihood adaptive behaviors during this stage. Households endowed with abundant physical and economic capital, notable human capital, and robust social capital often demonstrate greater capacity to opt for adaptation methods offering heightened tourism benefits, such as catering and accommodation provision.

In the exploration and wavering adaptive stage, the growth rate of tourists in the Huangling scenic area decelerated, while competition among households intensified rapidly for tourists, leading to a deterioration in households' social relations. Coupled with the impact of Covid-19, households' accumulated livelihood capital is gradually released. Physical capital, human capital, social capital, and psychological capital emerged as key determinants guiding households' choices in livelihood adaptive behaviors during this stage. Households with substantial physical and social capital but relatively limited psychological and human capital began transitioning from direct rural tourism participation to indirect or seasonal involvement. Moreover, as households deepened their understanding of rural tourism development, they increasingly recognized the significance of adhering to local tourism management norms and began strict compliance with them.

During the transformation and reorganization adaptive stage, the Huangling scenic area maintained a stable development trajectory. Nevertheless, confronted with fluctuating market demands and intense customer competition, certain households augmented their economic investment in tourism operation in response to shifts in tourism consumption market demand. Concurrently, they actively acquired, mastered, and applied new rural tourism operation skills, and joined organizations and associations affiliated with rural

tourism development under the guidance of local governments. Additionally, with an enhanced subjective consciousness, households commenced active reflection on extant issues within local rural tourism development, endeavoring to address and resolve these issues through their own actions, thereby facilitating the accumulation of livelihood capital throughout the process of rural tourism adaptation. Economic capital, human capital, and psychological capital emerged as decisive factors influencing changes in households' livelihood adaptive behaviors during this stage.

In the new discrete adaptive stage, the explosive growth of tourists in the Huangling scenic area precipitated a significant upsurge in households' overall psychological capital. Having assimilated the adaptation patterns through prolonged rural tourism participation, households exhibited greater flexibility in their livelihood adaptive behaviors choices. Households endowed with higher levels of economic, human, and psychological capital prioritized further skill enhancement and increased tourism investment, whereas those with comparatively limited economic, human, and psychological capital focused on improving the quality of tourism services. Psychological capital emerged as the primary determinant influencing households' selection of livelihood adaptive behaviors during this stage, with human and economic capital directly shaping the execution of livelihood adaptive behaviors.

It is essential to highlight that in this study, the livelihood adaptive behaviors of households in the surrounding villages of the Huangling scenic area not only rapidly transitioned into the reorganization stage after a brief release stage but also embarked on a new round of growth stage following a brief reorganization stage. This progression can be attributed to the effective rural tourism development and operational model implemented within the Huangling scenic area, coupled with the transformation of households' own rural tourism adaptation concepts and enhancements in their adaptability. Effective tourism development management and operations serve as crucial prerequisites for ensuring the sustained and stable evolution of the rural tourism industry (Qian et al., 2017; Zuo et al., 2017). The tourism company of Huangling scenic area has assumed a proactive role in the scenic area tourism operations by undertaking comprehensive households' relocation, property rights replacement, investment in public resources of households, and land resource transfers, all while safeguarding the rights and interests of local households in rural tourism development. The tourism company not only diligently excavates elements of traditional local cultural resources through extensive restoration of ancient houses and buildings, preservation of the original

appearance of ancient villages, and the creation of expansive floral landscapes like the thousand-mu terrace sea of flowers, but also remains attuned to evolving consumer demands by continuously introducing both new and revitalized tourism products, such as flower towns, forest exploration, and night tours of lights. Despite the setback of the Covid-19 pandemic in 2020 resulting in a temporary decline in tourist numbers, the scenic spot not only averted stagnation but also capitalized on this buffer period to further enrich and enhance tourism products and reception service facilities, better aligning with post-epidemic tourism consumer demands. Consequently, rural tourism in the Huangling scenic area has consistently maintained a positive and stable developmental trajectory, laying a solid foundation for households to adapt to the rural tourism development.

Meanwhile, the adaptability of households themselves serves as the internal impetus for their livelihood adaptation, with the subjective initiative exhibited by adaptive subjects based on their adaptability also constituting a pivotal factor influencing their adaptive outcomes (Li et al., 2020a). Over years of rural tourism participation, households in the surrounding villages of the Huangling scenic area have not remained passive but have instead demonstrated robust subjective initiative. An examination of the adaptive process of rural tourism development by households in the case study area reveals a transition from simplicity to complexity and from singularity to diversification in their engagement with rural tourism development. Households endowed with relatively strong adaptability continuously acquire new knowledge and skills tailored to the consumption needs of the tourism market, thereby facilitating the enhancement of their tourism service reception and better catering to the consumption demands of tourists while achieving their livelihood goals. Conversely, households with relatively weaker adaptability demonstrate the ability to promptly adjust their rural tourism participation, supplementing their existing livelihoods with tourism-based endeavors, diversifying their livelihood sources through seasonal or indirect involvement, and thus more effectively attaining their livelihood goals.

## **5.6 Conclusions**

This chapter employs thematic analysis to elucidate the livelihood adaptive behaviors of households in the surrounding villages of Huangling scenic area amidst the influence of rural tourism. It not only comprehensively examines the phased characteristics of the livelihood adaptive behaviors developed by households in response to rural tourism development, but also delves into the timely evolution mechanism of rural households'

livelihood adaptive behaviors. The research yields the following three conclusions:

Firstly, in the process of adapting to the development of rural tourism, the livelihood adaptive behaviors of households in the surrounding villages of the Huangling scenic area has undergone five phases: initial discrete adaptation, collective rapid adaptation, exploratory and wavering adaptation, transformation and reorganization adaptation, and new discrete adaptation. These phases precisely align with the five stages of growth, protection, release, reorganization, and re-growth in the livelihood adaptive behavior cycle model. The evolution direction of livelihood adaptive behaviors among households in rural tourism destination is determined by the types and structural configurations of livelihood capital owned by the households themselves. Moreover, the roles played by different types of livelihood capital vary across different adaptive stages. During the initial discrete adaptive stage, the natural capital, cultural capital, and human capital initially possessed by households are pivotal in supporting their adaptation to rural tourism development. Subsequently, in the stage of rapid collective adaptation, the economic capital, physical capital, and social capital accumulated by households emerge as key factors influencing their adaptive behavior choices. In the exploration and wavering adaptive stage, physical capital, human capital social capital, and psychological capital become the dominant factors shaping the livelihood adaptive behaviors of households. In the transformation and reorganization adaptive stage, the existing psychological capital and economic capital, and the increasing human capital of households serve as the core influencing factors driving their adaptive behavior adjustments. Finally, in the new discrete adaptation stage, psychological capital emerges as the primary factor influencing the choice of livelihood adaptive behaviors among households, while human capital and economic capital directly determine the implementation of their livelihood adaptive behaviors.

Secondly, the effective top-down development and management model employed by the tourism company in rural tourism has established a robust livelihood adaptation environment for households to continuously adapt to the development of rural tourism. Despite the enterprise-led development model adopted in the Huangling scenic area, as opposed to a community-led approach, tourism companies often possess stronger economic capital and more advanced tourism management concepts compared to rural community households with relatively limited economic resources and knowledge capabilities. Consequently, through substantial investments and efficient management and operations, the tourism company has not only effectively facilitated the preservation

and utilization of traditional residential buildings in Huangling scenic area but also maximized the value of natural and cultural resources such as terraced rapeseed flowers and autumn Shaiqiu customs. Furthermore, by introducing various types of new tourism products and projects, the Huangling scenic area sustains a positive trajectory of rural tourism development over the long term. Simultaneously, the tourism company have taken into account the interests of community households. Since the inception of tourist attraction development, the tourism company have continuously involved local households in rural tourism development initiatives through various mechanisms such as resource investment and profit-sharing schemes, enabling households to actively participate in scenic area development, construction, and employment. This concerted effort has significantly augmented economic prospects and employment opportunities for households in the surrounding villages of the Huangling scenic area, fostering a conducive livelihood environment for households in the case study area to adapt to the development of rural tourism.

Thirdly, the bottom-up evolution of ideological concepts and the enhancement of knowledge and skills among households serve as internal catalysts for facilitating their successful adaptation to rural tourism development and achieving their livelihood goals. In the process of adapting to rural tourism development, households in the surrounding villages of the Huangling scenic area are not passively accepting their circumstances; rather, they demonstrate proactive subjective initiative. They actively seize the livelihood opportunities generated by rural tourism development and strive to enhance their livelihood adaptive capacity, adjust their livelihood adaptive behaviors in a timely manner, and minimize livelihood risks associated with rural tourism development. Households in the surrounding villages of the Huangling scenic area perceive various livelihood opportunities such as economic opportunities, employment opportunities, learning opportunities and developmental opportunities, throughout the process of rural tourism development. They choose the most suitable livelihood adaptive behaviors at different adaptive stages, thereby promoting the accumulation of their livelihood capital such as economic capital, human capital, and physical capital, as well as enhancing their tourism occupational skills. Furthermore, the continuous accumulation of various forms of livelihood capital and the effective enhancement of households' knowledge and skills enable them to better cope with livelihood risks such as economic risks, market risks, and health risks. Therefore, households in rural tourism destination, as the livelihood adaptive subject, the dynamic mobilization of their inherent subjective initiative also plays a crucial role in shaping the evolution of their livelihood adaptive behaviors.

# **Chapter 6 Factors influencing the livelihood adaptative outcomes of households in rural tourism destination**

## **6.1 Introduction**

This chapter focuses on research objective three and presents findings of the quantitative analysis. Its purpose is to investigate the factors influencing the livelihood adaptive outcomes of households in rural tourism destinations. Building upon cognitive appraisal theory and self-efficacy theory, the study constructs the “Opportunity-Risk-Capacity (O-R-C)” model to underpin the theoretical hypotheses. Data on perceived livelihood opportunities, perceived livelihood risks, perceived livelihood adaptive capacities, livelihood adaptive behaviors, and livelihood adaptive outcomes, were collected from households in villages surrounding the Huangling scenic area through a questionnaire survey.

The chapter is organized into five sections: theoretical rationale, survey sample, questionnaire design, hypothesis development, and empirical analysis. First, it integrates cognitive appraisal theory and self-efficacy theory to develop the “O-R-C” conceptual model. Second, it describes the sample used in the study. Third, it outlines the measurement scales for the variables of households’ perceived livelihood opportunities, perceived livelihood risks, perceived livelihood adaptive capacities, livelihood adaptive behaviors, and livelihood adaptive outcomes. Fourth, a hypothesis model is constructed to illustrate the proposed relationships among the variables. Finally, Smart PLS 4.0 software is employed to examine the effect of households’ perceived livelihood opportunities, perceived livelihood risks, and perceived livelihood adaptive capacities on their livelihood adaptive behaviors, and the effect of households’ livelihood adaptive behaviors on their livelihood adaptive outcomes. The analysis aims to elucidate the mechanisms influencing livelihood adaptive outcomes among households in rural tourism destination.

## **6.2 Theoretical rationale**

Cognitive appraisal theory (CAT) originated from the study of individual responses to



stress in psychology (Lazarus & Folkman, 1984). Its core idea is to explain individual responses to external environmental stimuli (Lazarus, 1998), positing that individuals will respond differently to external stimuli based on their own evaluations (Hosany, 2012). In tourism research, CAT, as one of the important theories for understanding the process of individual response to the external environment (Wu, 2018), has been employed by numerous scholars to elucidate the relationship between tourists' experiences or image perceptions and behavioral intentions (Agyeiwaah et al., 2021; Breitsohl & Garrod, 2016; Choi & Choi, 2019; Liu et al., 2022; Otoo, Badu - Baiden, & Kim, 2019; Wen, Hu, & Kim, 2018), as well as residents' perceptions of tourism impacts and coping strategies (Jordan & Prayag, 2022; Ouyang et al., 2017; Zheng et al., 2019). This provides a robust explanatory framework for researching individual behavior in tourism studies. Therefore, building upon CAT, this study regards tourism disturbance as an external stimulus, households' perception of livelihood opportunities and risks as their positive and negative evaluations of tourism disturbance, respectively, and suggests that the perception of livelihood opportunities and livelihood risks among rural households in tourism destinations will jointly influence their livelihood adaptive behaviors, thereby further affecting their livelihood adaptive outcomes.

Furthermore, while CAT emphasizes the impact of external environmental stimuli on individual behavioral responses, it overlooks human agency (Bandura, 1988). Bandura (1997) countered this perspective by asserting that individuals are not merely passive recipients of environmental influences but are proactive, self-regulating agents. This implies that human behavior is a complex interplay of personal capabilities and external factors. To account for the influence of individual beliefs on behavior, Bandura introduced the concept of self-efficacy within social cognitive theory. This construct posits that individuals' perceptions of their abilities significantly influence their behavioral intentions (Bandura, 1997). A substantial body of research supports the link between self-efficacy and behavioral intentions (Kickul et al., 2009). In the context of tourism, self-efficacy has been employed to examine various behaviors, including tourism employment (Kakoudakis et al., 2017), employee turnover (Khan et al., 2021), entrepreneurial performance (Hallak et al., 2014, 2015), sustainable practices (Kornilaki et al., 2019), and resident attitudes (Wang & Xu, 2015). Similarly, households in rural tourism destinations are not passive in the process of adapting to rural tourism development but exhibit subjective initiative and reflection, continually adjusting their adaptive behavior based on their adaptive capacity (Xue & Kerstetter, 2019). Consistent with research on entrepreneurial behavior, adaptive capacity, often equated with entrepreneurial ability,

is positively correlated with adaptive outcomes, as it empowers individuals to seize opportunities (Baron, 2006; Clarysse et al., 2011).

Therefore, this study integrates CAT and self-efficacy theory and proposes a model termed “Opportunity-Risk-Capacity (O-R-C)”. In this model, households’ perceived livelihood opportunities, livelihood risks, and livelihood adaptive capacities will influence their livelihood adaptive behaviors, subsequently impacting their livelihood adaptive outcomes in the context of rural tourism development (Figure 6-1).

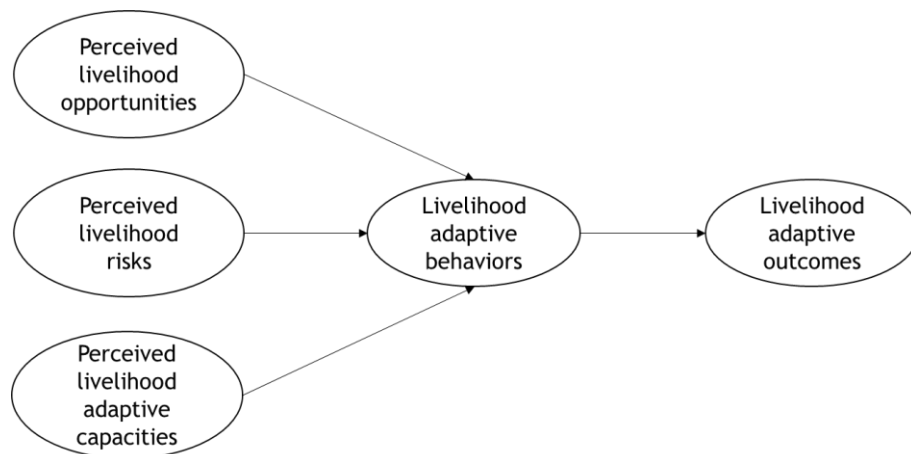


Figure 6-1 The conceptual model of “Opportunity-Risk-Capacity (ORC)”

(Source: Author)

### 6.3 Research hypotheses

Numerous studies have demonstrated that tourism development can generate increased economic, employment, social, and other livelihood opportunities for destination households (Anderson, 2015; Carte, McWatters, Daley, & Torres, 2010; Song & Fabinyi, 2022). According to cognitive appraisal theory (CAT), an individual’s favourable evaluation of the external environment enhances their ability to maintain a positive attitude and willingness to engage in behaviour (Jordan & Prayag, 2022). For households in rural tourism destinations, the more they perceive the benefits of tourism, the more inclined they are to support and participate in rural tourism development (Wang et al., 2021c). For example, Jaafar, Rasoolimanesh and Ismail (2017) assert that households’ positive perceptions of tourism impacts, such as increased household income and employment opportunities, can stimulate their participation in tourism. Simpson’s (2008) study reveals that households feel they have gained greater self-identity and cultural identity through participation in rural tourism development, leading them to invest more time and effort in community rural tourism development. Moreover, rural households in tourism

destinations also actively acquire relevant knowledge and skills in rural tourism management to better exploit the livelihood opportunities arising from rural tourism development, thereby advancing their livelihood goals (Hunt, Durham, Driscoll, & Honey, 2015; Scheyvens & Russell, 2012; Xue & Kerstetter, 2019). Therefore, households' perception of livelihood opportunities significantly encourages the emergence of their livelihood adaptive behaviors. Based on the foregoing discussion, the study proposes the following hypothesis:

*H1 The perception of livelihood opportunities of households in rural tourism destinations has a positive effect on their livelihood adaptive behaviors*

The development of tourism not only creates new livelihood opportunities for households but also inevitably introduces numerous livelihood risks (Towner & Davies, 2019). Similarly, according to CAT, negative evaluations of the external environment by individuals can significantly impede the formation of their behavioral intentions (Agyeiwaah, Adam, Dayour, & Badu Baiden, 2021). As Rasoolimanesh, Ringle, Jaafar, and Ramayah (2017) discovered, perceptions of negative impacts such as increased living costs and pollution among residents of rural tourism destinations can lead to their reluctance to support tourism development. Burbano and Meredith (2021) conducted a study on the livelihood diversity of households in the Galapagos Islands and found that due to the continuous enhancement of tourist demand quality, tourist destinations need to allocate more resources to enhance the quality of tourism services such as catering and accommodation. However, owing to the volatility of the tourism consumer market, some households may be unwilling to participate in rural tourism due to high operating costs or may cautiously deliberate overinvesting too much capital in tourism operations. Mitchell and Shannon's (2018) study further highlighted the evident seasonality in rural tourism employment and the instability of tourism income compared to their original livelihood. Consequently, some households may remain disinclined to engage in rural tourism management over an extended period. Additionally, the absence of a unified community vision and the widening income gap among households engendered by tourism may also diminish tourism participation among certain households (Bidwell & Murray, 2019). It is apparent that households' perception of livelihood risks substantially impedes the emergence of their livelihood adaptive behaviors. Therefore, the study proposes the following hypothesis:

*H2 The perception of livelihood risks of households in rural tourism destinations has a negative effect on their livelihood adaptive behaviors*

According to the theory of self-efficacy, an individual's perception of their own abilities also significantly influences their behavioral choices (Bandura et al., 1997). Households engaged in tourism-related activities such as catering, accommodation, and tourism commodity sales require not only a certain amount of physical, economic, and human capital to establish a resource foundation for their participation in tourism development (Praptiwi et al., 2021) but also the ability to effectively identify employment opportunities through relevant knowledge and skills (Tsao and Ni, 2016; Makandwa et al., 2022) and make judgments according to the changes in tourism market demand (Burbano and Meredith, 2021). Previous studies have demonstrated that households with a stronger resource base, including economic and social capital, are often more likely to adapt to rural tourism development and effectively achieve their livelihood goals (Steel, 2012; Akash and Aram, 2022). Households with proficient tourism marketing skills, innovative thinking, and adventurous abilities can make timely adjustments to their livelihood adaptive behaviors to achieve better livelihood outcomes (Makandwa et al., 2022). As found by Jaafar et al. (2020) in their research, the self-determination ability and perceived competitiveness of rural tourism destination households serve as internal driving forces that promote their sustained participation in rural tourism development. Wu and Tsai (2016) also noted that capacity building of households in tourism management can provide strong support and assurance for them to better adapt to tourism development. The empirical study by Makandwa et al. (2022) on the skills of female tourism small entrepreneurs also suggests that households' own skills in marketing, goal planning, communication, and negotiation can aid in choosing the most suitable adaptive behaviors and effectively achieving their livelihood goals. Based on the above discussion, the study proposes the following hypothesis:

*H3 The perception of livelihood adaptive capacities of households in rural tourism destinations has a positive effect on their livelihood adaptive behaviors*

The livelihood adaptive behavior choices of households in rural tourism destinations inevitably result in various livelihood adaptive outcomes (Rao et al., 2022). The adaptation of rural households to rural tourism development and the livelihood strategies they adopt determine the overall performance of rural household livelihoods (Li, Guo, Nijkamp, Xie, & Liu, 2020). Households with higher levels of engagement in rural tourism often have access to greater livelihood capital (Ma et al., 2021), leading to increased livelihood satisfaction (Chen et al., 2020). As found by Qian et al. (2016), households that accrue more economic, physical, and social capital through participation in rural tourism

development tend to be more content with their current tourism-based lifestyle. Some scholars have also noted that the tourism industry does not necessarily replace households' original livelihoods entirely but more often serves as a supplement to other livelihood strategies, thus enhancing the diversification of households' livelihoods (Tao & Wall, 2009). As demonstrated by Su et al. (2018; 2019b; 2020a; 2020b), the tourism industry can effectively integrate and coexist with traditional agricultural livelihoods such as rice, tea, and grapes. Consequently, households participating in rural tourism development often engage in a more diversified range of livelihood strategies. Moreover, households can enhance their language and communication skills, and increase knowledge through participation in tourism development, enabling them to select the most suitable livelihood approach for themselves (Su et al., 2019b). As indicated in Xue and Kerstetter's (2019) research, households continually enhance their relevant knowledge and skills to overcome obstacles encountered in tourism participation, thereby enabling them to select a suitable livelihood approach. It is evident that households who adopt appropriate behavioral strategies to adapt to rural tourism development are often more likely to experience higher levels of livelihood satisfaction and diversification and possess greater capacity to choose from various livelihood strategies. Therefore, the study proposes the following hypothesis:

*H4 The livelihood adaptive behaviors of households in rural tourism destinations have a positive effect on their livelihood adaptive outcomes*

Overall, this study posits that the perceptions of livelihood opportunities, livelihood risks, and livelihood adaptive capacities among households in rural tourism destinations will influence their choices of livelihood adaptive behaviors, thereby further impacting their livelihood adaptive outcomes. The research hypotheses model is depicted in Figure 6-2.

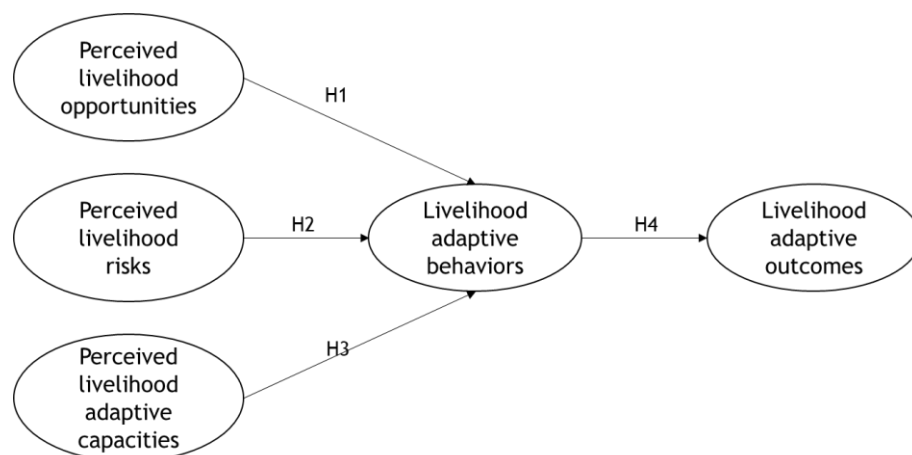


Figure 6-2 The model of research hypotheses  
(Source: Author)

## 6.4 Survey sample

The questionnaire survey was administered following the completion of semi-structured interviews, allowing the researcher to refine and validate key measurement dimensions before conducting the quantitative study. A stratified purposive sampling technique was employed to select participating households based on their varying levels of involvement in rural tourism development within the case study area. This sampling approach ensured that the selected households represented diverse engagement patterns, including those operating homestays, restaurants, tourism-related retail businesses, and those engaged in agricultural activities or scenic spot workers affected by rural tourism. The questionnaire survey was conducted with the assistance of the local village committee, which helped facilitate participant recruitment and logistical arrangements. Data collection took place over a two-week period, during which the researcher visited households in Huangling new village, Xiaorong village, and Lingjiao village. Households were approached either at their residences or places of business, ensuring that a broad spectrum of tourism-involved households was included.

Given that household livelihood decisions are often made jointly by spouses, the primary respondent was typically the male or female head of household. In cases where neither was available, another adult family member (aged 18 or older) was invited to respond on behalf of the household. Before completing the questionnaire, each participant was informed about the study's purpose, assured of confidentiality, and given the opportunity to ask questions. Participation was entirely voluntary, and informed consent was obtained from all respondents. The questionnaire covered multiple key areas, including: households' perceptions of livelihood opportunities (economic, employment, social, learning, development, and identity opportunities); households' perceptions of livelihood risks (environmental, market, economic, health, and social risks); households' perceived livelihood adaptive capacities; households' livelihood adaptive behaviors; households' livelihood adaptive outcomes; and households' demographic characteristics (e.g., age, gender, education level, household income, household size, and tourism involvement)

A total of 300 questionnaires were distributed. After excluding incomplete or invalid responses, a total of 293 valid questionnaires were obtained, yielding a response rate of 97.7%. The high validity rate was attributed to on-site verification, where the researcher reviewed responses for completeness before concluding each interview. In cases of missing or unclear answers, respondents were given an opportunity to clarify their

responses immediately. The collected data were subsequently coded and entered into a statistical software program for further analysis. Table 6-1 presents the demographic characteristics of the respondents.

Table 6-1 Demographic characteristics of the respondents

Profile	Frequency (N=293)	Percentage	Profile	Frequency (N=293)	Percentage
<b>Gender</b>			<b>Number of family members</b>		
Male	128	43.7%	2 and below	30	10.2%
Female	165	56.3%	3	117	39.9%
<b>Age</b>			4	122	41.6%
18-24	2	0.7%	5 and above	24	8.3%
25-34	19	6.5%	<b>Family's rural tourism employment</b>		
35-44	89	30.4%	Catering reception	26	8.9%
45-54	122	41.6%	Accommodation reception	159	54.3%
55-64	49	16.7%	Sales of tourism products	49	16.7%
65 and above	12	4.1%	Workers in Hunagling scenic spot	56	19.1%
<b>Education</b>			Other	11	3.8%
Primary school and below	117	39.9%	<b>Annual family income</b>		
Junior	124	42.3%	Lower than ¥30, 000	8	2.7%
High school or vocational college	25	8.5%	¥30, 000-¥50, 000	20	6.8%
University and above	27	9.2%	¥50, 000-¥80, 000	42	14.3%
			¥80, 000-¥100, 000	40	13.7%
			More than ¥100, 000	183	62.5%

Source: Author.

Among the surveyed participants, there were 165 female respondents, accounting for a relatively high proportion of 56.3%, while 128 male respondents accounted for 43.7%. The majority of respondents fell within the age range of 35 to 54 years old, with the highest proportion (41.6%) in the 45 to 54 age group, followed by the 35 to 44 age group, accounting for 30.4%. The lowest proportion was observed in the 18 to 24 age group, comprising only 0.7% of respondents. In terms of education level, the overall educational attainment of the respondents was relatively limited, with the majority having attained primary school education or below (39.9%) or junior high school education (42.3%). Respondents with a university education or higher comprised the smallest group,

accounting for only 9.2%. During the research process, the author noted that there were still many young individuals with relatively high levels of education who preferred seeking employment opportunities in urban areas.

Regarding household size, the majority of surveyed households consisted of three or four members, accounting for 39.9% and 41.6% respectively. These households primarily comprised middle-aged and young couples engaged in rural tourism and home-based employment while also attending to their children's education. Households with two or fewer members constituted 10.2% of the total, mostly consisting of couples aged 54 and above engaged in rural tourism activities at home while their children had already established independent families. The smallest proportion was observed in households with five or more members, accounting for only 8.3%. These households were mainly characterized by young and middle-aged children who had established their own families but continued to reside with their parents due to the need to support or care for their parents or children

In terms of family involvement in rural tourism employment, tourism accommodation reception was the most common, accounting for 54.3%, followed by work at the scenic spot and engagement in tourism product sales, accounting for 19.1% and 16.7% respectively. Among the three villages surveyed, Xiaorong village had a relatively high number of households working at the scenic spot, while Huangling new village and Lingjiao village primarily engaged in tourism accommodation reception due to their comparatively favorable economic conditions and location. The proportion of households engaged in tourism catering reception was relatively low at 8.9%, mainly concentrated among households in Huangling new village with advantageous family locations near the entrance of the scenic spot. Additionally, 3.8% of households reported engaging in other rural tourism employment such as working in restaurants and homestays or serving as tourist charter drivers. Furthermore, 8 surveyed households were involved in two or more types of rural tourism employment simultaneously, with most indicating that the female owner managed rural tourism catering or accommodation reception at home while the male owner assisted during off-hours while working in the scenic spot.

Regarding annual household income, over 60% of surveyed households reported an annual household income exceeding 100,000 yuan. The proportion of households with annual household incomes ranging from 50,000 to 80,000 yuan and 80,000 to 100,000 yuan was 14.3% and 13.7% respectively. However, the proportion of households with annual



household incomes below 30,000 yuan was the lowest at only 2.7%, indicating a relatively high overall income level among surveyed households. The development of rural tourism has significantly improved the annual income level of surveyed households.

## **6.5 Questionnaire design**

To gain an in-depth understanding of the impact of households' perceptions of livelihood opportunities, livelihood risks, and livelihood adaptive capacities on their livelihood adaptive behaviors and outcomes, this study employed a questionnaire survey method. The survey collected data on households' perceptions of livelihood opportunities, livelihood risks, and livelihood adaptive capacities, as well as their livelihood adaptive behaviors and outcomes. This approach facilitated a quantitative analysis of the mechanisms influencing livelihood adaptive outcomes among households in rural tourism destinations. The specific measurement scales for households' perceptions of livelihood opportunities, livelihood risks, and livelihood adaptive capacities, as well as their livelihood adaptive behaviors and outcomes, are detailed as follows.

### **6.5.1 Perceived livelihood opportunities**

Building upon the livelihood opportunity dimensions identified through qualitative content analysis in Chapter 4, this study developed a structured measurement scale (Table 6-2) to assess households' perceptions of livelihood opportunities in rural tourism destinations. The scale encompasses six key dimensions, each reflecting a distinct aspect of how households perceive and evaluate the livelihood opportunities available to them in the context of rural tourism development. these dimensions are as follows: perceived economic opportunities; perceived employment opportunities; perceived social opportunities; perceived learning opportunities; perceived development opportunities; perceived identity opportunities. To quantitatively evaluate these perceptions, a structured questionnaire survey was conducted among households in the villages surrounding the Huangling scenic area. A five-point Likert scale was used to measure responses, ranging from 1 (strongly disagree) to 5 (strongly agree). This methodological approach allowed for a systematic and empirical assessment of how households perceive livelihood opportunities in the context of rural tourism, providing a robust foundation for subsequent quantitative analysis.

Table 6-2 Measurement scale and mean value of perceived livelihood opportunities

Dimensions	Items
Perceived economic opportunities (EcO)	EcO1 Increased the level household income
	EcO2 Increased the source of household income
	EcO3 Increased households financing opportunities
Perceived employment opportunities (EmO)	EmO1 Increased types of employment channels
	EmO2 Increased opportunities for vocational skills training
	EmO3 Enhanced the job freedom
Perceived social opportunities (SO)	SO1 Increased communication and interaction between households
	SO2 Increased interaction between households and tourists
	SO3 Increased interaction between households, tourism companies, and local governments
Perceived learning opportunities (LO)	LO1 Improved knowledge learning atmosphere
	LO2 Increased accesses for knowledge learning
	LO3 Lower cost of knowledge learning
Perceived development opportunities (DO)	DO1 Improved occupational skills
	DO2 Improved growth in knowledge
	DO3 Better achievement of identity transformation
Perceived identity opportunities (IO)	IO1 Enhanced self-identity
	IO2 Enhance community identity
	IO3 Enhanced cultural identity

Source: Author.

### 6.5.2 Perceived livelihood risks

Analogous to the measurement of perceived livelihood opportunities, a structured measurement scale for perceived livelihood risks (Table 6-3) was developed based on the key dimensions identified through qualitative content analysis in Chapter 4. This scale was designed to systematically assess households' perception of potential risks associated with their livelihoods in rural tourism destinations. The measurement framework encompasses five critical dimensions, each capturing a specific category of livelihood risks that may affect households' adaptive behaviors and outcomes. These dimensions are as follows: perceived environmental risks; perceived market risks; perceived economic risks; perceived health risks; perceived social risk. To quantitatively assess these perceptions, a structured questionnaire survey was conducted among households in rural tourism destinations. A five-point Likert scale was employed, with response options ranging from 1 (strongly disagree) to 5 (strongly agree). This methodological approach enabled a systematic evaluation of how households perceive livelihood risks, providing a robust foundation for subsequent quantitative analysis.

Table 6-3 Measurement scale and mean value of perceived livelihood risks

Dimensions	Items	
Perceived environment risks (EnR)	EnR1	Land resources available to households have been deteriorated
	EnR2	Water resources available to households have deteriorated
	EnR3	The waste in the community has increased
Perceived market risks (MR)	MR1	Unstable consumer preferences of tourists
	MR2	Unstable consumption level of tourists
	MR3	Unstable consumption frequency of tourists
Perceived economic risks (EcR)	EcR1	Increased costs of living of households
	EcR2	Increased tourism operating costs of households
	EcR3	Unstable price of tourism products
Perceived health risks (HR)	HR1	I feel More physically exhausted
	HR2	I feel Increased psychological pressure
	HR3	My pace of life has worsened
Perceived social risks (SR)	SR1	Social relations among households have worsen
	SR2	Lack of common development goals and visions
	SR3	Widened wealth gap between households

Source: Author.

### 6.5.3 Perceived livelihood adaptive capacities

Adaptive capacity refers to the ability of a family or community to effectively handle, cope with, or recover from external disturbances, and to remain stable, seize new opportunities, avoid risks, and undergo other changes without forfeiting future advantages (Folke et al., 2002; Smit et al., 2010; Walker & Salt, 2012). It is represented by the set of available resources and the system's ability to respond to disturbances, including the capacity to design and implement effective adaptation strategies (Nelson et al., 2007).

Regarding the measurement of households' livelihood adaptive capacity, current research determines the specific evaluation index system from two perspectives: livelihood capital and livelihood resilience (Chen et al., 2020; Jing et al., 2024; Li et al., 2020a). Scholars who establish the evaluation index system of livelihood adaptive capacity from the perspective of livelihood capital believe that households' livelihood adaptive capacity can be largely reflected by their livelihood capital, which can include dimensions such as natural capacity, human capacity, financial capacity, social capacity, physical capacity, etc. (Li et al., 2020a; Rao et al., 2022). Scholars who derive the evaluation indicators of livelihood adaptive capacity from the perspective of livelihood resilience suggest that the livelihood adaptive capacity of rural households can be specifically derived from buffer

capacity, learning capacity, and self-organization capacity (Dang et al., 2022; Nyamwanza, 2012).

However, livelihood resilience and livelihood capital are distinct concepts. Livelihood capital emphasizes the current objective asset status owned by households and is not forward-looking (Dang et al., 2022), while livelihood adaptive capacity refers more to households' ability to dynamically adjust their characteristics and behaviors to better cope with external disturbances based on their resource conditions (Nelson et al., 2007), which is constantly evolving (Berkes et al., 2008) and represents a dynamic quality (Pelling, 2010). Although adaptive capacity from the perspective of livelihood resilience can well reflect households' dynamic adjustment ability in the adaptation process, it overlooks households' psychological factors. Due to the seasonality and instability of tourism itself (Su et al., 2022), especially in recent years, the Covid-19 pandemic has significantly affected rural households' confidence to continue participating in rural tourism employment (Jalil et al., 2021). Thus, psychological capacity is also an important component of livelihood adaptive capacity for households in rural tourism destinations (Guo et al., 2022; Lindsay-Smith et al., 2022; Randolph et al., 2022). Therefore, this study considers adaptive capacity from both the livelihood capital and livelihood resilience perspectives and adds the dimension of psychological capacity. It proposes that the livelihood adaptive capacity of households in rural tourism destinations consists of four dimensions: resource capacity, learning capacity, self-organization capacity, and psychological capacity.

Resource capacity refers to the resource base that households possess, contributing to the enhancement of their livelihoods (Bennett et al., 2012; Li, Deng, & Zhou, 2022). This specifically includes factors such as the number of households capable of participating in rural tourism operations (Li et al., 2020a; Rao et al., 2022), available funds for rural tourism investment (Li et al., 2020a), housing area available for rural tourism operations (Ma et al., 2021), types of social networks available for rural tourism operations (Li et al., 2020a; Hagedoorn et al., 2021), and location conditions in the process of participating in rural tourism operations (Dai et al., 2018).

Learning capacity refers to households' ability to enhance knowledge and skills through various means to better cope with external disturbances (Li, Deng, & Zhou, 2022). It is primarily reflected by the extent to which households are informed about information related to rural tourism development (Li et al., 2020a), their mastery of knowledge and

skills related to rural tourism operation (Dai et al., 2018), the application of their knowledge and skills to rural tourism operation (Dai et al., 2018), and the ability of households to anticipate demand in the rural tourism consumption market (Milestad & Darnhofer, 2003; Obrist et al., 2010).

Self-organization capacity refers to households' ability to continually adjust and sustain themselves by integrating internal and external resources (Holling, 2001; Biggs, 2011). It can be assessed by the frequency of households' involvement in the management and decision-making affairs related to rural tourism development (Campbell, 2021; Jacobi et al., 2018; Liang et al., 2023), the proficiency in applying previous knowledge and experience to rural tourism operations (Speranza et al., 2014; Davoudi et al., 2013; Ashkenazy et al., 2018), the degree of positive social relations with other actors (Rao et al., 2022; Speranza et al., 2014), and the proficiency in utilizing various social networks for rural tourism operations (Li, Deng, & Zhou, 2022; Liang et al., 2023).

Psychological capacity refers to the intrinsic psychological state that enables households to effectively manage and address the various needs and challenges encountered in their livelihood activities (Fang et al., 2020). It can be demonstrated by the degree of confidence households have in rural tourism development (Chang et al., 2022; Wang et al., 2021a), their confidence level in engaging in rural tourism operations (Guo et al., 2022; Jalil et al., 2021), their trust in government and tourism companies (Gursoy et al., 2019; Nunkoo & Gursoy, 2016; Nunkoo, 2017; Tichaawa et al., 2023), and their awareness of tourism crisis response and management intensity (Guo et al., 2022; Jalil et al., 2021; Randolph et al., 2022).

Based on the above discussion, the perceived livelihood adaptive capacity of households in rural tourism destinations is conceptualized as comprising four dimensions: perceived resource capacity, perceived learning capacity, perceived self-organization capacity, and perceived psychological capacity. Specific measurement indicators for each dimension are detailed in Table 6-4, with each indicator measured using a five-point Likert scale ranging from "Strongly disagree" to "Strongly agree" (1-5).

Table 6-4 Measurement scale and mean value of perceived livelihood adaptive capacities

Dimensions	Items
Perceived resources	RC1 My family has sufficient workforce to support our participation in rural tourism operations

Dimensions	Items	
capacity (RC)	RC2	My family has enough funds to support our participation in rural tourism operations
	RC3	My family has enough housing area to support our participation in rural tourism operations
	RC4	My family has enough social connections to support our participation in rural tourism operations
	RC5	My family has good location to support our participation in rural tourism operations
Perceived learning capacity (LC)	LC1	My family is familiar with the information of rural tourism development
	LC2	My family is familiar with the knowledge and skills related to rural tourism operations
	LC3	My family is proficient in using the knowledge and skills related to rural tourism operations
	LC4	My family can well understand and anticipate the consumption needs and preferences of tourists
Perceived self-organization capacity (SC)	SC1	My family frequently participates in the management and decision-making of rural tourism development related affairs
	1C2	My family is skilled in applying our previous knowledge and experience to rural tourism operations
	SC3	My family maintains good social relations with other actors
	SC4	My family is skilled in using various social networks for rural tourism operations
Perceived psychological capacity (PC)	PC1	My family has confidence in the development of rural tourism
	PC2	My family is confident with our engagement in rural tourism operations
	PC3	My family has confidence in the local government and tourism developers
	PC4	My family is confident in our ability to cope with uncertainties such as tourism crisis

*Source: Author.*

#### 6.5.4 Livelihood adaptive behaviors

Households' livelihood adaptive behavior refers to the adjustments and changes made by households to better adapt to rural tourism development in order to achieve their livelihood goals. These behaviors can be measured by assessing the extent to which households have implemented behavioral changes. Based on the analysis results of the evolution of livelihood adaptive behaviors of households in villages surrounding the Huangling scenic area in Chapter 5, and referring to relevant literature on household livelihood adaptive behaviors, this study measures the livelihood adaptive behaviors of households using the following five indicators (Table 6-5): (1) the degree of households' participation in rural tourism employment, such as catering, accommodation, commodity sales, and scenic area workers (Liang et al., 2023; Rongna & Sun, 2022); (2) the extent to which households actively acquire knowledge and skills related to rural tourism

employment (Xue & Kerstetter, 2019); (3) the degree of households' involvement in the distribution of rural tourism benefits (Rasoolimanesh, Ringle, Jaafar, & Ramayah, 2017; Wang, Dai, Ou, & Ma, 2021); (4) the extent to which households engage in rural tourism development decision-making (Ryu, Roy, Kim, & Ryu, 2020; Huo et al., 2023); and (5) the extent to which households join local organizations and associations related to rural tourism development (Zhang & Lei, 2012; Huo et al., 2023).

Table 6-5 Measurement scale and mean value of livelihood adaptive behaviors

Items	
LAB1	My family has participated in rural tourism employment such as catering, accommodation, commodity sales, and scenic spot workers
LAB2	My family often actively learns knowledge and skills related to rural tourism employment
LAB3	My family has followed the development planning and management of rural tourism
LAB4	My family often provides suggestions for the development of rural tourism
LAB5	My family has joined local organizations and associations related to rural tourism development

Source: Author.

### 6.5.5 Livelihood adaptive outcomes

Livelihood adaptive outcome represents the consequences of households' adaptive behavior choices in response to disturbances caused by rural tourism (He, Yang & Wang, 2019; Yu et al., 2013). These outcomes are reflected in the achievement of households' livelihood goals and can be measured through indicators including livelihood satisfaction, livelihood freedom, and livelihood diversification. Specifically, livelihood satisfaction pertains to households' contentment with their overall livelihood status (Su, Wall, & Xu, 2016; Su et al., 2022); livelihood freedom is evident in households' ability to choose from various livelihood strategies (Su, Wall, & Jin, 2016; Su, Wall, & Xu, 2016; Wu & Pearce, 2014); and livelihood diversification is characterized by the range of livelihood strategies and income sources available to households (Mbaiwa & Stronza, 2010; Su, Wall, & Jin, 2016; Su, Wall, Wang, & Jin, 2019). All indicators of households' livelihood adaptive outcomes are likewise assessed using a five-point Likert scale.

Table 6-6 Measurement scale and mean value of livelihood adaptive outcomes

Items	
LAO1	My family are satisfied with our current livelihood
LAO2	My family can choose different types of livelihood strategies
LAO3	My family has two or more livelihood choices and income sources

Source: Author.

## 6.6 Testing research hypotheses

### 6.6.1 Common method variance test

Common method variance (CMV) refers to systematic error arising from characteristics inherent in the questionnaire itself, such as the same data source or respondent, consistent social expectations, and the length of questionnaire items and content. This results in artificial covariation between predictor variables and standard scale variables, potentially leading to various research result confusions and misleading conclusions (Sharma et al., 2009). Therefore, besides employing procedural control methods like spatially separating respondents, ensuring anonymity, and minimizing respondent suspicion to mitigate common bias, this study employs two additional methods to assess the presence of common bias in the research data to ensure analytical accuracy.

Firstly, single-factor testing was conducted using SPSS 22.0 analysis software, revealing that without any rotation for factor analysis, the explanatory power of the first factor was 35.694% (less than 50%), indicating that no single factor explains the majority of the variance (Podsakoff et al., 2003). Secondly, this study adopts the approach proposed by Podsakoff et al. (2003) and Liang et al. (2007), employing the Partial Least Squares (PLS) analysis technique of Smart PLS 4.0 software. A common method bias factor was artificially introduced into the model to influence all questionnaire measurement items. If the analysis demonstrates that the average variance of questionnaire items explained by all potential variables is significantly greater than the explanatory power of the newly added factors on questionnaire items, indicating a large proportion between the two, it suggests that the common method bias of the sample data in this study has no significant impact (Podsakoff et al., 2003; Liang et al., 2007). The results of the PLS Algorithm method reveal that the average variance explained by all potential variables is 0.784, while the average variance explained by the common method bias factor is only 0.007, yielding a ratio of 111:1. Moreover, the influence of the common method bias factor on the path of the items is not significant, further validating the absence of significant common bias in this study.

### 6.6.2 Measurement model analysis

The analysis and application of Partial Least Squares Structural Equation Modeling (PLS-SEM) involve two steps: first, conducting reliability and validity analysis on the



measurement model; second, testing the path coefficients and predictive ability of the structural model (Urbach & Ahlemann, 2010). The purpose of these steps is to confirm that each measurement indicator effectively explains the research variable and to test the research hypotheses to estimate the predictive ability of the constructed model and elucidate the relationships between the research variables (Henseler, 2010). Therefore, this study will first analyze the reliability and validity of the measurement model.

Reliability refers to the internal consistency of the latent variable measurement items, indicating whether each item measures the same latent variable. This can be reflected by the factor loading of the measurement items, Cronbach's  $\alpha$  of the latent variable, and composite reliabilities (CR) (Fornell & Larcker, 1981). Higher factor loadings, Cronbach's  $\alpha$ , and CR values of the measurement items indicate higher reliability of the latent variable, meaning the latent variable is well measured (Fornell & Larcker, 1981). In this study, the factor loadings of all measurement items, Cronbach's  $\alpha$ , and CR values of latent variables are shown in Table 6-7. When the factor loading value is greater than 0.6, Cronbach's  $\alpha$  is greater than 0.7, and CR is greater than 0.7, it signifies good internal consistency between each item and acceptable measurement results (Urbach & Ahlemann, 2010; Hair et al., 2014). In this study, the standardized factor loading values of all measurement items were greater than 0.6, and the Cronbach's  $\alpha$  and CR values of all latent variables were greater than 0.7, indicating high reliability of all latent variables and measurement items in this study.

Table 6-7 Reliability and validity test of the measurement model

Variable	Standard loadings	Cronbach's $\alpha$	CR	AVE	R2
Perceived economic opportunities (EcO)	0.799 ***	0.838	0.841	0.759	0.633
EcO1	0.899 ***				
EcO2	0.919 ***				
EcO3	0.790 ***				
Perceived employment opportunities (EmO)	0.852 ***	0.862	0.861	0.789	0.729
EmO1	0.790 ***				
EmO2	0.932 ***				
EmO3	0.934 ***				
Perceived social opportunities (SO)	0.844 ***	0.819	0.837	0.738	0.714
SO1	0.907 ***				
SO2	0.909 ***				
SO3	0.753 ***				
Perceived learning opportunities (LO)	0.656 ***	0.911	0.916	0.849	0.432
LO1	0.903 ***				

Variable	Standard loadings	Cronbach's $\alpha$	CR	AVE	R2
LO2	0.914 ***				
LO3	0.946 ***				
Perceived development opportunities (DO)	0.757 ***	0.929	0.932	0.876	0.576
DO1	0.933 ***				
DO2	0.946 ***				
DO3	0.929 ***				
Perceived identity opportunities (IO)	0.737 ***	0.943	0.946	0.897	0.545
IO1	0.967 ***				
IO2	0.944 ***				
IO3	0.930 ***				
Perceived environment risks (EnR)	0.792 ***	0.763	0.786	0.679	0.637
EnR1	0.772 ***				
EnR2	0.803 ***				
EnR3	0.893 ***				
Perceived market risks (MR)	0.763 ***	0.792	0.800	0.705	0.584
MR1	0.822 ***				
MR2	0.840 ***				
MR3	0.857 ***				
Perceived economic risks (EcR)	0.826 ***	0.703	0.706	0.627	0.685
EcR1	0.783 ***				
EcR2	0.790 ***				
EcR3	0.802 ***				
Perceived health risks (HR)	0.762 ***	0.810	0.812	0.725	0.582
HR1	0.852 ***				
HR2	0.864 ***				
HR3	0.838 ***				
Perceived social risks (SR)	0.784 ***	0.835	0.835	0.752	0.616
SR1	0.877 ***				
SR2	0.884 ***				
SR3	0.840 ***				
Perceived resource capacities (RC)	0.732 ***	0.944	0.944	0.817	0.535
RC1	0.908 ***				
RC2	0.879 ***				
RC3	0.926 ***				
RC4	0.879 ***				
RC5	0.926 ***				
Perceived learning capacities (LC)	0.655 ***	0.959	0.960	0.891	0.429
LC1	0.942 ***				
LC2	0.948 ***				
LC3	0.958 ***				
LC4	0.926 ***				
Perceived self-organization capacities (SC)	0.895 ***	0.965	0.965	0.905	0.800
SC1	0.930 ***				

Variable	Standard loadings	Cronbach's $\alpha$	CR	AVE	R2
SC2	0.952 ***				
SC3	0.956 ***				
SC4	0.968 ***				
Perceived psychological capacities (PC)	0.857 ***	0.941	0.946	0.851	0.735
PC1	0.859 ***				
PC2	0.959 ***				
PC3	0.944 ***				
PC4	0.925 ***				
Livelihood adaptive behaviors (LAB)		0.866	0.876	0.654	0.496
LAB1	0.784 ***				
LAB2	0.755 ***				
LAB3	0.868 ***				
LAB4	0.736 ***				
LAB5	0.888 ***				
Livelihood adaptive outcomes (LAO)		0.865	0.868	0.788	0.491
LAO1	0.845 ***				
LAO2	0.904 ***				
LAO3	0.912 ***				
Perceived livelihood opportunities		0.867	0.901	0.604	
Perceived livelihood risks		0.845	0.890	0.617	
Perceived livelihood adaptive capacities		0.794	0.868	0.625	

Source: Author.

Validity refers to the degree to which a measurement item accurately reflects the characteristics of potential variables. Higher validity indicates more accurate measurement results. The validity analysis of the measurement model specifically includes convergent validity and discriminant validity (Fornell and Larcker, 1981). Convergent validity can be measured by the Average Variance Extracted (AVE) (Fornell & Larcker, 1981). In this study, as perceived livelihood opportunities, perceived livelihood risks, and perceived livelihood adaptive capacities are all second-order latent variables, Smart PLS 4.0 software cannot calculate the AVE values of second-order latent variables. Therefore, this study manually calculated the AVE values of perceived livelihood opportunities, perceived livelihood risks, and perceived livelihood adaptive capacities based on the equation proposed by Hair et al. (2021). The final results showed that the AVE values of all latent variables ranged from 0.604 to 0.905 (Table 6-8), all greater than 0.5, indicating that the latent variables included in this study have good convergent validity (Hair et al., 2014).

Discriminant validity refers to whether latent variables are distinct and measure different

concepts (Fornell & Larcker, 1981). In a measurement model with good discriminant validity, the correlation between each latent variable should be lower than the internal consistency of the corresponding latent variable, which can be assessed using the correlation coefficient matrix of latent variables. Specifically, if the average variance extracted (AVE) of a latent variable is greater than the squared correlation between that variable and any other variable, it indicates good discriminant validity (Fornell & Larcker, 1981). This study employs the following two methods to assess the discriminant validity between latent variables. The first method, proposed by Fornell and Larcker (1981), evaluates discriminant validity using the square root of the average variance extracted (AVE). According to the PLS-SEM results (Tables 6-8), all diagonal values in the correlation matrix exceed the corresponding Pearson correlation coefficients, indicating that the square root of each first-order latent variable's AVE is greater than its correlations with other latent variables. This suggests good discriminant validity for the first-order latent variable in this study. The second method, proposed by Henseler et al. (2015), is the Heterotrait-Monotrait Ratio (HTMT) estimation. Henseler et al. (2015) argue that the Fornell-Larcker criterion tends to overestimate standardized factor loadings, leading to inflated AVE values and underestimated correlations between variables. The HTMT method addresses this by calculating the ratio of the average correlation between different constructs to the average correlation within the same construct. If the HTMT value is below 0.9, it indicates adequate discriminant validity (Henseler et al., 2015; Hair et al., 2021). To further validate discriminant validity, this study applied the HTMT method to all first-order latent variables, and the results (Table 6-9) showed that all HTMT values were below 0.9, reinforcing the conclusion that the first-order latent variables exhibit good discriminant validity.

Table 6-8 Analysis of Fornell and Larcker discriminant validity

	EcO	EmO	SO	LO	DO	IO	EnR	MR	EcR	HR	SR	RC	LC	SC	PC	LAB	LAO
EcO	0.871																
EmO	0.672	0.888															
SO	0.685	0.747	0.859														
LO	0.470	0.547	0.456	0.921													
DO	0.422	0.464	0.482	0.421	0.936												
IO	0.421	0.489	0.507	0.244	0.789	0.947											
EnR	0.356	0.444	0.439	0.303	0.275	0.340	0.824										
MR	0.371	0.428	0.405	0.324	0.276	0.283	0.596	0.840									
EcR	0.223	0.229	0.223	0.236	0.156	0.149	0.557	0.509	0.792								
HR	0.357	0.446	0.392	0.233	0.168	0.243	0.459	0.452	0.590	0.851							
SR	0.283	0.236	0.219	0.245	0.086	0.147	0.529	0.469	0.592	0.510	0.867						
RC	0.524	0.519	0.467	0.446	0.343	0.374	0.376	0.450	0.305	0.427	0.407	0.904					
LC	0.385	0.389	0.421	0.447	0.419	0.373	0.184	0.200	0.167	0.197	0.162	0.291	0.944				
SC	0.454	0.476	0.420	0.407	0.290	0.432	0.353	0.413	0.263	0.360	0.356	0.488	0.530	0.951			
PC	0.503	0.495	0.491	0.398	0.338	0.457	0.399	0.394	0.262	0.364	0.273	0.529	0.353	0.750	0.923		
LAB	0.503	0.529	0.462	0.452	0.429	0.492	0.371	0.400	0.309	0.402	0.361	0.621	0.401	0.542	0.516	0.808	
LAO	0.467	0.495	0.458	0.452	0.391	0.438	0.319	0.318	0.185	0.377	0.259	0.631	0.363	0.451	0.502	0.701	0.888

Source: Author.

Table 6-9 Analysis of HTMT discriminant validity

	EcO	EmO	SO	LO	DO	IO	EnR	MR	EcR	HR	SR	RC	LC	SC	PC	LAB	LAO
EcO																	
EmO	0.790																
SO	0.825	0.887															
LO	0.534	0.615	0.524														
DO	0.476	0.515	0.549	0.455													
IO	0.470	0.539	0.572	0.259	0.843												
EnR	0.446	0.547	0.547	0.355	0.330	0.406											
MR	0.289	0.294	0.300	0.291	0.192	0.183	0.749										
EcR	0.455	0.518	0.501	0.380	0.322	0.325	0.748	0.674									
HR	0.433	0.533	0.480	0.266	0.190	0.274	0.580	0.776	0.557								
SR	0.340	0.278	0.263	0.279	0.096	0.170	0.647	0.763	0.568	0.616							
RC	0.591	0.575	0.530	0.477	0.364	0.393	0.430	0.366	0.515	0.486	0.458						
LC	0.428	0.427	0.480	0.478	0.441	0.389	0.218	0.205	0.236	0.220	0.181	0.305					
SC	0.504	0.522	0.475	0.430	0.305	0.450	0.409	0.317	0.468	0.404	0.396	0.511	0.550				
PC	0.566	0.550	0.565	0.427	0.359	0.483	0.468	0.315	0.449	0.414	0.305	0.558	0.370	0.786			
LAB	0.582	0.604	0.539	0.503	0.473	0.539	0.441	0.396	0.479	0.473	0.418	0.677	0.437	0.586	0.566		
LAO	0.549	0.572	0.544	0.506	0.435	0.485	0.389	0.233	0.384	0.446	0.303	0.697	0.399	0.493	0.555	0.804	

Source: Author.

### 6.6.3 Structural model analysis

The PLS-SEM method is employed to assess the predictive ability of explanatory variables on the dependent variable. Initially, the overall fit index of the model needs to be examined. The PLS-SEM fit index is specifically reflected by the GOF (Goodness of Fit) value of the overall model (Wetzels et al., 2009). A GOF value exceeding 0.36 indicates high fit, while a range between 0.25 and 0.36 indicates moderate fit, and a range between 0.10 and 0.25 indicates low fit (Wetzels et al., 2009). Upon calculation, the GOF value of the model in this study is 0.69, surpassing the high fitting standard proposed by Wetzels et al. (2009) of 0.36, indicating that the model in this study exhibits a high degree of fitness.

Furthermore, the validity analysis of the structural model can be discerned through the coefficient of determination ( $R^2$ ), effect size ( $f^2$ ), and predictive relevance ( $Q^2$ ) (Müller, Schuberth, & Henseler, 2018). The study utilizes the PLS Algorithm method to compute the  $R^2$  value,  $f^2$  value, and  $Q^2$  value of each latent variable. Among these,  $R^2$  aims to gauge the overall explanatory power of potential variables (Chin, 1998). When the  $R^2$  value of a potential variable exceeds 0.67, its explanatory power is considered significant; when the  $R^2$  value hovers around 0.33, its explanatory power is moderate, and when the  $R^2$  value is approximately 0.19, its explanatory power is weak (Chin, 1998). The results presented in Table 6-7 indicate that in this study, the  $R^2$  values of perceived employment opportunities, social opportunities, economic risks, psychological capacity, and self-organization capacity range from 0.685 to 0.800, all exceeding 0.67, thereby indicating significant explanatory power for these five potential variables. The  $R^2$  values of other structural variables range from 0.429 to 0.637, all surpassing 0.33, suggesting a moderate level of explanatory power or higher. It is evident that all structural variables in this study demonstrate good explanatory power and can effectively reflect the connotation of the variables.

The  $f^2$  value measures the impact of explanatory latent variables on the explained latent variable (Cohen, 1988; Chin, 1998). When the  $f^2$  value approaches 0.350, it signifies a significant impact. A  $f^2$  value of 0.150 denotes a moderate impact, while a  $f^2$  value near 0.020 suggests a weak impact (Cohen, 1988; Chin, 1998). In this study, the predictive effect indicators ( $f^2$ ) (Table 6-10) of the explanatory variables, namely perceived livelihood opportunities, perceived livelihood risks, and perceived livelihood adaptive capacities, on the outcome variable livelihood adaptive behaviors were 0.077, 0.024, and

0.150, respectively. The predictive effect indicator ( $f^2$ ) of livelihood adaptive behaviors on livelihood adaptive outcomes was 0.966, all exceeding the minimum threshold value of 0.02, indicating that the model in this study exhibits good predictive ability.

$Q^2$  can reflect the predictive correlation between variables (Fornell and Cha, 1994). A  $Q^2$  value greater than 0 indicates predictive correlation, with larger values signifying stronger predictive correlation (Stone, 1974; Geisser, 1975; Fornell and Cha, 1994). The study further utilized the PLS blindfolding method to calculate  $Q^2$  values, revealing that the  $Q^2$  values of all potential variables ranged from 0.315 to 0.719, all exceeding 0, indicating a good predictive correlation of the model. In summary, the  $R^2$  value,  $f^2$  value, and  $Q^2$  value of this study all meet validity requirements, suggesting that the structural model of this study possesses good predictive ability.

#### **6.6.4 Research hypotheses test**

The study employed the PLS Bootstrap resampling method to generate 5000 samples for parameter calculation and significance analysis of the evaluation model coefficients (Hair et al., 2011). The results of the research hypotheses tests are presented in Table 6-10 and Figure 6-3. Table 6-10 displays the path coefficients ( $\beta$ ), standard deviations (STDEV), t-values, and p-values of four latent variables: perceived livelihood opportunity, perceived livelihood risk, perceived livelihood adaptive capacity, and livelihood adaptive behavior. According to Hair et al. (2014), when the t-values exceed the critical values of 1.65, 1.96, and 2.57, the significance levels of the path coefficients are 10%, 5%, and 1%, respectively. In this study, the t-values of the four hypotheses ranged from 2.585 to 24.491, all exceeding 2.57, indicating that all four hypotheses reached a significance level of at least 1%. Specifically, households' perceived livelihood opportunities ( $\beta = 0.278$ ,  $t = 5.163$ ) and perceived livelihood adaptive capacities ( $\beta = 0.400$ ,  $t = 6.803$ ) have a significant positive impact on their livelihood adaptive behaviors, supporting H1 and H3. Households' livelihood adaptive behaviors ( $\beta = 0.701$ ,  $t = 24.491$ ) also significantly positively influence their livelihood adaptive outcomes, thus supporting H4. Interestingly, the hypotheses test results reveal that households' perceived livelihood risks ( $\beta = 0.131$ ,  $t = 2.585$ ) has a significant positive impact on their livelihood adaptive behaviors, contrary to the original hypothesis, indicating support for H2 in the opposite direction.



Table 6-10 Results of path analysis and hypotheses test

Path	Path coefficients	STDEV	t-value	f <sup>2</sup>	P- value	Results
H1 Perceived livelihood opportunities -> Livelihood adaptive behavior	0.278	0.048	5.163	0.077	0.000	Supported
H2 Perceived livelihood risks -> Livelihood adaptive behavior	0.131	0.042	2.585	0.024	0.01	Not supported
H3 Perceived livelihood adaptive capacities -> Livelihood adaptive behaviors	0.400	0.052	6.803	0.150	0.000	Supported
H4 Livelihood adaptive behaviors -> Livelihood adaptive outcomes	0.701	0.027	24.491	0.966	0.000	Supported

Source: Author.

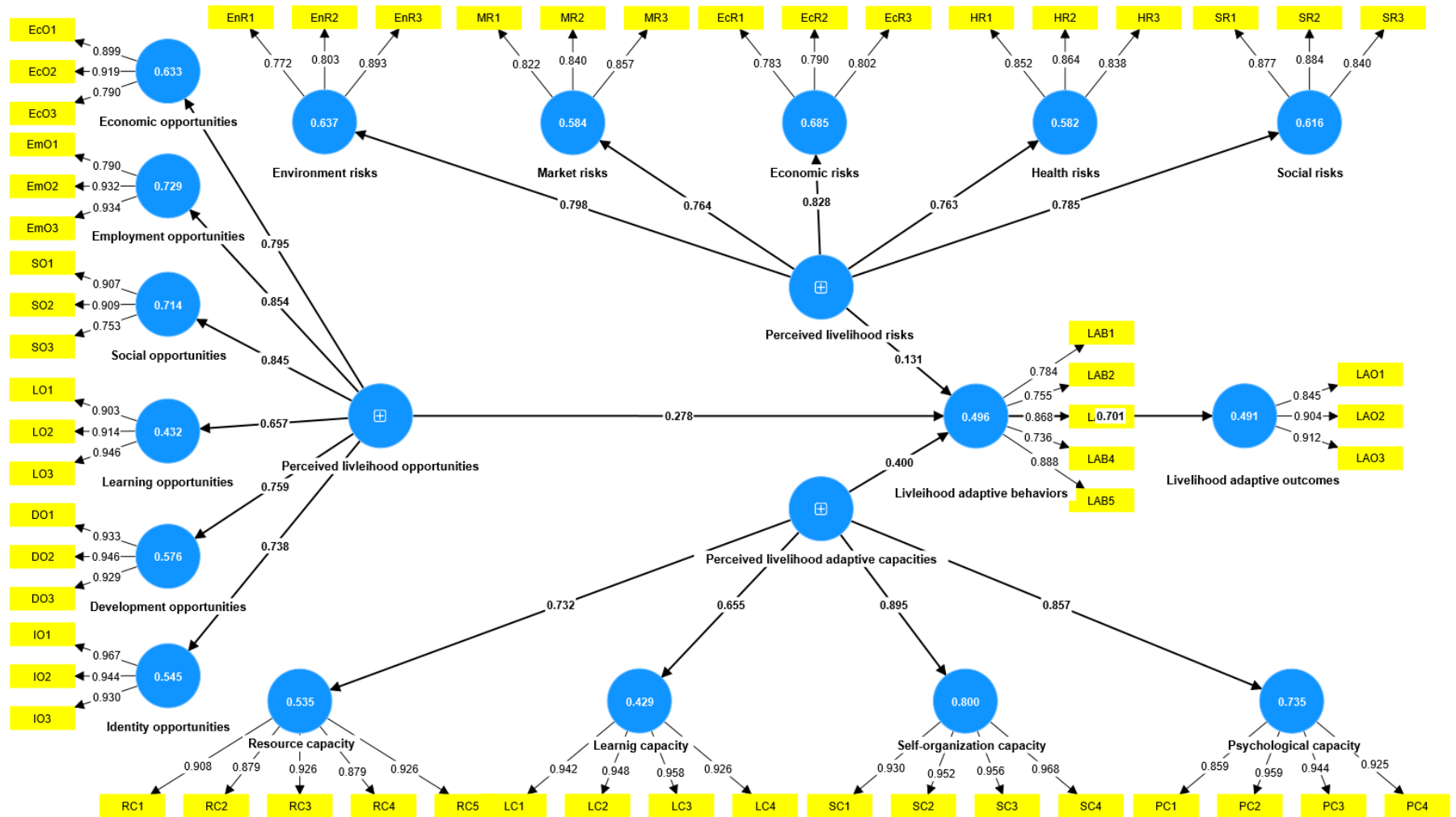


Figure 6-3 The results of hypotheses model test

(Source: Author)

## 6.7 Conclusions

Based on cognitive appraisal theory and self-efficacy theory, this chapter constructs a hypothesis model that encompasses five latent variables: perceived livelihood opportunities, perceived livelihood risks, perceived livelihood adaptive capacities, livelihood adaptive behaviors, and livelihood adaptive outcomes. PLS-SEM is employed to examine the research hypotheses and elucidate the influential mechanism of livelihood adaptive outcomes among households in rural tourism destinations. The research yields the following four conclusions:

Firstly, the perception of livelihood opportunities among households in rural tourism destinations significantly influences their livelihood adaptive behaviors positively. This implies that the stronger their perception of economic, employment, learning, social, development, and identity opportunities, the more likely they are to engage in livelihood adaptive behaviors. The expansion of rural tourism fosters an increase in livelihood opportunities, encouraging households to transition from traditional agricultural and labor-based livelihoods to tourism-based ones. To better use the livelihood opportunities presented by rural tourism development, households actively acquire tourism-related skills such as online marketing, communication, and hospitality services. They also engage with informal organizations pertinent to rural tourism within their communities to broadening their social network. Moreover, households in the study area exhibit a degree of compliance with local rural tourism development management and planning regulations. They offer suggestions and recommendations for local tourism development, thereby contributing to the sustainable growth of rural tourism in the scenic area.

Secondly, rural households' perception of livelihood risks significantly influences their livelihood adaptive behaviors positively. This implies that the stronger their perception of environmental, economic, market, health, and social risks, the more they engage in livelihood adaptive behaviors. Despite recognizing that rural tourism development introduces both new opportunities and risks, households in the case study remain inclined to participate in tourism employment. This tendency stems from their response to economic and market risks, where heightened awareness prompts them to engage in learning activities related to rural tourism employment and join relevant informal organizations. Through these actions, they mitigate potential economic and market risks. Additionally, households perceive environmental, health, and social risks associated with rural tourism development as manageable compared to the opportunities it offers. Hence,

they are inclined to pursue livelihood strategies based on tourism to enhance their overall livelihood standards.

Thirdly, the perception of livelihood adaptive capacities among rural tourism destination households significantly influences their livelihood adaptive behaviors positively. This means that the stronger their perception of their own resource capacity, learning capacity, self-organizational capacity, and psychological capacity, the more likely they are to engage in livelihood adaptive behaviors. Households with a stronger perception of livelihood adaptive capacities are more inclined to pursue tourism employment methods requiring higher economic investment and knowledge and skills, such as catering, accommodation, and commodity sales. Conversely, those with weaker livelihood adaptive capacities tend to opt for employment methods within the scenic spot. Households tailor their livelihood adaptive behaviors based on their perceived livelihood adaptive capacities. Those with a stronger perception of their resource capacity have more options in terms of tourism employment methods. Similarly, households with enhanced learning and self-organizational capacities are more likely to engage in livelihood adaptive behaviors such as acquiring tourism-related knowledge and skills and participating in informal organizations. Furthermore, households with a heightened psychological capacity perception can better navigate various uncertain factors encountered during tourism employment, thereby fostering the emergence of livelihood adaptive behaviors.

Fourthly, the livelihood adaptive behaviors of rural tourism destination households significantly influence their livelihood adaptive outcomes positively. The more proactive households are in adapting to rural tourism development, the better the outcomes of their livelihood adaptation efforts. While rural tourism employment has emerged as a crucial livelihood method for households in the case study area, many households tend to complement their existing livelihood strategies with rural tourism employment rather than entirely replacing them. This practice effectively contributes to enhancing their livelihood diversification. As households acquire and master a greater range of rural tourism employment knowledge and skills and engage in more informal organizations, they become better equipped to select the most suitable livelihood strategies, thereby enhancing their livelihood freedom. Moreover, households who actively implement various livelihood adaptive behaviors, provide suggestions and take practical actions for local rural tourism development, contribute to the sustainable and stable growth of rural tourism. Consequently, they are more likely to derive benefits from rural tourism employment, leading to an overall increase in their livelihood satisfaction.

## Chapter 7 Conclusions, discussion and implication

### 7.1 Introduction

This research develops a theoretical framework for examining households' livelihood adaptation in rural tourism destinations, and conducts a comprehensive investigation of livelihood adaptation among households in villages surrounding the Huangling scenic area, Wuyuan county, Jiangxi province, China. This chapter comprises five sections. The first section summarizes the three key findings of this research. Section two engages in a dialogue with the existing literature, discussing both the similarities and differences between this study's findings and previous research. The third section highlights the four theoretical contributions, while section four presents the managerial implications from the perspectives of local governments, tourism enterprises, and community households. The final section summarizes the study's limitations and proposes future research directions.

### 7.2 Key findings

To address the three research questions outlined in Chapter 1, this research identifies the livelihood opportunities and risks engendered by rural tourism development for destination households, elucidates the evolutionary process of households' livelihood adaptive behaviors in response to rural tourism development, and reveals the mechanisms influencing households' livelihood adaptive outcomes in rural tourism destinations. Key findings are as follows:

**Firstly, rural tourism development exerts a dual impact on households' livelihoods. While affording households six types of livelihood opportunities, including economic, employment, social, learning, developmental, and identity opportunities, it also introduces five types of livelihood risks, namely environmental, economic, market, health, and social risks.** Rural tourism development in the Huangling scenic area has enabled households to engage in various facets of tourism sector, such as catering, accommodation, commodity sales, and employment within the scenic spot, thereby enhancing their economic prospects and employment opportunities. Concurrently, rural

tourism development has facilitated increased interaction and exchange opportunities between households and tourists, the tourism company, and local governments. Households have gained cultural knowledge through interactions with tourists, while local governments and the tourism company have offered additional opportunities for vocational skills training and other forms of education to support their participation in rural tourism development. Moreover, households have successfully undergone identity transformation and enhanced their tourism vocational skills through participation in rural tourism development, thereby accessing further development opportunities. The growing popularity of tourism and improved livelihood standards among households have also fostered a heightened sense of self-identity, community identity, and cultural identity.

Nevertheless, as rural tourism development deepens, competition among households in tourism businesses has intensified, exposing them to various new livelihood risks. The development of rural tourism has encroached upon significant farmland, reducing households' land resources, while the degradation of water quality and increase in waste from tourism activities, catering services, and accommodations have amplified environmental risks for local households. Additionally, the seasonal nature of rural tourism development introduces uncertainty regarding tourist numbers, thereby subjecting households to economic and market risks. The disruption of households' routines and lifestyle patterns during the peak tourism season further exacerbates health risks. Furthermore, intensifying competition in tourism businesses among households and widening wealth disparities contribute to heightened social risks.

**Secondly, the livelihood adaptive behaviors of households in rural tourism destinations have evolved from singularity to diversification. This evolution is jointly determined by the types and structural configurations of livelihood capital owned by the households. The roles of different types of livelihood capital vary across different adaptive stages.** In the process of adapting to rural tourism development, households' livelihood adaptive behaviors have traversed five stages: initial discrete adaptation, collective rapid adaptation, exploration and wavering adaptation, transformation and reorganization adaptation, and new discrete adaptation. These stages correspond precisely to the five phases of growth, protection, release, reorganization, and re-growth in the livelihood adaptive behavior cycle model.

During the initial discrete adaptive stage, the natural capital, cultural capital, and human

capital initially possessed by households are pivotal in supporting their adaptation to rural tourism development. In the subsequent stage of rapid collective adaptation, the economic capital, physical capital, and social capital accumulated by households become the predominant factors influencing their livelihood adaptive behavior choices. As households progress into the exploration and wavering adaptive stage, their accumulated livelihood capital gradually becomes available, with psychological capital, social capital, and human capital emerging as the primary influencers of their livelihood adaptive behaviors. In the transformation and reorganization adaptive stage, households further accumulate livelihood capital, with psychological capital, economic capital, and human capital effectively facilitating the transformation and reorganization of their livelihood adaptive behaviors. In the new discrete adaptive stage, households' psychological capital experiences significant enhancement, and alongside economic capital and human capital, plays a dominant role in shaping their livelihood adaptive behavior choices.

It is noteworthy that the effective rural tourism development and management model operated by the tourism company has laid a solid foundation for local households to continuously adapt to rural tourism development. Moreover, continuously updated ideological concepts and knowledge skills of households have served as an internal driving force enabling them to successfully adapt to rural tourism development and achieve their livelihood goals. The rational planning of tourism enterprises from top to bottom and the self-organization of households from bottom to top have collaboratively facilitated the successful livelihood transformation and upgrading of households in rural tourism destinations.

**Thirdly, the livelihood adaptive outcomes of households in rural tourism destinations largely hinge on their livelihood adaptive behaviors. The execution of these behaviors is determined by their perception of external livelihood opportunities and risks, as well as their internal livelihood adaptive capacities.** Households' perceived livelihood opportunities, perceived livelihood risks, and perceived livelihood adaptive capacities can effectively foster the emergence of their livelihood adaptive behaviors. A stronger perception of livelihood opportunities created by rural tourism development correlates with a greater willingness among households to engage in positive livelihood adaptive behaviors, such as participating in rural tourism employment. This inclination enables households to better grasp the economic, employment, and social opportunities fostered

by rural tourism development, thus facilitating the achievement of their livelihood goals. Conversely, the perception of livelihood risks among households due to rural tourism development not only fails to suppress the emergence of livelihood adaptive behaviors but also encourages households to adopt active adaptive strategies. These behaviors may include learning and enhancing tourism knowledge and skills, as well as participating in relevant organizations and associations to mitigate the economic and market risks that they face.

Moreover, the stronger the perception households have of their inherent resource capacity, learning capacity, self-organization capacity, and psychological capacity for livelihood adaptation, the better equipped they are to engage in rural tourism employment and navigate various uncertainties inherent in the adaptive process. This, in turn, aids households in effectively implementing positive livelihood adaptive behaviors.

Additionally, the livelihood adaptive behaviors of households in rural tourism destinations can positively affect their livelihood adaptive outcomes, including livelihood satisfaction, livelihood diversification, and livelihood freedom. A higher level of participation in rural tourism employment and related organizations and associations, coupled with proficiency in learning and mastering the knowledge and skills of the rural tourism industry, enables households to not only accrue more tourism benefits and thus experience heightened livelihood satisfaction but also expand their livelihood choices. Consequently, this promotes greater diversification and freedom in their livelihood pursuits.

## **7.3 Discussions on the main findings**

### **7.3.1 Discussion on the livelihood opportunities and livelihood risks brought by rural tourism to households**

On one hand, this study revealed that the development of rural tourism has generated new livelihood opportunities for households in the case study area, encompassing economic, employment, learning, social, developmental, and identity opportunities. Firstly, rural tourism development in the Huangling scenic area not only directly enhances households' income sources but also stimulates price escalation and sales of local agricultural products such as crown chrysanthemum and green tea, along with traditional



handicrafts like wood carvings and oil paper umbrellas. This finding aligns with previous research indicating that tourism development can diversify households' livelihood sources (Mbaiwa, 2011) and stimulate the growth of traditional agriculture and associated crafts (Anderson, 2015; Burbano & Meredith, 2021; Scheyvens & Russell, 2012), thereby augmenting economic opportunities for rural households (Ezeuduji, 2017).

Secondly, rural tourism development has generated more direct or indirect employment opportunities for households in the surrounding villages of the Huangling scenic area. Specifically, not only can some households find employment within the scenic spot including positions as tour guides, transporters, attendants and construction workers, but many young and middle-aged individuals have even returned to their hometowns to establish small enterprises and engage in tourism businesses. This finding is consistent with the assertions of Simpson (2008) and Kheiri and Nasihatkon (2016), who emphasize that tourism development can expand employment prospects for households. Furthermore, this also aligns with the findings of previous studies that tourism development can promote the emergence of new job positions (Mbaiwa & Stronza, 2010; Hunt et al., 2015), generate new entrepreneurial avenues (Song & Fabinyi, 2022) and fosters the emergence of numerous small enterprises such as catering, accommodation, and tourism souvenir shops (Tichaawa & Lekgau, 2020).

Additionally, this study also find that rural tourism development can create more learning, development, social and identity opportunities for households in surrounding villages of Huang scenic area. This is similar with the findings of previous studies, participation in rural tourism development enables households to acquire additional knowledge and skills, thereby giving them more learning and development opportunities to elevate their cultural proficiency (Scheyvens & Russell, 2012; Su et al., 2016b; 2019b). Rural tourism also facilitates the exchange of knowledge and culture between local households and tourists, enhances households' communication and connectivity with the external world (Steel, 2012; Towner & Davies, 2019), and broadens households' existing social networks (Akash & Aram, 2022; Buckley & Ollenburger, 2013; Ponting & O'Brien, 2013). Moreover, rural tourism development deepens households' awareness and comprehension of local traditional cultural knowledge, effectively bolstering their cultural and identity acknowledgment (Simpson, 2008; Kinseng et al., 2018; Wu & Ma, 2024).

On the other hand, this study also found that the development of rural tourism has

introduced new livelihood risks to households in the case study area, including environmental, economic, market, health, and social risks. In line with the findings of Su et al. (2019a; 2016b), the development of rural tourism in the Huangling scenic area has involved the expropriation and conversion of significant farmland resources from households in surrounding villages, resulting in a reduction of households' original farmland resources. Familiar with previous studies, the provision of tourism catering and accommodation services has led to an increase in community waste and a deterioration in water resource quality (Rashid, 2020), thereby exacerbating environmental risks for households (Fabinyi, 2020; Fabinyi et al., 2022).

Despite efforts to diversify its tourism product system, the development of rural tourism in the Huangling scenic area still exhibits a certain degree of seasonality due to holiday systems and climate fluctuations. As noted in relevant studies, tourism development often demonstrates clear seasonality and instability (Towner & Davies, 2019), which contributes to increased economic and market risks for households resulting from rural tourism development (Tang et al., 2023). Excessive reliance on the tourism industry may not only diminish households' livelihood diversity but also subject them to heightened market risks due to uncertainties in tourist demand and length of stay (Burbano & Meredith, 2021; Liu et al., 2022; Mitchell & Shannon, 2018).

In addition, this study found that high-intensity work during the peak tourism season increased the physical fatigue of households in the surrounding villages of the Huangling scenic area, while unstable tourism income created a certain level of psychological stress. This is consistent with the findings of Liu et al. (2022), indicating that both physical fatigue and psychological stress further contribute to the health risks faced by households in the study area. Furthermore, echoing the findings of Liu et al. (2022), as the number of households engaging in rural tourism employment rises, the surrounding villages of the Huangling scenic area experience intensified competition for customers, disrupting traditional social relationships. The absence of a shared development vision among households results in significant disparities in their benefits from tourism development. This widening wealth gap among households further exacerbates social risks (Bidwell & Murray, 2019; Kinseng et al., 2018; Su et al., 2019a).

### **7.3.2 Discussion on the evolution of households' adaptive behaviors in response to the rural tourism development**

The changing process of livelihood adaptive behaviors among households in villages surrounding Huangling scenic area is neither immediate nor static; rather, it constitutes a slow, dynamic progression that traverses multiple adaptative stages. Adapting to rural tourism development is a challenging endeavor for households, necessitating ongoing exploration, adjustment, learning, and overcoming various obstacles and challenges (Anand et al., 2012). They may encounter financial constraints in engaging in rural tourism operations or lack the capability to sustain and successfully manage rural tourism ventures (Anderson, 2015). This aligns with the findings of Xue and Kerstetter (2019), indicating that households must surmount various hurdles to participate in rural tourism development, enhancing their tourism skills to attain their livelihood objectives amid evolving tourist demands and intense market competition. However, the type and distribution of livelihood capital owned by households largely dictate the trajectory of their livelihood adaptive behavior choices (Li et al., 2020a; Wakil et al., 2021; Wei, Xu, & Wall, 2024). Households endowed with greater human, economic, and social capital are often more adept at managing rural tourism business (Zhao et al., 2011). Robust institutional support and adept knowledge and skills can facilitate households' adaptation to rural tourism development. Conversely, the absence of human, economic, and social capital, along with institutional support, can impede households' livelihood transformation in rural tourism development. Continuous learning and enhancement of livelihood adaptability are imperative for households to directly benefit from rural tourism development (Burbano & Meredith, 2021).

Diversifying livelihood strategies and continually adjusting rural tourism participation strategies are fundamental approaches for households to adapt to the ongoing development of rural tourism (Tsao & Ni, 2016). In this study, the tourism sector has never served as the sole livelihood source for households in the surrounding villages of Huangling scenic area. Rather, in the process of adapting to rural tourism development, households in the study area did not wholly abandon other livelihood pursuits such as agriculture and migrant work; instead, they leveraged the tourism industry as a supplementary avenue for their livelihoods. As argued by Tao and Wall (2009), tourism should complement traditional livelihoods rather than entirely replace them. Unlike Mbaiwa's (2011) study,

which suggests that the tourism sector is fragile and susceptible to natural and social factors like economic downturns and disease outbreaks, relying solely on tourism for livelihoods may heighten community livelihood insecurity, increasing vulnerability and instability. The livelihood adaptation process of households represents their rational survival choices amidst the influence of rural tourism (Rao et al., 2022). In this study, households in the surrounding villages of Huangling scenic area gradually internalized the rules during the protracted process of adaptation to rural tourism development, thereby shaping seasonal and indirect tourism participation behaviors. The development of rural tourism did not exacerbate households' livelihood vulnerability in the surrounding villages of Huangling scenic area but rather enriched their livelihood diversification. This echoes the findings of Rongna and Sun (2020), indicating that tourism-based livelihoods can integrate seasonally with households' traditional livelihoods, thereby enhancing livelihood sustainability.

Unlike natural factors such as climate change, which are beyond human control and often have adverse effects, rural tourism development is a socio-economic phenomenon. Effective models of rural tourism development and management can not only promote sustainable and stable rural tourism development but also significantly mitigate the negative impacts of rural tourism development on households' livelihoods (Shen & Quan, 2022). As highlighted by Mitchell (1998) and Mitchell and De Waal (2009), entrepreneurs often possess innovative thinking, and their successful investments serve as the fundamental driving force behind sustained and positive destination development. In this study, through rational planning and management by tourism enterprises at various levels, continuous investment and updates of tourism products have ensured the long-term prosperity of rural tourism development in Huangling scenic area, laying the groundwork for households in the surrounding villages to adapt to rural tourism development.

Additionally, the self-organizational and learning capabilities of households in the villages surrounding the Huangling scenic area, from the grassroots level upward, represent another crucial factor in their successful adaptation to rural tourism development. As the central adaptive actors amid rural tourism disturbances, households often demonstrate proactive engagement rather than passive adaptation during rural tourism development, showcasing significant subjective initiative (Berkes & Ross, 2016; Nelson et al., 2007; Niehof, 2004). Self-organization and learning ability are paramount attributes of an

adaptive system, and the innovation and enhancement of the adaptive actors' knowledge and skills are essential for ensuring the conscientious cycling operation of the system (Folke, 2006; Hooli, 2018; Xue, 2022). Rural tourism, as a complementary component to traditional livelihoods, continuously shapes households' adaptability to their livelihoods (Ghoddousi et al., 2018). Therefore, when confronted with the impacts of rural tourism, households proactively acquire new knowledge and skills (Magis, 2010) to alter their conceptual frameworks and adjust their adaptive behavioral strategies in response to external environmental changes (Bui et al., 2020), all in pursuit of sustainable livelihood development.

### **7.3.3 Discussion on the influencing factors of livelihood adaptive outcomes of households in rural tourism destinations**

The perception of external livelihood opportunities and risks among rural tourism destination households can stimulate their engagement in positive livelihood adaptive behaviors. As evidenced by Li et al. (2020a) and Wang et al. (2021b), households who perceive stronger economic and employment opportunities in rural tourism development are more inclined to participate in tourism-related employment, thus fostering the long-term growth of the tourism sector. Furthermore, aligning with prior research by Simpson (2008) and Hunt et al. (2015), this study reveals that heightened perceptions of learning, social, development, and identity opportunities among households correlate with their increased willingness to actively support local rural tourism management and planning. Households with stronger perceptions of livelihood opportunities demonstrate a greater propensity to invest their time and effort into local rural tourism development initiatives. However, contrary to the findings of Rasoolimanesh et al. (2017), this study observes that households' perceptions of livelihood risks, such as environmental and economic risks, not only fail to inhibit their livelihood adaptive behaviors but also, to some extent, stimulate their pursuit of knowledge and skills relevant to rural tourism participation, such as online marketing and language proficiency. This aligns with the conclusions drawn by Xue and Kerstetter (2019), who suggest that households continuously enhance their competitiveness while engaging in rural tourism employment, thereby better addressing tourists' consumption needs and mitigating the livelihood risks associated with rural tourism participation.

The perception of internal livelihood adaptive capacities among rural tourism destination

households can facilitate the manifestation of positive livelihood adaptive behaviors. Research findings indicate that households' willingness to engage in rural tourism employment, such as catering, accommodation, and commodity sales, is positively correlated with their perceived resource capacity, learning capacity, self-organization capacity, and psychological capacity. This observation not only corroborates the findings of Praptiwi et al. (2021), emphasizing that households' human, physical, and financial resources are fundamental prerequisites for their involvement in rural tourism management, but also resonates with the perspectives put forth by Makandwa et al. (2022) and Burbano and Meredith (2021). These scholars suggest that stronger learning, self-organization, and psychological capacities among households can motivate them to undertake positive livelihood adaptive behaviors, such as acquiring tourism-related vocational skills and participating in relevant organizational associations, enabling them to effectively respond to the dynamic demands of the rural tourism market and ultimately achieve favorable livelihood adaptive outcomes. Therefore, the perception of livelihood adaptive capacities among rural tourism destination households serves as an intrinsic driving force underlying their livelihood adaptive behaviors. The enhancement of households' livelihood adaptive capacities can significantly stimulate the generation and adjustment of their livelihood adaptive behaviors, enabling them to better adapt to rural tourism development and realize their desired livelihood adaptive outcomes (Akash & Aram, 2022; Steel, 2012; Tsao & Ni, 2016).

The livelihood adaptive outcomes of rural tourism destination households are largely contingent upon their engagement in positive livelihood adaptive behaviors. This research indicates that higher levels of participation in rural tourism employment and related organizational associations among households are associated with increased engagement in learning tourism-related skills and knowledge, as well as greater investment of time and energy into the development of local rural tourism. Consequently, households experience higher levels of livelihood satisfaction, livelihood freedom, and livelihood diversity. This finding is consistent with the perspectives of Chen et al. (2020) and Qian et al. (2016), who suggested that households with greater involvement in rural tourism often possess higher levels of livelihood capital, thereby leading to increased livelihood satisfaction. Furthermore, in this study, households in villages surrounding Huangling scenic area gradually acquired the knowledge and strategies necessary to adapt to the development of rural tourism over an extended period. On one hand, most households

view rural tourism employment as a supplementary income source rather than a complete replacement for their traditional livelihood strategies, resulting in significantly improved livelihood diversification levels. On the other hand, households have continuously enhanced their knowledge and skills through learning and participation in relevant organizations and associations, thereby augmenting their capacity to choose from various livelihood strategies and substantially increasing their livelihood freedom. This aligns with the findings of Tao and Wall (2009) and Su et al. (2019b), indicating that tourism-based livelihoods can be effectively integrated with other forms of livelihood strategies such as agricultural production and seasonal migrant work, thereby enhancing livelihood diversification and freedom for rural tourism destination households.

## 7.4 Theoretical contributions

This research makes four theoretical contributions:

Firstly, this study constructs a theoretical framework for analyzing the livelihood adaptation of households in rural tourism destinations following the logic idea of “adaptive object-adaptive subject-adaptive process-adaptive outcome”. This new analytical framework links the external tourism disturbances with the intrinsic livelihood system of rural households, enriching the theoretical system of research on rural households’ livelihood adaptation. In this framework, the adaptive objects encompass the positive and negative livelihood disturbances brought by rural tourism development, respectively characterized by livelihood opportunities and risks. The adaptive subject is the households themselves, who are directly impacted by rural tourism development and are the core agents in responding to these livelihood disturbances. The adaptive process is specifically manifested in the dynamic evolution of livelihood adaptive behaviors developed by households in response to rural tourism development, while the adaptive outcomes include households’ livelihood satisfaction, livelihood freedom, and livelihood diversification.

Although existing studies have explored households’ livelihood adaptation to climate change through the perspectives of vulnerability or resilience (Chen et al., 2018b; Nelson et al., 2007), these analytical frameworks have primarily focused on the internal dynamics of the livelihood system, neglecting the interaction between the inner system

and the external environment. The livelihood adaptation analytical framework constructed in this research not only focuses on the livelihood disturbances brought by rural tourism development but also addresses the limitations of previous frameworks that primarily emphasized the static livelihood adaptability and behavioral strategy choices of households from the perspectives of vulnerability or resilience. Moreover, the application of this analytical framework is not confined to rural tourism destinations in China. Researchers can utilize this framework to investigate the livelihood adaptation of households in diverse cultural contexts and various types of tourism destinations worldwide, such as ecotourism or cultural heritage tourism destinations.

**Secondly, this study identified the specific types of livelihood opportunities and risks brought by rural tourism development to destination households, as well as developing corresponding measurement scales for each type of livelihood opportunities and risks. This comprehensive approach contributes to a robust theoretical framework for assessing and quantifying the livelihood disturbances caused by rural tourism to local households.** Unlike existing studies, which mainly discuss the impact of rural tourism development on households' livelihood capital or strategies within the Sustainable Livelihoods Framework (SLF) (e.g. Aazami & Shanazi, 2020; Kry et al., 2020; Kunjuraman, 2023; Liu et al., 2022), this study uses livelihood opportunities and risks to respectively delineate the positive and negative livelihood disturbances brought by rural tourism development to destination households. Employing a qualitative content analysis approach, the study identified the six types of livelihood opportunities and five types of livelihood risks encountered by rural tourism destination households.

Furthermore, specific measurement scales were derived for each type of livelihood opportunities and risks. Future research can utilize the livelihood opportunities and risks types identified in this study, along with their measurement indicators, to quantitatively assess the livelihood opportunities and risks faced by households in rural tourism destinations. This approach aims to accurately delineate the impact of rural tourism development on households' livelihoods, offering theoretical reference and guidance for households to better seize the livelihood opportunities generated by rural tourism development while mitigating the associated livelihood risks.

**Thirdly, this study summarized the behavioral traits of rural tourism destination**



households at different adaptive stages and elucidated the internal mechanisms driving the evolution of households' livelihood adaptive behaviors. These findings substantially contribute to the theoretical understanding of the evolutionary process of livelihood adaptive behaviors among households in rural tourism destinations. It responds to the call made by Burbano and Meredith (2021) to deepen the understanding of the dynamic adaptation process of households under the influence of tourism and bridges the gap left by previous studies that predominantly focused on the livelihood adaptive behavior strategies of rural tourism destination households within a single developmental stage. Unlike prior research that primarily explored static households' adaptive strategies and capacity (Yu et al., 2013; He et al., 2019; Li et al., 2020), this study integrated the adaptive cycle model to examine the dynamic evolution of households' livelihood adaptive behaviors in rural tourism destinations.

Moreover, this study elucidated the dynamic evolutionary mechanism of livelihood adaptive behaviors of households in rural tourism destinations. By combining the actual characteristics of livelihood adaptive behaviors among rural tourism destination households, the study characterized the inherent potential within the adaptive cycle model with various types of livelihood capital owned by households, and delineated the connectedness in the adaptive cycle model with different combinations of livelihood capital types. The types and structures of livelihood capital owned by households at different adaptive stages collectively shape their distinct livelihood adaptive behaviors, thus manifesting a phased evolutionary characteristic. This research enriches the theoretical explanation of the evolution process of livelihood adaptive behaviors among rural tourism destination households, thereby facilitating a better understanding of the selection and change mechanisms underlying the livelihood adaptive behaviors of households in rural tourism destinations.

Fourthly, this study developed the "Opportunity-Risk-Capacity (O-R-C)" model by integrating cognitive appraisal theory and self-efficacy theory. This novel theoretical model provides a valuable tool for investigating the factors influencing the livelihood adaptive outcomes among rural households. Unlike existing research, which predominantly focuses on the influence of households' livelihood capital or livelihood adaptability on their livelihood strategies (Li et al., 2020a; Rao et al., 2022), the "O-R-C" theoretical model simultaneously incorporates external livelihood environmental factors

(namely livelihood opportunities and risks) as well as the inherent livelihood adaptive capacities of households themselves. Based on this model, the study employed the quantitative research method PLS-SEM to examine the effects of households' perceived livelihood opportunities, perceived livelihood risks, and perceived livelihood adaptive capacities on their livelihood adaptive behaviors, as well as the impact of these behaviors on their livelihood adaptive outcomes. Consequently, the study delineated and summarized the influential mechanisms underlying livelihood adaptive outcomes among households in rural tourism destinations.

The "O-R-C" theoretical model proposed in this study not only offers a robust theoretical explanation for the emergence of livelihood adaptive behaviors among rural tourism destination households but also provides theoretical guidance for realizing favorable outcomes in households' livelihood adaptation endeavors. Moreover, this theoretical framework exhibits strong universality as a theoretical guidance framework for analyzing the influential mechanism of households' livelihood adaptive outcomes. It can be applied to investigate the influencing factors of households' livelihood adaptive behaviors and outcomes in rural tourism destinations with varied development models and across different types of tourism destinations worldwide, including natural ecological tourism destinations and cultural heritage tourism destinations.

## 7.5 Managerial implications

There are three managerial implications arising from this research:

**From the perspective of local governments, effective rural tourism development planning, coupled with supportive conditions for household participation, can significantly facilitate household adaptation to the evolving rural tourism landscape.** As the primary policymakers and decision-makers in rural tourism development, local governments are responsible for providing the necessary support and security measures for households involved in rural tourism. Firstly, local governments can disseminate more information about rural tourism development to households and provide them with more tourism vocational training, as well as financial and policy support. This will encourage rural residents to return to their hometowns to engage in tourism-related ventures such as catering, accommodation, and commodity sales, while simultaneously improving their

tourism service capabilities, and enable households to better grasp the trends in local rural tourism development and adapt to the ever-changing demands of the tourism consumer market. Local governments can also further increase financial support for households and implement financial security policies to help households establish connections and partnerships with banks and enterprises, thereby broadening their funding channels for rural tourism investment and enhancing their participation in rural tourism.

Secondly, local governments can assist households in establishing relevant cooperative mechanisms for rural tourism participation. On the one hand, they can foster the development of rural community organizations and actively promote the role of informal organizations such as homestays associations. By encouraging rural tourism households to participate in these informal organizations, a stronger sense of community can be cultivated, and information and resource sharing among households can be facilitated. This can transform disorderly competition among households into orderly cooperation and mutual assistance. On the other hand, local governments can guide households to engage in differentiated rural tourism operations to reduce homogenous competition among households. This maximizes the benefits of rural tourism development for all households, narrows the wealth gap, and ultimately mitigates social risks such as strained interpersonal relationships, intense competition, and widening income disparities caused by rural tourism development.

Furthermore, local governments need to formulate plans and regulations to ensure the long-term sustainability of rural tourism. They can develop management measures for ecological environment protection and resource utilization in rural tourism destinations to enhance the environmental awareness of tourism enterprises and households. By promoting the rational use of land, water, and other natural resources by the tourism company and households and actively maintaining the environmental sanitation of the scenic area and community, local governments can reduce environmental risks such as declining farmland conditions, deteriorating water quality, and increased waste, thereby facilitating the sustainable utilization of the natural ecological resources. At the same time, to address issues such as the conversion of farmland into private parking lots, local governments should formulate standardized guidelines for farmland utilization. These guidelines should clearly define the utilization of farmland for rural tourism operations,

thereby promoting a coordinated and unified overall village image in rural tourism destinations and ensuring the standardization of rural household participation in tourism.

**From the perspective of tourism enterprises, effective rural tourism development planning, coupled with supportive conditions for household participation, can significantly facilitate household adaptation to the evolving rural tourism landscape.**

In enterprise-led rural tourism destinations, tourism enterprises, as the direct managers and decision-makers of rural tourism development, play a crucial role in maintaining the long-term vitality of these destinations through their sound planning and operations. In this study, rural households surrounding the Huangling scenic area experienced a brief phase of release and reorganization before rapidly entering a new growth stage in their adaptation to rural tourism development. This significant progress can largely be attributed to the successful operation and management of the tourism company. Compared to local governments and households, tourism enterprises often possess deeper capital foundations and sharper market insights. Therefore, tourism enterprises need to continuously enrich and improve their rural tourism product systems based on tourist demands, thereby enhancing the attractiveness and reputation of rural tourism destinations, increasing tourist arrivals and length of stay, and creating more stable economic and employment opportunities for rural households to adapt to rural tourism development.

The tourism company should also focus on improving the benefits sharing mechanism of households in rural tourism development. Although the tourism company of the Huangling scenic area has provided certain guarantees for household participation in rural tourism development through profit sharing and employment opportunities, as the rural tourism of the Huangling scenic area has rapidly developed, the benefits obtained by local households have been relatively limited compared to the rapid growth of tourism revenue for the company. This has led to a certain degree of distrust towards the tourism company among some households over the long-term participation in rural tourism. Therefore, the tourism company can try to involve households more deeply in the development of rural tourism, deepen their understanding of the operational management costs of the tourism enterprise, and adjust the corresponding revenue distribution system in a timely manner based on the actual situation of the rural tourism development. This can improve the mechanism for sharing tourism benefits among households.

In addition, the tourism company can proactively assume social responsibilities by, on the one hand, actively assisting local governments in improving public service facilities such as sewage treatment, transportation, and environmental sanitation in surrounding villages, thereby promoting the improvement of the collective social benefits of rural households. On the other hand, they can focus on assisting disadvantaged household groups and providing relevant vocational skills training for households facing difficulties in rural tourism development, paying attention to the opinions and suggestions of households regarding the rural tourism development. This can increase learning opportunities, development opportunities, and identity opportunities for households in the process of adapting to rural tourism, thereby stimulating proactive livelihood adaptive behaviors among households in rural tourism destinations and improving their overall livelihood satisfaction, livelihood freedom, and livelihood diversification.

**From the perspective of community households, as the primary actors in livelihood adaptation, households in rural tourism destinations must fully utilize their agency and continuously develop their adaptive capacities to effectively achieve their livelihood goals.** Firstly, households should strengthen their sense of ownership and acknowledge the various livelihood risks they may encounter when participating in rural tourism development. Community elites with social prestige can play a leading role in organizing households to establish community-level rural tourism management organizations such as tourism cooperatives. These organizations can provide standardized management for households, transforming disorderly competition into orderly cooperation and mutual assistance, thereby fostering a win-win model of rural tourism participation and ensuring more equitable distribution of tourism benefits among households. This can mitigate social risks such as widening income disparities and strained social relationships caused by rural tourism development. Concurrently, households can further strengthen their communication and interaction with each other by joining community-level rural tourism management organizations, enhancing their collective consciousness, reinforcing the concept of common development, and truly promoting the sustainability of household livelihoods.

Moreover, households need to strengthen their sense of responsibility and recognize that as the owners of rural tourism destinations, they cannot rely solely on the coercive rule and regulations of local governments. On the contrary, they should proactively protect

the local natural environment to mitigate potential environment risks. For example, community elites with strong leadership and knowledge can take the lead in actively guiding households to cooperate with local governments and the tourism company in improving village environmental sanitation and consciously abide by relevant management regulations for environmental sanitation and farmland utilization. In particular, households engaged in rural tourism catering and accommodation not only need to address the treatment of food waste and sewage discharge and take responsibility for community environmental sanitation management but also need to properly utilize existing farmland resources and rationally build new houses for tourism business to collectively maintain the overall image of the village.

Additionally, enhancing the livelihood adaptive capacities of households themselves is an endogenous driving force for their effective adaptation to rural tourism development. Therefore, households need to improve their livelihood adaptation capacities in the following aspects: Firstly, based on their existing human capital and economic capital, households need to seize the economic opportunities and employment opportunities brought about by rural tourism development. By engaging in various types of rural tourism employment such as catering, accommodation, merchandise sales, or scenic area work, they can accumulate more economic and material capital and enhance their family resource capacity. Secondly, households need to leverage rural tourism development opportunities, effectively utilize various vocational skills training provided by local governments, the tourism company, and community organizations, and actively participate in relevant organizations and associations. This can continuously update their thinking, expand their social networks, and improve their learning capacity and self-organization capacity. Finally, households need to continuously strengthen their psychological capacity, enhance their confidence in family participation in rural tourism development, and improve their ability to respond to the uncertainties of rural tourism development.

## **7.6 Limitations and future research**

According to the differences in the management entities of rural tourism development, the current management models in China can be broadly categorized into three types: government-oriented, community-oriented, and enterprise-oriented (Dai et al., 2023).

Compared to government-oriented or community-oriented initiatives, tourism enterprises often boast a stronger capital base and advanced operational concepts, facilitating the sustainable development of rural tourism (Brouder & Eriksson, 2013; Su et al., 2019a). This study endeavors to merge qualitative and quantitative research methods, scrutinizing both the livelihood disturbances brought by rural tourism development to households and the evolution process of livelihood adaptive behaviors developed by households in response to rural tourism development from a qualitative perspective, and exploring the influential mechanism of the livelihood adaptive outcomes of households in rural tourism destinations from a quantitative standpoint. The utilization of mixed methods approach in this research can deeply investigate the livelihood adaptation of households in rural tourism destinations.

However, due to constraints on article length and the author's time and strength, this study focuses solely on Huangling scenic area, a rural tourism destination managed by the tourism enterprise, for a single case study. Multiple cases of diverse rural tourism development models were not selected for comparative analysis in this research. Although the tourism company in Huangling scenic area has made substantial efforts to consider the rights and interests of local households through various means such as investing dividends for the utilization of natural and cultural resources and re-employment within the scenic spot, disparities in households' participation in tourism benefits distribution and management decisions inevitably exist across different rural tourism development models. While there are many advantages for single case study, conducting comparative research on the livelihood adaptation of rural tourism destination households under various development models may offer more insights into the differences in households' livelihood adaptation among different types of rural tourism destinations. This could enrich the theoretical understanding of rural tourism destination households' livelihood adaptation and provide comprehensive guidance for livelihood adaptation management and promoting sustainable livelihood development among households in other types of tourism destinations.

Future research could build upon the households' livelihood adaptation framework proposed in this study to explore multiple case studies encompassing various rural tourism development models, including government-oriented, community-oriented, and enterprise-oriented cases, to compare the similarities and differences of households'

livelihood adaptation in rural tourism destinations. Similar enterprise-oriented rural tourism development model cases also could be selected for further comparative analysis, thereby extending the applicability of the proposed framework and enhancing the universality of the findings of this study. Specifically, future research could delve into a comparative analysis of livelihood disturbances in rural tourism destinations under diverse development models, examining the distinctive characteristics of livelihood opportunities and risks encountered by households in these contexts. Such an analysis would contribute to the validation and refinement of the dimensions and measurement scales of livelihood opportunities and risks identified in this study. Moreover, future research could engage in longitudinal studies of the evolution of livelihood adaptive behaviors in rural tourism destinations under various development models, leveraging the proposed livelihood adaptative behavior cycle model. This would enable researchers to explore the similarities and differences in the trajectory of livelihood adaptative behaviors across different development models, ultimately distilling the underlying mechanism driving these behaviors. Furthermore, future research could employ the “Opportunity-Risk-Capacity (O-R-C)” theoretical model developed in this study to conduct a comparative analysis of the differential effects of households’ perceived livelihood opportunities, risks, and adaptive capacities on their livelihood adaptive behaviors and outcomes in rural tourism destinations under varying development models. Additionally, it could also investigate the distinct effects of households’ perceptions of different dimensions of livelihood opportunities, risks, and adaptive capacities on their adaptive behaviors and outcomes, thereby elucidating the mechanisms through which these perceptions influence households’ livelihood adaptive behaviors and outcomes.



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# Appendix I Semi-structured interview guide

## Part I Interview guide for the households

### *Introduction*

Dear households, thank you very much for taking the time to meet with me today. My name is Rong Wang. I am a dual PhD student of Nankai University and University of Glasgow. I would like to talk to you about 1) the rural tourism development of Huangling scenic area; 2) your opinion of the impacts of rural tourism development on your livelihood; and 3) your experience engaging in rural tourism employment. The interview will take less than an hour. I will be taping the session because I don't want to miss any of your comments. Although I will be taking some notes during the session, I can't possibly write fast enough to get it all down. Because we're on tape, please be sure to speak up so that we don't miss your comments.

All responses will be kept confidential. This means that your interview responses will only be shared with our research team members and we will ensure that any information we include in our report does not identify you as the respondent. Remember, you don't have to talk about anything you don't want to and you may end the interview at any time.

Are there any questions about what I have just explained?

Are you willing to participate in this interview?

Interviewee

Witness

Date

### *Warm up questions for households:*

1. In your opinion, how did rural tourism in the Huangling scenic spot develop and when?
  - 1.1 What was the reaction of villagers agree to the presence of tourists?
  - 1.2 What do you think are the main reasons that the tourism company choose Huangling for rural tourism development
2. How do you think rural tourism development has affected the community in which you live?
  - 2.1 Can you give some specific examples of the positive or negative impacts of rural tourism development on your community?
  - 2.2 Is there a clear system for you to engage in rural tourism revenue distribution and rural tourism employment?

***Formal questions for all households***

1. What were your family's livelihood activities before the development of rural tourism in the area?

1.1 Can you tell me more about your family's livelihood status before the development of rural tourism?

2. Does your family income depend on rural tourism? (if yes, ask Q3-Q9, if not Q10-Q11)

3. When did your family start working in the rural tourism sector?

4. What are the main reasons that motivated your family to be involved in the rural tourism sector?

5. What kinds of rural tourism employments have your family participated in?

5.1 Has your family activities changed over time? Can you talk more details with me?

5.2 What are the main reasons for these changes?

6. What kind of livelihood opportunities do you think rural tourism development has brought to your family?

6.1 Can you give some specific examples about these livelihood opportunities?

6.2 What kind of livelihood opportunities do you care about most? What are the main reasons that you think these livelihood opportunities are important for your family?

6.3 What are the advantages of participating in rural tourism employment compared to previous livelihood strategies? Can you talk something more about it or tell me the differences between your family's previous livelihood strategies and rural tourism employment?

7. What livelihood risks do you think rural tourism development has brought to your family?

7.1 Can you give some specific examples about these livelihood risks?

7.2 What kind of livelihood risks do you worry about most? What are the main reasons that you think these livelihood risks are significant for your family?

7.3 What are the disadvantages of participating in rural tourism employment compared to previous livelihood strategies? Can you talk something more about it or tell me the differences between your family's previous livelihood strategies and rural tourism employment?

8. What difficulties did your family encounter in the process of participating in rural tourism employment?

8.1 Can you give me some specific examples about these difficulties?

8.2 Can you tell me more about what measures you take to overcome these difficulties?

9. Would your family consider to quit rural tourism employment in the future?

9.1 What factors might cause your family to withdraw from rural tourism employment?

9.2 In your opinion, what could you do to better grasp the livelihood opportunities and reduce the livelihood risks brought by rural tourism?

9.3 What do you think the tourism company and the local government can do to increase the households' benefits from rural tourism development?

10. Why did your family decide not to be involved in the rural tourism sector?

11. Would your family consider to work in the rural tourism sector in the future?

11.1 What factors will motivate your family to work in the rural tourism sector?

11.2 What do you think the tourism companies and the local government can do to increase the households' benefits from rural tourism development?

### ***Demographic information of households***

How old are you?

What is your level of education?

How long have you worked in this sector? (if applicable)

Does your income fully depend on rural tourism?

### ***Closing for households***

Is there anything more you would like to add?

I will analyze the information you and others gave me for my PhD dissertation. I will be happy to send you a copy to review if you are interested.

Thank you very much for your time and participation.

## Part II Interview guide for government and Huangling scenic spot officials

### *Introduction*

Dear government or Huangling scenic spot officials, thank you very much for taking the time to meet with me today. My name is Rong Wang. I am a dual PhD student of Nankai University and University of Glasgow. I would like to talk to you about 1) the rural tourism development of Huangling scenic area; 2) your opinion of the impacts of rural tourism development on the community households' livelihoods. The interview will take less than an hour. I will be taping the session because I don't want to miss any of your comments. Although I will be taking some notes during the session, I can't possibly write fast enough to get it all down. Because we're on tape, please be sure to speak up so that we don't miss your comments.

All responses will be kept confidential. This means that your interview responses will only be shared with our research team members and we will ensure that any information we include in our report does not identify you as the respondent. Remember, you don't have to talk about anything you don't want to and you may end the interview at any time.

Are there any questions about what I have just explained?

Are you willing to participate in this interview?

Interviewee

Witness

Date

### *Formal questions for government and Huangling scenic spot officials*

1. Can you describe the history of rural tourism development about Huangling scenic spot?
  - 1.1 When did Huangling start developing rural tourism?
  - 1.2 Did most of the villagers agree to the development of rural tourism at that time?
  - 1.3 In your opinion, What are the main reasons that the tourism company choose Huangling for rural tourism development?
2. How do you think rural tourism development has affected/changed the life of the local community?
  - 2.1 Can you give some specific examples of the positive and negative impacts of rural tourism development on the local community?
3. What impact do you think the development of rural tourism has had on the livelihood of rural households?

3.1 Do you think the livelihood status of households is better than before? In what aspects?

3.2 What's your opinion about the main reasons for households to work in the rural tourism sector?

4. What measures do you think can be taken to increase households' benefits from rural tourism industry?

4.1 Have you established a system allowing the households to benefit from rural tourism development and rural tourism revenue distribution?

4.2 As far as you know, do local households support the development of rural tourism? What are the main reasons for this support?

5. What do you think are the main factors that could facilitate or hinder the development of rural tourism of Huangling scenic spot?

5.1 What measures do you think should be taken to make sure the development of rural tourism of Huangling scenic spot is sustainable?

#### ***Demographic information***

How old are you?

What is your level of education?

How long have you worked in your institution?

What is your current position in your institution?

#### ***Closing for government and Huangling scenic spot officials***

Is there anything more you would like to add?

I will analyze the information you and others gave me for my PhD dissertation. I will be happy to send you a copy to review if you are interested.

Thank you very much for your time and participation.

## Appendix II Questionnaire Survey

Dear Households,

Thank you very much for participating in this study. The researcher is a dual PhD student of Nankai University and University of Glasgow. This research aims to understand how you adapted your livelihood in the face of the development of rural tourism in the Huangling scenic spot. Your participation in this survey will provide important information to local governments and scenic spot managers to promote the development of rural tourism in the Huangling scenic spot. As researchers, we are deeply interested in the reasons that motivated you to change (or not to change) your livelihood and adapt to an increase in the tourism demand. It will take you about 10-20 minutes to complete this survey, and you are free to choose whether or not to participate. If you choose to participate in this study, we encourage you to answer every question carefully and truthfully. Please note that there are no right or wrong answers, all your answers are for this research only, and all information is anonymized and confidential. Thank you again for your support and cooperation in this study. If you have any questions about this study, please feel free to contact the researcher xxxxxxxx@student.gla.ac.uk.

Many thanks again for your time and participation.

Sincerely,

Rong Wang, PhD Candidate

College of Tourism and Service Management, Nankai University

School of Social and Environmental Sustainability, University of Glasgow

### Part I : Perception of livelihood opportunities

We ask you to rate each statement shown in the tables below to express your perception on how strongly you agree or disagree with it. Each table focuses on potential livelihood opportunities brought by rural tourism in your area.

Please rate each statement using the following scale.

**1= Strongly disagree    2=Disagree    3= Neutral    4=Agree    5=Strongly agree**

***Table 1. Economic opportunities***

Increased the level household income	1	2	3	4	5
Increased the source of household income	1	2	3	4	5
Increased households financing opportunities	1	2	3	4	5

**Table 2. Employment opportunities**

Increased types of employment channels	1	2	3	4	5
Increased opportunities for vocational skills training	1	2	3	4	5
Enhanced the job freedom	1	2	3	4	5

**Table 3. Social opportunities**

Increased communication and interaction between households	1	2	3	4	5
Increased interaction between households and tourists	1	2	3	4	5
Increased interaction between households, tourism companies, and local governments	1	2	3	4	5

**Table 4. Learning opportunities**

Improved knowledge learning atmosphere	1	2	3	4	5
Increased accesses for knowledge learning	1	2	3	4	5
Lower cost of knowledge learning	1	2	3	4	5

**Table 5. Development opportunities**

Improved occupational skills	1	2	3	4	5
Improved growth in knowledge	1	2	3	4	5
Better achievement of identity transformation	1	2	3	4	5

**Table 6. Identity opportunities**

Enhanced self-identity	1	2	3	4	5
Enhance community identity	1	2	3	4	5
Enhanced cultural identity	1	2	3	4	5



## Part II: Perception of livelihood risks

The following items are about your perception of livelihood risks.

1= Strongly disagree 2=Disagree 3= Neutral 4=Agree 5=Strongly agree

**Table 7. Environment risks (sub-dimension 1)**

Land resources available to households have been deteriorated	1	2	3	4	5
Water resources available to households have deteriorated	1	2	3	4	5
The waste in the community has increased	1	2	3	4	5

**Table 8. Market risks (sub-dimension 2)**

Unstable consumer preferences of tourists	1	2	3	4	5
Unstable consumption level of tourists	1	2	3	4	5
Unstable consumption frequency of tourists	1	2	3	4	5

**Table 9. Economic risks (sub-dimension 3)**

Increased costs of living of households	1	2	3	4	5
Increased tourism operating costs of households	1	2	3	4	5
Unstable price of tourism products	1	2	3	4	5

**Table 10. Health risks (sub-dimension 4)**

I feel More physically exhausted	1	2	3	4	5
I feel Increased psychological pressure	1	2	3	4	5
My pace of life has worsened	1	2	3	4	5

**Table 11. Social risks (sub-dimension 5)**

Social relations among households have worsen	1	2	3	4	5
Lack of common development goals and visions	1	2	3	4	5
Widened wealth gap between households	1	2	3	4	5

### Part III: Perception of livelihood adaptive capacities

The following items are about your perception of livelihood adaptive capacities.

1= Strongly disagree 2=Disagree 3= Neutral 4=Agree 5=Strongly agree

**Table 12. Resources capacity**

My family has sufficient workforce to support our participation in rural tourism operations	1	2	3	4	5
My family has enough funds to support our participation in rural tourism operations	1	2	3	4	5
My family has enough housing area to support our participation in rural tourism operations	1	2	3	4	5
My family has enough social connections to support our participation in rural tourism operations	1	2	3	4	5
My family has good location to support our participation in rural tourism operations	1	2	3	4	5

**Table 13. Learning capacity**

My family is familiar with the information of rural tourism development	1	2	3	4	5
My family is familiar with the knowledge and skills related to rural tourism operations	1	2	3	4	5
My family is proficient in using the knowledge and skills related to rural tourism operations	1	2	3	4	5
My family can well understand and anticipate the consumption needs and preferences of tourists	1	2	3	4	5

**Table 14. Self-organisation capacity**

My family frequently participates in the management and decision-making of rural tourism development related affairs	1	2	3	4	5
My family is skilled in applying our previous knowledge and experience to rural tourism operations	1	2	3	4	5
My family maintains good social relations with other actors	1	2	3	4	5
My family is skilled in using various social networks for rural tourism operations	1	2	3	4	5

**Table 15. Psychological capacity**

My family has confidence in the development of rural tourism	1	2	3	4	5
My family is confident with our engagement in rural tourism operations	1	2	3	4	5
My family has confidence in the local government and tourism developers	1	2	3	4	5
My family is confident in our ability to cope with uncertainties such as tourism crisis	1	2	3	4	5

#### Part IV: Livelihood adaptive behaviors related variables

1= Strongly disagree 2=Disagree 3= Neutral 4=Agree 5=Strongly agree

**Table 16. Livelihood adaptive behaviors**

My family has participated in rural tourism employment such as catering, accommodation, commodity sales, and scenic spot workers	1	2	3	4	5
My family often actively learns knowledge and skills related to rural tourism employment	1	2	3	4	5
My family has followed the development planning and management of rural tourism	1	2	3	4	5
My family often provides suggestions for the development of rural tourism	1	2	3	4	5
My family has joined local organizations and associations related to rural tourism development	1	2	3	4	5

#### Part V: Livelihood adaptive outcome related variables

1= Strongly disagree 2=Disagree 3= Neutral 4=Agree 5=Strongly agree

**Table 17. Livelihood adaptive outcomes**

My family are satisfied with our current livelihood	1	2	3	4	5
My family can choose different types of livelihood strategies	1	2	3	4	5
My family has two or more livelihood choices and income sources	1	2	3	4	5

**Part VI: Demographic Information**

1. Gender: A. Male B. Female
2. Age: A. 18-24 B. 25-34 C. 35-44 D. 45-54 E. 55-64 F. 65 years and older
3. Educational level: A. Primary school and below B. Junior C. High school or vocational college D. University and above
4. Total number of people in your family \_\_\_\_\_
5. Family's rural tourism employment: A. Catering reception B. Accommodation reception C. Sales of tourism products D. Workers in Hunagling scenic spot E. Other \_\_\_\_\_
6. Annual family income A. Lower than ¥30, 000 B. ¥30, 000~¥50, 000 C. ¥50, 000~¥80, 000 D. ¥80, 000~¥100, 000 E. More than ¥100, 000