Land Usage and Sustainable Livelihood: Case Comparative Study of Tourism Ethnic Villages in China

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Abstract: The land issue is the key to the Rural Revitalization Strategy of China. Tourism development will change land usage and promote livelihood changes. This study aims to analyze the impact of land usage on sustainable livelihood in the tourism environment. Through the case study of two ethnic tourism villages, this paper shows the benefit distribution and sustainable livelihood of two different land usage patterns and finds the intrinsic relationship between land usage and sustainable livelihood. The results show that tourism land use will lead to livelihood changes, and different land usage patterns produce different livelihood sustainable outcomes. The critical point for sustainable livelihood is that the land usage patterns should allow residents to participate in tourism and have a sustainable income. In addition, land usage will also change the traditional cultural space of ethnic villages. Finally, the paper puts forward practical suggestions on tourism land usage.

1. Introduction
Rural revitalization is a critical development strategy in China, and the land issue is the crucial point. The land is the basis of traditional agricultural production activities. Tourism development usually changes land ownership and agricultural use and promotes the change of livelihood. In recent years, ethnic-cultural tourism has developed rapidly in China. From 2016 to 2020, more than 1,000 ethnic villages in China have been involved in tourism development. In this process, many contradictions in land usage, such as land circulation and damage to the rights and interests of land-expropriated farmers, have also aroused social concern. People are generally worried about how land-expropriated farmers can achieve sustainable livelihoods.

The key to rural revitalization in China lies in handling the relationship between farmers and land. However, in tourism development, the impact of land usage on families and residents at the micro-level has not been deeply studied. What are the land-use patterns in tourism development? How does land use affect the livelihood change? What is the intrinsic relationship between land usage and sustainable livelihoods? These questions need further study.

Following the available research, land usage is central to tourism because the land is used in multiple ways as a resource for tourism-focused activities [1]. Tourism is a unique and essential form of land usage [2]. Land change and land transfer constitute two basic patterns of tourism land usage [3]. The primary trend of land usage in tourism was converting agricultural land into tourism-related activities [4]. Under the background of tourism, the identification of land usage [5], intensive land use, influencing factors [1,6], and land usage effects are the main topics of research [7].

With the development of tourism, traditional family livelihoods are disturbed by the change of land usage. Scholars mainly focus on the impact of land usage on rural sustainable livelihoods [8,9], the relationship between land usage patterns and livelihood dynamics [10], the adaptability of households
and a series of contradictions caused by land usage [12,13].

The relationship between land use and sustainable livelihoods in the tourism development environment has not been studied in depth. This study based on the Sustainable Livelihood Approach (SLA), taking two ethnic tourist villages in Southwest China as examples, analyzes the different land usage patterns and benefit distribution of the two cases, measures the outcomes of sustainable livelihoods, and illustrate the intrinsic relationship between land usage and sustainable livelihoods through a combination of quantitative and qualitative methods.

2. Research Methods

2.1. Land Usage Patterns of Research Cases

This study selects Jinglai and Hansha Village, two traditional ethnic villages in Southwest China, as research cases. Both villages are located in Yunnan Province, Southwest China, and they are ethnic tourism villages with affluent traditional ethnic cultural. On the one hand, through multi-case analysis, we can understand different land usage patterns in tourism development. On the other hand, this could find the internal impact of tourism land usage on sustainable livelihood by comparing tourism development, benefit distribution, and sustainable livelihood outcomes.

Jinglai village adopts the land lease and management mode of "Village+ Company+Family." Jinglai has been developing tourism since 2003. Tourism companies lease part of the villagers' land for infrastructure construction, supports the development of residents' farmhouses, and employ villagers to work. In the first three years, 8% of the ticket income was allocated to villages, and then the proportion increased to 12%.

Hansha village takes the business model of "Government+Company+Residents." This village started tourism development in cooperation with tourism companies in 2013. The village provided a part of the land to tourism companies, and the company was responsible for the construction and management of tourist centers, parking lots, shops, and other facilities. In the first five years of cooperation, tourism companies paid 80,000 RMB per year to villages. After that, 35% of the profits from scenic spot operations will be distributed to the village. The tourism company is also responsible for beautifying all family houses to adapt to tourists.

2.2. SLA and Research Methods

2.2.1. SLA Framework. The traditional SLA framework includes five parts: Vulnerability context, Livelihood assets, transforming structures & processes, Livelihood strategies, and Livelihood outcomes [14]. Livelihood is a way of making a living, and sustainable livelihood means recovering from shocks and providing livelihood opportunities for future generations [15]. Some international organizations and institutions proposals

SLA is also applicable to tourism research, mainly used to analyze livelihood capital, livelihood strategies, and sustainable livelihoods in the tourism development environment [16]. This research uses the SLA framework mainly because: First, the SLA has included land usage as a management and policy element in the framework; Second, the SLA framework can clearly show the mutual relationship between land usage, tourism development, and sustainable livelihoods.

2.2.2. Data and Research Method. The research team conducted a preliminary investigation and formal investigation on the Jinglai and Hansha village in March 2018, July 2018, and May 2019, using holder interviews, family questionnaires, and participatory observation to collect data.

Semi-structured interviews and collective interviews mainly conduct interviews. The family questionnaire focused on the family livelihood capital, livelihood strategy, and livelihood results involved in the analysis framework, including five parts and 23 questionnaires processed by the Likert Scale.

Consideration of the construction and measurement of an index, the computational formula of
livelihood capital is:

\[ C_i = \sum_{j=1}^{M} W_j X_{ij} \]

In the formula, \( C_i \) represents the value of livelihood capital of sample I; \( W_j \) represents the weight of j; \( X_{ij} \) is the standardized value of sample I under index j; M is the index number.

3. Research Results

3.1. Typical Tourism Land Usage Patterns

There are two typical patterns of rural tourism land usage in China. The first one is Land Acquisition, which transforms rural collective and villagers’ land into tourism land, changing the nature of the land. The farmers no longer have the right to use land, thus separating farmers from the land. Another one is Land Circulation, including contracting, leasing, shareholding, exchange, without changing the nature of the land, which is mainly used for tourism non-construction land. Farmers still retain the right to return the land.

3.2. Land usage impact on livelihood change

3.2.1. Tourism livelihood strategy for communities. Villagers rent land for the construction of tourism facilities, and traditional agricultural activities begin to decrease. Tourism business profit and land rent have become an essential part of income for residents. The proportion of tourism income in the income of village and farmers has gradually increased. For villages, improve tourism development has become an important development strategy.

3.2.2. Family livelihood strategies changed. Because many families rent their land to tourism companies, they have changed their previous livelihood strategy of agricultural activities, mainly focusing on tourism. Moreover, there are more and more families with tourism livelihood strategies. Families participate in tourism in various ways, such as working in scenic spots, setting up home B&B, operating ethnic catering, and selling tourism commodities.

3.3. Sustainable livelihoods outcomes under different land usage patterns

3.3.1. Comparison of livelihood capitals. Judging from livelihood capital measure results, the average household livelihood capital in Jinglai is 0.599, higher than in Hansha of 0.442. Comparing the sub-capitals, the value of all six livelihood capitals in Jinglai is higher than in Hansha.

| Table 1. Livelihood Capital Assessment |
|---------------------------------------|
| Human Capital | Natural Capital | Physical Capital | Social Capital | Financial Capital | Cultural Capital | Total Capital |
| Jinglai       | 0.132          | 0.064            | 0.110          | 0.178            | 0.044           | 0.072         | 0.599         |
| Hansha        | 0.095          | 0.044            | 0.082          | 0.175            | 0.035           | 0.009         | 0.442         |
3.3.2. Comparison of sustainable livelihood outcomes. According to the sustainable livelihood outcomes, the sustainable family livelihood in Jinglai is better, while in Hansha is slightly worse. The sustainability of Jinglai in four aspects has been recognized by the residents, while Hansha has not passed the economic sustainability, social sustainability, and tourism sustainability. It shows that the sustainable development problems implied in the tourism development process of Hansha are still worthy of attention.

|                | Economic | Social | Environment | Tourism |
|----------------|----------|--------|-------------|---------|
| Jinglai        | 1.78     | 1.44   | 1.72        | 1.56    |
| Hansha         | 3.15     | 2.44   | 2.05        | 2.67    |

3.4. Land usage patterns and tourism benefit distribution

The benefit distribution modes of Jinglai and Hansha are the difference between "Ticket Sharing" and "Business Profit Sharing," and land lease also plays a vital role in benefit distribution. Comparatively speaking, residents in Jinglai get better benefits from tourism land lease, and it increases continuously with the development of tourism in the future.

Jinglai has rent out a large amount of land for tourism infrastructure. Residents can benefit from land leasing and participate in tourism through scenic spot work and business, which drives residents' enthusiasm to participate and support tourism development.

Meanwhile, the leased land in Hansha village is mainly communal land of villages, even the villages get a share of the benefits from land leasing, but the villagers have fewer opportunities to be an employee and participate in tourism management.

3.5. Intrinsic impacts of land usage on livelihood sustainability

3.5.1. Land usage affects the livelihood activities of residents. No matter what kind of land usage patterns in tourism development, it will change the land use and make farmers gradually separate from the land and start new livelihood activities. Therefore, whether the development of tourism products can provide suitable livelihood opportunities for residents is particularly critical. When livelihood changed, and new tourism products cannot provide residents with new work opportunities, villagers will face sustainable livelihood difficulties in the long term, even if land usage revenue is enormous and quickly.

Comparing the two cases in this study, the development of tourism products in Jinglai provides opportunities for villagers to carry out tourism livelihood activities and produces new tourism-based alternative livelihoods conducive to the sustainability of livelihoods.

3.5.2. Land usage determines benefit distribution. Different patterns of land usage bring different ways of benefit distribution. According to the contract, the tourism enterprise will pay the land revenue in one lump sum if the land acquisition pattern is adopted. Then the tourism development will be separated from the local community and farmers, and the tourism company will not need to consider the participation of the community and residents. In a second way, land circulation, the villagers retain the land ownership and transfers the management right to the tourism enterprise, which pays the land rent at the agreed price. In contrast, the second one leaves power space for villages, giving villagers more choices when facing fluctuations in tourism development, which is often easier to conduct sustainable development.

3.5.3. Land usage has changed the traditional cultural space. Tourism land usage has changed the traditional cultural space, which has grown out of traditional farming livelihood activities. When communities and families begin to decide their livelihood choices with the market operation, economic rationality, and tourism culture after tourism development, they will replace traditional cultures such as farming culture, social relations, and indigenous culture. The land usage impact on livelihood changes will be thorough.
4. Conclusion

Land usage and management have always been the focus and difficulty in tourism development. People are worried about how land-expropriated farmers can adapt to and maintain a sustainable livelihood. How to take appropriate land usage patterns to meet the challenge of tourism volatility? Therefore, it is necessary to study the relationship between land usage and sustainable livelihood. The comparative analysis of two ethnic villages shows the two typical tourism land usage patterns, compares sustainable livelihood outcomes under different land usage patterns, and analyzes the intrinsic relationship between land usage and sustainable livelihood. The research is the significance of perfecting the theory of sustainable livelihood and guiding tourism land development.

The study results show that land acquisition and land circulation are the main patterns of tourism land usage, and land usage will promote livelihood changes. Secondly, different land usage patterns lead to different benefit distribution and sustainable livelihood outcomes, depending on whether land usage can provide residents with opportunities to participate in tourism. Thirdly, land usage will also change the traditional ethnic-cultural space and affect social relations.

The main contribution of this study is to take land usage as an essential factor affecting livelihood sustainability, analyze land usage and different impact results, provide case support for analyzing the relationship between land usage and sustainable livelihood, and further improve the sustainable tourism livelihood theory.

For the practice of tourism development, the local government needs to pay special attention to the patterns and influence of land usage, determine the reasonable way of land use according to the local cultural and social development reality, and provide the community and residents with opportunities to participate in tourism and income growth, to help residents achieve sustainable livelihood.

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References:
[1] Boavida-Portugal I, Rocha J, Ferreira C C 2016 Exploring the impacts of future tourism development on land use/cover changes Applied Geography 77 82-91
[2] Karki S T 2013 Do protected areas and conservation incentives contribute to sustainable livelihoods? A case study of Bardia National Park, Nepal Journal of environmental management 128 988-99
[3] Wu G C, Niu X, Xu H Z 2013 Study on land transfer risk evaluation during the development of rural tourism Economic Geography 33(3) 187-91
[4] Saha J, Paul S 2020 An insight on land use and land cover change due to tourism growth in coastal area and its environmental consequences from West Bengal, India Spatial Information Research 1-16
[5] Hoang T T H, Van Rompaey A, Meyfroidt P, et al 2020 Impact of tourism development on the local livelihoods and land cover change in the Northern Vietnamese highlands. Environment, Development and Sustainability 22(2) 1371-95
[6] Xie Y, Zhu Q 2021 Study on Changes in Tourism Land and Influence Factors in Mountain Areas? A Case Study of Luanchuan County, China bioRxiv
[7] Campbell D J, Lusch D P, Smucker T A, et al 2005 Multiple methods in the study of driving forces of land use and land cover change: a case study of SE Kajiado District, Kenya Human Ecology 33(6) 763-94
[8] Yirgu T, Govindu V, Yihunie Y 2021 Land use/cover dynamics and its impact on the rural livelihood of potter communities Environment, Development and Sustainability 1-17
[9] Mutoko M C, Hein L, Bartholomeus H 2014 Integrated analysis of land use changes and their impacts on agrarian livelihoods in the western highlands of Kenya Agricultural Systems 128 1-12
[10] Soini E 2005 Land use change patterns and livelihood dynamics on the slopes of Mt. Kilimanjaro, Tanzania Agricultural systems 85(3) 306-23
[11] Allen J S, Lu K S, Potts T D 1999 A GIS-based analysis and prediction of parcel land-use change in a coastal tourism destination area Strom Thurmond Institute
[12] Kusiluka M M, Kongela S, Kusiluka M A, et al 2011 The negative impact of land acquisition on indigenous communities' livelihood and environment in Tanzania Habitat International 35(1) 66-73.
[13] Hjalager A M 2020 Land-use conflicts in coastal tourism and the quest for governance innovations Land Use Policy 94 104566.
[14] Chambers R, Conway G 1992 Sustainable rural livelihoods: practical concepts for the 21st century Institute of Development Studies (UK)
[15] Carney D 2003 Sustainable livelihoods approaches: progress and possibilities for change London: Department for International Development
[16] Tao T C H, Wall G 2009 Tourism as a sustainable livelihood strategy Tourism Management 30(1) 90-8.