

MCSTO

联合国世界旅游组织
旅游可持续发展
观测点管理与监测中心

Monitoring Centre for UNWTO Sustainable Tourism Observatories

Monitoring Report on the Sustainable Tourism Development (2021)

Yangshuo, Guilin

Guilin Municipal Bureau of Culture, Radio, Television, and Tourism

People's Government of Yangshuo County

Monitoring Centre for UNWTO Sustainable Tourism Observatories

2022.01

1 Origin of the Monitoring

In 2004, a cooperation agreement between Guilin and the United Nations World Tourism Organisation proposed the inclusion of Yangshuo's tourism data in *Indicators of Sustainable Development for Tourism Destinations - A Guidebook* (UNWTO, Madrid, 2012). On 26 July 2005, the first tourism sustainable development observatory was officially established in Yangshuo and inaugurated in October 2009, marking the official launch of long-term sustainable development monitoring in Yangshuo.

- In September 2010, the United Nations World Tourism Organisation (UNWTO) and Sun Yat-sen University signed a cooperation agreement to establish the UNWTO Monitoring Centre for the Sustainable Tourism Observatories (UNWTO MCSTO). The Monitoring Centre is responsible for the management and monitoring of sustainable tourism development observatories in China and the Asia-Pacific region in the future, ensuring the monitoring work is carried out in a sustainable, comprehensive, and effective way. The establishment marked the official inauguration of the Monitoring Centre and marked the substantive cooperation between Sun Yat-sen University and UNWTO in promoting sustainable tourism worldwide.

1 Origin of the Monitoring

- ❑ Since August 2006, the Centre for Tourism Planning and Research at Sun Yat-sen University has successfully completed the monitoring of sustainable tourism development in Yangshuo from 2006 to 2021 based on the indicators and methods of the UNWTO GOST project, focusing on indicators of the impact of tourism development on Yangshuo's natural resources, ecological environment and social and cultural aspects. The monitoring has also analysed and assessed the state of tourism development, identified problems in the tourism development of Yangshuo and introduced corrective and remedial measures.
- ❑ The project has received full recognition from the World Tourism Organisation and has promoted the sustainable development of Yangshuo's tourism.

2 Methods for Monitoring and the Process

□ Monitoring period and monitoring team

- October 31 to November 7, 2021, 8 days
- 13 people from the School of Tourism Management, Sun Yat-sen University (one professor, four PhD students, four master students, four undergraduate students)

□ Monitoring content

- Thematic in-depth studies: “Tourism and Community”, “Tourist Satisfaction”, “Health, Safety, and Resilience”, “Tourism Planning and Management”, and “Tourism, Environmental Protection, and Resource Conservation”

□ Monitoring objects

- Domestic tourists, government departments, community residents
- Owners of small-size tourism enterprises
- Local employees and employees from other places

□ Monitoring scope

- Important attractions (e.g., Yangshuo West Street, Ten-Mile Gallery, Moon Mountain, Great Banyan Tree, Stone Town, Old County, Yulong River Scenic Area, Shiwaitaoyuan, Xingping Ancient Town, Ruyi Peak)

□ Monitoring methods

- Questionnaire method, focus group, interview method, photographic method



Monitoring Team

2 Methods for Monitoring and the Process

❑ Questionnaire surveys

- Simple random sampling and convenience sampling were used in the monitoring. The monitoring team distributed questionnaires to and conducted interviews with residents, tourists, tourism operators, and employees in the tourism industry. A total of 97 responses were collected from residents, 119 from tourists, 30 from tourism operators, and 59 from practitioners in the tourism industry.

❑ Field research and interviews

- Field research of typical tourism communities (e.g., Jiwodu Village, Yulong River Village, Xingping Ancient Town, Fishing Village) and tourism enterprises (Banyan Tree Yangshuo Hotel, Fenghuangshanshui Shangjing, Yangshuo Bay)

❑ Seminars

- Several seminars were held with officials of governments, typical tourism enterprises, owners of homestays, and representatives of tourism communities to discuss changes in the economic and social situation in Yangshuo, the current status of tourism development, and problems of tourism development.



2 Methods for Monitoring and the Process

□ Photographic method

- The monitoring team took photos of multiple elements (e.g., shops in the surrounding areas of Yangshuo West Street, ancient buildings in Yangshuo, communities, the natural environment, tourist signs) to collect comprehensive and systematic visualized materials and information.

□ Team member exchange: “three questions a day”

- Members of the monitoring team would summarise the daily monitoring situation, their gains, and the problems facing them. Each member would put forward three research questions for the group discussion, reporting findings from the field research and delving deeper into all aspects of sustainable tourism development of Yangshuo.



2 Methods for Monitoring and the Process

□ Overview of the Monitoring Process



Professor Sun Jiuxia led the team to conduct research on tourist attractions.



Research in the Rain



Questionnaire Surveys of Tourism Operators



Seminar on Community Participation in Tourism and Rural Revitalisation



Professor Sun Jiuxia led the team to have discussions with managers of enterprises at attractions.



Interviews with Tourism Operators After the Meal



Questionnaire Surveys and Interviews at the Homestays

3 Overview of the Monitoring (Monitoring Findings)

3.1 Tourism and Community

- **Communities and their residents are one of the main parts of tourism development. Questionnaire surveys and in-depth interviews** were conducted to learn about residents' perceptions and the influence of tourism on communities.
- The monitoring focused on residents' overall perception of the tourism development of Yangshuo and their perceptions of Yangshuo's economy, culture, and environment. The interviews touched upon residents' understanding of sustainable tourism development, community participation, wealth gap, cultural exchange, health care, and environmental pollution of Yangshuo.
- Residents' perceptions of the impact of tourism development:

Overall, residents' **overall satisfaction with the development of tourism in Yangshuo improved**, with the vast majority of residents **supporting** the development of tourism in Yangshuo. They also acknowledged many positive impacts of tourism development, including increased employment opportunities and participation in tourism development.

Nevertheless, residents also pointed out **issues that should be addressed**, such as environmental pollution and distributive justice. Most residents believed that the environment was the foundation for the development of tourism of Yangshuo; however, the tourism industry significantly impacted the environment. Some residents also expressed their dissatisfaction with people from other places taking up local resources and employment opportunities.

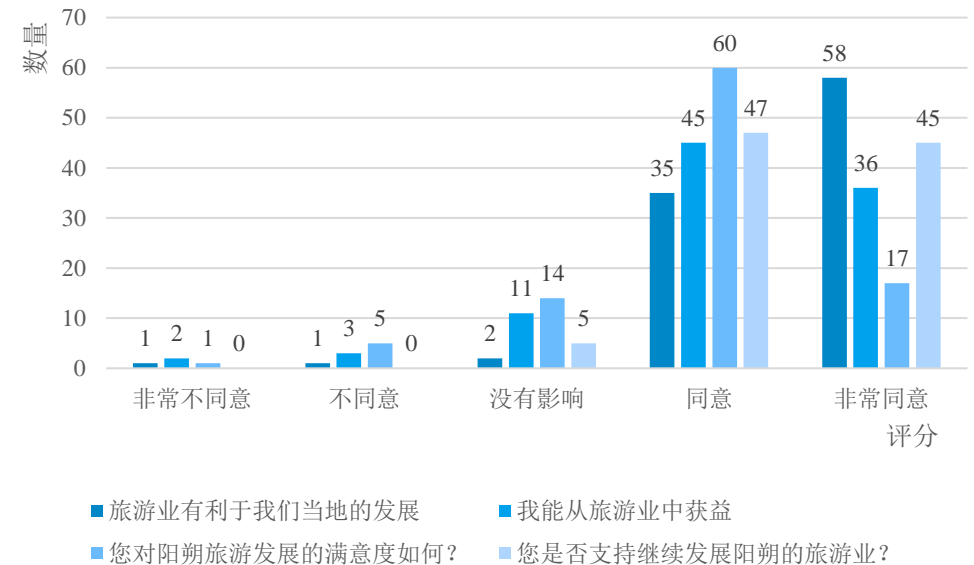


Figure 3-1-1 Yangshuo Residents' Overall Perception of Tourism Development

3 Overview of the Monitoring (Monitoring Findings)

3.1 Tourism and Community

- In terms of economic impacts, residents had strong perceptions of the impacts of the tourism economy. There were two sides to the impacts.

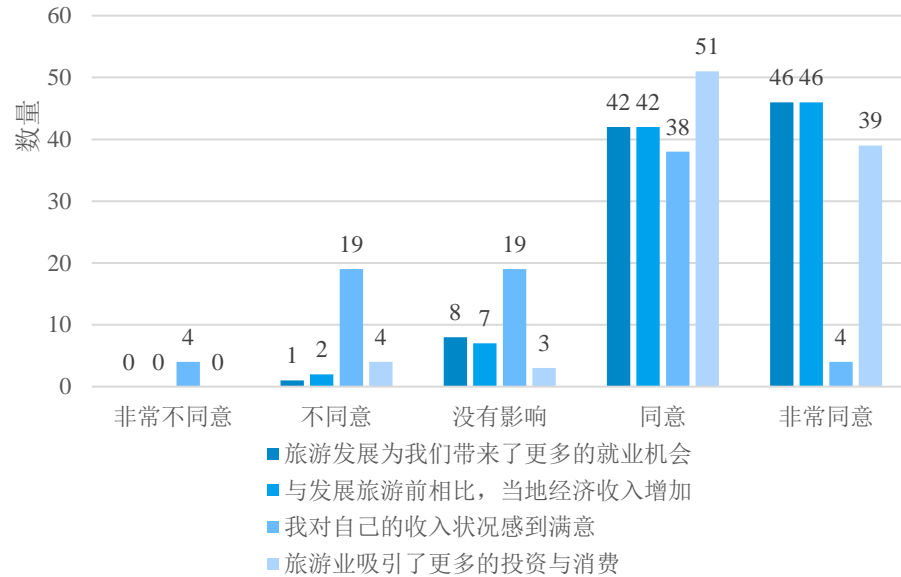


Figure 3-1-2 Residents' Positive Evaluation of the Economic Impact of Tourism

Residents fully acknowledged the positive role of tourism in boosting Yangshuo's economy.

However, the rising prices of goods, rising house prices, and unequal distribution of benefits negatively affected individuals.

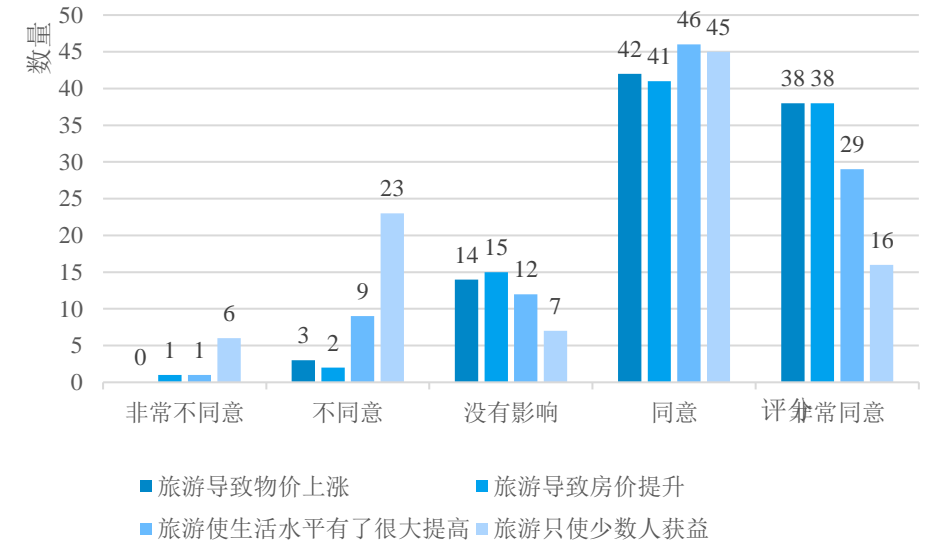


Figure 3-1-3 Residents' Negative Evaluation of the Economic Impact of Tourism

3 Overview of the Monitoring (Monitoring Findings)

3.1 Tourism and Community

- ❑ In terms of the impacts of tourism on the society and culture, most residents believed that the development of tourism **had a significant positive impact** on the society and culture. **They did not have a strong perception of the negative effects** of tourism on the society and culture.
 - ✓ The development of tourism in Yangshuo contributed to improving infrastructure and promoting cultural exchanges between Yangshuo and the rest of the world.
 - ✓ The development of tourism stimulated the development of local handicrafts and made local cultural activities and traditional festivals in Yangshuo richer and more diversified.
 - ✓ It helped to arouse more people’s sense of cultural mission to promote traditional culture. Besides, it also strengthened local residents’ sense of pride and identity and made them proud of Yangshuo and Yangshuo’s culture.

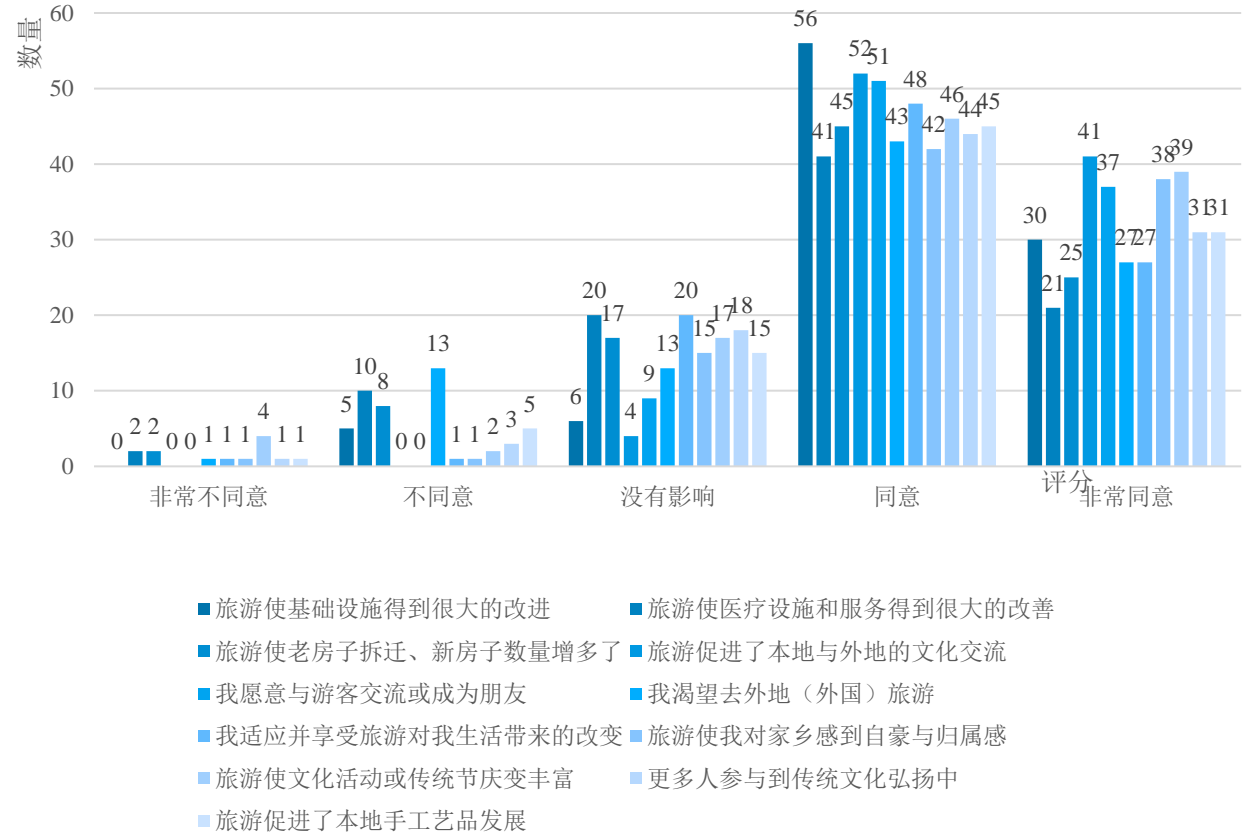


Figure 3-1-4 Residents’ Positive Evaluation of the Impacts of Tourism on the Society and Culture

3 Overview of the Monitoring (Monitoring Findings)

3.1 Tourism and Community

In terms of the impacts of tourism on the environment, **less than half of the residents** believed that tourism development caused severe air, water, and noise pollution in Yangshuo. Residents had the strongest perceptions of solid waste pollution (58%) and traffic congestion.

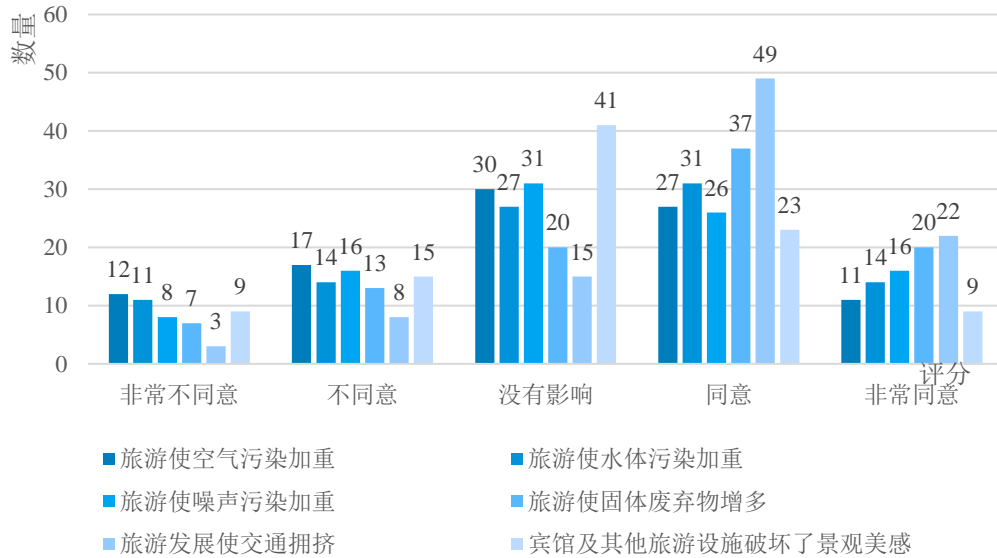


Figure 3-1-5 Residents' Negative Evaluation of the Impacts of Tourism on the Environment

The vast majority of residents had a positive perception of the environment and considered that different kinds of pollution gradually reduced. Tourism development and environmental protection measures further stimulated residents' awareness of environmental protection.

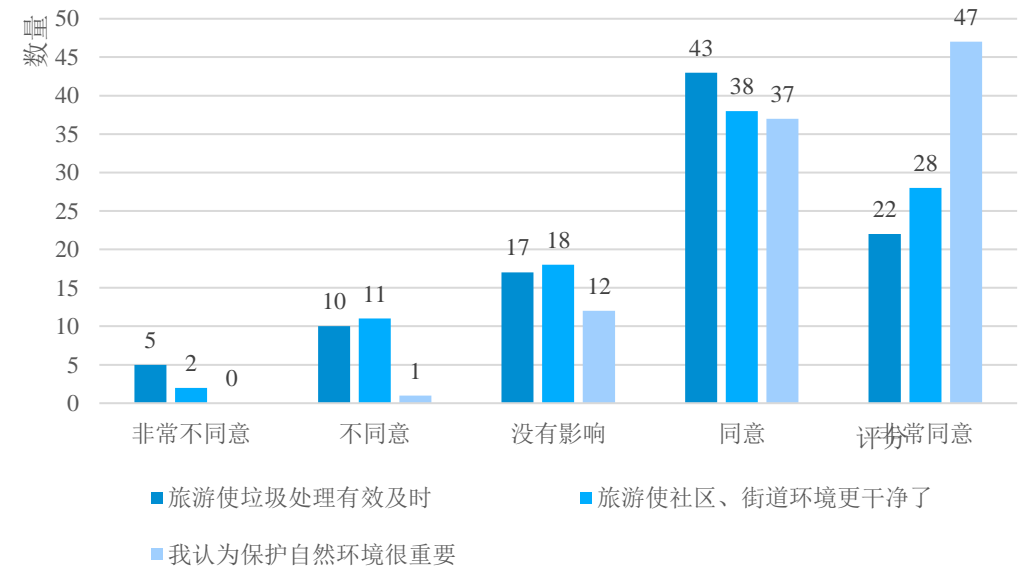


Figure 3-1-6 Residents' Positive Evaluation of the Impacts of Tourism on the Environment

3 Overview of the Monitoring (Monitoring Findings)

3.1 Tourism and Community

□ In terms of community participation, most residents expressed **a high level of willingness to participate in** the development of scenic areas, overall tourism development, and the development of communities.



□ However, there was **no convenient and practical channel for tourists to give their feedback and suggestions. Besides, there was a lack of reliable channels to learn about local tourism development and policymaking.**



□ How to combine top-down design with people's wisdom, how to inspire residents to get involved in the tourism industry, and how to provide people with more opportunities would be important issues that the government and communities should address.

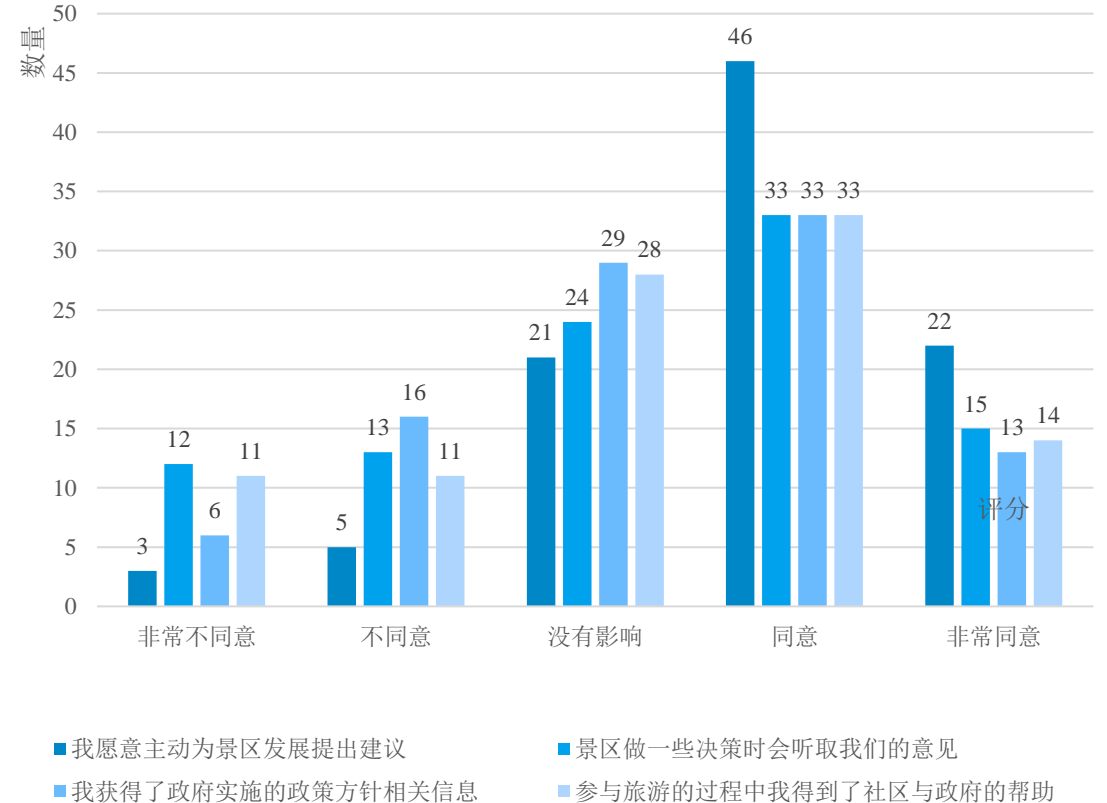


Figure 3-1-7 Community Residents' Participation in Tourism

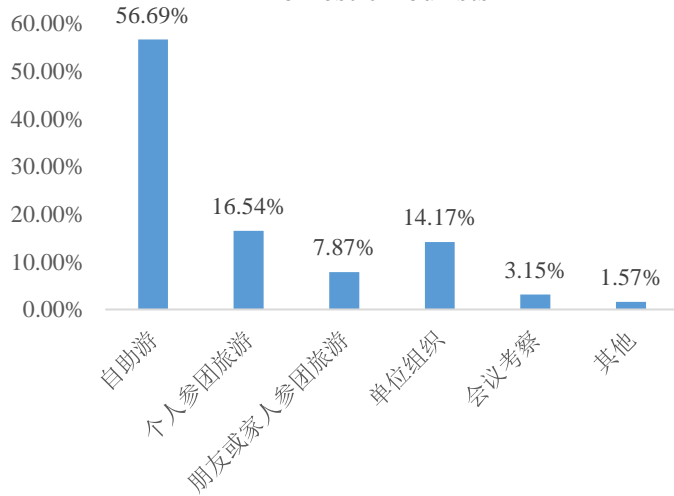
3 Overview of the Monitoring (Monitoring Findings)

3.2 Tourist Satisfaction

The study of tourist satisfaction aims to predict the response of tourists. Tourists' satisfaction is the competitiveness of a tourist destination.

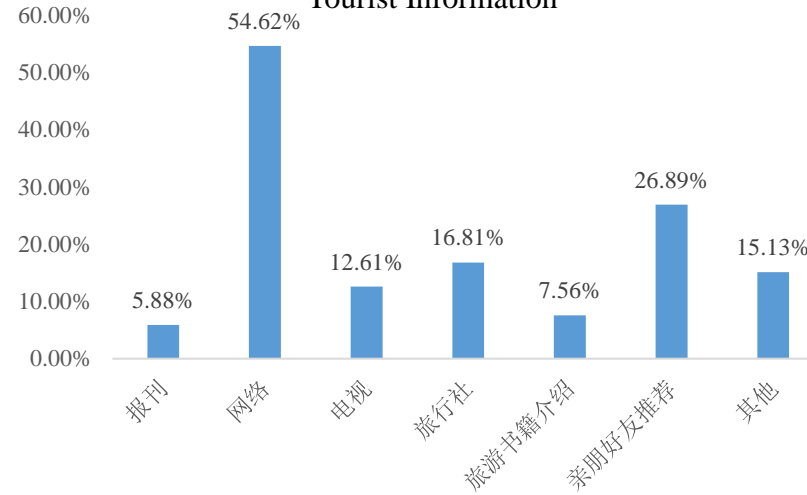
□ Characteristics of Tourist Behaviour

Figure 3-2-1 Travel Patterns of Domestic Tourists



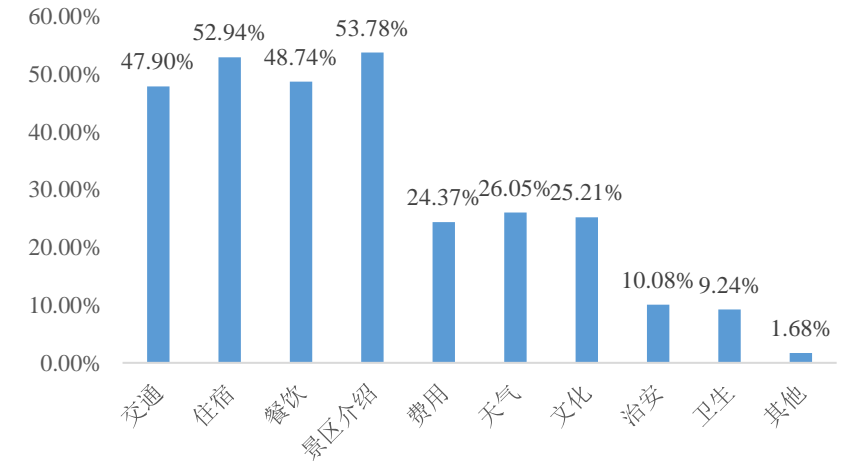
Due to the pandemic, the proportion of tourists choosing self-guided tours and group tours by themselves increased significantly, while the proportion of tourists choosing group tours with their family members and friends declined.

Figure 3-2-2 Ways for Domestic Tourists to Obtain Tourist Information



Tourists mainly obtained tourist information through the introduction offered by relatives and friends and the Internet.

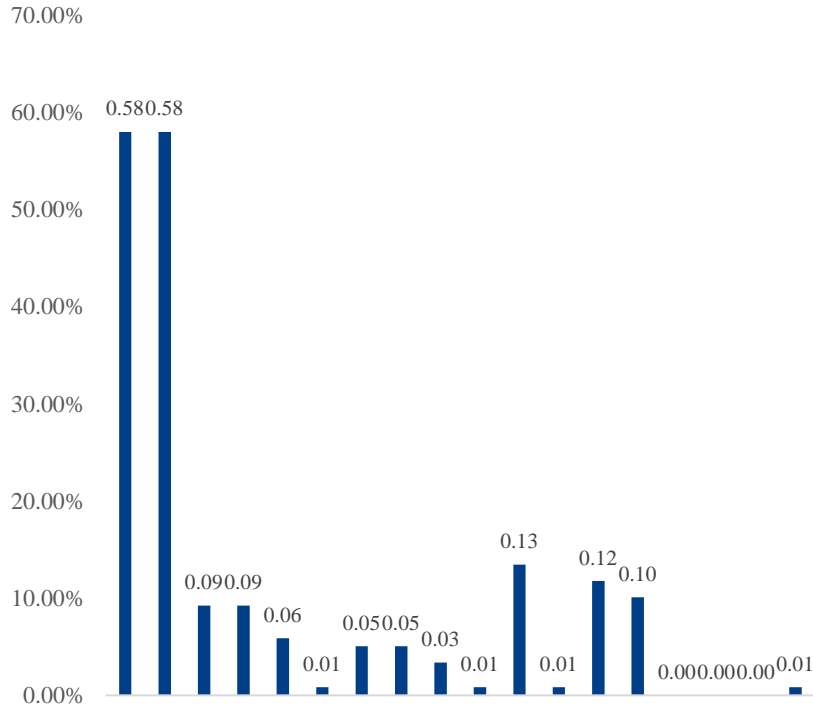
Figure 3-2-3 Tourist Information that Tourists Would Like to Obtain the Most



The most crucial tourist information for domestic tourists was information related to transport, accommodation, food and drink and introduction to scenic spots. Overall, tourists did not lay great emphasis on security.

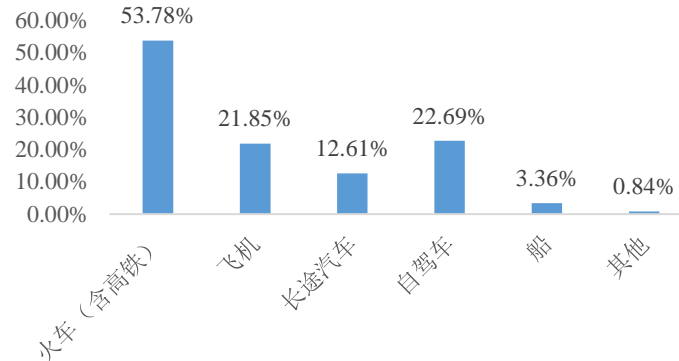
3 Overview of the Monitoring (Monitoring Findings)

Figure 3-2-4 Domestic Tourists' Travel Motivation



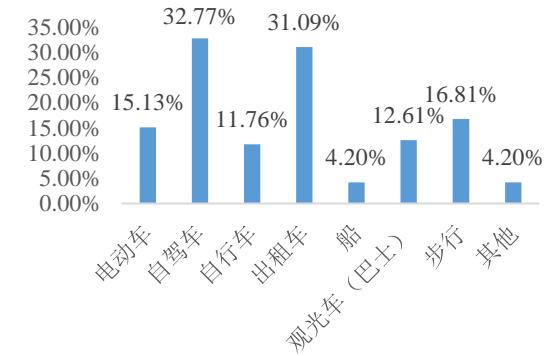
Most tourists still came to Yangshuo for sightseeing and leisure activities. With the mitigation of the pandemic, tourists' travel motivation has been more diversified.

Figure 3-2-5 Modes of Transportation Chosen by Domestic Tourists on the Way to Yangshuo



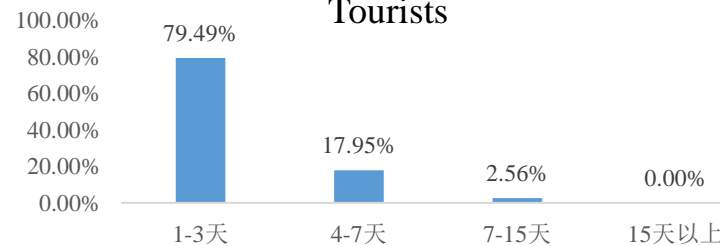
In terms of transport modes, trains (including high-speed railways) still played an important role. The proportion of tourists choosing to travel to Yangshuo by plane increased. When tourists were travelling in Yangshuo, the proportion of tourists choosing to get around by bike within the county decreased, which might be related to the development of electric motorcycle rental.

Figure 3-2-6 Modes of Transportation Chosen by Domestic Tourists Travelling in Yangshuo



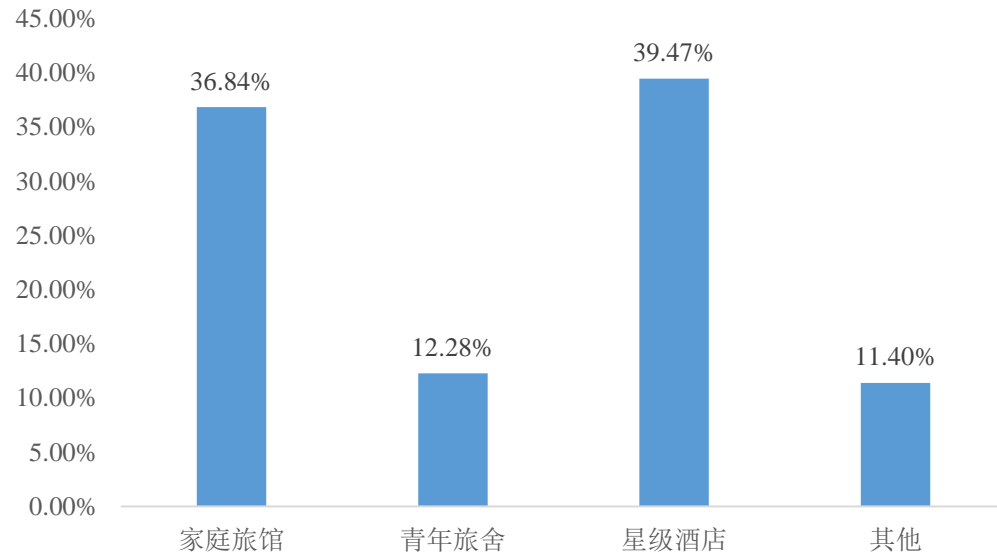
The proportion of tourists choosing short-term trips increased, with around 50% of visitors choosing to stay for 1-3 days, consistent with the prevailing trend in the length of travel for domestic visitors. The proportion of tourists choosing to stay for a long time decreased.

Figure 3-2-7 Length of Stay of Domestic Tourists



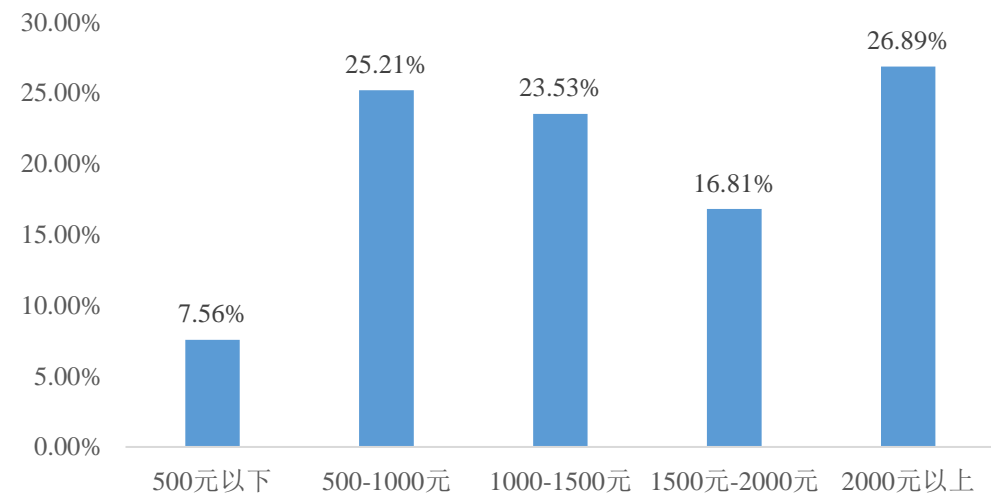
3 Overview of the Monitoring (Monitoring Findings)

Figure 3-2-8 Domestic Tourists' Choices of Accommodation



Most tourists still preferred family hotels and star-rated hotels. The proportion of tourists choosing youth hostels and star-rated hotels increased, while the proportion of tourists choosing family hotels decreased.

Figure 3-2-9 Expenditure of Domestic Tourists



Compared to the downward trend in overall travel expenditure due to the pandemic in 2020, the travel expenditure rebounded in 2021 and achieved a good recovery. The proportion of tourists whose tourism consumption was middle or high increased.

3 Overview of the Monitoring (Monitoring Findings)

- Tourist Satisfaction**

Table 3-2-1 Tourists' Evaluation of Tourism Resources

Project	Specific Items	Mean	Variance	Degree of Agreement	
Tourism Resources	Nature	Rich in Natural Resources and Beautiful Scenery	4.47	0.37	94.1%
		Good Water Quality of the Li River	4.14	0.51	80.7%
		Good Water Quality of the Yulong River	4.15	0.60	78.2%
	Culture	The landscape of Yangshuo is the best in Guilin	4.38	0.51	86.6%
		Cultural Landscape with Local Characteristics	4.06	0.55	75.6%

The natural landscapes are a highlight in Yangshuo. They are also world-class tourism resources. Through the self-recovery of the natural environment and the government's regulations in the pandemic, domestic tourists' were highly satisfied with all aspects of Yangshuo's tourism resources. Compared to visitors in previous years, tourists' reviews of the water quality of the Li River and the Yulong River improved.

Visitors were generally satisfied with Yangshuo's tourism services; however, a downward trend in visitors' satisfaction was detected. We should pay more attention to the following aspects:

- The ratings of services in scenic areas improved; however, scenic areas had some problems: poor quality of the interpretation of tour guides, insufficient number of tourist toilets and low satisfaction with the use of toilets.
- The ratings of the service quality of staff in scenic areas declined. Scenic areas should provide junior staff members more training and increase their job security, improving the quality of their services.
- The development of the homestay industry was remarkable; however, its operations and market capacity should be predicted and measured in advance.
- Thorny issues, such as traffic congestion, poor hygienic conditions and safety of accommodation, and unreasonable prices of goods, negatively impacted Yangshuo's tourism image. Therefore, it is necessary to address these issues to upgrade the tourism industry of Yangshuo.

3 Overview of the Monitoring (Monitoring Findings)

Table 3-2-2 Tourists' Evaluation of Tourism Environment

Project	Specific Items	Mean	Variance	Degree of Agreement	Project
Tourism Environment	Environment of Scenic Areas	Good Natural Scenery	4.30	0.50	85.71%
		Clean Environment	4.06	0.70	74.79%
		Not Crowded with Tourists	3.88	0.61	64.71%
	Human Environment	Friendly Residents	3.94	0.56	72.27%
		Safe Communities	4.07	0.61	73.11%
		Overwhelmingly Vibrant Commercial Atmosphere	4.09	0.56	78.15%
		Convenient Interaction with Tourists Different Countries or Regions	3.60	0.62	52.94%

Yangshuo's tourism environment, especially the environment of scenic areas, left favourable impressions on domestic tourists; however, the overwhelmingly commercial atmosphere impacted tourists' satisfaction with Yangshuo's human environment. Besides, although the ratings of folk customs increased, the ratings remained relatively low.

Table 3-2-3 Tourists' Evaluation of Folk Customs

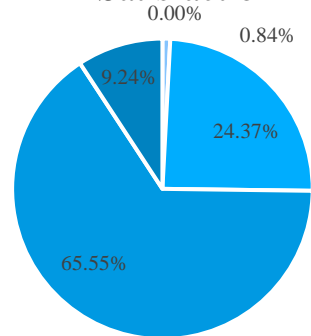
Project	Specific Items	Mean	Variance	Degree of Agreement
Folk Customs	Enjoyable Experience of Minority Religious Activities	3.44	0.55	44.54%
	Enjoyable Experience of Minority Wedding Activities	3.35	0.57	39.50%
	Enjoyable Experience of Minority Festivals and Events	3.54	0.62	49.58%
	Unique Houses for Ethnic Minorities	3.50	0.59	50.42%
	Unique Food for Ethnic Minorities	3.56	0.45	52.94%

The folklore experience is an important part of the tourism experience. In the future, Yangshuo should try to present the cultural stories of Yangshuo, develop folklore activities with cultural connotations, enable tourists to experience folklore activities, and develop products with characteristics of Yangshuo and ethnic minorities to facilitate Yangshuo's tourism development.

3 Overview of the Monitoring (Monitoring Findings)

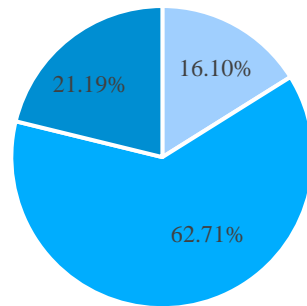
- Overall, the healthy development of Yangshuo as a tourist destination has undergone **major upgrading from a sightseeing destination to a destination providing leisure vacations**. According to the monitoring data, the length of stay increased in the past years, consistent with the upgrading of tourism.
- However, due to the constant pandemic in the past two years and the regulatory requirements for prevention and control of the pandemic, the monitoring data in 2021 showed that tourists' length of stay and satisfaction decreased, requiring Yangshuo to **further promote the quality of its tourism industry**. Yangshuo should **explore the local culture and provide special tourism products (e.g., rural tourism, folklore tourism)**. Besides, based on the new characteristics of tourists' consumption in the pandemic, Yangshuo should offer tourists high-quality tourism products in the context of tourists' shorter length of stay and make constant innovations in products and experience programs to increase the rate of revisiting.

Figure 3-2-10 Overall Satisfaction



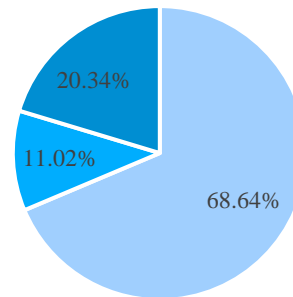
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Figure 3-2-11 Domestic Tourists' Expectations



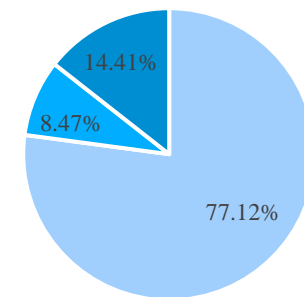
■高于预期 ■和预期一样 ■低于预期

Figure 3-2-12 Tourists' Willingness to Revisit



■会重游 ■不会重游 ■不确定

Figure 3-2-13 Tourists' Willingness to Recommend



■会推荐 ■不会推荐 ■不确定

3 Overview of the Monitoring (Monitoring Findings)

3.3 Health, Safety, and Resilience

In terms of residents' perceptions, residents were more satisfied with **the security situation and medical services**, indicating that Yangshuo enjoyed good public security and that tourism played a role in improving local healthcare.

Table 3-3-1 Residents' Perceptions of Crime Rates and Health Services

Project	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Rising Crime Rates	8.25%	14.43%	24.74%	30.93%	21.65%
Improvement in Medical Services	21.65%	42.27%	24.74%	10.31%	1.03%

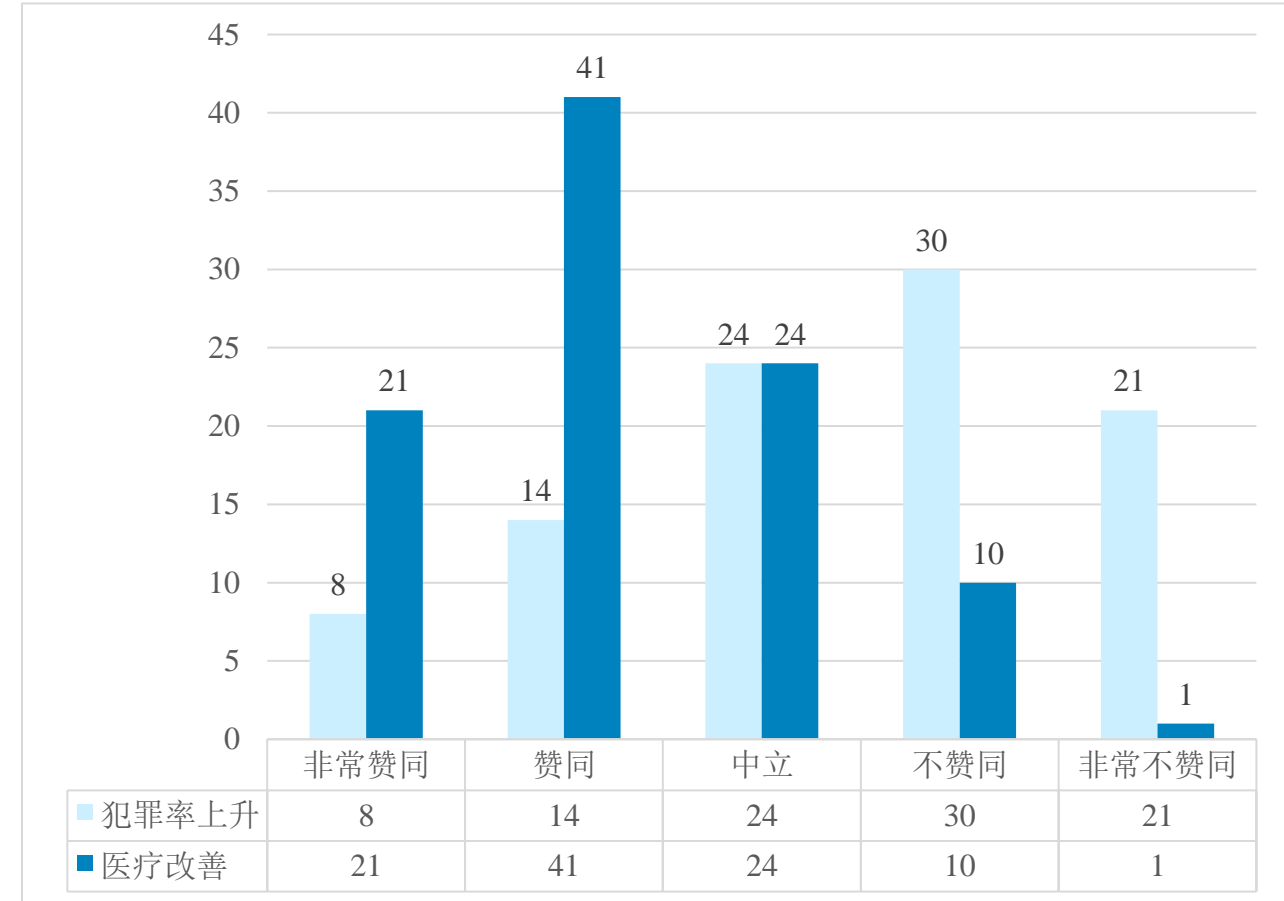


Figure 3-1-1 Residents' Perceptions of Crime Rates and Health Services

3 Overview of the Monitoring (Monitoring Findings)

3.3 Health, Safety, and Resilience

More severe environmental protection and inadequate sanitation also affected the everyday life of Yangshuo residents to some extent. Yangshuo should further strengthen air and water pollution prevention and control in the future.

Table 3-3-2 Residents' Perceptions of Environmental Pollution

Project	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
More Severe Air Pollution	11.22%	27.55%	30.61%	17.35%	13.27%
More Severe Water Pollution	14.29%	31.63%	27.55%	14.29%	12.24%
More Severe Noise Pollution	16.33%	26.53%	31.63%	16.33%	9.13%

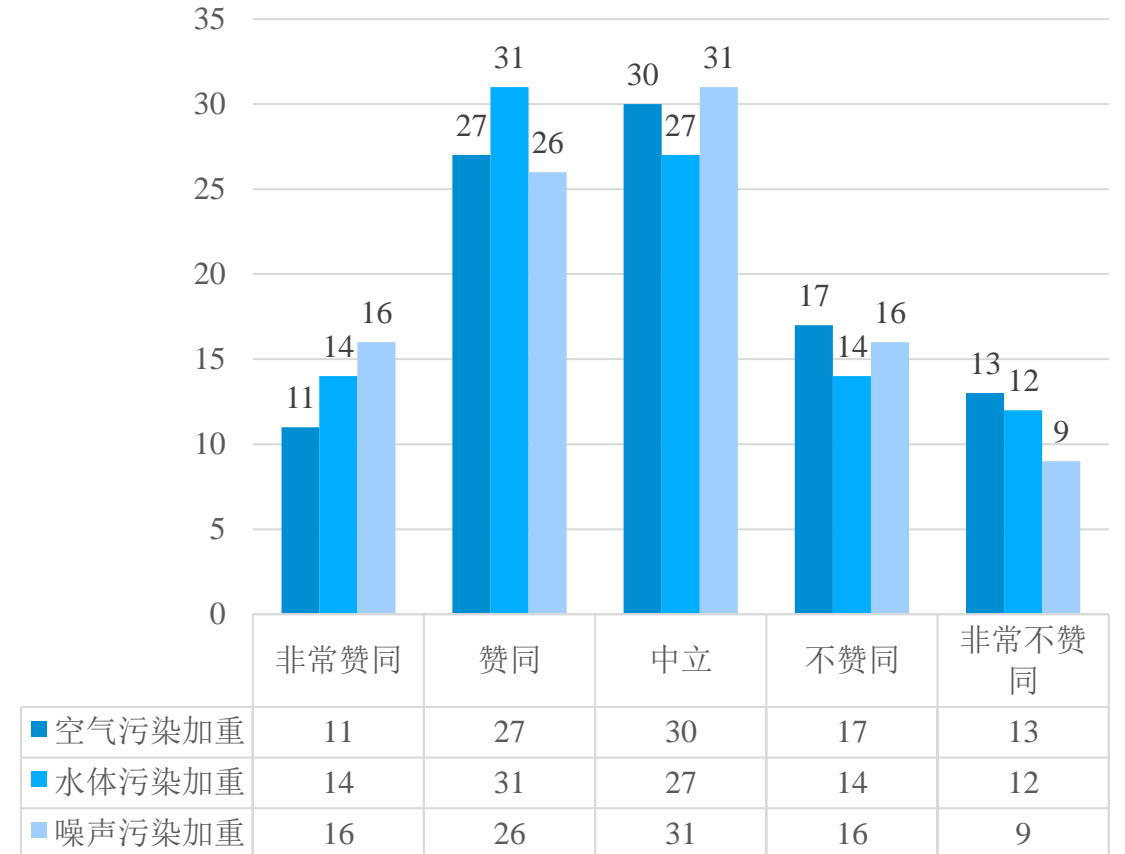


Figure 3-3-2 Residents' Perceptions of Environmental Pollution

3 Overview of the Monitoring (Monitoring Findings)

3.3 Health, Safety, and Resilience

In terms of tourists' perceptions, the vast majority of visitors were relatively satisfied with **the safety of Yangshuo's accommodation, social security, food safety, and the environment of scenic areas.**

Table 3-3-3 Tourists' Perceptions of the Safety of Accommodation

Project	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
%	21.85%	42.86%	34.45%	0.84%	0.00%
Number of Tourists	26	51	41	1	0

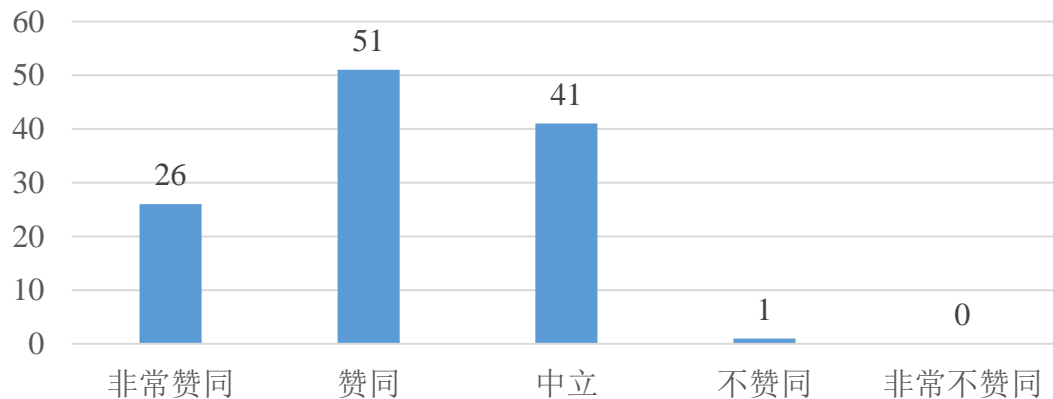


Figure 3-3-3 Tourists' Perceptions of the Safety of Accommodation

Table 3-3-4 Tourists' Perceptions of the Security

Project	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
%	33.61%	39.50%	26.89%	0.00%	0.00%
Number of Tourists	40	47	32	0	0

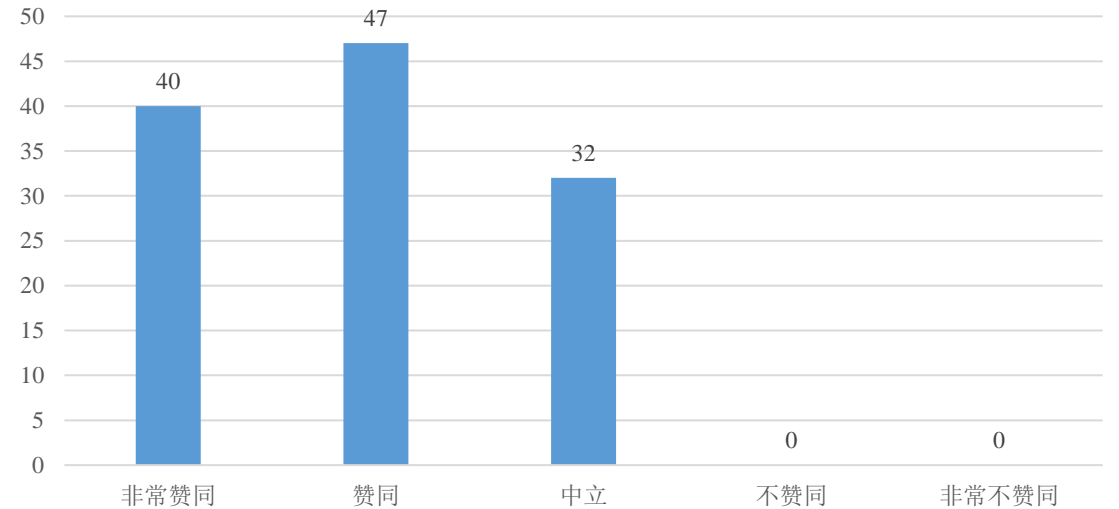


Figure 3-3-4 Tourists' Perceptions of the Security

3 Overview of the Monitoring (Monitoring Findings)

3.3 Health, Safety, and Resilience

Tourists' satisfaction with **tourist toilets** was significantly lower than their satisfaction with the safety of accommodation and social security. It had an extremely negative impact on the image of the destination. In the future, Yangshuo should try to improve tourist toilets tangibly.

Table 3-3-5 Tourists' Perceptions of Food Safety

Project	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
%	18.49%	41.18%	36.13%	3.36%	0.84%
Number of Tourists	22	49	43	4	1

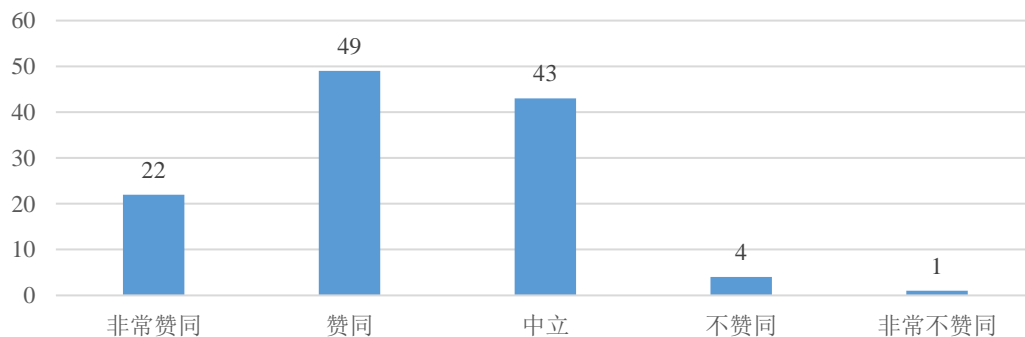


Figure 3-3-5 Tourists' Perceptions of Food Safety

Table 3-3-6 Tourists' Perceptions of the Environment of Scenic Areas

Project	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Clean Environment	34.45%	40.34%	21.85%	3.36%	0.00%
Tourist Toilets	10.08%	42.02%	39.97%	8.40%	2.52%
Natural Landscape	44.54%	41.18%	14.29%	0.00%	0.00%
Spacious Scenic Areas	21.85%	47.90%	26.89%	3.36%	0%

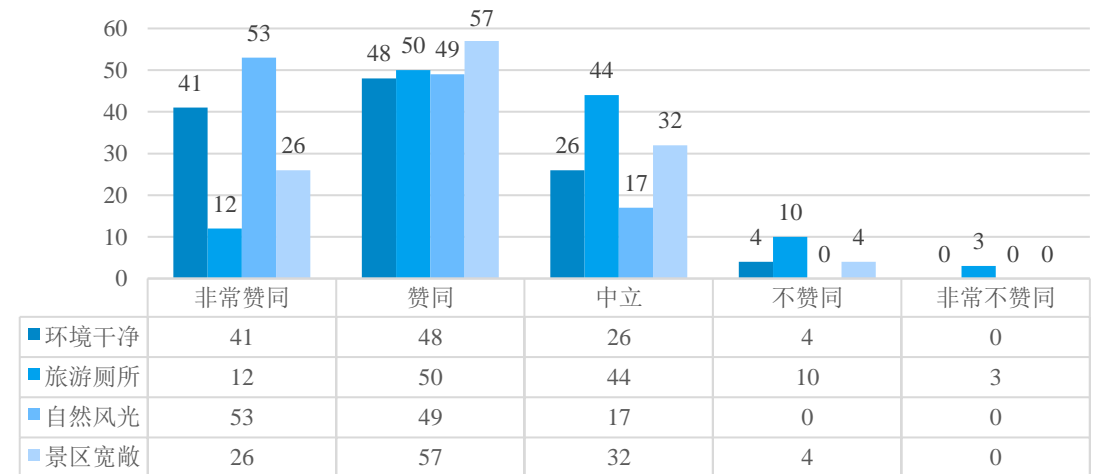


Figure 3-3-6 Tourists' Perceptions of the Environment of Scenic Areas

3 Overview of the Monitoring (Monitoring Findings)

3.4 Tourism Planning and Management

- **Tourist transport and tourist flow management: Tourism infrastructure was further improved, and tourists were basically satisfied with the infrastructure.**

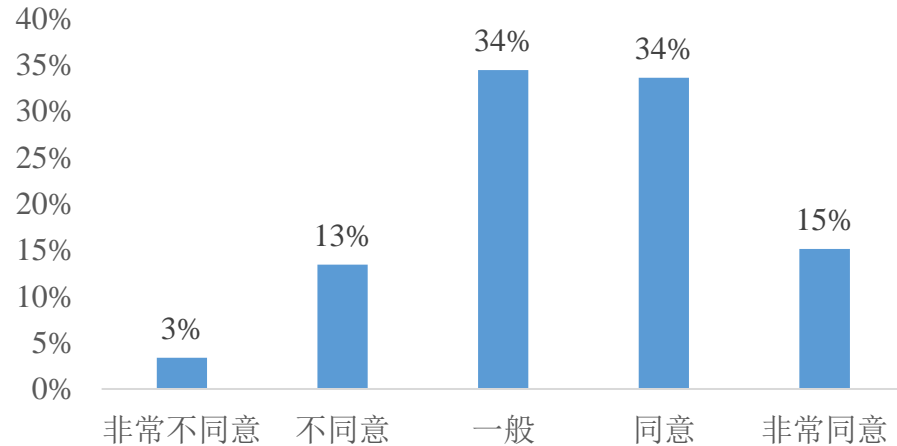


Figure 3-4-1 Tourists' Perceptions of the Convenience of Transport

Tourists' perceptions of the convenience of transport decreased, lagging behind tourism services.

Compared to 2020, the proportion of tourists who perceived the convenience of transport decreased significantly by approximately 10% in 2021.

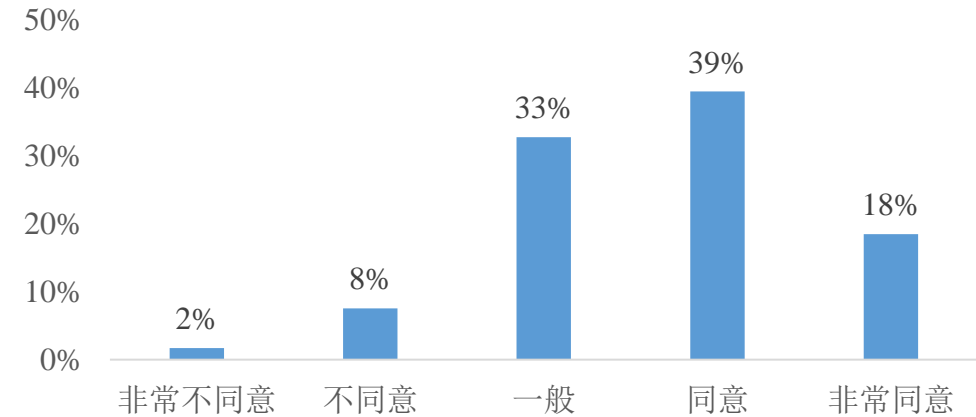


Figure 3-4-2 Tourists' Perceptions of the Clarity of the Traffic Signage System

Tourists' perceptions of the clarity of the traffic signage system decreased. More emphasis should be laid on its design.

Tourists' perceptions of the clarity of the traffic signage system decreased slightly. In the future, more emphasis should be laid on its design to make the system more rationalised and clearer.

3 Overview of the Monitoring (Monitoring Findings)

□ Tourist transport and tourist flow management: Tourism infrastructure was further improved, and tourists were basically satisfied with the infrastructure.

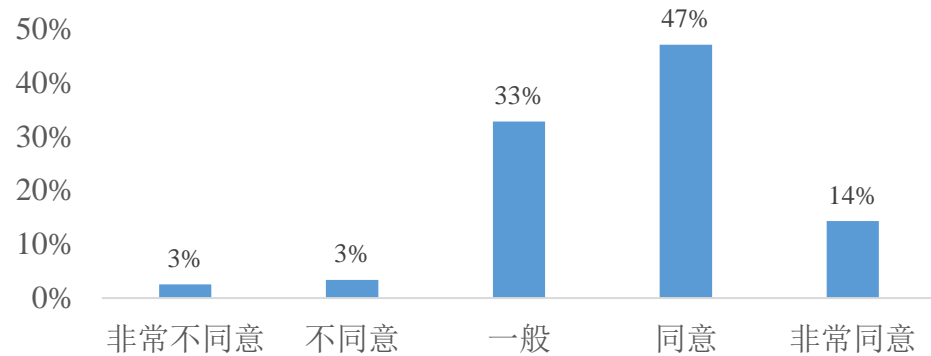


Figure 3-4-3 Tourists' Perceptions of the Reasonableness of Transport Prices

Tourists' perceptions of the reasonableness of transport prices increased. Transport prices became more affordable.

In comparison to 2020, the proportion of tourists who believed that the transport prices in Yangshuo were reasonable increased by 10%, indicating that transport prices became more affordable.

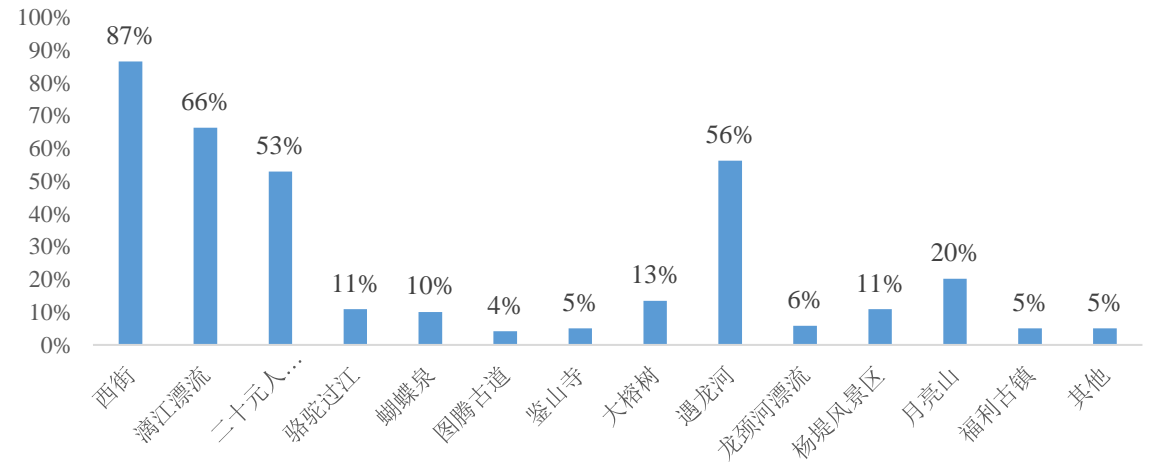


Figure 3-5-4 Statistics of Tourist Attractions to Which Tourists Paid a Visit

The tourist flow management should be improved in most visited attractions.

Most tourists travelled to Yangshuo West Street, Li River Rafting, Yulong River, and the 20 Yuan Scene. The proportion of tourists who travelled to the Great Banyan Tree and Moon Hill declined significantly.

3 Overview of the Monitoring (Monitoring Findings)

❑ Comprehensive development of tourism resources: insisting on protective development and further exploring historical and cultural resources

➤ Balancing supply and demand to optimise tourism products

Yangshuo should strike a balance between the supply of products and the diversified and personalised needs of the market, promoting the changes in the structure of tourism products (dominated by sightseeing tourism) and developing leisure tourism products with rich cultural connotations to meet the increasingly diversified needs of visitors.

➤ Further exploring historical and cultural resources to promote tourism attractiveness

Yangshuo enjoys rich historical and cultural resources, a rich historical heritage, and unique and diversified folk customs. Therefore, Yangshuo should explore further its local cultural resources (e.g., historical relics, folk customs, food, festivals and events) to promote the innovations in the cultural tourism industry.

➤ insisting on protective development and keeping the mode of community-based tourism

At present, the comprehensive development of Yangshuo's tourism resources lays great emphasis on Yangshuo's unique natural tourism resources and abides by the principle of protective development. Meanwhile, in terms of community residents, the local customs and friendly and hospitable residents have increased the attractiveness of Yangshuo and become the most important part in attracting tourists. Therefore, it is necessary to continue to adhere to the mode of community-based tourism, summarise the rich experience of people's full involvement and extensive participation in the tourism industry, and cultivate residents' subjectivity and capacity to get involved in tourism.

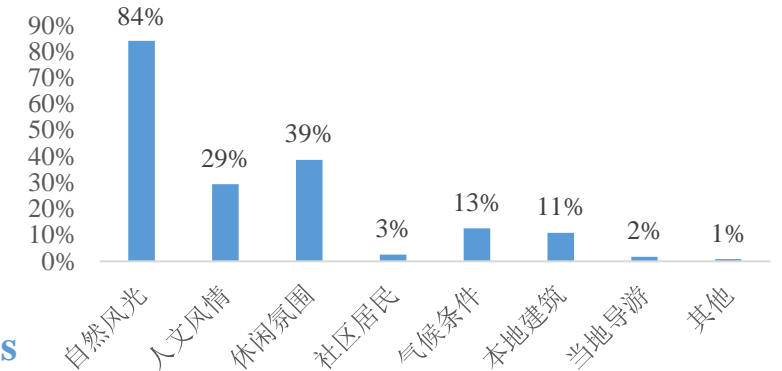


Figure 3-4-5 Yangshuo's Tourism Resources that Have Left Tourists with a Deep Impression

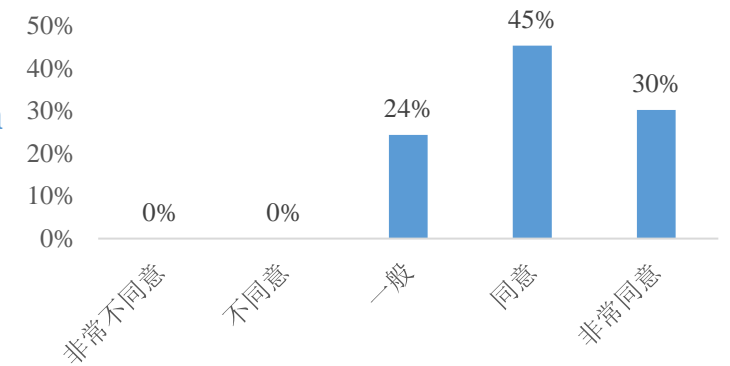


Figure 3-4-6 Tourists' Recognition of Cultural Landscape with Local Characteristics

3 Overview of the Monitoring (Monitoring Findings)

□ Tourism land use planning issues: The characteristics of tourism-led land use have been prominent and land-use conflicts should be alleviated.

➤ **The spatial layout for regional tourism of “one core, two areas, and three belts”**

The spatial layout for regional tourism of Yangshuo has been “one core” (i.e., the Yangshuo County), “two areas” (i.e., Putao Area, Xingping Area), and “three belts” (i.e., the Li River basin, the Yulong River basin, and the Jinbao River basin). The layout has also formed the basis for the overall development of tourism in Yangshuo.

Table 3-4-1 Tourism Land Use in Major Tourism Towns In Yangshuo County (2006-2020) (Unit: Hectares)

Land-Use Categories	Yangshuo	Baisha	Fuli	Xingping	Gaotian	Yangdi
Total Land Area	7528.95	15383.14	23285.21	31376.89	15492.93	10263.55
Forest Area	1831.07	4667.48	6344.59	10028.94	7984.56	5632.98
Urban Construction Land	860.1	121.27	116.23	49	50.06	0
Mining and Independent Construction Land	11.42%	0.79%	0.5%	0.16%	0.32%	0
Rural Residential Land	71.15	160.07	110.98	133.4	134.88	30.56
Scenic and Natural Heritage Areas	0.95%	1.04%	0.48%	0.43%	0.87%	0.3%
Other Land	139	402.99	498.75	375.94	392.92	125.35
Heritage Areas	1.85%	2.62%	2.14%	1.2%	2.54%	1.22%
Other Land	1940.64	2168.54	3899.89	12143.08	876.71	2397.79
Heritage Areas	25.78%	14.1%	16.75%	41.89%	6.3%	23.36%
Other Land	411.84	811.73	4584.22	1179.71	545.08	496.98
Other Land	5.47%	5.28%	19.69%	3.76%	3.52%	4.74%

➤ **Prominent issues about profit-driven tourism land conversion**

In terms of the land-use allocation of Yangshuo, the proportion of land used as scenic and natural heritage areas was the largest (25.78%). The conversion of too much land into tourism land may damage the ecological environment, loss of balance in development, insufficient cultivated land reserve resources, and pressure to protect permanent basic farmland.

➤ **Focuses of the land use in major tourism towns**

The proportion of urban construction land of Yangshuo as the core of development was significantly higher than that of other tourism towns (11.42%). Xingping Town, located in one of “two areas” (i.e., Xingping Area), laid emphasis on dwellings and experiences of local customs. The proportion of land used as scenic and heritage areas was significantly higher than that of other tourism towns (41.89%).

3 Overview of the Monitoring (Monitoring Findings)

3.5 Tourism, Environmental Protection, and Resource Conservation

□ Improved air quality and water environment

➤ All indicators were able to meet the Class II standards for air quality

Table 3-5-1 Air Conditions in Guilin Urban Area in 2020 Compared to the Same Period of the Previous Year

Factor	Item	Daily Average Concentration Range	Annual Average	Compared to 2019
	Sulphur Dioxide	5~35 $\mu\text{g}/\text{m}^3$	10 $\mu\text{g}/\text{m}^3$	Down 16.7%
	Nitrogen Dioxide	5~57 $\mu\text{g}/\text{m}^3$	18 $\mu\text{g}/\text{m}^3$	Down 21.7%
	Respirable Particulate Matter	5~159 $\mu\text{g}/\text{m}^3$	43 $\mu\text{g}/\text{m}^3$	Down 12.2%
	Carbon Monoxide	0.4~2.3 mg/m^3	1.2 mg/m^3	Down 7.7%
	Ozone	4~160 $\mu\text{g}/\text{m}^3$	124 $\mu\text{g}/\text{m}^3$	Down 9.5%
	Fine Particulate Matter	5~113 $\mu\text{g}/\text{m}^3$	29 $\mu\text{g}/\text{m}^3$	Down 14.7%
	Precipitation by pH	3.89~7.62	5.13	Up 0.13

In the urban area of Yangshuo County, the flood control sluice, storage lake, drainage sluice, and Youjiao Pond related to the river-lake-reservoir water system connecting project were improved. Projects about the ecological restoration of Hulutang, Park Lake, Diecui Lake, Baoquan Lake, and Lianhuatang Pond were completed. Yangshuo has been facilitating the projects of the management of small and medium-sized rivers in the Jinbao River Area and continued the management of Fuli and Puyi sections as the tributaries of the Gui River.

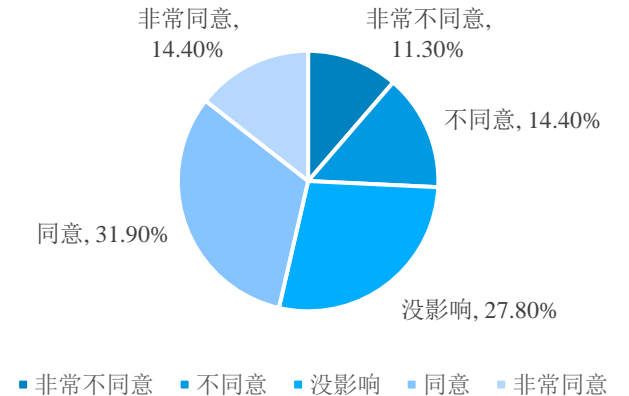


Figure 3-5-1 Residents' Perceptions of Whether Tourism Activities Lead to Water Pollution

3.5 Tourism, Environmental Protection, and Resource Conservation

□ Noise pollution seriously affected the image of Yangshuo as a destination.

➤ Noise pollution affected residents' everyday life and caused sleep disturbances.

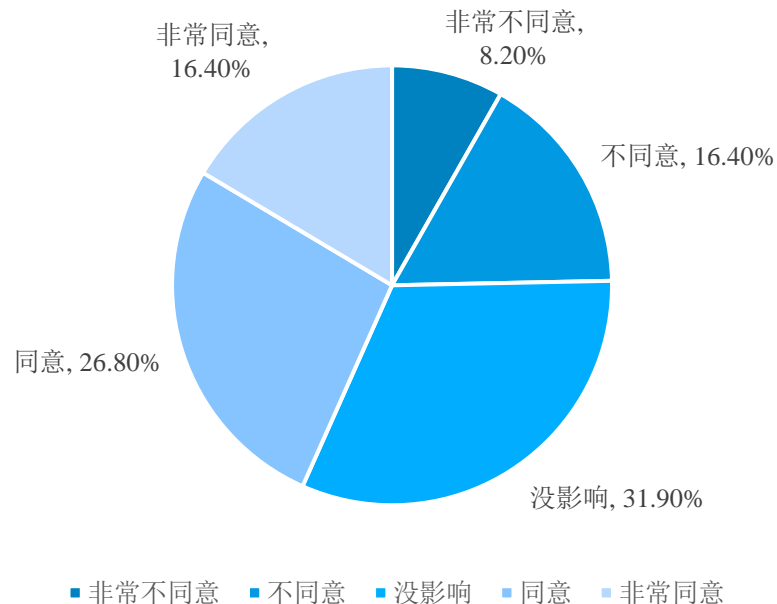


Figure 3-5-2 Residents' Perceptions of Whether Tourism Leads to More Severe Noise Pollution

➤ Excessive noise pollution of tourist commercial streets

- Noise levels of the entrance to Yangshuo West Street were measured with a mobile phone. It was found that the average maximum decibel level at the entrance could be above 60 decibels during the day (measured at 9:40), and the average maximum decibel level at the entrance could be above 60 decibels at night (measured at 19:50). – noisy and nerve-racking

➤ High proportion of tourists' negative comments concerning the “Noisy Environment”

- As of November 2021, the received negative feedback rate of Yangshuo on Ctrip was 4.2%, with negative feedback increasing in recent years. Most tourists complained about Yangshuo's “chaos”, “commercialisation”, “noise”, “crowdedness”, and “vulgarity”. There were many complaints about the over-commercialisation, increasing vulgarity, noise pollution, and dirty environment of the West Street. They contended that the West Street was not what it used to be. Most international tourists stayed away from the West Street and travelled to other small bars or villages along the Li River.

3 Overview of the Monitoring (Monitoring Findings)

3.5 Tourism, Environmental Protection, and Resource Conservation

□ Timely and effective solid waste disposal and increased utilisation

Yangshuo was determined to implement the comprehensive rectification and improvement of the Li River. It has been facilitating the project of Yangshuo Eco-Environmental Technology Park to develop eco-environmental technologies characterised by the integration of waste incineration and power generation, science education, and industrial tourism to promote the integration between ecological environmental protection and new tourism business forms in Yangshuo and facilitate innovations.

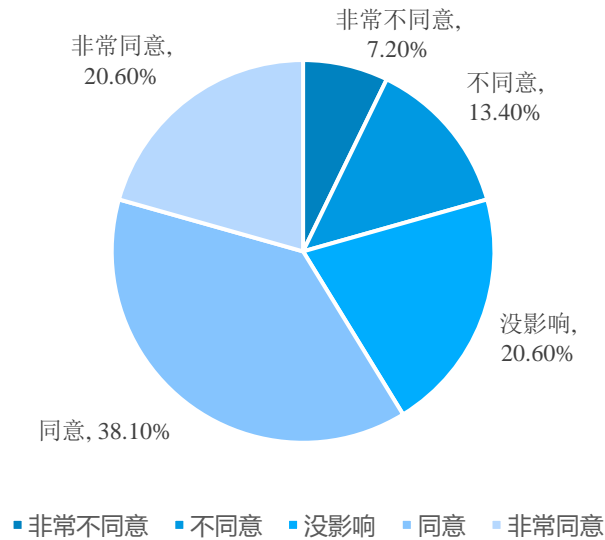


Figure 3-5-3 Residents' Perceptions of Whether Tourism Makes Waste Disposal Effective

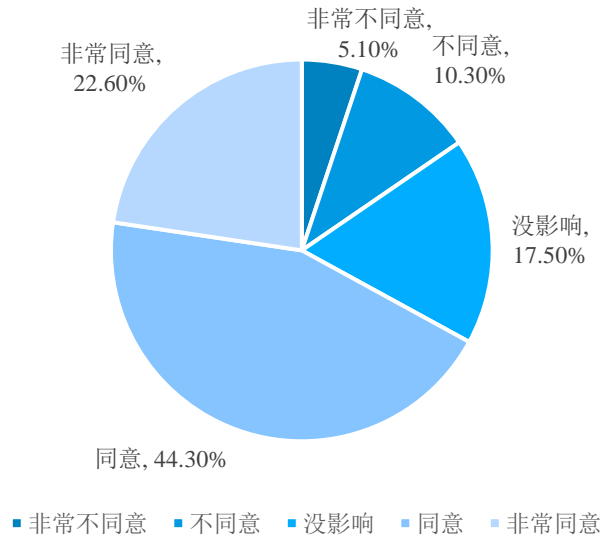


Figure 3-5-4 Residents' Perceptions of Whether Tourism Makes Communities and Streets Cleaner

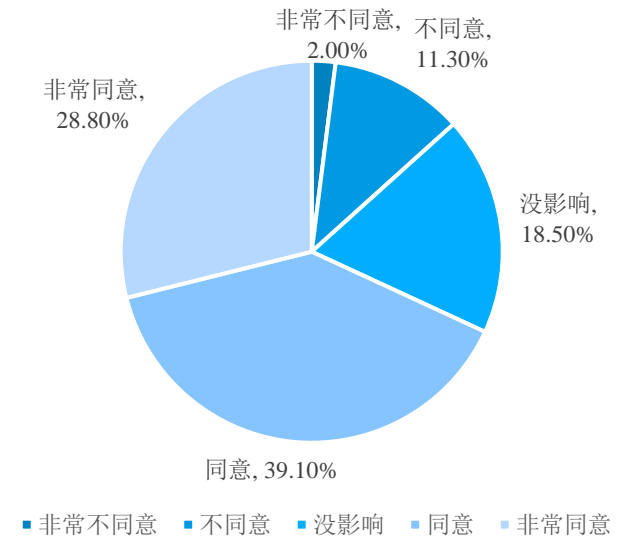


Figure 3-5-5 Residents' Perceptions of the Sanitary Environment in Scenic Areas

4 Existing Problems

- ❑ **The low quality of tourism products and the lack of in-depth experience activities made Yangshuo less appealing and the length of stay of tourists shorter.**

The development of the tourism industry was disorderly and there was a lack of industry development standards. The low quality of tourism products and the lack of in-depth experience activities made Yangshuo less appealing and the length of stay of tourists shorter.

Electronic Banner of a Bar “Live Pole Dancing”



Sign of a Bar Featuring a Naked Woman Bound by Red Ropes



Vulgar Shop of the Shooting Game: Daguizi (fighting against Japanese invaders)



In the video, under the logo of CCTV, there were some vulgar activities. A group of children and their parents were watching those activities.

4 Existing Problems

- ❑ **Poor quality of tourism environment: Noise pollution and poor visual and olfactory experience affected residents' life and tourists' satisfaction.**

The lack of regulation and management of the tourism market further caused many problems, such as noise pollution and disorderly commercial signboards, negatively impacting residents' life and tourist experiences to some extent.



Noise Pollution from Shops Playing Music
Crowdedness at Night Due to Heavy Tourist Flows



Signboards of all kinds were everywhere
and the overall image was poor.



There were too many shops selling stinky tofu and grilled durians, emitting foul odours.

4 Existing Problems

❑ Inadequate regulation of natural resource development and environmental protection

Resource and environmental problems brought by the tourism development persisted (e.g., river litter, illegal fishing, the misuse of pesticides and fertilisers). In addition, the government's regulation of illegal acts concerning natural resources was inadequate, and the government's post-disaster actions were not vigorous enough. The problems above negatively impacted Yangshuo's natural resources and environment and led to poorer environmental sanitation and health.



Electric fishing has been going on though it has been officially illegal.



Bulks of Mud and Piles of Rubbish after the Flood



Inadequate Treatment of River's Aquatic Life

4 Existing Problems

❑ Overheated investment in the tourism market and the need for innovations and breakthroughs in policies related to tourism planning and land use

Yangshuo has entered a new stage of development. A large amount of construction land has been used for the construction of tourism facilities and the development of tourism commercial projects, leading to an increase in demand for tourism land use and the unfavourable connections between the real state industry and the tourism industry. The problems above have caused a lot of industrial waste, negatively impacted the natural environment of Yangshuo, and provoked land-use conflicts. These problems have had urgent demands for the effective use and management of lands and highlighted the need for innovations and breakthroughs in policies related to tourism land use.



A Large Number of Modern Buildings along the Li River



Natural Landscape Blocked by Many Houses Built in front of the Hills



A Large Number of New Buildings Being Built for the Development of the Homestay Industry

4 Existing Problems

❑ Decreased efficiency in community participation in tourism and a lack of scientific guidance and training

There was a lack of scientific guidance for residents to participate in tourism. The way residents participated in tourism was relatively simple. Residents' subjectivity and capacity to get involved in tourism should be further improved.

Disorderly Car Rental Places



Shops' Seats and Mobile Vendors
along the Street



Unauthorised guides were enticing tourists everywhere,
disturbing the public order and taking up public resources.



□ **Doing scientific planning, improving tourism infrastructure, and promoting the upgrading of the tourism industry**

- Yangshuo should coordinate the development of the tourism industry and do detailed planning for the tourism industry. Yangshuo should think about high-quality tourism in Yangshuo strategically on the basis of the industrial coordinated development of Guangdong-Hong Kong-Macao Greater Bay Area and rural revitalisation. Yangshuo needs to incorporate Yangshuo County's tourism development (an important part) into economic and social development planning, territorial spatial planning, infrastructure construction, and ecological and environmental protection to guide the high-quality development of tourism in Yangshuo County.

□ **Exploring local culture, telling cultural stories of Yangshuo, and enhancing the human environment**

- Yangshuo should make full use of local resources and further explore local culture, developing folklore activities with cultural connotations, enabling tourists to experience folklore activities, and developing products with characteristics of Yangshuo and ethnic minorities. Besides, based on the new characteristics of tourists' consumption in the pandemic, Yangshuo should offer tourists high-quality tourism products in the context of tourists' shorter length of stay and make constant innovations in products and experience programs to increase the rate of revisiting.

- ❑ **Improving the resilience of the tourism industry and effectively striking a balance between development opportunities and risks**
 - Strengthening the management of the approval and support of tourism projects, developing a few quality projects, and giving more opportunities to outstanding local enterprises
 - Leveraging the strengths of local resources, stimulating investments from enterprises located in other places, and achieving the transition from quantity to quality
 - Alleviating land-use conflicts, improving the resilience of the tourism industry, and promoting the integrated development of the tourism industry with other industries

- ❑ **Creating a good tourism environment and cultivating residents' subjectivity**
 - Keeping the tourism market in order comprehensively, emphasising publicity, and creating a good competitive environment for tourism participation
 - Guiding residents to legitimately participate in tourism development and cultivating the consciousness of bona fide operation and observance of the discipline and law among micro, small or medium enterprises
 - Enhancing the awareness of observance of the discipline and law, bona fide operation, and subjectivity among tourism operators and tourism practitioners and enforcing red lines strictly

□ Overall monitoring objectives and results

- The monitoring lasted for eight days. It generally completed research on five topics (i.e., “Tourism and Community”, “Tourist Satisfaction”, “Health, Safety, and Resilience”, “Tourism Planning and Management”, and “Tourism, Environmental Protection, and Resource Conservation”) and finished collecting related data. The monitoring team produced the “Monitoring Report on the Sustainable Tourism Development of Yangshuo in 2021”, finding that Yangshuo was able to promote tourism development and stable socio-economic development in the context of the prevention and control of the pandemic and responses to natural disasters in the post-pandemic era. Yangshuo gradually improved the natural environment and kept a healthy, good and safe tourism environment. Overall, residents and visitors were supportive of Yangshuo’s tourism and were satisfied with the tourism industry in Yangshuo.

□ Monitoring methods and the monitoring process need to be improved.

- The monitoring was conducted during the rainy season of Yangshuo. On the one hand, there were fewer tourists, which made the research ineffective on rainy days and affected the efficiency and quality of the research. On the other hand, the rain influenced the evaluation of the natural environment, water quality, and air quality. Besides, there was a lack of monitoring of the discharge of tourism enterprises along the Li River and the Yulong River, the disposal of food waste and food waste in tourist restaurants, and perceptions of rural residents, resulting in incomplete monitoring results. In addition, due to the pandemic, the number of international tourists was small. The monitoring did not distribute questionnaires to international tourists. In the future, the monitoring team should make more rational and scientific arrangements in terms of monitoring plans, targets and methods.

□ **Some aspects of the monitoring can be optimised, and the monitoring can consider more topics in the future.**

- The monitoring in 2021 mainly followed the content of the regular monitoring and took the specific situation in 2021 into consideration; however, some new topics on sustainable development closely related to local development (e.g., tourism market saturation, corporate social responsibility, food waste, urban-rural disparities) can be incorporated in the monitoring in the future to enrich the comprehensiveness of the sustainable tourism development monitoring system and make the system more scientific.