

Monitoring Report on the Sustainable Tourism Development of Yangshuo

Guilin Municipal Tourism Bureau

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1. Foreword

1.1 Origin

Since 2002, the Guilin Municipal Government has strengthened contacts and cooperation with UNWTO. The Boao Asian Tourism Forum organized by the China National Tourism Administration, the Boao Forum for Asia and the Asia Cooperation Dialogue in November 2002, and hosted by the Guilin Municipal Government drew extensive global concern. In December 2003, UNWTO, the China National Tourism Administration and the Guilin Municipal Government held the UNWTO Regional Seminar on Tourism Partnerships in Destination Development and Management jointly in Guilin, which was the first seminar on tourism partnerships in destination development and management held by UNWTO. In 2004, the Guilin Municipal Government and UNWTO entered into a mutual cooperation agreement, which defined Yangshuo as one of UNWTO's global tourism observatories, and UNWTO included tourism data of Yangshuo in its book *UNWTO Sustainable Development Indicators*.

Since 2006, Sun Yat-Sen University (SYSU for short) has completed the 2006-2008 monitoring report of Yangshuo using the indicators and methods of UNWTO's GOST program since 2006. In October 2009, the Yangshuo Observatory was completed and put into operation, indicating the start of Yangshuo's long-term sustainable tourism development monitoring. On September 28, 2010, UNWTO and SYSU entered into a cooperative agreement, and founded the UNWTO Monitoring Center for Sustainable Tourism Observatories (UNWTO MCSTO, hereinafter the "Center") to take charge of the management and monitoring of sustainable tourism observatories in China and even those in the Asian-Pacific region in the future, and other technical work, so as to ensure continuous, comprehensive and effective monitoring. This round of monitoring was a new round of monitoring on the basis of the previous round of monitoring, and also the first monitoring of Yangshuo observatory after the foundation of the Center.

1.2 Monitoring Methodology

1.2.1 Monitoring Process

During August 6-16, 2011, the Center completed the monitoring of the sustainable tourism development indicators of Yangshuo with the great support of the Guilin Municipal Tourism Bureau and the Yangshuo County Government. The task force is composed of 15 members, including one teacher from the Center for Tourism Planning and Research at SYSU, one project coordinator from the Center, one doctor's degree candidate, 3 master's degree candidates and 9 undergraduate students. The task force investigated the major scenic zones of Yangshuo, including West Street, Big Banyan, Earthly Paradise, Xingping (Jiumahua Valley and Fishing Village), Impression Liu Sanjie, Yulong River and Ancient Totem Path, and some tourism communities, including Licun, Longtan and Jiuxian, and also interviewed the tourism bureau, local taxation bureau, administration for industry and commerce, public security bureau, land and resources bureau, environmental protection bureau, disease prevention and control center, traffic bureau, employment service center, civil affairs bureau, water and power supply bureau, statistics bureau, investment promotion bureau, health bureau, culture and sports bureau, prices bureau, Xingping Town Government, and other government departments, as well as local community elites.

Through interviews with stakeholder groups of tourism development in Yangshuo County (government departments, community committees, tourism business owners and community elites), the task force further learned the current sustainable tourism development of Yangshuo, and identified the monitoring questions and indicators. In this survey, the task force distributed 760 copies of the questionnaire for domestic tourists (Chinese), in which 748 copies were valid; 177 copies of the questionnaire for foreign tourists (English), in which 171 copies were valid; 430 copies of the questionnaire for community residents, in which 407 copies were valid; 115 copies of the questionnaire for enterprise employees, in which 113 copies were valid; and 35 copies of the questionnaire for business owners, in which 34 copies were valid.

This report has been prepared based on an analysis of the existing study, field survey, interview data and questionnaire statistics, and by reference to *Indicators of Sustainable Development for Tourism Destinations: A Guidebook* published by UNWTO (2004). This report consists of 7 parts: tourism and community, tourist satisfaction, tourism planning and control, economic impacts of tourism, tourism, and resources and environmental protection, and tourism products and services.

1.2.2 Screening of Key Issues and Indicators

The following table covers the key topics and basic indicators of all aspects for sustainable tourism development monitoring of Yangshuo, and has been developed based on UNWTO's indicators and methods, and the past monitoring indicators and practical tourism development of Yangshuo.

Table 1-1 Summary of Topics and Basic Indicators of Sustainable Tourism Development Monitoring of Yangshuo

	Topic	Basic monitoring indicator
Tourism and community	Attitude of Residents to Tourism	• Overall satisfaction(questionnaire) • Satisfaction with all aspects of tourism (questionnaire)
	Impacts of tourism on local communities	• Resident perception of economic, community and cultural impacts of tourism (questionnaire) • Services and infrastructure construction arising from tourism (secondhand data)
	Community engagement and awareness	• Percentage (number) of community residents doing tourism-related jobs and main types (sampling questionnaire survey); • Perception of tourism involvement by community residents (questionnaire) • Percentage of the concept “sustainable tourism development” by community residents • Issues on tourism involvement of concern for community residents (questionnaire, resident interview)
Tourist satisfaction	Maintaining tourist satisfaction	• Tourist satisfaction with all aspects of tourism (questionnaire) • Overall tourist satisfaction (questionnaire) • Perception of tourism experience against expectation (questionnaire) • Willingness of tourists to revisit and recommend (questionnaire)
Tourism planning and control	Whether land utilization or development planning supports tourism specifically	• Land use control at the overall strategic level • Layout planning of tourism development spaces, and land use control • Tourism service facilities and county traffic land planning • Land utilization of main destination townships • Land conversion and additional tourism land
Economic impacts of tourism	Tourism income	• Tourism statistics (gross tourism income, number of tourists, number of beds, number of tourists staying overnight, etc.)
	Contribution of Tourism to Yangshuo's GDP and Public Finance	• Percentage of tourism income to GDP • Contribution of tourism income to tax revenue

	Impact of Tourism on Industry Mix	• Overall development trend of tertiary industries driven by tourism • Impacts of tourism development on Yangshuo's agricultural structure
	Impacts of tourism on Yangshuo's handicraft and commercial development	• Development trend of accommodation and catering services driven by tourism (statistics) • Development trend of handicrafts and characteristic agriculture driven by tourism (statistics, store survey)
	Impacts of tourism on Yangshuo's public employment	• Job opportunities created by tourism (sampling questionnaire survey, interview) • Impacts of tourism on Yangshuo's employment structure (interview) • Resident training and skills development driven by tourism (number of English training agencies in the county)
Tourism, and resources and environmental protection	Atmospheric environment	• Air quality monitoring and conformance to standard • Evaluation of resident and tourist perceptions
	Utilization of water resources and conservation of aquatic environment	• Utilization of water resources • Conservation of aquatic environment • Evaluation of resident and tourist perceptions
	Noisy environment	• Noise monitoring and conformance to standard • Evaluation of resident and tourist perceptions
	Solid waste	• Disposal rate of solid waste • Evaluation of resident and tourist perceptions
	Landscape and visual impacts of tourism	• Whether there is landscape and visual improvement and control in support of tourism development • Evaluation of resident and tourist perceptions
	Energy Management	• Percentage of enterprises taking energy conservation measures and types of such measures
Tourism products and services	Purposes of tourism	• Purposes of tourism and percentages (questionnaire)
	Intensity of utilization of different scenic spots	• Percentages of tourists in different scenic spots (questionnaire)
	Scope of tourism services	• Types of tourism services available to tourists (store survey) • Spatial distribution of facilities (observation, store survey)

2. Tourism and Community

In this round of monitoring, a random questionnaire survey was conducted on residents in Yangshuo County, with 430 copies of the questionnaire collected, including 407 valid copies, with an effective rate of 94.7%, in which 60 copies were collected from Licun residents, including 58 valid copies, with an effective rate of 96.7%. During the analysis of the survey results, the questionnaire copies of non-Licun residents were subject to a general analysis, and those of Licun residents to a case analysis to confirm the results of the general analysis. In addition, community committees and residents in the Big Banyan scenic spot, Chuanyan Village, Licun Village and Xingping Old Street were interviewed, and these interview materials will be a supplement to data analysis. Secondhand information obtained from government departments or organizations concerned will also be an important information source.

Background of Licun Village, Gaotian Town

Licun Village, Gaotian Town, Yangshuo County is located south of Guilin City, about 7 kilometers north of the Yangshuo county town, and connected to Liuzhou City via National Highway 321. Since the village is located right opposite to the “Moon Mountain”, a well-known scenic spot in Yangshuo, this natural village is also called the “Moon Village”. The village has 107 households with 466 persons.

The tourism industry of Licun Village rose in the late 1990s, when several households built the first guesthouses of Gaotian Town through self-financing. Other villages followed them actively afterwards. In particular, after 2001, villagers have joined in local tourism services in various forms, such as opening guesthouses and restaurants, and acting as tour guides. Currently, over 80% of households in this village are engaged in tourism-related services, and the village’s tourism income accounts for over 80% of its gross income. Tourism has become the main income source of villagers.

From 2001 to 2009, the number of villager-run guesthouses rose from 6 to 25, and there were 180 guestrooms with 350 beds, and 42 villager-run restaurants, receiving nearly 3,000 tourists per day. The superior geographic environment and the rich tourism resources have fueled the rapid tourism development of the village, making the village the “first tourist destination village of Yangshuo”. The village received the honorary title “Civil and Hygienic Village of Guilin City” in 2004, and the title “National Demonstration Site of Agricultural Tourism” in 2006. Therefore,

for the tourism and community monitoring indicators, Licun Village is analyzed separately as a typical tourism community of Yangshuo and compared with the entirety.

2.1 Attitude of Residents to Tourism

2.1.1 Overall Attitude of Residents to Tourism Development

The overall attitude of residents to tourism development can be reflected in the 4 questions “Tourism is good to our local development”, “I can benefit from tourism”, “How satisfied are you with Yangshuo’s tourism development” and “Will you support Yangshuo’s sustainable tourism development” in the questionnaire.

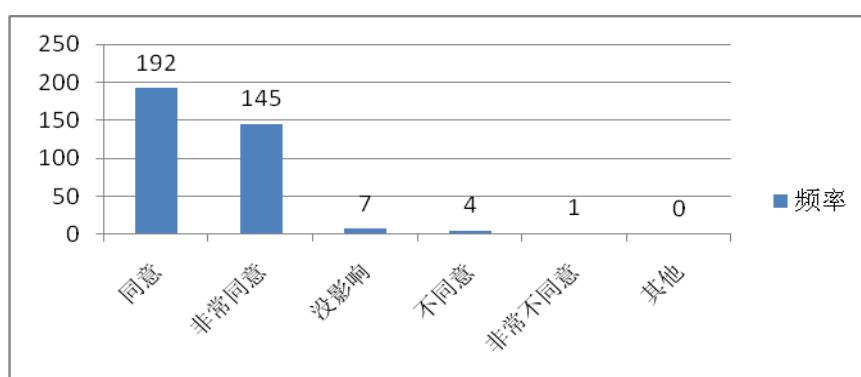


Figure 2-1 Tourism Is Good to Our Local Development

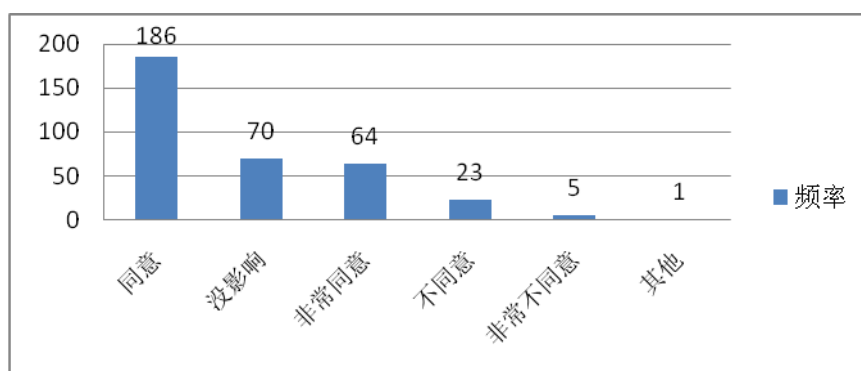


Figure 2-2 I Can Benefit from Tourism

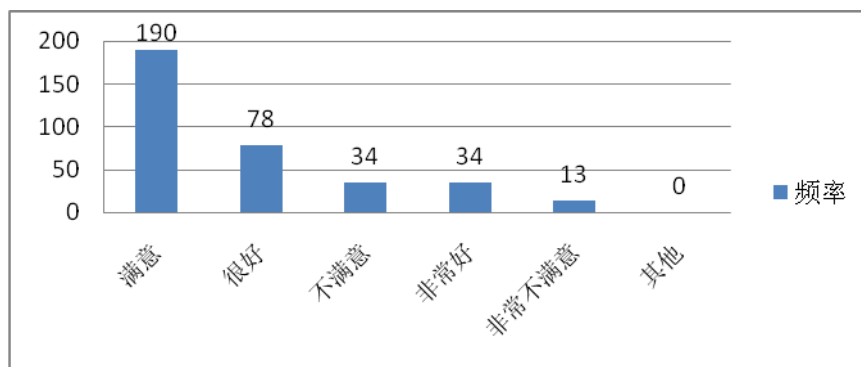


Figure 2-3 How Satisfied Are You with Yangshuo's Tourism Development

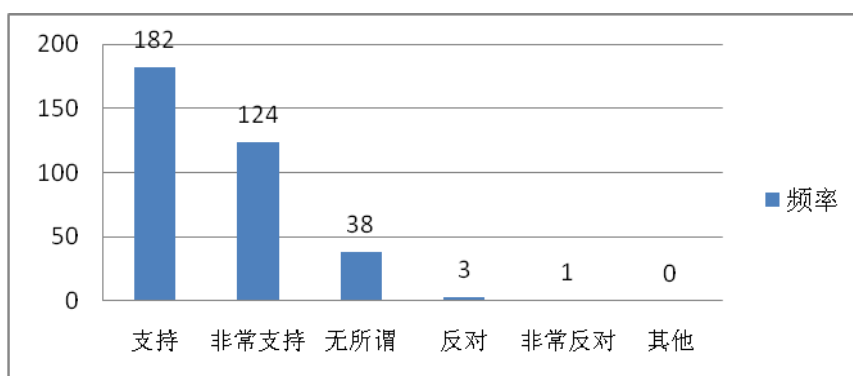


Figure 2-4 Will You Support Yangshuo's Sustainable Tourism Development

It can be seen from Figures 2-1, 2-2, 2-3 and 2-4 that most of Yangshuo residents have positive perceptions of and attitudes to impacts of tourism development, and are willing to continue support Yangshuo's tourism development. This is supported by data: Even if residents themselves cannot benefit from tourism, they still think that tourism is good to local development and support further tourism development.

However, it can be seen that not all residents can benefit from tourism development, and not all of them are satisfied. The task force has also learned from the questionnaire distribution and collection process that there remain to be a number of conflicts between residents and government departments concerned.

Historical comparative analysis: Among the 60 Licun residents surveyed, 89.65% are satisfied with Yangshuo's tourism development (very close to the percentage of non-Licun residents of 86.53%), 89.66% will continue to support tourism development (slightly higher than the percentage of non-Licun residents of 87.93%). 94.83% think tourism is good to local development (slightly lower than the percentage of non-Licun residents of 96.56%), and 81.03% think they will benefit from tourism (higher than the percentage of non-Licun residents of 71.64%).

2.1.2 Evaluation of Economic Impacts of Tourism by Residents

The evaluation indicators of tourist impacts for residents include the three aspects of economic, social and cultural, and environmental impacts. In order to reflect resident attitudes and inclinations to different impact indicators more clearly, “strongly agree” and “agree” in the scale have been combined into “agree”, and “strongly disagree” and “disagree” into “disagree”. The indicators on economic impacts are analyzed as follows:

Table 2-1 Perception of Economic Impacts of Tourism by Non-Licun Residents

	Indicator	Disagree	Neutral	Agree
Economic impacts	Tourism development has brought more job opportunities to us	5.44%	7.74%	86.53%
	Tourism development has created more job opportunities for local youth	6.59%	13.75%	79.66%
	I'm satisfied with my income	37.54%	22.06%	40.11%
	Tourism has attracted more investment and consumption	5.53%	8.88%	84.53%
	Tourism has led to price rise	12.03%	7.74%	79.94%
	Tourism has led to the rise of real estate prices	10.32%	11.17%	77.94%
	Tourism has improved living standard greatly	18.62%	17.77%	63.61%

Source: 2011 Resident Questionnaire

It can be seen from Table 2 that **most of residents recognize positive impacts of tourism on the economy, especially in employment promotion and investment attraction**. 63.61% of residents think tourism has improved their living standard greatly, but most of residents also think that tourism has driven up commodity and real estate prices (by 79.94% and 77.94% respectively).

Historical comparative analysis: 89.66%, 86.20% and 79.31% of Licun residents agree that “tourism development has brought more job opportunities to us”, “tourism development has created more job opportunities for local youth” and “tourism has improved living standard greatly”, all higher than the percentages of non-Licun residents. 78% and 69% of Licun residents agree that “tourism has led to price rise” and “tourism has led to the rise of real estate prices”, both lower than the percentages of non-Licun residents. This shows that positive economic impacts of tourism are more significant for the tourism community of Licun Village.

2.1.3 Resident Evaluation of Social and Cultural Impacts of Tourism

2.1.3.1 Evaluation of impacts on community living environment

Table 2-2 Perception of Social and Cultural Impacts of Tourism by Non-Licun Residents

	Indicator	Disagree	Neutral	Agree
Social cultural impacts (community living environment)	Tourism has increased crime rate	42.41%	30.37%	27.22%
	Tourism has disturbed our former lives	38.40%	36.96%	24.64%
	Tourism has restricted my use of tourism resources	34.67%	33.81%	30.95%
	Tourism has improved infrastructure greatly	6.59%	15.19%	77.65%
	Tourism has improved medical facilities and services greatly	16.33%	32.96%	50.43%
	Tourism has increased quantities of demolished old houses and newly built houses	10.03%	13.75%	76.22%
	Tourism development has led to congested traffic	11.17%	12.90%	75.64%

Source: 2011 Resident Questionnaire

27.22% and 24.64% of residents agree that “tourism has increased crime rate” and “tourism has disturbed our former lives” respectively, while 42.41% and 38.40% of residents strongly disagree. In contrast, “traffic congestion” is a negative aspect perceived strongly by residents, and 75.64% of residents agree that “tourism development has led to congested traffic”.

In terms of the use of tourism resources, similar percentages of residents agree, disagree and are neutral about that “Tourism has restricted my use of tourism resources”, showing that residents do not have strong perceptions of this, and tourism development has not perplexed residents in this respect to date.

Residents have significant perceptions in infrastructure and medical services. Most residents (77.65%) think tourism can improve infrastructure greatly, while 7.16% of residents disagree with this.

In the resident survey, 76.22% of residents think tourism has increased quantities of demolished old houses and newly built houses. When asked the greatest change of Yangshuo in recent years, some residents have mentioned that there have been more guesthouses and relevant facilities. As mentioned above, 77.94% of residents think Tourism has led to the rise of real estate prices, and 10.32% of residents disagree with this, showing that tourism development has inevitably increased residents’ living costs while promoting urban construction.

In sum, the primary negative impact of tourism on the local community living environment as perceived by residents is “traffic congestion”. In addition,

most residents have also seen the improvement in infrastructure and medical services brought by tourism, which is a positive impact of tourism on the local community environment.

Historical comparative analysis: In terms of community living environment, the values of most indicators of Licun residents are very close to those of non-Licun residents. The two indicators with significant differences are as follows: 84.48% of Licun residents agree that “tourism development has led to congested traffic” (75.64% for non-Licun residents); and 62.06% of Licun residents agree that “tourism development has improved medical facilities and services greatly” (50.43% for non-Licun residents), showing that impacts (both positive and negative) of tourism on the community living environment have been enlarged at Licun Village from the perspective of resident perception.

2.1.3.2 Evaluation of impacts on community cultural variation

Table 2-3 Perception of Social and Cultural Impacts of Tourism by Non-Licun Residents

	Indicator	Disagree	Neutral	Agree
Social cultural impacts (community culture)	Tourism has promoted cultural exchanges with the outside	3.44%	9.74%	86.82%
	Tourism has increased cultural activities or traditional festivals	10.03%	25.50%	64.47%
	Tourism has involved more people in the extension of traditional culture	13.18%	27.79%	59.02%
	Tourism has promoted local handicraft development	6.02%	12.32%	81.66%
	Tourism has promoted cultural exchanges with the outside	3.44%	9.74%	86.82%
	Tourism has ruined local morals	53.58%	32.09%	14.33%
	Folk customs and cultural traditions have been ruined and forgotten	44.13%	28.94%	26.08%

Source: 2011 Resident Questionnaire

It can be seen that as for positive impacts of tourism on community social and cultural changes, 86.8% of residents agree that “tourism has promoted cultural exchanges with the outside”, 64.5% agree that “Tourism has increased cultural activities or traditional festivals”, 59% agree that “tourism has involved more people in the extension of traditional culture”, and 81.6% agree that “tourism has promoted local handicraft development”. In contrast, as for negative impacts of tourism on community cultural changes, only 14.3% of residents agree that “tourism has ruined local morals”, and 26.3% of residents think “folk customs and cultural traditions have been ruined and forgotten”.

It has been found through further interviews that as for “social morals”, most

residents think tourist behaviors are civil and will not ruin local morals; some residents have mentioned that tourism development has led to some bad phenomena, such as guest grabbing and cheating. However, they stress that this is something inevitable arising from economic development, and conflicts are acceptable as long as they are within certain limits.

As for “traditional culture”, most residents think folk customs and cultural traditions will not be ruined and forgotten by tourism, and traditional culture will be developed and inherited instead. However, some residents say that as the economy develops, more young people will get employed outside, and things that have been inherited generation by generation (e.g., some old ceremonies and customs) will be forgotten gradually. However, this is not necessarily caused by tourism but a number of factors.

As for “cultural exchanges”, most residents think tourism can promote cultural exchanges with the outside. However, some residents point out that they rarely make cultural exchanges with tourists actively, and tourists rarely stay to talk with them. Communications between residents and tourists are focused on shopping, path finding and other simple aspects.

As for “festivals and events”, most residents think tourism has increased the population of Yangshuo on holidays, and cultural events and traditional festivals significantly. Few residents are insensitive to this because they are not or rarely engaged in tourism or festivals.

As for “cultural promotion”, many residents think Tourism has involved more people in the extension of traditional culture, but many residents also think that people involved in traditional cultural promotion are mostly those engaged in tourism, and this is unrelated to them.

As for “handicrafts”, most residents think tourism can promote local handicraft development, because they see that there are many handicraft stores or peddlers on streets of Yangshuo.

In sum, although residents have many different views about impacts of tourism on social and cultural changes, residents have given more positive comments on impacts of tourism on Yangshuo’s social and cultural changes than negative ones.

Historical comparative analysis: As for community cultural changes, the values of most indicators of Licun residents are very close to those of non-Licun residents, but 68.96% of Licun residents agree that “tourism has promoted local

handicraft development” (much lower than the percentage of non-Licun residents of 81.66%). It can be seen residents think that “local handicraft development” is equal to “more and more handicraft peddlers or stalls”. However, in fact, handicrafts are mostly supplied from Guilin other than produced locally. Therefore, though many people agree with this statement, differences between reality and resident perceptions are to be further verified.

2.1.4 Resident Evaluation of Environmental Impacts of Tourism

Table 2-4 Perception of Environmental Impacts of Tourism by Non-Licun Residents

	Indicator	Disagree	Neutral	Agree
Environmental Impacts	Tourism has aggregated air pollution	23.50%	21.77%	54.73%
	Tourism has aggregated water pollution	20.63%	18.63%	60.45%
	Tourism has aggregated noise pollution	19.83%	12.64%	67.24%
	Tourism has increased solid waste	16.33%	16.33%	66.76%
	Guesthouses and other tourism facilities have ruined landscape aesthetics	31.52%	32.66%	35.53%

Source: 2011 Resident Questionnaire

The analysis shows that residents have complaints about negative impacts of tourism on the natural environment to varying degrees. As for air pollution, water pollution, noise pollution and solid waste pollution, 54.73%, 60.45%, 67.24% and 66.76% of residents agree respectively, while 23.50%, 20.63%, 19.83% and 16.33% of residents disagree. The similarity of these groups of data shows that tourism development has aggravated Yangshuo’s air, water and noise pollution, and increased solid waste.

As for the destruction of landscape aesthetics by tourism facilities, the percentages of residents “disagreeing with”, “neutral about” and “agreeing with” this are largely equal, showing that this issue is not prominent at present. It can be seen from interviews that many local residents have not realized the importance of the balance between natural and cultural landscapes, and they are concerned about economic benefits of tourism. Some residents have also realized the importance of this balance, but the benefits of tourism have increased their tolerance to landscape damages arising from tourism.

In sum, residents perceive negative impacts of tourism environment apparently, but it is still necessary to further educate residents in terms of landscape and environmental protection.

Historical comparative analysis: Licun residents perceive negative impacts on

the natural environment more strongly than non-Licun residents. As for air pollution, water pollution, noise pollution and solid waste pollution, 74.14%, 79.31%, 75.86% and 74.14% of Licun residents agree respectively, and 46.55% of non-Licun residents think that tourism facilities have no impact on landscape aesthetics, showing that non-Licun residents are insensitive to this indicator.

2.2 Services and Infrastructure Construction

In June 2010, Yangshuo County was identified as one of the first tourism standardization pilot counties of China. Tourism development has driven the construction of public service facilities in Yangshuo, especially in the following two aspects:

Tourism environment facilities of old urban area:

- A. The water supply system reconstruction/expansion works with a total main sewer length of 7,100 meters in 4 townships, including Baisha Town have been completed;
- B. The county government has invested over RMB80 million in the landscaping, beatification and lighting of key buildings in the county town, the Foreign Affairs Wharf, Xiufeng Bridge, Liyu Bridge, county town gas stations, Longjishan tunnel area, Central Square, Yangshuo Bridge, Xiangshuiqiao regulating reservoir and Dongling area, and the construction of stepping stones, waterfalls and fountains.
- C. The Lijiang River “four modernizations” project, ecological revetment project, civil residence appearance improvement project, sewage control and immunity project, riverside poverty relief project and project resident enrichment by tourism project have been further implemented to conserve tourism resources and protect the environment.

Public tourism services and infrastructure:

- D. The tourism guidance system project has been started. According to the 6 basic standards for becoming one of the first tourism standardization pilot counties of China, the construction plan for the tourism guidance system of Yangshuo County has taken shape, and this system is composed of a vehicle guidance system, a pedestrian guidance system, street signs and toilet signs. In this project, the Tourism Map of Yangshuo and image signs will be set up at crossings of West Street, and other key tourism points.

- E. Tourism information service facilities have been improved. RMB500,000 has been invested to build the Yingbin Gallery consulting point, and tourist guide service points, and RMB800,000 yuan has been invested to build urban tourism distribution centers at three levels. The first phase has been completed.
- F. Star tourist toilets have been reconstructed or expanded. Currently, there are 19 tourist toilets in the county town. The first phase of the reconstruction and expansion project has been started, and the 4-star tourist toilet at the coach station has been completed.
- G. Rural road construction has been further promoted. Over RMB35 million has been invested to construct 9 village-level cement-pavement roads with a total length of 55 kilometers, including the road from Wulong Village, Putao Xiang to Fuma Village, Baisha Town and that from Fuli to Baimian, and RMB160 million has been invested to complete the construction of Bayang Road, Putao Road, Feijiping-Nanbianshan Road and roads in the Ten-mile Gallery scenic spot with a total length of 66 kilometers, improving the local tourism environment.

2.3 Community Engagement and Awareness

The percentage of community residents doing tourism-related jobs reflects the degree of community participation of residents, whether residents are willing to give advice on scenic zone development actively or not and reflect the depth of community participation of residents, and whether tourism decisions incorporate resident opinions or not and whether residents can obtain information on relevant government policies or not reflect the awareness of community participation of residents.

2.3.1 Community Engagement

2.3.1.1 Employment of community residents in tourism-related jobs

Valid samples (non-Licun residents): 349 (missing value: 48)

Tourism employees (based on the question “your job” in the questionnaire): 161 (53.5% of all respondents, in which 81% are full-time); non-tourism employees: 140

Trend analysis: The above indicator shows that residents in Yangshuo County are highly involved in tourism, and tourism plays an important role in Yangshuo’s employment structure. (Note: Since the sampling points are mostly places where tourism is more developed, this percentage may be slightly higher than the actual

value.)

It can be seen from the survey on resident jobs that the tourism-related jobs of residents mainly include family guesthouse operation, restaurant operation, souvenir store operation, peddler, leasing bicycle, field guide, tour guide, attendant, receptionist, driver, ticket seller and bamboo rafter, especially tour guide, attendant and souvenir seller. The above jobs are mostly characterized by low level and low income, and few residents do senior executive jobs.

Historical comparative analysis:

Valid samples (Licun residents): 58 (missing value: 2)

Tourism employees: 42 (75.0% of all respondents, in which 73.8% are full-time); non-tourism employees: 14

It has been found that tourism-related jobs of Licun residents mainly include souvenir store operation, peddler operation, agritainment site operation, restaurant employee, photographer and driver, especially souvenir store operation, peddler operation and restaurant employee.

2.3.1.2 Perception of tourism engagement by community residents

Table 2-5 Perception of Tourism Engagement by Non-Licun Residents

Indicator	Disagree	Neutral	Agree
I'm willing to provide advice on the development of the scenic zone	9.17%	17.77%	70.77%
Some decisions of the scenic zone incorporate our advice	33.81%	21.78%	44.12%
I've received information on government policies	40.97%	22.83%	35.81%
I'm satisfied with government enforcement	40.40%	22.35%	36.96%

Source: 2011 Resident Questionnaire

In terms of perception of the relationship between the scenic zone and the government by community residents, 70.8% of residents are willing to make suggestions on the development of the scenic zone, and the other 3 indicators (participation in decision-making, availability of information and satisfaction with government enforcement) show low levels of agreement, with almost the same percentages of residents agreeing, neutral and disagreeing, showing that the resident perception of tourism participation is unclear.

Historical comparative analysis: All indicators are very close to those of non-Licun residents.

2.3.2 Awareness of Community Participation

2.3.2.1 Perception of the concept of sustainable tourism development by community residents

29.2% of residents have heard of the concept of “sustainable tourism development”, in which 9.8% have just heard of it but does not understand it. It can be seen that the local popularity of this concept is very low.

In resident answers, many residents have mentioned environmental protection, and the balance between development and protection. Some residents have also mentioned that the quality of tourism employees and tourism planning should be improved, government management strengthened, innovative tourism options launched, and the number of revisitors increased, and have a certain understanding of the concept of “sustainable tourism development”.

Historical comparative analysis: 36.2% of Licun residents have heard of “sustainable tourism development”, and 14.3% have heard but do not understand it. About this concept, some Licun residents have mentioned environmental protection, the balance between development and protection, energy conservation and emission reduction, and others have mentioned cultural implications, such as preserving folk customs and promoting cultural exchanges.

2.3.2.2 Tourism development issues of interest to community residents

63.4% of residents (including non-Licun and Licun residents) have pointed out changes in tourism development or their concerns about tourism development in Yangshuo in recent years. Quite a number of residents have mentioned such problems are increasing tourists, more serious environmental pollution, traffic congestion and more rapid rise of commodity prices than wages (many Licun residents have emphasized that agritainment restaurants have discharged sewage to farmland, so that paddy rice can hardly grow). Some residents have mentioned such negative impacts as too strong commercial atmosphere, bad quality of tourism products and nonconformity in tourism development, while some residents have also mentioned such positive factors as improved infrastructure and night lighting. The other 36.6% of residents say that there is no change or they have no special feeling.

44.5% of residents have given advice on Yangshuo’s tourism development, especially improving overall resident quality and service attitude, strengthening control over illegal guides, conserving the local environment and cultural characteristics, broadening roads, strengthening road dredging, increasing ashbins and public toilets, and improving the sanitation of public spaces. Some residents have also

made such suggestions as improving sewage treatment, regulating tourism order, helping local residents increase income, “providing timely and effective market information to direct residents to improve business operations”, and “keeping certain places silent”.

It can be seen that Yangshuo’s tourism development has been recognized by most residents and residents. In addition, many residents have felt negative impacts of tourism development on the community living environment, cultural changes, the natural environment, etc., and given advice actively. Many residents have been involved in tourism-related activities, but most of them do low-income, low-level jobs, and rarely participate in tourism decisions of the scenic zone and the government. The community engagement and awareness of residents have to be further improved.

3. Tourist Satisfaction

The tourist satisfaction evaluation in Yangshuo was conducted in the manner of questionnaire survey. During August 6-15, 2011, the task force conducted a random survey on domestic and foreign tourists in the main scenic spots of Yangshuo County, including West Street and its surrounding area, Yangshuo Park, the Big Banyan scenic spot, the Earthly Paradise scenic spot, the Impression Liu Sanjie theater and Xingping. 760 copies of the domestic tourist questionnaire (including 748 valid copies) and 177 copies of the foreign tourist questionnaire (including 172 valid copies) were completed. The questionnaires investigate tourist satisfaction in 4 dimensions – tourism resources, tourism services, tourism environment and other.

24 secondary indicators are provided for the 4 topics, and tourists evaluate these indicators based on their tourism experiences on a five-point scale of strongly agree, agree, neutral, disagree and strongly disagree. In the analysis below, we will use the numbers 5, 4, 3, 2 and 1 to denote strongly agree, agree, neutral, disagree and strongly disagree respectively for the convenience of calculation and comparison.

3.1 Tourist Evaluation of Tourism Resources

6 indicators are provided in the evaluation of tourism resources, which are the quality of natural resources of the scenic zone, the environmental cleanliness of the scenic zone, traffic congestion in the scenic zone, whether cultural landscapes are of local characteristics, the water quality of the Lijiang River and The water quality of the Yulong River.

Table 3-1 Tourist Evaluation of Tourism Resources

		Domestic tourists		Foreign tourists	
		Average	Variance	Average	Variance
Evaluation of tourism	The scenic zone is beautiful	4.41	0.40	4.64	0.25
	The environment of the scenic zone is clean	3.69	0.76	3.54	0.89
	Traffic in the scenic zone is congested	3.64	0.86	3.98	0.92
	Cultural landscapes are of local characteristics	3.86	0.72	3.84	0.71
	The water quality of the Lijiang River is good	3.82	0.91	3.24	0.77
	The water quality of the Yulong River is good	3.80	0.81	3.35	0.66

Source: 2011 Tourist Questionnaire

It can be seen from the above data that the overall evaluation of Yangshuo's tourism resources by domestic and foreign tourists is positive, and most of them hold positive views.

In the group of indicators on Yangshuo tourism resources, both domestic and foreign tourists give the highest score for the aesthetic degree of Yangshuo's landscapes, which is also the highest-score one among the 24 indicators. 93.3% of domestic tourists agree or strongly agree the Yangshuo scenic zone is beautiful, and 98.8% of foreign tourists agree or strongly agree the Yangshuo scenic zone is beautiful. This shows that the renowned natural landscapes of Yangshuo have been indeed generally recognized by tourists, and that Yangshuo's rich natural tourism resources are an important factor that attracts tourists.

In contrast, Yangshuo's cultural landscapes are not as well recognized as natural landscapes. 70.4% of domestic tourists agree or strongly agree Yangshuo's cultural landscapes are of local characteristics, and 73.6% of foreign tourists agree or strongly agree Yangshuo's cultural landscapes are of local characteristics. It is learned from tourist interviews that both domestic and foreign tourists think that: First, there is no prominent cultural resource to be developed in Yangshuo; second, all tourist destinations nationwide tend to be identical and losing their own characteristics. Therefore, Yangshuo should find its own unique points and distinguish it from other tourist destinations.

Tourists do not highly recognize the cleanliness of the Yangshuo scenic zone, showing that the environment should be made cleaner. Environmental cleanliness is an important indicator of the sophistication of a scenic zone. The questionnaire survey shows that 62% of domestic tourists agree or strongly agree that the environment of Yangshuo is clean, and 54% of foreign tourists agree or strongly agree with this only. Good environmental hygiene relies on higher quality of tourists, and greater attention of Yangshuo to environmental hygiene.

In addition, with the development of tourism, Yangshuo has become increasingly famous, and attracted more and more tourists. In particular, the successful launch of Impression Liu Sanjie in 2004 has increased the number of tourists in Yangshuo greatly. While the infrastructure construction of the Yangshuo scenic zone is relatively slow, the increase of tourists will certainly make the scenic zone crowded. 54% of domestic tourists and 70% of foreign tourists are dissatisfied with the crowdedness of the scenic zone. In particular, the perception of crowdedness by foreign tourists reflects that the traffic congestion of the Yangshuo scenic zone has already affected tourist experiences.

Domestic tourists think that the water quality of the Lijiang River differs slightly from that of the Yulong River and is relatively good, while foreign tourists think that the water quality of the Yulong River is much better than that of the Lijiang River, and that water quality is the most pessimistic one among the tourism resources indicators. The evaluation of these two indicators affects the overall evaluation of natural landscapes. 8% of domestic tourists strongly disagree or disagree that the water quality of the Lijiang River is good, 5% of domestic tourists strongly disagree or disagree that the water quality of the Yulong River is good, 16% of foreign tourists strongly disagree or disagree that the water quality of the Lijiang River is good, and 3% of foreign tourists strongly disagree or disagree that the water quality of the Yulong River is good. Although the two rivers are not seriously polluted yet, the deterioration of water quality is already an undisputable trend, and the primitive environment has also been damaged due to tourism development.

3.2 Tourist Evaluation of Tourism Services

4 indicators are provided in the evaluation of tourism services – catering and accommodation hygiene, the service quality of catering and accommodation employees, the service quality of scenic spot interpreters, and the service quality of employees of tourism commodity stores.

Table 3-2 Tourist Evaluation of Tourism Services

		Domestic tourists		Foreign tourists	
		Average	Variance	Average	Variance
Evaluation of tourism services	The quality of catering and accommodation hygiene is high	3.34	0.83	3.62	0.73
	The service quality of catering and accommodation is high	3.28	0.85	3.93	0.64
	The service quality of interpreters is high	3.50	0.74	3.49	0.74
	The service quality of employees of tourism commodity stores is high	3.31	0.80	3.20	0.84

Source: 2011 Tourist Questionnaire

It can be seen that comments of domestic and foreign tourists on Yangshuo's tourism services are positive in general, and most of them hold positive views. The overall satisfaction of domestic tourists is lower than that of foreign tourists. It has been found in interviews that attendants tend to favor foreign tourists when rendering services. The evaluation differences between domestic and foreign tourists lie mainly in catering and accommodation hygiene, and the service quality of catering and accommodation employees, where the evaluation of domestic tourists is much lower

than that of foreign tourists.

It can be seen from Figures 3-1 and 3-2 that 63% of domestic tourists and 70% of foreign tourists choose self-funded travel. They rarely employ interpreters, and obtain tourism information from the Internet and travel books mainly, so most of them choose neutral to show their standpoint. However, it can also be seen that some tourists who have received interpretation services still give positive comments.

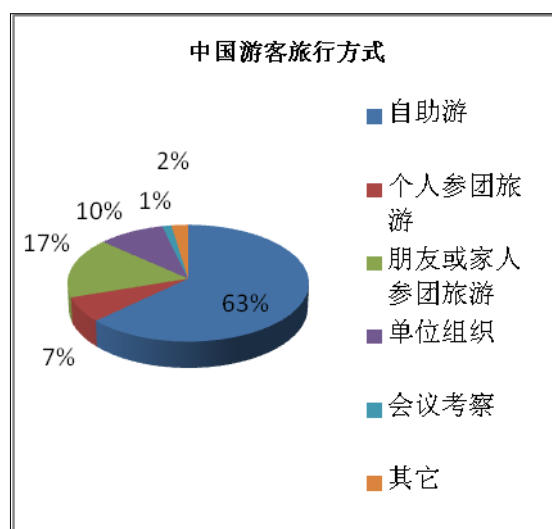


Figure 3-1 Traveling Modes of Domestic Tourists

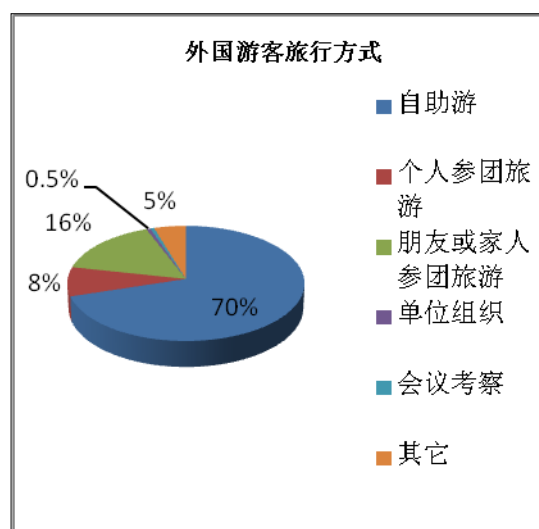


Figure 3-2 Traveling Modes of Foreign Tourists

The evaluation of the service quality of employees of tourism commodity stores by both domestic and foreign tourists is low, especially foreign tourists. In interviews, tourists mentioned that forced shopping is serious in Yangshuo. Many foreign tourists have mentioned that prices offered by stores are often higher than those offered to domestic tourists, and often have to pay more, so many foreign tourists complain that the pricing mechanism is nontransparent, affecting their tourism experiences seriously.

3.3 Tourist Evaluation of Tourism Environment

10 indicators are provided in the evaluation of the tourism environment, which are public security, urban traffic, air cleanliness, noise, resident friendliness, reasonableness of catering and accommodation prices, reasonableness of traffic prices, reasonableness of entrance ticket prices of scenic spots, price reasonableness of tourism commodities, and price reasonableness and richness of entertainment activities.

Table 3-2 Tourist Evaluation of Tourism Environment

		Domestic tourists		Foreign tourists	
		Average	Variance	Average	Variance
Tourism environment	Public security is good	3.71	0.71	3.94	0.78
	The urban traffic of Yangshuo County is good	3.36	0.94	2.95	1.06
	The air of Yangshuo clean	4.01	0.72	3.68	0.73
	Noise is low in Yangshuo	3.36	1.06	2.80	1.14
	Residents are friendly	3.71	0.84	4.04	0.54
	Entrance tick prices of scenic spots are reasonable	3.05	0.94	3.20	0.88
	Catering and accommodation prices are reasonable	3.32	0.86	3.75	0.90
	Traffic fares are reasonable	3.49	0.78	3.73	0.90
	Prices of tourism commodities are reasonable	3.15	0.86	3.24	1.02
	Entertainment activities are reasonably priced and rich	3.35	0.87	3.40	0.81

Source: 2011 Tourist Questionnaire

It can be seen that domestic the aspect of Yangshuo's tourism environment with which tourists are most satisfied is air, with an average value of 4.01, and this is the only indicator on the tourism environment with a value of over 4. In contrast, foreign tourists give an average value of 3.68 only.

The aspect of Yangshuo's tourism environment with which foreign tourists are most satisfied is the friendliness of residents, with an average value of 4.04, and this is the only indicator on the tourism environment with a value of over 4. In contrast, domestic tourists give an average value of 3.71 only, which is somewhat related to service differences of catering and accommodation employees for domestic and foreign tourists, because many employees are local residents, and have frequent contact with domestic and foreign tourists, so tourists inevitably regard these employees as representatives of Yangshuo residents. Based on resident interviews, it can be found that most residents welcome tourists, especially tourism employees, who think that tourists have increased their living standard, so they are friendlier to tourists.

The aspects of Yangshuo's tourism environment with which foreign tourists are most dissatisfied are noise and traffic in the Yangshuo county town, with average values of 2.80 and 2.95 respectively. The evaluation of domestic tourists is also low (3.36), but slightly higher than that of foreign tourists, which may be related to cultural background differences. The sound that domestic tourists feel bustling may be noise for foreign tourists. However, it must be noted that domestic and foreign tourists give low scores for ambient noise, showing that the high noise of the Yangshuo scenic zone and blocks has affected tourism experiences. While the number of tourists of Yangshuo is growing rapidly while the infrastructure is constructed slowly, traffic

conditions have dissatisfied domestic and foreign tourists, who think that the Yangshuo County Government should improve the traffic of the county town and the accessibility to the scenic zone from the outside, strengthen road safety management, broaden roads, and provide sidewalks and bicycle ways to ensure the safety of pedestrians and bicycles.

Foreign tourists think highly of Yangshuo's public security. It can be seen tourists are satisfied with Yangshuo's public security and the overall evaluation of this indicator by domestic and foreign tourists ranks second among the tourism environment indicators. Similarly, most residents think local public security is better and better.

The overall evaluation of Yangshuo's tourism prices by domestic and foreign tourists is relatively low. Specifically, both domestic and foreign tourists think they are most dissatisfied with entrance ticket prices, with average values of 3.05 and 3.20 respectively. In communications with domestic and foreign tourists, they have expressed dissatisfaction with entrance ticket prices. In addition, some tourists say they have got an experience of being cheated.

Second, domestic and foreign tourists regard prices of tourism commodities as the second dissatisfactory factor. The average values of domestic and foreign tourists are 3.15 and 3.24 respectively. Prices of many tourism commodities in Yangshuo are much higher than costs, especially in the scenic zone and West Street. Although foreign tourists are less sensitive to prices, their price evaluation is also low. In interviews, many foreign tourists have raised objections against prices of tourism commodities in Yangshuo: They think that prices of tourism commodities are different for foreign tourists and domestic tourists. In addition, some domestic tourists have also mentioned that the same tourism commodity may vary greatly in price at different places of Yangshuo.

Third, domestic and foreign tourists vary greatly in the evaluation of catering and accommodation prices, and their average values are 3.32 and 3.75 respectively. Foreign tourists are quite satisfied with catering and accommodation prices, but domestic tourists are not.

Traffic prices are the highest-value indicator about Yangshuo's tourism prices among domestic tourists, despite a low average value of 3.49. The average value given by foreign tourists is 3.73, second only to that for catering and accommodation prices. Domestic and foreign tourists make similar evaluations on entertainment prices, with average values of 3.35 and 3.40 respectively.

It can be seen from the above data that domestic tourists' evaluation on

Yangshuo's tourism prices is much lower than that of foreign tourists, and differences in income and price levels between China and foreign countries may be an important factor contributing to this.

3.4 Tourist Evaluation of Other Aspects of Tourism

3 indicators are provided in the evaluation of other aspects of Yangshuo tourism, which are whether local commodities are of local characteristics, whether the local commercial atmosphere is too strong and whether they are willing to accept services of local roadside tour guides.

Table 3-3 Tourist Evaluation of Other Aspects of Tourism

		Domestic tourists		Foreign tourists	
		Average	Variance	Average	Variance
Other	Local commodities are of local characteristics	3.58	0.97	3.44	0.77
	The local commercial atmosphere is too strong	3.88	0.81	3.98	0.69
	I'm willing to accept services of local roadside tour guides	3.17	1.23	2.40	1.11

Source: 2011 Tourist Questionnaire

In general, comments of domestic and foreign tourists about the above aspects are similar, and the only exception is that 27% of domestic tourists are unwilling to accept services of local roadside tour guides, and as many as 56% of foreign tourists are unwilling to accept such services. It has been further learned that domestic tourists prefer such services because they are cheap and convenient, while many foreign tourists say that roadside tour guides have affected their private spaces by importuning or following them, thereby affecting their tourism experiences seriously.

Both domestic and foreign tourists have shown strong repulsive emotions about Yangshuo's commercial atmosphere, and given low comments in this respect. In interviews, many people have mentioned that they prefer to go to Xingping Old Street that is more remote.

Both domestic and foreign tourists give low scores for whether Yangshuo's tourism commodities are of local characteristics. In tourist interviews, some tourists say that tourism handicrafts and souvenirs on West Street are indistinctive yet expensive, and differ slightly from souvenirs available in many other scenic zones of China.

3.5 Overall Tourist Evaluation of Tourism

Tourist satisfaction is the outcome of comparison between tourist expectations and real experiences, and lays stress on the mental comparison process and outcome of tourists. If the real experience is higher than the prior expectation, a tourist is satisfied, otherwise consequences such as grievance, departure and negative reputation may result.

57% of domestic tourists think their perceived tourism experiences meet or highly meet their expectations, while only 31% of foreign tourists think so. The overall evaluation of tourism experience reflects the level of acceptance of the tourist destination by tourists. Since more than half domestic tourists think their expectations are met or exceeded, while only less than one third of foreign tourists think so, the satisfaction of foreign tourists is lower than that of domestic tourists: The score given by domestic tourists is 3.85, while that given by foreign tourists is 3.56.

On the other hand, tourists still vary greatly in the overall evaluation of Yangshuo, especially foreign tourists.

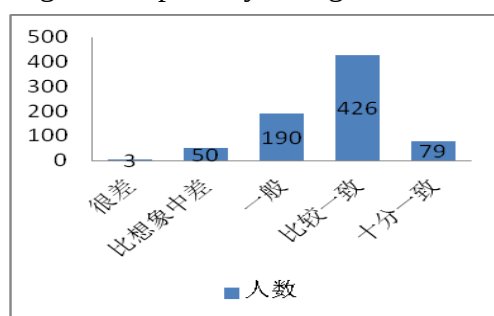


Figure 3-3 Differences between Perceived and Expected Experiences of Domestic Tourists

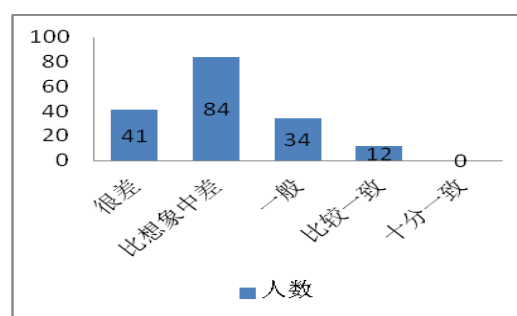


Figure 3-4 Differences between Perceived and Expected Experiences of Foreign Tourists

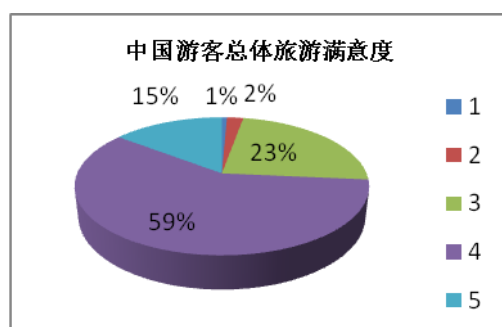


Figure 3-5 Overall Tourism Satisfaction of Domestic Tourists

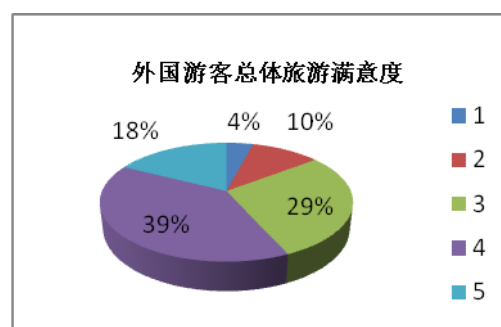


Figure 3-6 Overall Tourism Satisfaction of Foreign Tourists

3.6 Willingness of Tourists to Revisit and Recommend Yangshuo

As mentioned above, a high level of tourist satisfaction will have positive effects on the willingness of tourists to revisit and recommend; on the contrary, if tourists are dissatisfied with the tourist destination, consequences such as grievance, departure and negative reputation may result.

Data indicates that 60% of domestic tourists and 33% of foreign tourists are willing to revisit Yangshuo, and 5% of domestic tourists and 19% of foreign tourists state that they will not revisit. However, actually 32% of domestic tourists and 19% of foreign tourists are re-visitors.

It is found through interviews that many tourists think Yangshuo is not distinctive, where tourism commodities here are similar to those available in other domestic tourist destinations, such as Lijiang and Zhangjiajie, while the natural landscapes that were formerly distinctive have become indistinctive under the cover of artificial buildings. Second, there are deficiencies in service quality, environmental protection, traffic, tourism prices and roadside tour guide management, and the current tourism management does not match the rapidly growing number of tourists, making tourists dissatisfied in many aspects. Finally, many tourists say that Yangshuo lay too much stress on economic benefits, while neglect the conservation of natural and cultural resources, making them feel an extremely strong commercial atmosphere, which is adverse to the long-term development of tourist destination. The above problems should be considered carefully in Yangshuo's future development.

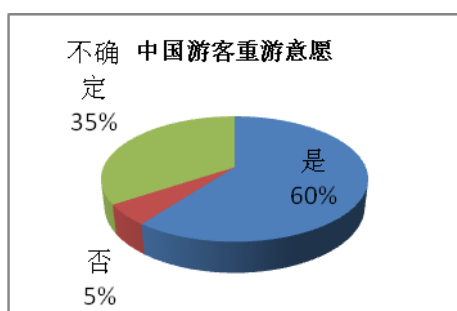


Figure 3-7 Willingness to Revisit of Domestic Tourists

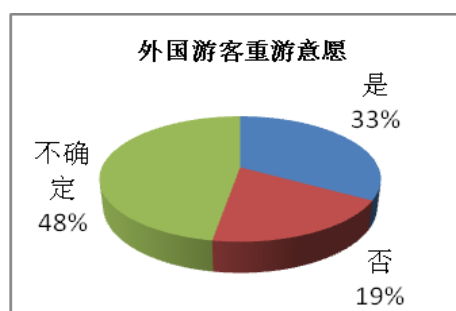


Figure 3-8 Willingness to Revisit of Foreign Tourists

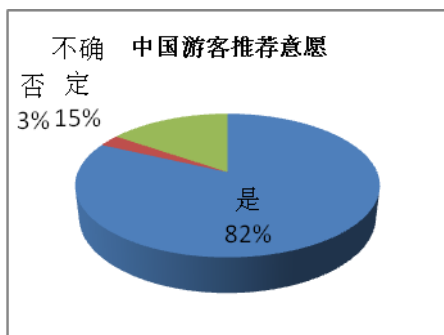


Figure 3-9 Willingness to Recommend of Domestic Tourists

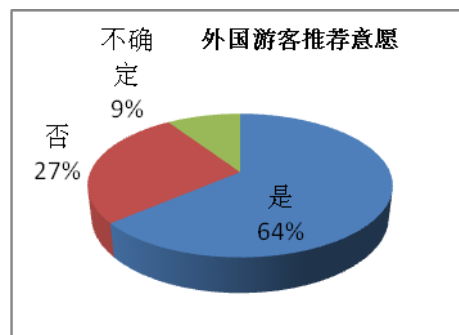


Figure 3-10 Willingness to Recommend of Foreign Tourists

4. Economic Impacts of Tourism

4.1 Current Tourism Development

As of 2011, Yangshuo County had one 5A-class scenic spot, two 4A-class scenic spots and four 3A-class scenic spots, over 500 hotels and guesthouses, including four 5-star hotels under construction, four hotels constructed and put into operation as per the 5-star standard and four 4-star hotels, over 14,000 registered beds and over 10,000 temporary beds, over travel agencies and service outlets, over 160 bars and cafes, 126 pleasure boats, over 500 sightseeing vehicles, over 20,000 bicycles for lease, over 600 local tour guides, and over 80,000 direct tourism employees. In 2010, Yangshuo received 8.113 million men-times of tourists and 1.238 million men-times of inbound tourists, its tourism income was RMB3.15 billion and 2.792 million men-times of overnight tourist, up 13%, 22.6%, 30.5% and 31% year on year respectively. In the first half of 2011, Yangshuo County received 3.849 million men-times of tourists in total, a year-on-year growth of 28.9%; there were 1.29 million men-times of overnight tourists, a year-on-year growth of 27.3%; tourism income was RMB1.59 billion, a year-on-year growth of 33.6%; and there were 531,000 men-times of inbound tourists, a year-on-year growth of 18.9%. It is expected that the county will receive over 8.5 million men-times of tourists and its gross tourism income will be RMB3.5 billion in the whole year of 2011. Tourism has become a pillar and driving industry of the county economy. See Table 4-1.

According to the 12th Five-year Plan Outline of Yangshuo, Yangshuo is planned to be a “world-class tourist destination, tourist distribution center, and a leisure and tourism paradise”, and a “medium tourism development city”. It is predicted that by 2015, the number of tourists received per annum will break through 13 million men-times, with an annual average growth of 10%, and gross tourism income will reach RMB7.8 billion, with an annual average growth of 20%.

Table 4-1 Tourist Statistics of Yangshuo (2009-June 2011) Unit: 0,000 men-times, RMB00 million

	2009	2010	Jan.-Jun. 2011
Total number of tourists	720	811.3	384.9
Where: foreign tourists	101	123.8	53.1
Overnight tourists	212.3	279.2	129

Average stay (day)	1.36	1.38	1.38
Gross tourism income	24.2	31.5	15.9
Per capita consumption of tourists (RMB)	336.1	388.3	413.1

Source: Yangshuo County tourism bureau

4.2 Contribution of Tourism to Yangshuo's GDP and Public Finance

4.2.1 GDP Contribution of Tourism

According to the Tourism Satellite Account, this indicator will be measured by comparing the added value of tourism income with GDP. However, for Yangshuo County, the added value of tourism income is hardly available, so the percentage of tourism income to GDP is used here instead.

Table 4-2 Growth of Yangshuo's GDP and Gross Tourism Income from 2000 to H1 2011

Year	GDP (based on current prices) (RMB00 million)		tourism (based on current prices) (RMB00 million)		Percentage of tourism to GDP
	Amount	Growth rate	Amount	Growth rate	
2000	10.05	5.32%	1.85		18.41%
2001	10.54	8.42%	2.14	15.68%	20.30%
2002	11.36	9.32%	2.41	12.62%	21.21%
2003	11.75	9.18%	2.44	1.24%	20.77%
2004	14.31	14.57%	4.06	66.39%	28.37%
2005	17.89	7.74%	5.51	36.21%	30.80%
2006	22.91	23.32%	9.64	74.85%	42.08%
2007	33.06	10.30%	12.77	32.47%	38.63%
2008	39.67	10.30%	17.9	40.17%	45.12%
2009	43.23	10.96%	24.2	35.20%	55.98%
2010	56.12	24.10%	31.5	30.17%	56.13%
H1 2011	18.58	15.50%	15.9		85.58%

Source: Yangshuo County Statistics Bureau, Yangshuo County Tourism Bureau

It can be seen from Table 4-2 that tourism is a “rising sun industry” of Yangshuo County, and the contribution of gross tourism income to Yangshuo's GDP has been growing year by year. From 2000 to 2010, the percentage of gross tourism income to GDP rose from 18.41% to 56.13%. During this period, the SARS outbreak in 2003 resulted in a growth of 1.24% only, but with the mitigation of the epidemic situation in 2004, Yangshuo tourism revived violently and its year-on-year growth was as high

as 66.39%. During this decade, gross tourism income grew much faster than GDP except in 2003. It can be seen that tourism plays a crucial role in Yangshuo's economic development.

4.2.2 Contribution of Tourism to Public Finance

The contribution of industries affected directly or indirectly by tourism to public finance is the most important aspect of the contribution of tourism to public finance. The gross fiscal revenue brought by tourist consumption should be the sum of the fiscal revenues of industries affected directly and indirectly by tourism.

In the tax statistics of Table 4-3, the item "tourism" refers mainly to the tax revenue of tourism enterprises as identified from their business licenses. In July 2011, the tax revenue of "tourism" was about RMB1 million, accounting for 7.59% of that month's gross tax revenue. It has been found through comparison that the year-on-year growth rate of this item was higher than those of the other items and that of this item in the same period of the previous year. In addition, the sum of "tourism" plus the 4 items indispensable to tourism of "catering", "guesthouses", "lease" and "entertainment" accounted for 19% of that month's gross tax revenue. The contribution of tourism income to tax revenue can reflect the contribution of tourism to Yangshuo's public finance indirectly.

Table 4-3 Contribution of Yangshuo's Tourism Income to Tax Revenue in July 2011 Unit: RMB

Item	Monthly total	Year to date	Same period last year	Amount of increase / decrease	Percentage of Increase / decrease
Gross tax revenue	14,176,723.52	155,562,662.35	163,658,444.68	-8,095,782.33	-4.95%
.....					
Catering	858,442.27	5,249,078.24	4,117,006.04	1,132,072.20	27.50%
Guesthouses	539,160.82	3,313,611.28	2,438,043.15	875,568.13	35.91%
Lease	130,460.66	1,612,881.71	1,147,807.64	465,074.07	40.52%
Tourism	1,075,558.23	4,588,253.34	3,025,442.10	1,562,811.24	51.66%
Entertainment	53,480.00	362,783.00	305,426.20	57,356.80	18.78%
.....					

Source: Yangshuo County Local Taxation Bureau

4.3 Impact of Tourism on Industry Mix

4.3.1 Overall Development Trend of Tertiary Industries

Tertiary industries are industries other than primary and secondary industries, especially service industries. The development of tertiary industries is an outcome and symbol of deepening of economic activities, in which tourism is one of the most active tertiary industries.

Yangshuo's tourism development has driven the development of tertiary industries. It can be seen from Figure 15 that the percentage of tertiary industries to GDP rose from 42.04% in 2006 to 45.25% in the first half of 2011, and tertiary industries grew faster than GDP, both growing in a largely consistent trend. Tourism is a key industry in Yangshuo's economic restructuring.

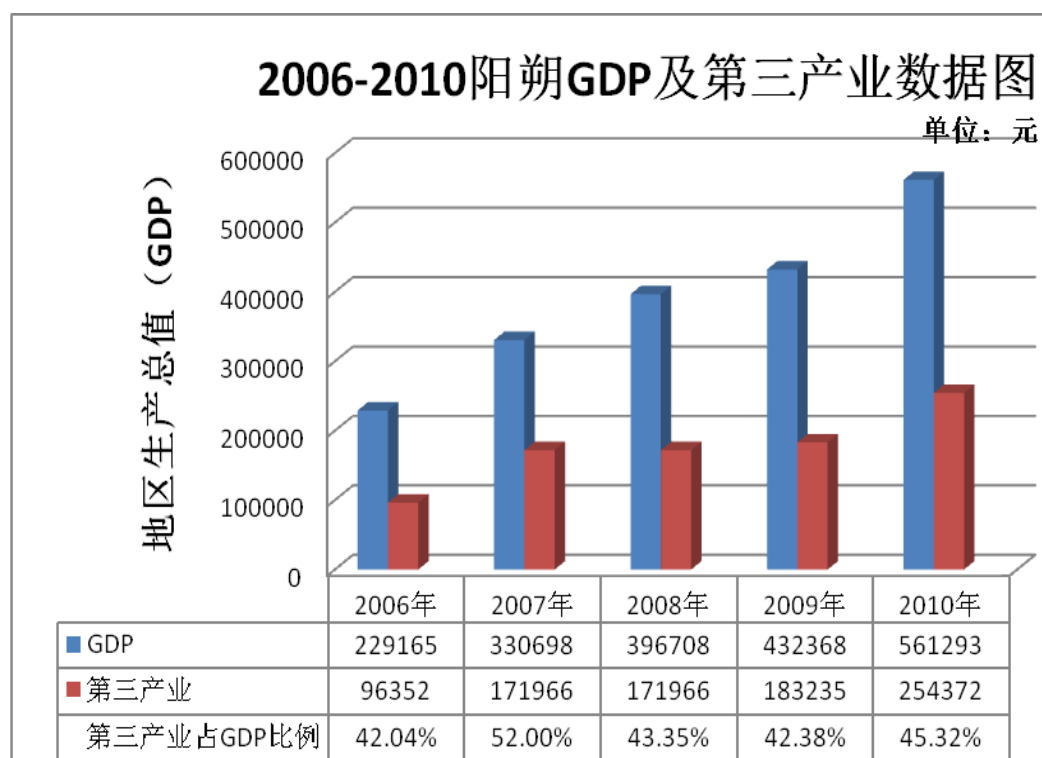


Figure 4-1 Yangshuo's GDP and Output Income of Tertiary Industries during 2006-2010

Source: Yangshuo County statistics bureau

4.3.2 Tourism Has Promoted Agricultural Restructuring

Agriculture is a fundamental industry of Yangshuo, and tourism development will facilitate agricultural restructuring. Before the mid 1990s, Yangshuo County was a traditional agricultural county that cultivated paddy rice mainly, with an agricultural

population of 260,000 and a cultivated area of 17,718 hectares. In recent years, Yangshuo County has restructured agriculture and optimized crop structure to develop characteristic farm products based on local natural advantages, such as kumquat. In addition, the 12th Five-year Plan for National Economic and Social Development of Yangshuo County (Draft) specifically proposes that Yangshuo will be developed into a home of kumquat and a demonstration county of eco-agriculture of China, and eco-tourism and sightseeing agriculture will be explored actively to realize sustainable agricultural development. This will promote the commercialization of agricultural products and the development of new tourism products, thereby driving the further development of tourism and commerce. In 2010, the county's gross output value of agriculture, forestry, stockbreeding and fishery was RMB2.02 billion, a year-on-year growth of 5%; the added value of agriculture was RMB1.3 billion, a year-on-year growth of 4.7%; and the per capita net income of farmers was RMB6,234, 2.2 times that of 2005, with an annual average growth of 17%. In addition, according to statistics of the county tourism bureau, the number of farmers engaged in tourism grew from 6,000 in 2000 to 70,000 in 2011.

4.4 Tourism Drives the Development of Local Industry and Commerce

According to the field survey in Yangshuo County, businesses in the county town have been classified, as shown in Figure 4-2. 7 types of businesses, namely “hotels and guesthouses”, “restaurants”, “bars and Western-style restaurants” and “souvenir stores”, “Chinese-style healthcare centers”, “foreign language schools” and “tourism consulting agencies”, are directly related to tourism. Based on statistics, these 7 types of businesses account for about 47.13% of all businesses in the Yangshuo county town, and rely essentially on the consumption of non-local tourists.

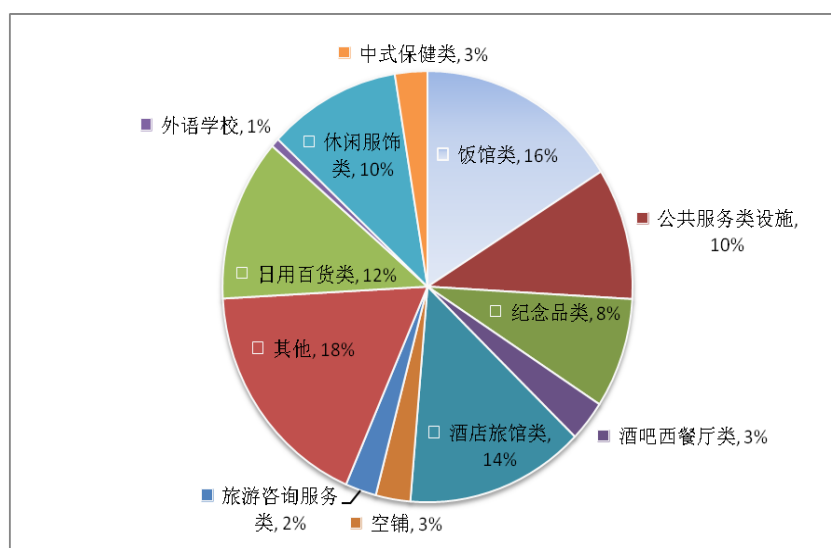


Figure 4-2 Distribution of Businesses in Yangshuo County Town

Source: store statistics of the Yangshuo county town by the task force (August 7, 2011)

4.4.1 Catering and Accommodation

With the tourism development of Yangshuo, Yangshuo's catering and accommodation industry has developed rapidly. Among the above 7 types of businesses, "restaurants", "hotels and guesthouses", and "bars and Western-style restaurants" related to catering and accommodation account for 33.2% of all businesses in the county town. Based on data from the Yangshuo County Administration for Industry and Commerce, the catering and accommodation businesses in Yangshuo County are as shown in Table 4-4.

Table 4-4 Number of Business Units Related to Tourism in Yangshuo County

Item Year	Accommodation	Catering	Business and lease services	Tourism agencies
2009	248	481	70	25
2010	370	538	90	34
2011 (as of July)	421	625	109	40

Source: Yangshuo County administration for industry and commerce

Table 4-4 is based on information from the business registration system of the Yangshuo County Administration for Industry and Commerce (including 2009, 2010 and 2011 data, in which the 2011 data was as of July). Based on the above statistics, Yangshuo is an agriculture county, and there are 1,046 catering and accommodation businesses in the county town with a population of about 270,000 (as of July 2011), but the actual number may be more. These catering and accommodation businesses

have developed with tourism, and reflect the increasing number of overnight tourists in recent years.

4.4.2 Handicrafts and Characteristic Farm Products

Among businesses in the Yangshuo county town, souvenir stores account for 8% of all businesses, and sell handicrafts and characteristic farm products mainly.

Yangshuo's characteristic handicrafts mainly include bamboo and wood sculptures, bamboo sleeping mats, painting and calligraphic works, painted fans, marble and talc products, potted landscapes, stone products, ethnic embroideries, jewelries, colorful silk balls, printed T-shirts and antique potteries. Handicraft retail stores and stalls in the county town are located mainly on West Street, new West Street, Binjiang Road and Pantao Road that are much visited by tourists. The development of handicrafts creates favorable conditions for resident employment. In addition, local specialties are also an integral part of Yangshuo's tourism commodities, mainly including Shatian pomelo, kumquat, yam, ponkan, sweet taro, chestnut, bamboo shoot, bamboos, dried persimmon, ginger candies, jasmine and sweet osmanthus flower. With the increase of tourists, more tourists are buying souvenirs for relatives and friends, promoting the development of Yangshuo's industry and commerce strongly.

4.5 Contribution of Tourism to Yangshuo's Social Employment

During Yangshuo's tourism development, the types of tourism businesses providing job opportunities to Yangshuo residents directly include pleasure boats, accommodation, catering, tourism consulting and tourism handicraft manufacture. In addition, the development of tourism commodities has also promoted the development of handicrafts and agriculture. It can be seen that Yangshuo tourism has generated a large number of job opportunities for residents and changed their employment structure.

In addition, tourism development has also caused local residents to improve their language and service skills through training in order to obtain better job opportunities.

4.5.1 Job Opportunities

Based on the results of the resident questionnaire survey, 77.46% of residents think "tourism development has brought more job opportunities", and 80.59% of residents think "tourism has created more job opportunities for local youth". Residents have generally realized the positive impacts of tourism on local

employment.

Licun Village, Gaotian Town is a typical “National Demonstration Site of Agricultural Tourism”. 102 out of the 114 households deal with tourism services, and there are 25 rural restaurants, 15 rural guesthouses with 339 beds and 30 tour guides in the village, over 4 million men-times of tourists are received per annum, and the per capita net income of farmers is over RMB10,000.

Impression Liu Sanjie – a typical real landscape performance of Yangshuo tourism, is shown in Mushan Village. It is learned from interviews with management staff that this performance has over 600 performers, most of whom are fishermen in Tianjiahe, Xingping, Shanmu, Mushanzha and Maozishan Villages. A farmer performance is paid RMB20 per show. They work in the daytime and perform at night. Their monthly income is over RMB 1,000 on average including base pay. This has increased the income of local farmers effectively. In addition, Yangshuo farmers run agritainment sites or serve as tour guides voluntarily. Therefore, tourism has created a large number of job opportunities and plays an active role in poverty reduction.

In the questionnaire survey of employees of small tourism businesses, 57.4% of the respondents are local community residents, 14.8% are from other parts of Guilin, 8.7% are from other parts of Guangxi and 20.9% from elsewhere. This reflects that Yangshuo tourism has generated a large number of job opportunities for local communities and attracted many non-locals to work here.

4.5.2 Employment Structure

Yangshuo is a traditional agricultural county, and agriculture is a fundamental industry of Yangshuo. However, tourism development has changed the employment structure of local residents. Based on data from the Yangshuo County Tourism Bureau, Yangshuo’s population was 265,700 in 2000 and rural population engaged in tourism was 6,000; in 2010, Yangshuo’s population was only 272,200, but the rural population engaged in tourism rose to 70,000. Tourism employees account for a majority of rural population, and 95% of the 3,300 employees in Yulong River drift services alone are farmers. It can be seen that tourism has affected the employment of rural population greatly, and promoted the shift of considerable labor to tertiary industries.

4.5.3 Education of Residents

With the influx of foreign tourists into Yangshuo, many local residents are quite proficient in English. Residents have improved their employment skills and living

standard by learning English. An outstanding example is the “Moon Mother”—Xu Xiuzhen, a native Yangshuo resident. At the Moon Mountain scenic spot in Gaotian Town, she has mastered English gradually from a junior tour guide at the beginning, and become a professional English tour guide. In addition to getting a job, she has built her own brand and is renowned as the “Moon Mother” by tourists.

In addition, Yangshuo has become a gathering place of Chinese and Western cultures. Tourism development has also promoted the boom of local education and training institutions. Currently, there are 16 foreign language schools in the county town. These training not only train local residents on English to improve their employment skills, but also attracted many non-local tourists to learn foreign languages, thereby contributing to local tourism development.

5. Tourism Planning and Control

5.1 Basic Information on Land Use Control

The 2007 Monitoring Report of Sustainable Tourism Development of Yangshuo points out that land utilization is a key restraint on Yangshuo's sustainable tourism development. With the rapid development of Yangshuo tourism, the demand for land for the construction of infrastructure, tourism service facilities, scenic spots, hotels and guesthouses has risen greatly, but the restriction on construction land has resulted in a severe problem in tourism land for Yangshuo County. In additional construction land, over 2/3 of the land utilization quota is for rural settlement expansion and only 1/3 of the quota is for urban construction.

During the 11th Five-year Plan period, with the launch of a series of development strategies, including “building the Yangshuo county town into a sub-center city in the greater Guilin tourism circle” of Guilin City, and “international tourism resort small town”, “strong tourism economy county of China”, and “establishing the county with tourism and strengthening the county with industry” of Yangshuo County, the county government has realized that the structure and layout of construction land reserved in the previous round of planning are obviously irrational, in which agritainment construction land is not fully allowed for in land for tourism facility and rural settlement construction for scenic spots, and tourism development and infrastructure construction land is inconsistent with the planned layout. It can be seen from the table below that the current land utilization plan of Yangshuo County is focused on urban construction. In 2010, additional urban industrial and mining land accounted for 89.45% of the quota for additional urban construction land, while this percentage will rise to 90.11% in 2020.

Table 5-1 2010 and 2020 Land Control Plans of Yangshuo County (Unit: hectares)

Item			2010	2020
Agricultural land control	Cultivated land	Existing cultivated land	27086.00	27006.00
		Cultivated land occupied by additional construction land	219.00	499.00
		Cultivated land replenished through land management	1669.98	1940.84
	Garden land		12460.00	12810.00
	Woodland		84330.00	84660.00

Construction land control	Pasture land		55.00	165.00
	other agricultural land		4111.72	4461.72
	Urban construction land	Urban industrial and mining land	908.33	1469.44
		Land for rural settlements	3031.67	2798.56
	Traffic and water resources land		1490.00	1822.00
	Additional urban construction land	Additional urban industrial and mining land	229.00	838.00
		Additional land for rural settlements	27.00	92.00
	Additional traffic and water resources land		292.00	519.00

Source: Yangshuo County Land and Resources Bureau

5.2 Spatial Layout Planning and Land Use Control for Tourism Development

The overall layout of Yangshuo's scenic spots is based on “one pole, one area and six axes”.



Figure 5-1 Spatial Layout of Tourism Development of Yangshuo County (2008-2025)

By 2011, the land area in Yangshuo County for tourism development and tourism resource conservation was 28,498.78 hectares, accounting for 19.85% of total land area, in

which 286.15 hectares of land were used for the construction of the above key projects (new projects mainly).

5.3 Land Use Plan for Tourism Service Facilities and County Road Traffic

In recent years, the Yangshuo County Government has proposed the strategy of “extending southward mainly and improving the north”, i.e., a spatial layout of “two blocks and multiple zones” will be created based on the built-up area, where additional land in the north block will be used mainly for tourism, leisure, commerce, finance, scientific research, education and residence mainly, while that in the south block mainly for tourism, vacationing, administration, culture, sports and residence. Although the north and south of the county are focused on tourism development, they will follow distinct directions of development, which is shown clearly in the construction of tourism service facilities and road traffic.

Among 220.74 hectares of additional land for tourism service facilities, guesthouses and hostels will be built mainly on the administration land for old urban area improvement in the north block; in the south block, tourism resort hotels, holiday hotels, international cultural exchange and conference centers, and leisure, recreational and recuperation centers will be constructed mainly.

The coach station of Yangshuo County will be relocated to Fengming District in the north block, occupying 3.97 hectares of land; a bus terminal will be provided east of the living area in the south block, occupying 3.76 hectares of land; 8 parking lots will be built in public activity centers, business centers, resorts, and commercial and financial areas, occupying 0.6-11.6 hectares of land each; the gas station will be relocated to the north of Dacun District, occupying 1.6 hectares; and a new gas station will be built in the south block, occupying 1 hectare.

With the southward transfer of the administrative, cultural and living centers of Yangshuo County, the north of the county will be built into a “tourism district” focused on tourism and related industries (e.g., financial industry).

5.4 Land Utilization in Key Tourist Destination Townships

As the seat of the Yangshuo County Government, Yangshuo Town is a key town of the “international tourism resort small town” and the “sub-center city in the greater Guilin tourism circle”, and the location of main scenic spots of Yangshuo County, such as the Yulong River, West Street and Impression Liu Sanjie. In the whole land

utilization plan of Yangshuo Town, land for scenic spots and nature / culture reserves accounts for the highest percentage of 25.78%, and the priority of land utilization is to ensure urban development, and the construction of infrastructure and tourism service facilities. Xingping Town beside the Lijiang River is not only the largest township of Yangshuo County, but also abounds with tourism resources. Xingping Town has the largest land for scenic spots and nature /culture reserves among all townships of Yangshuo County, being 13,143.08 hectares, accounting for 41.89% of the land area of Xingping Town. The town is focused on the development of ecological and adventure tourism, and will be built into a sub-center tourism town and railway center of Yangshuo County. Gaotian Town is the largest production base of tourism handicrafts of Yangshuo County. Although there are also the Big Banyan, the Moon Mountain, Julong Lake and other well-known scenic spots in the town, and the priority of land utilization of Gaotian Town is to protect and consolidate cultivated land, meet agricultural land demand, and ensure the availability of land for handicrafts processing and tourism facilities.

**Table 5-2 Land Utilization in Key Tourist Destination Townships of Yangshuo County
(2006-2020) (Unit: hectares)**

Land use	Yangshuo Town	Baisha Town	Fuli Town	Xingping Town	Gaotian Town	Yangdi Xiang
Total land area	7528.95	15383.14	23285.21	31376.89	15492.93	10263.55
Woodland	1831.07	4667.48	6344.59	10028.94	7984.56	5632.98
	24.32%	30.34%	27.25%	31.96%	51.54%	54.88%
Urban construction land	860.1	121.27	116.23	49	50.06	0
	11.42%	0.79%	0.5%	0.16%	0.32%	0
Land for rural settlements	139	402.99	498.75	375.94	392.92	125.35
	1.85%	2.62%	2.14%	1.2%	2.54%	1.22%
Land for mining and independent construction	71.15	160.07	110.98	133.4	134.88	30.56
	0.95%	1.04%	0.48%	0.43%	0.87%	0.3%
Land for scenic spots and nature /culture reserves	1940.64	2168.54	3899.89	13143.08	976.71	2397.79
	25.78%	14.1%	16.75%	41.89%	6.3%	23.36%
Land used for other purposes	411.84	811.73	4584.22	1179.71	545.08	486.98
	5.47%	5.28%	19.69%	3.76%	3.52%	4.74%

Source: Yangshuo County Land and Resources Bureau

5.5 Land Conversion and Additional Land for Tourism

The Master Land Utilization Plan of Yangshuo County (2006-2020) points out that during the planning period, the land area for settlements in farms will be reduced by 307.81 hectares through conversion, consolidation and integrated management, in which 65.48 hectares of land will be converted into tourism land, agritainment land is

located in Yangshuo, Baisha, Fuli, Xingping, Putao and Gaotian townships mainly, and tourism villages include Longtan Village of Gaotian Town, Xingping Fishing Village of Xingping Town and Jiuxian Village of Baisha Town.

6. Tourism, and Resources and Environmental Protection

6.1 Atmospheric Environment

6.1.1 Air Quality

Data from the Yangshuo County Environmental Protection Bureau reveals that the current priority of environmental protection in Yangshuo is to reduce coal-fired boilers and catering SO₂, control coal-fired boiler and catering pollution in fume control areas, and extend the application of clean fuels. The county's domestic SO₂ emissions are mainly from domestic coal burning in the catering and accommodation industry. The county environmental protection bureau reduces SO₂ emissions and protects the ambient air quality of the county town by prohibiting and improving catering coal-fired boilers in the county town, and extending the application of solar energy, liquefied petroleum gas, electricity, heat pump, biomass fuel, light fuel oil and other clean fuels.

According to the 2010 and 2011 Reports on the Work of the Yangshuo County Government, Yangshuo's gross COD (chemical oxygen demand) emission was 1,312.7 tons in 2009 and 1,216 tons in 2010, gross NO₂ emission was 984 tons in 2009, and gross SO₂ emission was 1,209 tons in 2010.

According to the 2010 Atmospheric Monitoring Report of the Yangshuo County Environmental Monitoring Station, the atmosphere was sampled at Beimen'e and Experimental Primary School, and NO₂ (nitrogen dioxide) daily average level, SO₂ (sulfur dioxide) daily average level and PM₁₀ (inhalable particulate matter) daily average level were chosen as the atmospheric monitoring indicators (in milligram per standard cubic meter) (Table 6-1):

Table 6-1 2010 atmospheric monitoring report of Yangshuo County

Location	Point	5-day monitoring values during September 14-18, 2010 (mg/Nm ³)		
		Max.	Min.	5-day average
Beimen'e	NO ₂	0.025	0.009	0.017
	SO ₂	0.057	0.032	0.040
	PM ₁₀	0.118	0.043	0.087
Experimental	NO ₂	0.044	0.010	0.024

Primary School	SO ₂	0.052	0.030	0.038
	PM ₁₀	0.115	0.075	0.097

Source: Atmospheric Monitoring Report, Yangshuo County Environmental Monitoring Station (September 2010)

According to the Ambient Air Quality Standard (GB3095-1996), the area where the observatory is located is a Tier-2 area (residential areas, mixed commercial, traffic and residential areas, cultural areas, ordinary industrial areas and rural areas identified in the urban development plan). The above data shows that currently, the daily average levels of NO₂ and SO₂ of Yangshuo County have met the Class I standard (NO₂: 0.08; SO₂: 0.05), and PM₁₀ has met the Class II standard (0.15).

6.1.2 Perception Evaluation

From the perspective of residents, as shown in Figure 6-1, in the perception of “Tourism has aggregated air pollution”, resident perceptions vary greatly. 4.91% of residents strongly disagree, 17.20% of residents disagree, 20.39% of residents are neutral, 42.26% of residents agree, and 15.23% of residents strongly agree. There are 407 valid resident interviewees of the questionnaire.

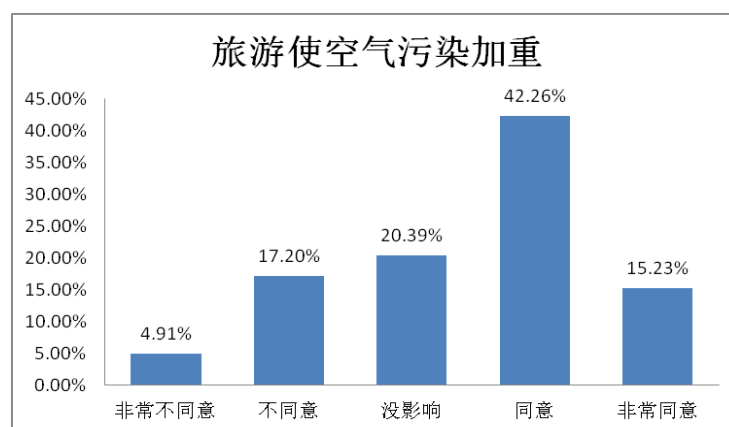


Figure 6-1 Tourism Has Aggregated Air Pollution

From the perspective of tourists, as shown in Figure 6-2, in the perception of the air cleanliness of Yangshuo, 0.55% of tourists strongly disagree, 5.45% of tourists agree, 20.07% of tourists are neutral, 46.67% of tourists agree, and 27.26% of tourists strongly agree. There are 917 valid tourist interviewees of the questionnaire, including 747 domestic tourists and 170 foreign tourists.

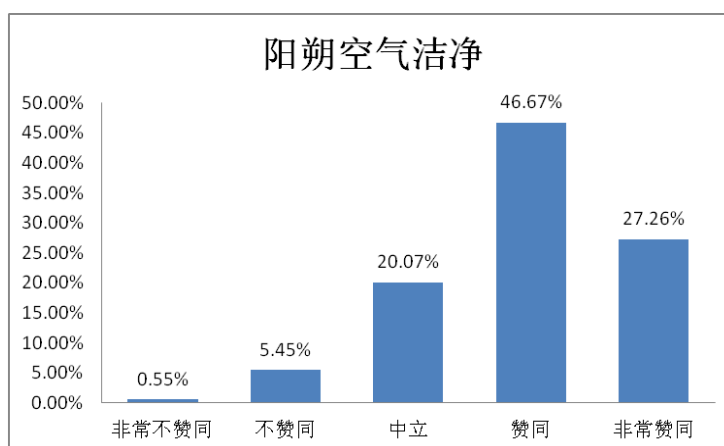


Figure 6-2 Yangshuo's Air Is Clean

6.2 Aquatic Environment

6.2.1 Water Resource Utilization

Yangshuo County abounds with water resources and has a water reserve of 2 billion m³, including 1.3 billion m³ of surface water, 650 million m³ of groundwater and about 700 million m³ of available water. There are 251 water supply reservoirs in Yangshuo, including 3 medium-sized reservoirs, 9 Small I type ones, 35 Small II type ones and 204 mountain pond ones. There are 120 turbine pumps, 220 electric pumping stations and 34 power stations, with a power generation capacity of 15,000 kW.

At the end of 2010, the population drinking unsafe water in rural areas, farms and forest farms of Yangshuo County was 53,780. These people are supplied with water in a decentralized manner from surface water and groundwater, which exceeds the bacteriological standard seriously and is untreated. The population drinking unsafe water in rural schools was 3,834. These people are supplied with insufficient water in a decentralized manner from groundwater. At the end of 2010, the population drinking unsafe water in rural areas, farms, forest farms and rural schools of Yangshuo County was 57,614. According to the statistics bureau, the resident population of Yangshuo County was 272,223 in 2010, so only 78.84% of local residents in Yangshuo can use treated water.

6.2.2 Protection of Aquatic Environment

There are two sewage treatment sites in Yangshuo County, all located in the Yangshuo county town; there is no sewage treatment site in rural areas. According to government data, the central treatment rate of urban sewage of Yangshuo in 2010 was 80%.

In addition, there are two water protection areas in Yangshuo County, which are the Lijiang River and Yulong River scenic spots.

6.2.3 Perception Evaluation

From the perspective of residents, in the perception of “Tourism has aggregated water pollution”, residents have different views. 4.68% of residents strongly disagree, 14.78% of residents disagree, 17.24% of residents are neutral, 45.57% of residents agree, and 17.73% of residents strongly agree. There are 406 valid resident interviewees of the questionnaire.

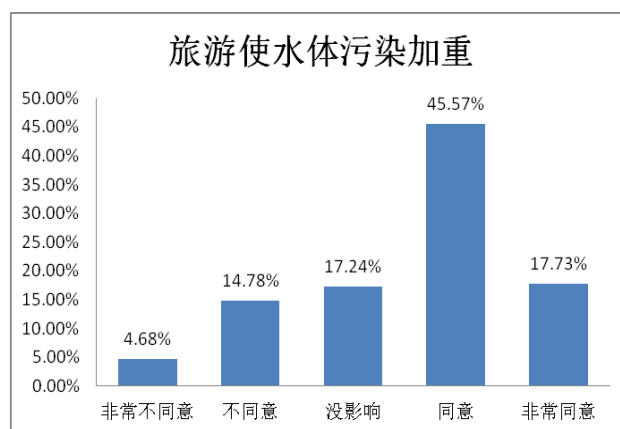


Figure 6-3 Tourism Has Aggregated Water Pollution

From the perspective of tourists, the overall evaluation of this by tourists is between “neutral” and “strongly agree”, as shown in Figure 6-4. In the perception of “The water quality of the Lijiang River is good”, 1.65% of tourists strongly disagree, 8.25% of tourists agree, 29.92% of tourists are neutral, 36.85% of tourists agree, and 23.21% of tourists strongly agree. There are 909 valid tourist interviewees of the questionnaire, including 743 domestic tourists and 166 foreign tourists.

in the perception of “The water quality of the Yulong River is good”, 1.14% of tourists strongly disagree, 4.68% of tourists agree, 37.21% of tourists are neutral, 34.93% of tourists agree, and 22.03% of tourists strongly agree. There are 876 valid tourist interviewees of the questionnaire, including 718 domestic tourists and 158 foreign tourists.

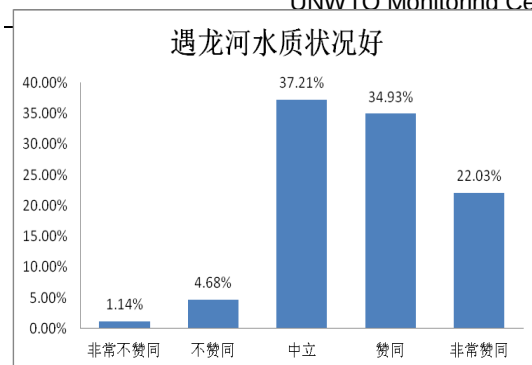


Figure 6-4 The Water Quality of the Lijiang River Is Good

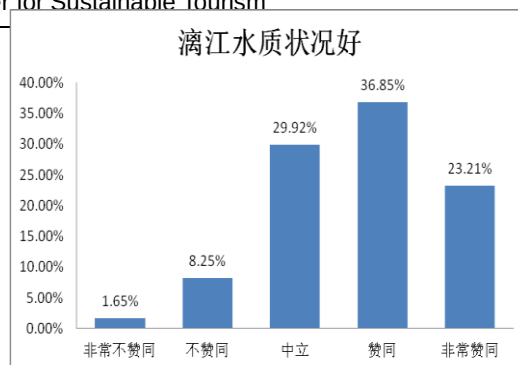


Figure 6-5 The Water Quality of the Yulong River Is Good

6.3 Noisy Environment

6.3.1 Noisy environment

According to the 2010 noise monitoring report of Yangshuo County, the key points are as follows:

Sample source:	Field sampling	Sample type:	Noise
Monitoring point:	Yangshuo county town	Monitoring period:	10 minutes
Sampling date:	Sep. 3-7, 2010	Weather:	Sunny
Purpose of monitoring:	Environmental quality monitoring	Reporting date:	Sep. 8, 2010

The criteria for evaluation are:

Basis of evaluation	Environmental quality standard for noise (GB3096-2009)	
Item	Daytime	Night
Class 2 standard	60dB (A)	50dB (A)
Class 4a standard	70dB (A)	55dB (A)

The monitoring results in the key functional areas of the Yangshuo county town are as follows:

Type of functional area	Test site	Daytime	Main sound source	Night	Main sound source
		Leq dB(A)		Leq dB(A)	
2	Yangshuo Town Primary School	52.1	Domestic noise	46.0	Domestic noise
2	Yangshuo Resort Restaurant	57.8	Domestic noise	47.5	Domestic noise
2	Beimen'e residential area	47.0	Domestic noise	42.6	Domestic noise
4a	Maintenance squad of the Guiyang	65.8	Traffic noise	54.8	Traffic noise

	Highway				
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Note: daytime traffic (990 vehicles/hour), night traffic (336 vehicles/hour)

The noise levels of the monitoring points in the main functional areas of the Yangshuo county town in the above table meet the quality standard for the corresponding environmental types.

6.3.2 Perception Evaluation

From the perspective of residents, in the perception of “Tourism has aggregated noise pollution”, 4.69% of residents strongly disagree, 14.07% of residents disagree, 12.35% of residents are neutral, 49.38% of residents agree, and 19.26% of residents strongly agree. There are 405 valid resident interviewees of the questionnaire.

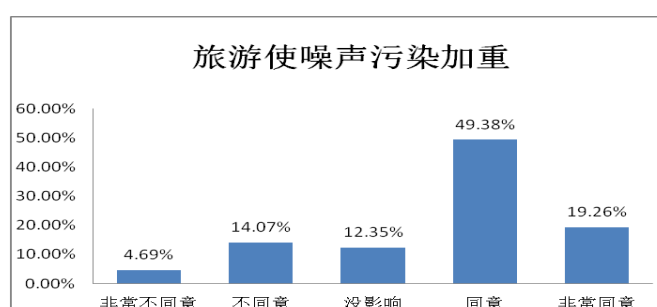


Figure 6-6 Tourism Has Aggregated Noise Pollution

From the perspective of tourists, in the perception of “Noise is low in Yangshuo”, tourists have different views. 6.01% of tourists strongly disagree, 17.38% of tourists disagree, 33.44% of tourists are neutral, 31.80% of tourists agree, and 11.37% of tourists strongly agree. There are 915 valid tourist interviewees of the questionnaire, including 745 domestic tourists and 170 foreign tourists.

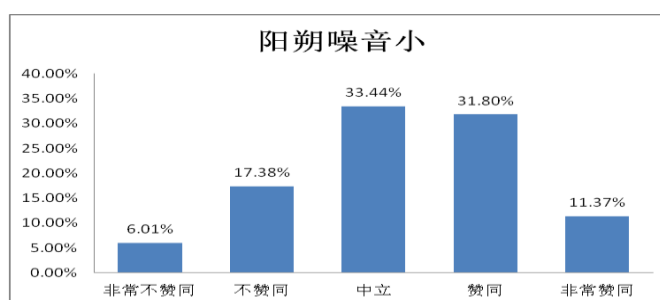


Figure 6-7 Noise Is Low in Yangshuo

6.4 Solid Waste

6.4.1 Waste Disposal

Based on government data, the domestic waste disposal project of the Yangshuo

county town has been largely completed, and the innocent treatment rate of urban domestic waste of Yangshuo was over 98% in 2010. No relevant data was available from the environmental protection bureau.

6.4.2 Perception Evaluation

From the perspective of residents, in the perception of “Tourism has increased solid waste”, 3.46% of residents strongly disagree, 12.35% of residents disagree, 16.05% of residents are neutral, 47.16% of residents agree, and 20.99% of residents strongly agree. There are 405 valid resident interviewees of the questionnaire.

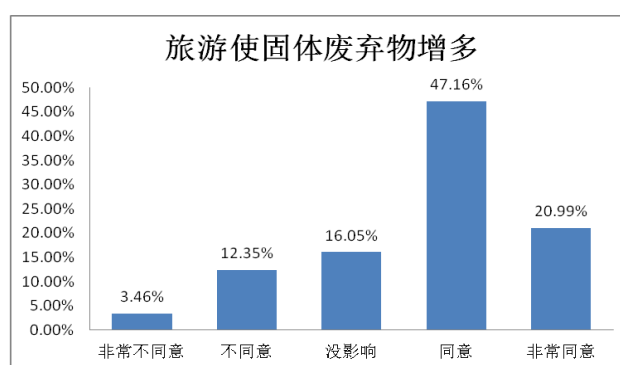


Figure 6-8 Tourism Has Increased Solid Waste

From the perspective of tourists, in the perception of “The environment of the scenic zone is clean”, 1.42% of tourists strongly disagree, 7.84% of tourists agree, 30.17% of tourists are neutral, 44.44% of tourists agree, and 16.12% of tourists strongly agree. There are 918 valid tourist interviewees of the questionnaire, including 747 domestic tourists and 171 foreign tourists.

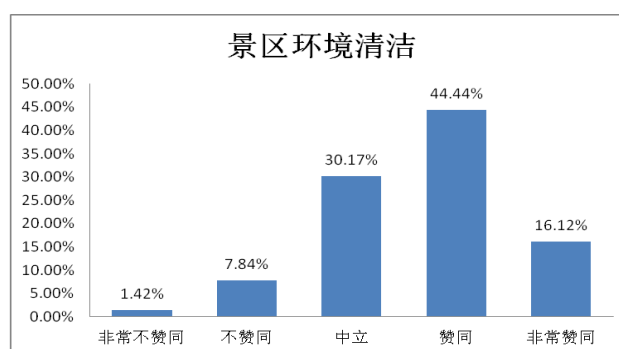


Figure 6-9 The Environment of The Scenic Zone Is Clean

6.5 Landscape and Visual Impacts

In 2010, the Yangshuo County Government implemented an urban and rural outlook improvement project; the facade improvement to the northern Guangxi style

according to the criteria of “sloped roof, small grey tile, white-washed wall, suspended balcony, lattice window and slate road (cement pavement road)” has been completed for visible civil residences along the Lijiang River, the Yulong River, Baili New Village, Guiwu Expressway, Guiyang Highway, Yangpu Highway, Yang’er Highway and Fuxing Highway. The county government has demolished awnings, water tanks, solar energy equipment and other facilities on building roofs in key areas, including the county town and areas around scenic spots, and stipulates that solar energy equipment can only be embedded into sloped roofs and should not protrude.

In addition, the county government has implemented the landscaping, beatification and lighting of key buildings in the county town, the Foreign Affairs Wharf, Xiufeng Bridge, Liyu Bridge, county town gas stations, Longjishan tunnel area, Central Square, Yangshuo Bridge, Xiangshuiqiao regulating reservoir and Dongling area, and the construction of stepping stones, waterfalls and fountains, installed a large LED screen at the coach station, and completed the nightscape lighting works of 88 peaks and the banks of the Lijiang River in the county town.

From the perspective of residents, in the perception of “Guesthouses and other tourism facilities have ruined landscape aesthetics”, 4.43% of residents strongly disagree, 26.85% of residents disagree, 34.73% of residents are neutral, 23.65% of residents agree, and 10.34% of residents strongly agree. There are 406 valid resident interviewees of the questionnaire.

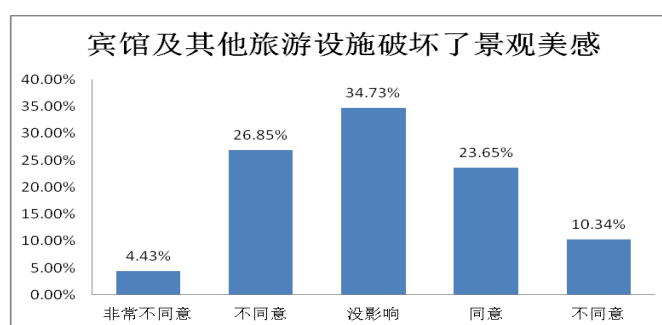


Figure 6-10 Guesthouses and Other Tourism Facilities Have Ruined Landscape Aesthetics

From the perspective of tourists, in the perception of “The scenic zone is beautiful”, 0.11% of tourists strongly disagree, 0.33% of tourists agree, 5.23% of tourists are neutral, 42.86% of tourists agree, and 51.47% of tourists strongly agree. There are 917 valid tourist interviewees of the questionnaire, including 747 domestic tourists and 170 foreign tourists.

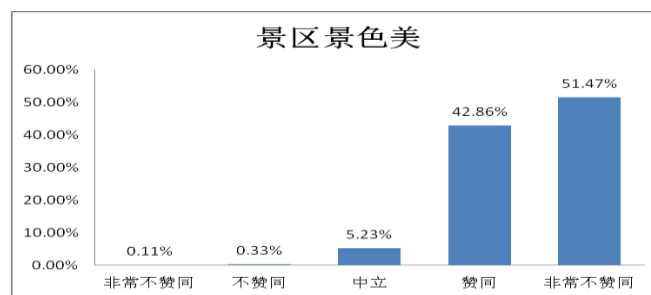


Figure 6-11 The Scenic Zone Is Beautiful

6.6 Energy Management

In order to investigate the percentage of tourism businesses participating in energy conservation projects or taking energy conservation measures and techniques, a questionnaire survey was conducted on the owners of 36 tourism businesses in this round of monitoring, with 35 valid copies collected. The survey results show that 15 tourism businesses (accounting for 44% of all valid copies) have taken energy / water conservation measures, including water conservation, water reuse, employee water conservation awareness building, using solar energy, air energy and intelligent power facilities, using environment-friendly electric appliances, and turning off power switches timely.

In addition, 13 tourism businesses (accounting for 44% of all valid copies) have not taken energy / water conservation measures but plan to take such measures. Some enterprises have realized that such measures can conserve resources and improve the environment but have not found effective ways.

6 tourism businesses (accounting for 18% of all valid copies) have not taken energy / water conservation measures and do plan to take such measures for the moment, mainly because daily operations of some businesses involve very low water consumption, such as stores selling packaged food, and some businesses do not know such measures.

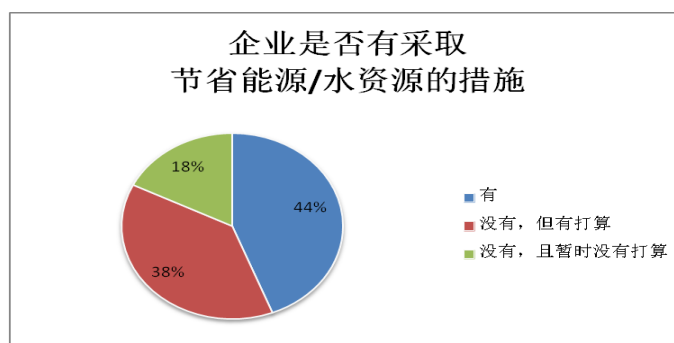


Figure 6-12 Whether Enterprises Have Taken Energy / Water Conservation Measures

7. Tourism Products and Services

Understanding the supply and demand relationship of tourism products and services in a tourist destination is a prerequisite to promoting tourism development and improving tourist satisfaction. In this round of monitoring, the survey on Yangshuo's tourism products and services was conducted in the form of questionnaire survey and observation mainly. Through the questionnaire survey, we know main reasons why tourists visit Yangshuo, and scenic spot information included in tours to monitor the profile of market demand of Yangshuo; through observations, we know the availability of Yangshuo's tourism service facilities to monitor the capacity of Yangshuo to supply tourism services and its potential of future tourism development.

7.1 Analysis of Tourism Purposes

Tourism purpose reflects tourist expectations for traveling in Yangshuo to some extent, and understanding tourism purposes of tourists in Yangshuo is an important prerequisite to learn market demand and further realize market segmentation. Based on the questionnaire survey, tourism purposes of domestic and foreign tourists are shown below. (Note: In the questionnaire, the question on tourism purposes allows multiple choices.)

Table 7-1 Comparison of Travel Purposes of Domestic and Foreign Tourists

	Domestic tourists (748 valid copies)			Foreign tourists (172 valid copies)		
Purpose of travel	Number	Percentage	Rank*	Number	Percentage	Rank*
Leisure and relaxation	668	89.30%	1	93	54.07%	1
Enjoyment and adventure	63	8.42%	4	5	2.91%	10
Participation in activities	47	6.28%	6	74	43.02%	2
Seeking changes and evasion	26	3.48%	8	13	7.56%	6
Education and learning	57	7.62%	5	8	4.65%	7
Acquiring geographic knowledge	86	11.50%	3	48	27.91%	4
Social reasons	20	2.67%	10	7	4.07%	9
Enjoying climate improvement	45	6.02%	7	8	4.65%	7
Learning culture and delicacies	198	26.47%	2	60	34.88%	3
Other	22	2.94%	9	24	13.95%	5

Source: 2011 Tourist Questionnaire; Note: * On a scale of 1-10, where a higher percentage represents a smaller rank

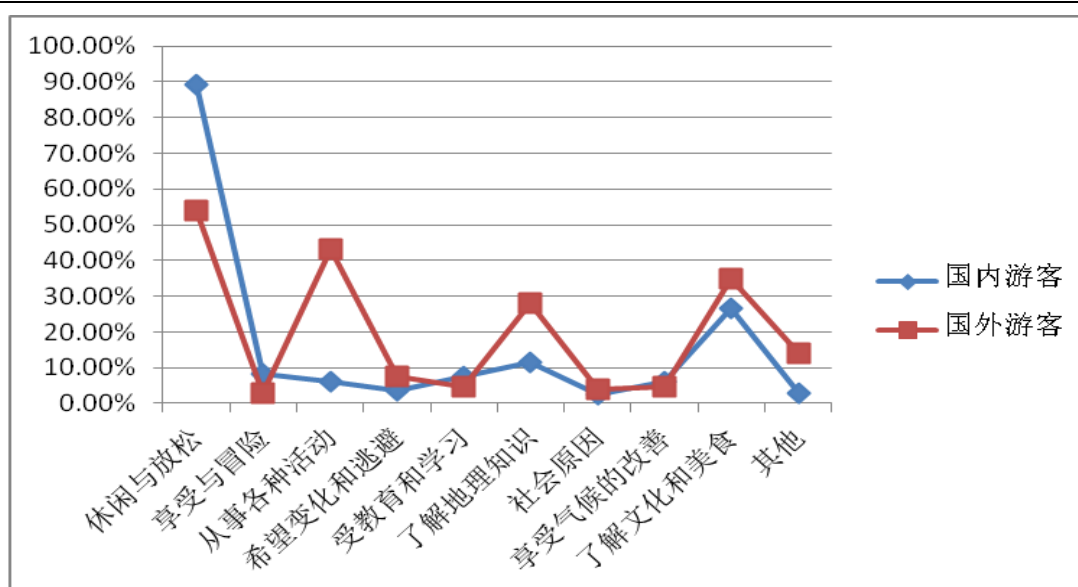


Figure 7-1 Comparison of Tourism Purposes between Domestic and Foreign Tourists

Most of domestic tourists (89%) and foreign tourists (54.07%) take “leisure and relaxation” as one of their purposes of traveling in Yangshuo tourism. Other relatively prominent purposes for both types of tourists are “learning culture and delicacies”, “acquiring geographic knowledge” and “participation in activities”. The difference is purposes of domestic tourists are more concentrated and similar (leisure is the main tourism purpose of most domestic tourists), while choices of foreign tourists are more scattered (leisure and relaxation, participation in activities, acquiring geographic knowledge, and learning culture and delicacies account for certain percentages), reflecting perception and experience differences between domestic and foreign tourists. In addition, these purposes will be reflected directly in differences in choices of tourism products between domestic and foreign tourists.

7.2 Tour Routes (Products Chosen)

The main scenic spots of Yangshuo County are West Street, East Street, Moon Mountain, Licun Village, Mushan Village, Yulong River, Earthly Paradise, Ancient Totem Path, Big Banyan, Impression Liu Sanjie, Longjing River drift, Xingping Ancient Town, Lijiang River scenic spot and Ten-mile Gallery. We have chosen 16 scenic spots from numerous scenic spots, which represent more sophisticated tourism products. (Note: In the questionnaire, the question on tourism purposes allows multiple choices.)

Table 7-2 Comparison of Tourist Volume of Scenic Spots

	Domestic tourists (748 valid copies)			Foreign tourists (172 valid copies)		
Scenic spot	Number	Percentage	Rank*	Number	Percentage	Rank*
Yangshuo West Street	677	90.51%	1	155	90.12%	1
Lijiang River scenic spot	537	71.79%	2	153	88.95%	2
Jiumahua Valley	334	44.65%	5	28	16.28%	8
RMB20 banknote background	368	49.20%	3	64	37.21%	5
Camel Crossing River	166	22.19%	11	9	5.23%	13
Butterfly Spring	183	24.47%	10	5	2.91%	16
Ancient Totem Path	147	19.65%	12	6	3.49%	14
Jianshan Temple	52	6.95%	16	6	3.49%	14
Big Banyan	299	39.97%	6	22	12.79%	9
Yulong River	347	46.39%	4	66	38.37%	4
Moon Mountain	268	35.83%	7	85	49.42%	3
Longjing River drift	127	16.98%	14	16	9.30%	12
Yangdi scenic spot	133	17.78%	13	19	11.05%	10
Earthly Paradise	219	29.28%	8	5	2.91%	16
Liu Sanjie Water Park	196	26.20%	9	38	22.09%	6
Fuli Ancient Town scenic zone	48	6.42%	17	29	16.86%	7
Other	54	7.22%	15	19	11.05%	10

Source: 2011 Tourist Questionnaire

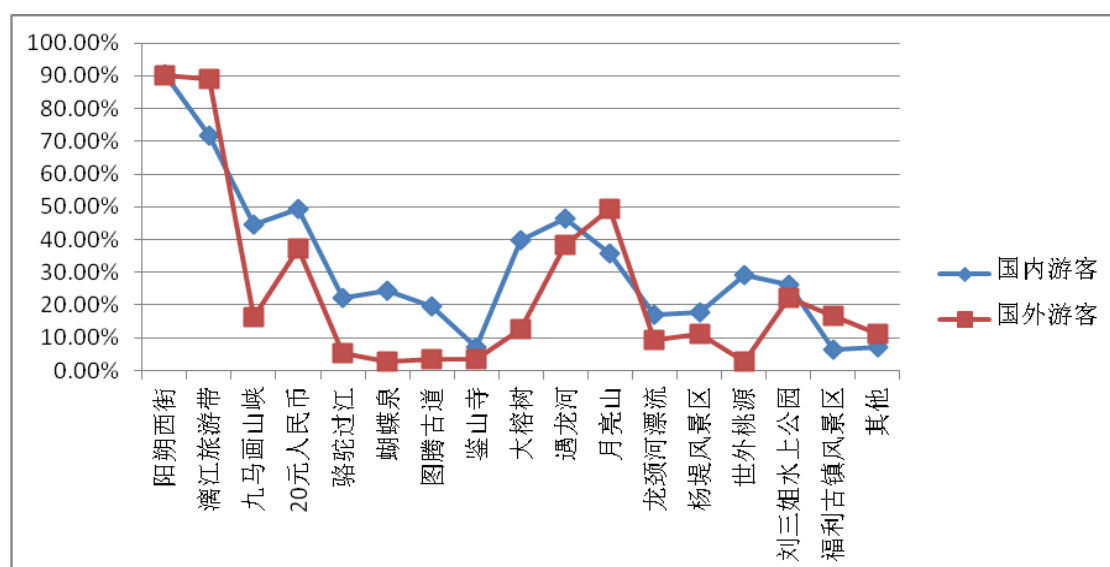


Figure 7-2 Differences of Choices of Scenic Spots between Domestic and Foreign Tourists

For both domestic and foreign tourists, West Street is the most important tourism product in Yangshuo. Among the respondents, 91% of domestic tourists and 90% of foreign tourists would visit Yangshuo West Street, showing its position as a core product.

Among other tourism products, there are some differences in choices between domestic and foreign tourists. Specifically, natural landscapes, such as the Lijiang River scenic spot, the Yulong River and the Moon Mountain (Licun Village at its piedmont is a folk culture attraction), and local folk culture tourism products represented by the Liu Sanjie Water Park and the Fuli Ancient Town scenic zone are favored by foreign tourists, consistent with their tourism purposes. More domestic tourists (especially tourists in tour groups) would visit the Butterfly Spring, Ancient Totem Path, Big Banyan and Earthly Paradise. For scenic spots of memorial value, such as the Jiumahua Valley, RMB 20 banknote background, Jianshan Temple and Yangdi scenic spot, the behaviors of domestic and foreign tourists are close to each other.

In sum, Yangshuo West Street is still the most attractive tourism product in Yangshuo. Domestic and foreign tourists have different inclinations to tourism products, where foreign tourists prefer natural landscapes and local customs.

7.3 Scope of Tourism Services

7.3.1 Scope of Services Offered by the Tourist Destination to Tourists

The tourism services available to tourists in Yangshuo County include catering (Chinese food, Western food and characteristic rural food, etc.), accommodation (star hotels, family guesthouses and youth hostels), shopping supermarkets (local specialty supermarkets), handicrafts (characteristic handicraft stores), clothes and leather (ethnic minority clothes, fabrics, leather goods), travel agencies, entertainment (KTV, massage, etc), groceries, photography (photographic services and purchase of photographic equipment), pharmacies, tourism-related agencies, tourism traffic services (bicycles, taxis, battery cars and vehicle lease).

7.3.2 Distribution of Tourist Destination Facilities

In order to analyze the availability of tourism service facilities more clearly, the Yangshuo county town is hereby divided into three areas (Area A, Area B and Area C).

Area A: core area and tourist gathering center, serving tourists mainly, including

Baoquan Road, Binjiang Road, Chengbei Road, Chengzhong Road, Dangxiao Road, Diecui Road, Furong Road, Fuqian Road, Guihua Road, Lianfeng Alley, West Street, Xianqian Road, New West Street and Yanjiang Avenue, especially West Street

Area B: mixed citizen and tourist area, shared by citizens and tourists, including Bilian Alley, Chengxi Road, Huashan Road, Jiangjun Road, Jingfeng Road, Lanhua Road, Longyue Road, Pantao Road and Shenshan Road

Area C: located at the peripheral traffic junction of Yangshuo County, serving local residents mainly, including East Street, Dongling Road, Guanlian Road, Jinshi Road, Kangzhan Road, Mingfeng Road, Shima Road, Wujing Road

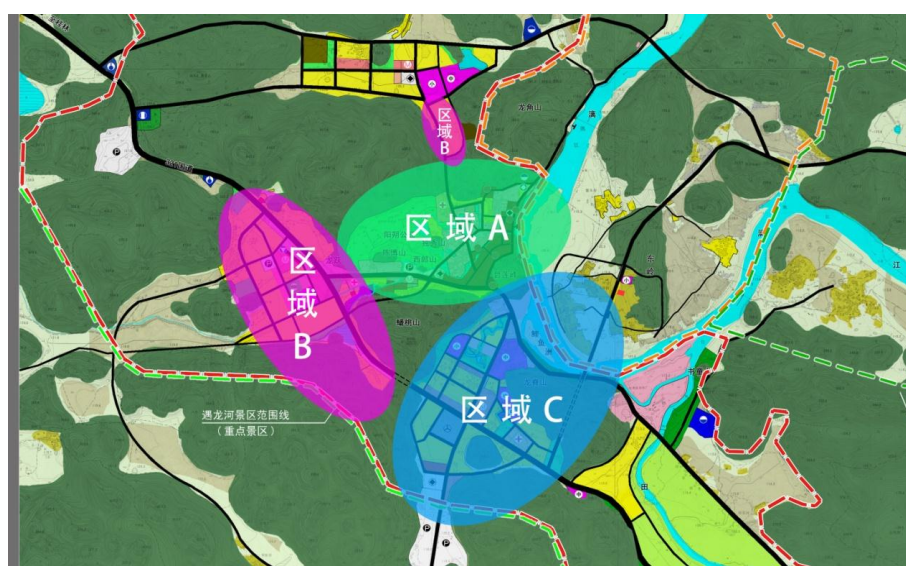


Figure 7-3 Tourism Service Facilities (Zoning Map)

Table 7-3 Variation of the Number of Tourism Businesses in 2011 and 2010 (Area A)

Area A	2011		2010	
	Number	Percentage	Number	Percentage
Hotels and guesthouses	99	22.60%	103	17.37%
Restaurants	127	29.00%	135	22.77%
Bars, Western-style restaurants	34	7.76%	86	14.50%
Souvenir stores	129	29.45%	210	35.41%
Tourism services	29	6.62%	37	6.24%
Chinese-style healthcare centers	13	2.97%	14	2.36%
Foreign language schools	7	1.60%	8	1.35%
Total	438	100%	593	100%

Source: 2011 field store survey

In Area A, the numbers of tourism businesses of all the 6 types have decreased from 2010, and the total number has decreased by 155, especially souvenir stores (decreased by 81).

Table 7-4 Variation of the Number of Tourism Businesses in 2011 and 2010 (Area B)

Area B	2011		2010	
	Number	Percentage	Number	Percentage
Hotels and guesthouses	163	34.68%	140	34.91%
Restaurants	180	38.30%	167	41.65%
Bars, Western-style restaurants	0	0.00%	0	0.00%
Souvenir stores	48	10.21%	32	7.98%
Tourism services	27	5.74%	22	5.49%
Chinese-style healthcare centers	43	9.15%	31	7.73%
Foreign language schools	9	1.91%	9	2.24%
Total	470	100%	401	100%

Source: 2011 field store survey

In Area B (surrounding area), the total number of tourism businesses of the 6 types is 69 more than last year. Except that the numbers of bars and Western-style restaurants, and foreign language schools have remained unchanged, the numbers of the other 4 types have increased. Relative to Area A, Area B shows a significant expansion of commercial spaces.

Table 7-5 Variation of the Number of Tourism Businesses in 2011 and 2010 (Area C)

Area C	2011		2010	
	Number	Percentage	Number	Percentage
Hotels and guesthouses	79	40.93%	69	34.50%
Restaurants	81	41.97%	94	47.00%
Bars, Western-style restaurants	1	0.52%	1	0.50%
Souvenir stores	23	11.92%	25	12.50%
Tourism services	3	1.55%	4	2.00%
Chinese-style healthcare centers	6	3.11%	6	3.00%
Foreign language schools	0	0.00%	1	0.50%
Total	193	100%	200	100%

Source: 2011 field store survey

Area C is located in the peripheral traffic junction of the county town and serves local residents mainly. Therefore, the total number of tourism businesses has changed

slightly, while the percentages of different types have varied, where the number of hotels and guesthouses has increased, and that of restaurants decreased.

Table 7-6 Variation of the Number of Tourism Businesses in 2011 and 2010

	2011			2010		
	Tourism related	Total number	Percentage	Tourism related	Total number	Percentage
Area A	438	867	50.52%	593	782	75.83%
Area B	470	1138	41.30%	401	1108	36.19%
Area C	193	414	46.62%	200	497	40.24%
Total	1101	2419	45.51%	1194	2387	50.02%

Source: 2011 field store survey

The number and percentage of tourism businesses in Area A have decreased, the number of tourism businesses in Area B has increased, and the percentage of tourism businesses in Area C has increased, showing that tourism businesses tend to transfer from the core area to the surrounding area and other townships in the county. The increased number of tourism businesses oriented to local residents in all the 3 areas shows that there are more consumption sites for local residents and their consumption power has increased. This indirectly reflects that local residents' economic condition has improved.

The total number of businesses in Yangshuo County has increased but the number of tourism businesses has decreased from 50.02% to 45.51%, showing that tourism-related industries are not as hot as before, which reflects to some extent that tourism commercial facilities in the core area of Yangshuo County tend to be saturated.

8. Conclusion

Through the integrated monitoring of Yangshuo in this year, the main monitoring data and basic conclusion points are as follows:

(1) Rapid tourism development is affecting community residents deeply.

Presently, Yangshuo's tourism development is still supported by most residents. Residents are generally open to and satisfied with tourism, and are glad to support Yangshuo's further tourism development.

Many residents recognize the positive impacts of tourism development on Yangshuo's economy, community living environment, and cultural changes, and think that incoming tourists have not disturbed their lives nor have they worsen public security. However, in the meantime, residents have gradually realized negative impacts of tourism, especially in traffic. Moreover, some residents have already realized that tourism development has deteriorated their natural environment, so they expect the government to strengthen planning and control.

The community engagement of tourism in Yangshuo is very high, and many residents have high awareness of tourism participation and have been gradually involved in tourism activities. However, most of them do low-level, low-income physical labor, and are rarely involved in tourism decision-making. The education of residents on tourism should be further improved.

(2) The overall satisfaction of tourists with Yangshuo tourism is medium.

The overall satisfaction of tourists with Yangshuo tourism is slightly above the medium level, and the overall satisfaction of domestic tourists is slightly higher than that of foreign tourists. Specifically, both domestic and foreign tourists think highly of Yangshuo's tourism resources (especially natural resources), but the evaluation of Yangshuo's current water quality (including the Lijiang and Yulong Rivers) by foreign tourists is relatively low; both domestic and foreign tourists think the scenic zone is too crowded; the tourist evaluation of tourism services is slightly above the medium level, and the satisfaction of domestic tourists with catering and accommodation is lower than that of foreign tourists; in terms of the tourism environment, domestic tourists are very satisfied with Yangshuo's air quality, while foreign tourists think highly of the friendliness of Yangshuo residents. Urban traffic, noise, entrance ticket prices and tourism commodity prices are the indicators of low satisfaction.

57% of domestic tourists think their perceived tourism experiences meet or highly meet their expectations, while only 31% of foreign tourists think so, showing that experiences of foreign tourists should be further improved.

The survey shows that 60% of domestic tourists are willing to revisit Yangshuo, and this percentage much higher than that of foreign tourists. In the survey, 32% of domestic tourists are re-visitors. In general, both domestic and foreign tourists are highly willing to recommend Yangshuo.

(3) Yangshuo tourism has brought significant economic contribution to the locality.

The economic contribution of tourism to Yangshuo is very significantly, shown in the following aspects mainly:

The contribution of tourism income to GDP and fiscal revenue is high. In 2010, tourism income was RMB3.15 billion. From 2000 to 2010, the growth rate of gross tourism income in every year was much higher than that of GDP except 2003. In addition, in July 2011, the year-on-year growth rate of the “tourism” item was higher than those of the other items, reflecting the contribution of tourism to Yangshuo’s public finance indirectly.

Tourism development has driven the agricultural restructuring of Yangshuo from traditional agriculture to modern agriculture, and promoted the commercialization of farm products into tourism commodities. In addition, tourism development has also driven the development of Yangshuo’s industry and commerce (catering, lease services and characteristic handicrafts) greatly.

In terms of employment, tourism has generated a large number of job opportunities for local residents, driven the employment restructuring of Yangshuo, promoted the considerable transfer of labor from primary industries to tertiary industries, attracted non-locals to start up businesses here, and caused local residents to learn English and other languages more actively.

(4) Resource conservation and environmental protection must be strengthened in Yangshuo’s tourism development

Since Yangshuo’s tourism is based mainly on its natural resources, it is essential to conserve resources and protect the environment. Currently, local residents and tourists have realized that tourism has damaged Yangshuo’s resources and environment to some extent. Local residents are very sensitive to this because they

have lived here for a long time.

The departments concerned of the Yangshuo County Government and enterprises have made some efforts in controlling water and solid waste pollution. In 2010, the daily average levels of NO₂ and SO₂ of Yangshuo County have met the Class I standard, and the central treatment rate of urban sewage was 80%, the noise level of Yangshuo County is essentially within the range specified in the Environmental quality standard for noise (GB3096-2009). However, there is still great room for improvement in environmental utilization and protection. For example, currently, only 78.84% of local residents in Yangshuo can use treated water. In interviews, many residents have mentioned that centralized sewage treatment is limited to urban areas only, and many rural agritainment sites are still discharging sewage directly into the natural environment. In addition, about half of residents think “tourism has aggravated local noise pollution”, many tourists (especially foreign tourists) have mentioned the noise problem in the survey, and the percentage of enterprises taking energy management measures remains low. Local residents, tourism businesses and tourists should be encouraged to implement energy conservation initiatives together.

(5) The land problem remains a major challenge for Yangshuo’s sustainable tourism development

In Yangshuo County, since most of the land is hilly land, and cultivated area is very small, there are strict cultivated land protection policies. In recent years, with the rapid development of tourism, the demand for tourism land has increased dramatically, resulting in a sharp conflict between tourism and land utilization in Yangshuo County inevitably.

During the 11th Five-year Plan period, the county government has realized that in the previous round of planning, agritainment construction land is not fully allowed for in land for tourism facility and rural settlement construction for scenic spots, and tourism development and infrastructure construction land is inconsistent with the planned layout. The current land utilization plan of Yangshuo County is focused on urban construction, and allocates more urban construction land.

The Master Land Utilization Plan of Yangshuo County (2006-2020) points out that during the planning period, the land area for settlements in farms will be reduced by 307.81 hectares through conversion, consolidation and integrated management, in which 65.48 hectares of land will be converted into tourism land, agritainment land is

located in Yangshuo, Baisha, Fuli, Xingping, Putao and Gaotian townships mainly, and tourism villages include Longtan Village of Gaotian Town, Xingping Fishing Village of Xingping Town and Jiuxian Village of Baisha Town. Yangshuo County is developing tourism land to mitigate the land shortage during land development.

Appendixes

Questionnaire of Yangshuo Sustainable Tourism Development (for Tourists)

Dear Sir or Madam,

We are from the Yangshuo sustainable tourism development monitoring task force of the **United Nations World Tourism Organization**, doing a study on the tourism development of Yangshuo. The results of this study are for academic research only, and will not be used for commercial purposes. All your personal information will be kept confidential. Please fill in appropriate information. Thank you for your support!

Thank you very much for your support!

1. Including this time, how many times have you been to Yangshuo _____?

2. You came to Yangshuo as

A. Independent traveler B. Joining a tour group on your own C. Joining a tour group with friends or families D. Joining a tour organized by your employer E. During a conference F. Other _____

3. How many companions with you came to Yangshuo _____?

4. Where did you get information about Yangshuo? (Multiple choices allowed)

A. Newspapers and magazines B. Internet C. TV D. Travel agency
E. Tour brochure F. Friends and relatives G. Other _____

5. What is your motivation to come to Yangshuo? (Multiple choices allowed)

A. Relax B. Take risks C. Take activities D. Want changes E. Education F. Know geographic knowledge G. Social factors H. Weather I. Culture and food J. Other _____

6. How did you come to Yangshuo?

A. Self-driving B. Coaches C. Taxi D. Boat E. Sightseeing tour bus F. Walk G. Other _____

7. How did you travel in Yangshuo during your stay? (Multiple choices allowed)

A. Self-driving B. Bike C. Taxi D. Boat E. Sightseeing tour bus F. Walk G. Other _____

8. How long do you plan to stay in Yangshuo?

A. 1-3 days B. 4-7 days C. 7-15 days D. Over 15 days

9. Where do you live?

A. Family hotel B. Youth hostel C. Star Hotel D. Other _____

10. What's your travel budget per person?

A. <RMB300 B. RMB300-600 C. RMB600-1,000
D. RMB1,000-2,000 E. > RMB2,000

11. So far, how much did you spend on following parts? (RMB/yuan)

Transportation: _____ yuan Catering: _____ yuan

Entertainment: _____ yuan Shopping: _____ yuan
Else: _____ yuan

12. What impresses you most?

- A. Natural scenery B. Unique humanistic feelings C. Recreational atmosphere D. Hospitable people E. Nothing

13. You are going to visit: (Multiple choices allowed)

- ☐ West Street ☐ Lijiang River ☐ Painted hill of nine horses ☐ Scenery on the RMB20 note ☐ Camel crossing the river ☐ Butterfly Fountain ☐ Totem Trail ☐ Jianshan Temple ☐ Big Banyan Tree ☐ Yulong River ☐ Moon Hill ☐ Longjing River Drifting Resort ☐ Yangdi Scenic Area ☐ Peach Resort ☐ Impression Liu Sanjie Show ☐ Fuli Town ☐ Else _____

14. Which kind of store are you most interested in?

- A. Hotel B. pub and western restaurant C. Souvenir shop
D. Chinese health care shop E. Chinese restaurant F. Travel agency
G. Foreign language school H. Other _____

15. Does Yangshuo meet your expectation?

- A. Exactly the same B. Large the same C. Neither better nor worse
D. Worse than expected E. Very bad

16. Will you visit Yangshuo again?

- A. Yes B. No C. Not sure

17. Will you recommend to Yangshuo friends or relatives?

- A. Yes B. No C. No sure

18. Please tick the appropriate option based on you travel experience.

		Strongly agree	Agree	Neutral	Disagree	Strongly disagree
Tourism resources	View in scenic spots is beautiful	5	4	3	2	1
	Environment is clean	5	4	3	2	1
	Traffic is crowded	5	4	3	2	1
	Ticket price of scenic spots is reasonable	5	4	3	2	1
	Cultural landscape has local amorous feelings	5	4	3	2	1
	Water quality of Lijiang River is high	5	4	3	2	1
	Water quality of Yulong River is high	5	4	3	2	1
Social services	Health quality of catering and accommodation is high	5	4	3	2	1
	Service of hotel and restaurant staff is good	5	4	3	2	1
	Service of interpretation in attractions is good	5	4	3	2	1
	Service of souvenir shop staff is good	5	4	3	2	1
Tourism environment	Local security is good	5	4	3	2	1
	Traffic condition is good	5	4	3	2	1
	Air condition is good	5	4	3	2	1
	Noise pollution is little	5	4	3	2	1

		Strongly agree	Agree	Neutral	Disagree	Strongly disagree
	Local residents are friendly	5	4	3	2	1
	Price of catering and accommodation is reasonable	5	4	3	2	1
	Price of transportation is reasonable	5	4	3	2	1
	Price of tourism products is reasonable	5	4	3	2	1
	Price of entertainment is reasonable and amount is abundant	5	4	3	2	1
Other	Goods have lots of local characteristics	5	4	3	2	1
	Commercialization is too much	5	4	3	2	1
	I'd like to accept local tour guide service in the street	5	4	3	2	1
	I'm generally satisfied with the tour	5	4	3	2	1

19. Have you watched the performance “Impression Liu Sanjie” in person?

☐Yes ☐No (Please jump to NO.21 directly)

20. What in “Impression Liu Sanjie” impresses you most?

A. Stage B. Light C. Local costume D. Dance

E. Singing F. Liu Sanjie G. Actors H. Other _____

Do you agree with the following (tick “√” where you agree)?	Agree	Disagree
During the performance, I cared about the story of Liu Sanjie most.		
During the performance, I cared about the performance on stage most.		
After return, I will get further understanding of the story of Liu Sanjie.		
The performance reveals the living conditions of local residents.		

21. What other aspects do you think Yangshuo need to improve for tourism development?

Please answer the following questions. Your personal information will be kept confidential.

1. Your gender: A. Male B. Female

Place of residence (country): _____

2. Your age:

A. <18 B. 18-24 C. 25-35 D. 36-45 E. 46-60 F. >60

3. Your educational level:

A. Primary school B. Junior high school C. Senior high school or technical secondary school D. Junior college E. Bachelor F. Higher

4 Your monthly income: (RMB/yuan)

A. ≤1,500 yuan B. 1,501-2,500 yuan C. 2,501-4,000 yuan
D. 4,001-6,000 yuan E. ≥6,001 yuan

Questionnaire of Yangshuo Sustainable Tourism Development (for residents)

Dear Sir or Madam,

We are from the Yangshuo sustainable tourism development monitoring task force of the **United Nations World Tourism Organization**, doing a study on the tourism development of Yangshuo. The results of this study are for academic research only, and will not be used for commercial purposes. All your personal information will be kept confidential. Please fill in appropriate information. Thank you for your support!

1. Please tick the appropriate option based on your perception of and satisfaction with Yangshuo's tourism development.

[5 for “strongly agree”, 4 for “agree”, 3 for “neutral”, 2 for “disagree”, 1 for “strongly disagree”]

		Strongly disagree	Disagree	Neutral	Agree	Strongly agree
A	Tourism is good to our local development	1	2	3	4	5
B	I can benefit from tourism	1	2	3	4	5
C	Local impacts of tourism					
	Tourism development has brought more job opportunities to us	1	2	3	4	5
	Tourism development has created more job opportunities for local youth	1	2	3	4	5
	I'm satisfied with my income	1	2	3	4	5
	Tourism has attracted more investment and consumption	1	2	3	4	5
	Tourism has led to price rise	1	2	3	4	5
	Tourism has led to the rise of real estate prices	1	2	3	4	5
	Tourism has improved living standard greatly	1	2	3	4	5
	Tourism has increased crime rate	1	2	3	4	5
	Tourism has disturbed our former lives	1	2	3	4	5
	Tourism has ruined local morals	1	2	3	4	5
	Tourism has restricted my use of tourism resources	1	2	3	4	5
	Tourism has improved infrastructure greatly	1	2	3	4	5
	Tourism has improved medical facilities and services greatly	1	2	3	4	5
	Tourism has increased quantities of demolished old houses and newly built houses	1	2	3	4	5
	Tourism has promoted cultural exchanges with the outside	1	2	3	4	5
	Folk customs and cultural traditions have been ruined and forgotten	1	2	3	4	5
	Tourism has increased cultural activities or traditional festivals	1	2	3	4	5
	Tourism has involved more people in the extension of traditional culture	1	2	3	4	5

Tourism has promoted local handicraft development	1	2	3	4	5
Tourism development has led to congested traffic	1	2	3	4	5
Tourism has aggregated air pollution	1	2	3	4	5
Tourism has aggregated water pollution	1	2	3	4	5
Tourism has aggregated noise pollution	1	2	3	4	5
Tourism has increased solid waste	1	2	3	4	5
Guesthouses and other tourism facilities have ruined landscape aesthetics	1	2	3	4	5
I think it is very important to protect the natural environment.	1	2	3	4	5
I'm willing to provide advice on the development of the scenic zone	1	2	3	4	5
Some decisions of the scenic zone incorporate our advice	1	2	3	4	5
I've received information on government policies	1	2	3	4	5
I'm satisfied with government enforcement	1	2	3	4	5

2. How satisfied are you with Yangshuo's tourism development?

A. Very dissatisfied B. Dissatisfied C. Satisfied D. Very good E. Excellent

3. Will you support Yangshuo's sustainable tourism development?

A. Strongly object B. Object C. Neutral D. Support E. Strongly support

4. What do you think have changed most in local tourism development in recent years? What are your greatest concerns?

5. Do you know what is sustainable tourism development? If yes, how to you understand it?

Your personal information is hereby provided for research purposes, and will be kept strictly confidential.

1. Your gender: A. Male B. Female

2. Your ethnic group: _____

3. Your age: A. <15 B. 15-24 C. 25-44 D. 45-60 E. >60

4. Your current place of residence: _____ Village, _____ Township

5. Your educational level:

A. Primary school or below B. Junior high school C. Senior high school or technical secondary school D. Junior college or bachelor E. Higher

6. Do you have the habit of studying English at ordinary times? A. Yes B. No

7. Your type of work: _____ A. Full-time B. Part-time

Your service length: _____

Your place of work: _____

8. Your monthly income: (RMB/yuan)

- A. 1,000 yuan or less B. 1,001-2,000 yuan C. 2,001-3,000 yuan
D. 3,001-5,000 yuan E. 5,000-10,000 yuan F. >10,000 yuan

9. Your monthly household income: _____ (percentage of your monthly income to your monthly household income: _____%)

10. Your length of local residence:

- A. <1 year B. 1-3 years C. 4-6 years D. 7-10 years E. 10 years or more

Questionnaire of Yangshuo Sustainable Tourism Development (for employees)

Dear Sir or Madam,

We are from the Yangshuo sustainable tourism development monitoring task force of the **United Nations World Tourism Organization**, doing a study on the tourism development of Yangshuo. The results of this study are for academic research only, and will not be used for commercial purposes. All your personal information will be kept confidential. Please fill in appropriate information. Thank you for your support!

1. Please tick the appropriate option: (5 for strongly agree, 1 for strongly disagree)

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
I'm satisfied with my wage level	5	4	3	2	1
I'm satisfied with the enterprise's bonus system	5	4	3	2	1
I'm satisfied with the prevailing leave system	5	4	3	2	1
My current job is challenging	5	4	3	2	1
The supervisor is able to objectively evaluate his subordinates' performance	5	4	3	2	1
The supervisor will help and direct me when I have any difficulty at work	5	4	3	2	1
The enterprise decide promotions based mainly on educational level	5	4	3	2	1
I'm able to see my prospect of promotion	5	4	3	2	1
I work well with my colleagues	5	4	3	2	1
I communicate smoothly with my colleagues	5	4	3	2	1
My job is supported by my family	5	4	3	2	1
The rules and regulations of the enterprise are well implemented	5	4	3	2	1
The enterprise clearly defines the responsibilities of different departments	5	4	3	2	1
I'm clear about the enterprise's business status	5	4	3	2	1
I'm clear about the business development objectives developed by the enterprise's management	5	4	3	2	1
The short-term business objectives of the enterprise are well implemented	5	4	3	2	1
I'm satisfied with the comfort of the workplace	5	4	3	2	1
I think that a scenic environment can improve working efficiency	5	4	3	2	1

- How satisfied are you with your current **job**?
A. Very satisfied B. Satisfied C. Neutral D. Dissatisfied E. Very dissatisfied
- Is this your first job in Yangshuo?
A. Yes B. No, this is my ____ job.
- Why do you work here?
A. I like the environment here and pursue a lifestyle B. Make a living C. Other _____
- Are there enough job opportunities suited for you in Yangshuo?

- A. Yes B. No
5. Do you plan to work elsewhere?
A. Yes, I plan to leave in _____ years B. No
6. Do you have the idea of changing a job?
A. Yes, I plan to do this in _____ years B. No
7. Do you plan to start a business yourself?
A. Yes, I plan to do this in _____ years B. No
8. Do you have the habit of studying English at ordinary times?
A. Yes B. No

Your personal information is hereby provided for research purposes, and will be kept strictly confidential.

1. **Your gender:** A. Male B. Female
2. **Your age:**
A. 15-24 B. 25-44 C. 45-65 D. 65 or more
3. **Your ethnic group:** A. Zhuang B. Han C. Other _____
4. **Are you a local?**
A. Yes, I have lived here for _____ years; B. No
5. **If not, where are you from?**
A. Yangshuo County B. Guilin City C. Guangxi D. Elsewhere _____
6. **Your educational level:**
A. Primary school or below B. Junior high school C. Senior high school or technical secondary school D. Junior college or bachelor E. Higher
7. **Your monthly income:**
A. 1,000 yuan or less B. 1,001-2,000 yuan C. 2,001-3,000 yuan
D. 3,001-5,000 yuan E. 5,000-10,000 yuan F. >10,000 yuan
8. **Do you have any other income source than this job?** _____
9. **Your monthly household income:** _____ (percentage of your monthly income to your monthly household income: _____%)

Questionnaire of Yangshuo Sustainable Tourism Development (for business owners)

Dear Sir or Madam,

We are from the Yangshuo sustainable tourism development monitoring task force of the **United Nations World Tourism Organization**, doing a study on the tourism development of Yangshuo. The results of this study are for academic research only, and will not be used for commercial purposes. All your personal information will be kept confidential. Please fill in appropriate information. Thank you for your support!

1. The enterprise is located in _____, and its name is _____.
 2. Which kind of services does the enterprise provide?
 - ☐ **Accommodation:** ①Hotel ②Hostel ③Family guesthouse ④Other
 - ☐ **Catering:** ①Ordinary restaurant ②Local-style restaurant ③Western-style restaurant, bar or cafe ④Cold drink store ⑤Food stall ⑥Other
 - ☐ **Entertainment:** ①Ball room ②Karaoke ③Other
 - ☐ **Commodity marketing or production:** ①Souvenirs ②Books and A/V products ③General merchandise ④Clothing ⑤Other
 - ☐ **Lease:** ①Vehicles ②Outdoor sports tools, e.g., rockcraft gear and bicycles ③Other
 - ☐ **Travel agency:** ①Tour guide ②Ticket booking ③Room booking ④Other
 - ☐ **Scenic spot operation**, specifically _____
 - ☐ **Beauty care & hairdressing** ☐ **Photo development**
 - ☐ **Other** _____ (The above questions are to be filled in by the interviewer.)
-

1. Your **products (or services)** mainly reflect:
A. Local characteristics B. Western characteristics C. Other _____
2. Your busy season is usually from _____ (month) to _____ (month).
3. Do you hire anyone?
A. Yes B. No
If yes, there are () employees; () employees in the busy season and () employees in the slack season; () female employees.
4. What skills do you need? (Enumerate 3 or 4 items) _____
5. What is the main educational level of employees?
A. Primary school or below B. Junior high school C. Senior high school or technical secondary school D. Junior college or bachelor E. Higher
6. Have the employees been trained before going to work? _____
How were they trained? _____ If yes, the percentage of trained employees is about _____.
What is the scope of training? _____
7. How many employees are locals? _____
8. What's your original intention to start your business here?
A. I like the environment here and pursue a lifestyle B. Make a living C. Other _____

9. What are the greatest factors that affect your business operations? (multiple choices allowed)

A. Rent B. Wages C. Product costs D. Competition E. Low consumption power of tourists F. High taxes

10. Tick the appropriate option for the following statements about Yangshuo.

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Yangshuo is a safe place	1	2	3	4	5
Yangshuo is a tourist destination worthy of investment	1	2	3	4	5
During after-hours, Yangshuo's leisure activities satisfy me	1	2	3	4	5
I think the commercial atmosphere of West Street is too strong.	1	2	3	4	5
The attraction of West Street to tourists is dropping	1	2	3	4	5

11. What type of ownership is your enterprise?

A. Privately owned B. Family owned
C. Owned by two or more shareholders D. Chain store

12. If you operate in rented premises, the monthly rent is RMB_____, and the tenure is _____ years.

13. Have you taken energy and water conservation measures?

A. Yes, what measures _____ B. No but planned C. No and not planned for the moment

14. Why do you take (or don't you take) energy and water conservation measures?

15. Do you know what is "sustainable tourism development"?

A. Very much B. Slightly C. Rarely D. Completely not

If yes, what are your sources of information on sustainable tourism development?

A. Government publicity B. Mass media (TV, broadcast, newspaper, magazine, etc.)
C. Specialized agency D. Other _____

16. Do you have any comment or advice on Yangshuo's future tourism development?

Your personal information is hereby provided for research purposes, and will be kept strictly confidential.

1. **Your gender:** A. Male B. Female

2. **Your age:** A.15-24 B.25-44 C.45-64 D.65 or more

3. **Your ethnic group:** A. Zhuang B. Han C. Other _____

4. **Are you a local?** A. Yes B. No

5. **If not, where are you from?**

A. Yangshuo County B. Guilin City C. Guangxi D. Elsewhere _____

6. **Your educational level:**

A. Primary school or below secondary school B. Junior high school C. Senior high school or technical school D. Junior college or bachelor E. Higher

7. Your monthly income:

A. 1,000 yuan or less B. 1,001-2,000 yuan C. 2,001-3,000 yuan
D. 3,001-5,000 yuan E. 5,001-10,000 yuan F. 10,001-30,000 yuan
G. 30,001-50,000 yuan H. >50,000 yuan

8. Do you have any other income source than running this tourism business?
