

**Monitoring Report on the Sustainable Tourism
Development of Kanas
(Simplified version)**

Kanas Scenic Spot Management Committee

**Monitoring Centre for UNWTO Sustainable Tourism
Observatories**

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1 Foreword

1.1 The origin of monitoring

Since September 2012, Kanas has been listed as the 4th sustainable tourism development observation site in China by the United Nations World Tourism Organization. Kanas Scenic Spot is located in the northern part of Burqin County, Altai Region, Xinjiang Uygur Autonomous Region, in the golden zone where China borders with Kazakhstan, Russia and Mongolia. According to *the Great Kanas Tourism Area Plan (2005-2020)* (《大喀纳斯旅游区总体规划 (2005 — 2020 年)》), the Kanas Scenic Area is bounded by 48°13' N latitude in the south, by Hemu Village in the east and by the national border in the northwest, with a planned area of 10,030 square kilometers, mainly including Kanas National Nature Reserve, Xinjiang Kanas National Geopark, Baihaba Forest Park, Jiadengyu Forest Park, Kanas River Valley, Hemu River Valley, Hemu Grassland, Naren Grassland and other eight natural landscape areas and three human-landscape areas, including Hemu Village, Baihaba Village and Kanas Village. Kanas Scenic Area has many titles such as National 5A Tourist Attractions, National Geopark, National Forest Park, Chinese Nature Reserve and National Natural Heritage. Its main features are the magnificent natural scenery of the northern border and the unique culture of Tuvan life, which have long attracted tourists from all over the world. Supported by its rich ecological resources and unique community culture, Kanas's sustainable tourism development has been attracting attention from tourism academia and industry.

In order to further explore and promote the model of sustainable tourism development effectively, the World Tourism Organization plans to conduct periodic monitoring at the Kanas observatory. The Tourism Sustainability Monitoring Center under the School of Tourism of Sun Yat-sen University, as the responsible institution for monitoring, carried out tourism sustainability monitoring activities in Kanas for the eighth time this year, mainly collecting real-time data required for the assessment indicators, covering tourism resources and environment, economy, society, industrial transformation and quality of life in Kanas scenic area, and at the same time establishing a database of Kanas tourism sustainability monitoring indicators, in order to analyze and assess the current

situation of tourism development in Kanas, and discover the problems of tourism development in time, hoping to provide some help to the Tourism Management Committee of Kanas Scenic Area, and to provide reference for the World Tourism Organization and other institutions devoted to tourism sustainable development research in the practical operation and application of relevant indicators.

1.2 Monitoring Procedure

The 2019 monitoring program could be divided into three stages, specifically: monitoring preparation stage, field monitoring stage and report stage.

Monitoring preparation Stage: from the monitoring task received in mid-August 2019, the Monitoring Centre for UNWTO Sustainable Tourism Observatories successfully completed the monitoring of sustainable tourism in Kanas in 2019 with the cooperation of many parties. The team responsible for the monitoring task was composed of 13 researchers, PhD students and master students from the Center for Tourism Development and Research of Sun Yat-sen University, in specific, with PhD student Wu Chuanlong as the leader of the monitoring team and associate researchers Lin Junfan, Jun Yuxian and Li Chenchen, PhD students Liu Tingting, Chen Yuanyi and Gao Cong, and master students Wang Yuning, Qu Mingya, Ye Xiaoxuan, Lin Yuchi, Wu Lili and Chen Yinghuan. In this stage, the monitoring team discussed and analyzed the monitoring task in detail, and initially formulated the monitoring index system of Kanas scenic area according to <Indicators of Sustainable Development for Tourism Destinations: A Guidebook> and the characteristics of Kanas scenic area. At the same time, a questionnaire for tourists, a questionnaire for community residents, a questionnaire for tourism owners and employees, and an outline for community interviews were designed for monitoring. In addition, the group also conducted an in-depth understanding of Xinjiang tourism information and Kanas scenic area information, laying a solid foundation for the later monitoring work.

Field monitoring stage: On September 15, the monitoring team set off from Guangzhou and formally carried out the research work of monitoring the sustainable

tourism development in Kanas on September 16. During the 7-day research period, the team received strong support and cooperation from the management committee of Kanas Scenic Area and successfully completed the monitoring work of sustainable tourism development indicators in Kanas Scenic Area. The monitoring team conducted questionnaires and interviews with tourists and community residents at major attractions and visitor stopping points, such as Kanas Visitor Center (Interchange Center), Kanas Old Village, New Village, Kanas Lake Area, Jatdengyu, Hemu Village and Baihaba Village; they also visited Kanas Scenic Area Management Committee to collect secondary information related to Kanas Scenic Area.

This monitoring mainly collected a lot of first-hand information about tourists, community residents, tourism enterprises and the local government by means of questionnaires and interviews. Specifically, for tourists, a total of 568 questionnaires were returned. In addition to the questionnaires, in-depth interviews were conducted with some tourists and tour guides about the tourism experience and tourism development suggestions to assist in the analysis; for the community residents, a random sampling method was adopted, with household surveys as the main focus, supplemented by intercept interviews, and the research method combined both semi-structured interviews and questionnaires. The scope of the survey included a total of 4 communities in the Kanas scenic area, including the most important village of Hemu, the new and old villages of Kanas, and the village of Baihaba, and in-depth interviews and some secondary return visits were conducted with the residents of the communities where the operations were carried out, and a total of 248 questionnaires were collected; for tourism enterprises, a sample of major operators and small enterprises in the 4 communities of Kanas were also surveyed, including accommodation enterprises, catering enterprises, souvenir stores, and retail stalls. Among them, 141 questionnaires were collected from owners and 152 from employees.

Report stage: Starting from October 8, the monitoring team began to collate the information obtained from the monitoring and finally drafted this report. This monitoring period combined the indicators and methods of the United Nations World

Tourism Organization with the actual situation of tourism development in Kanas to develop the basic indicator system of sustainable tourism development in Kanas (see Table 1-1). It should be noted that the content and level of detail of the statistics at the local statistical level differ from year to year, making it impossible to maintain the continuity of part of the data, which may result in some of the analytical conclusions not being comprehensive and accurate enough.

2 Tourism and Community

2.1 Basic situation of residents

Among the residents interviewed, the number of males was higher than that of females, and the middle-aged and young groups accounted for a larger proportion. In terms of education level, most of the residents have secondary education (high school, junior college, or college), and the proportion of residents with higher education (bachelor's degree or above) has slightly increased compared to 2018. More than 70% of the residents are engaged in tourism-related industries, and the types of occupations show diversified characteristics. Most of the interviewed residents are local indigenous residents, thus the sample is highly representative. The majority of residents are ethnic minorities, with significant ethnic diversity. The average monthly income of the residents is mainly concentrated in the middle-income level, but the gap between the rich and the poor is significant. The number of houses owned by residents remains basically the same, and houses are still mainly traditional wooden houses and Kazakh felt houses, and most of the existing houses were built after 2010. The proportion of houses rented and self-owned has decreased, but house rents continue to rise.

2.2 Residents' perception of the impact of tourism

2.2.1 Economic Influence

The vast majority of residents recognize the positive role of tourism development in improving local economic condition, increasing employment opportunities,

attracting investment and boosting consumption, and improving living standards, but their perceptions of specific issues like tourism-induced local price increases, benefits to a few groups of people, and widening disparities between rich and poor residents continue to deepen. Among them, residents' negative perceptions of local price increases caused by tourism and the widening gap between rich and poor residents have increased, and the negative perceptions of benefits to a few caused by tourism continue to increase.

2.2.2 Social influence

The majority of residents believe that tourism has improved infrastructures such as roads, water and electricity, medical conditions and education, and these positive perceptions continue to grow. In addition, residents' negative perceptions of tourism leading to the demolition of old houses and the addition of new houses have decreased, but negative perceptions of traffic congestion, increasing crime, disruption of their old lives, limited use of scenic resources, and tension between residents and tourists continue to expand.

2.2.3 Cultural influence

The vast majority of residents believe that tourism has facilitated exchanges between local and foreign countries, increased festivals, enriched life, and promoted the development of local handicrafts, where residents' positive perceptions of tourism which supported more festivals and enriched life are significantly enhanced. However, residents' perceptions of the impact of tourism on folk traditions and traditional culture have undergone a significant shift, and their negative perceptions have been enhanced, with the destructive effects of tourism on traditional culture being increasingly valued by residents.

2.2.4 Environmental Influence

An overwhelming majority of residents believe that tourism improves local sanitary conditions, promotes environmental education and conservation of flora and fauna, with only little change compared to the data in 2018. However, residents' negative perceptions of air pollution, noise pollution, water quality pollution, and consumption of resources needed by local residents as a result of tourism were

significantly enhanced, and the negative perception of increased garbage was slightly increased.

2.3 Residents' attitude and satisfaction

2.3.1 Residents' attitude

The vast majority of residents recognize the great contribution tourism has been making to local development. Residents hope that the scale of local tourism will continue to expand and are willing to work in tourism-related occupations, actively participate in promotion and publicity work and offer suggestions for scenic spots, with little change compared to data in 2018. Scenic areas are increasingly respecting residents' rights when making decisions, and positively listen to residents' opinions and suggestions. 67% of residents believe that scenic areas will listen to their opinions when making decisions, increased by 9 percentage points compared to that in 2018.

2.3.2 Residents' satisfaction

81% of residents are satisfied with tourism development, which is not much changed compared to the figure of 84% in 2018, and merely 2% of residents are dissatisfied with Kanas tourism development. This indicates that Kanas tourism development meets the developing needs of the majority of residents and satisfies the majority of residents.

3 Visitors' Perception and Satisfaction

3.1 Social demographic characteristics of the sample

The constructional distribution of tourists in Kanas is well-defined. And the tourist population is mainly young and middle-aged people, aged 25-45, with high income level and education, mostly from government agencies and institutions, company and enterprise personnel. On the one hand, Kanas has a unique landscape different from general popular attractions, which is more likely to attract tourists from economically developed regions with a relatively high cultural level. This group of tourists has higher aesthetic ability and awareness of environmental protection, which helps Kanas achieve sustainable development. On the other hand, as a border tourism

place, the outing cost of Kanas is high, which requires tourists to have certain financial ability as well as physical strength.

In terms of the choice of travel forms in Kanas, self-guided tours still dominate. With the prevalence of self-driving tours, it is becoming more convenient for tourists to reach Kanas scenic areas, but there is still more room for development of self-guided tours. Based on this fact, the scenic spot management committee needs to continuously improve the road infrastructure, set up viewpoints and service stations along the way to provide convenience and support for self-driving tourists; at the same time, it can design and promote diversified and characteristic self-driving tour routes to attract more self-driving tourists. On the other hand, joining a group tour is another important form of traveling in Kanas, which requires the management to continuously strengthen the supervision of travel agencies and tour groups for ripping off customers, cultivate the service awareness of tour guides, and ensure that group tourists have a satisfactory service experience.

It is noteworthy that though the overall cost of Kanas tourism is not low, the cost is concentrated on transportation, accommodation and meals, and tourists' interest in souvenir purchase is underperformed. To a certain extent, it relates to the advent homogenization of souvenirs sold in Kanas tourist stores, the low-cost performance and the lack of obvious local characteristics. Kanas should comprehensively exploit the existing resource's advantages and cultural characteristics, develop diversified tourist souvenirs with local ethnic characteristics, and strengthen the supervision of the products to ensure reasonable cost performance and guaranteed quality as well. This will not only drive tourists' consumption and promote local residents' benefits, but also be an effective way to promote Kanas culture.

3.2 Tourist perception and satisfaction monitoring indicators

3.2.1 Strong perception of natural scenery

Located in the Altai region in northern Xinjiang, Kanas is a comprehensive scenic spot integrating glaciers, lakes, forests, grasslands, pastures, rivers, ethnic customs, rare flora and fauna. The beautiful natural scenery and unique ethnic culture are the

core tourism attraction in Kanas. Meanwhile, accompanied by ethnic costumes and living habits, Kanas becomes a wonderland on the earth in tourists' imagination. Natural resources are the material carrier for tourists to understand the humanistic elements of Kanas, and tourists generally recognize the natural scenery of Kanas, but are not deeply impressed with the humanistic style and border scenery. Therefore, the future development of Kanas tourism needs to further present the ethnic customs and border characteristics, enhance the communication and interaction between tourists and local residents through tourism activities, so that the natural scenery and humanistic customs can complement each other and show the diversified characteristics of Kanas.

3.2.2 Strong willingness to revisit and recommend to others, but there is still room to improve for tourists' satisfaction

The natural scenery of Kanas is unique and enchanting, thus the willingness of Kanas tourists to revisit and recommend is strong. However, tourists do not have a deep and penetrating experience of the local culture and humanistic resources, which is not conducive to the sustainable and healthy development of Kanas tourism. Therefore, for tourism development in the future, Kanas needs to develop some more tourism activities that highlight local ethnic culture and customs, increase tourists' participation in tourism, gradually realize the transformation from sightseeing tourism to experience tourism, and promote the sustainable development of the scenic spot.

3.2.3 Infrastructure and service need to ameliorated

While tourists praised the scenery of Kanas, they also made pertinent comments on the management services and infrastructure construction of the scenic spots. One is the urgent need to improve the infrastructure construction, such as widening some roads with high traffic flow or adding parking spaces, and taking effective measures to divert tourists to solve the problem of queuing and traffic deployment; the other is to strengthen the capacity and level of tourism service reception, and provide cost-effective and informative accommodation and catering services to meet the tourism needs of different groups. In short, Kanas should pay more attention to

tourists' feedback, improve the management level of scenic spots on the basis of operational feasibility, and provide tourists with a good experience.

4 Impact of tourist economy

4.1 Winter Tourism promotes the improvement of various tourism facilities

Benefiting from the launch of winter tourism and marketing promotion, the number of tourists and tourism revenue of Kanas scenic spots increased significantly from 2017 to 2019. According to statistics, as of September 15, the cumulative number of tourists in 2019 was as high as 2,451,400, catching up with the annual number of tourists in 2018. In addition, according to the number of existing hotels, B&Bs and restaurants above the scale in the scenic area, it can be found that the infrastructure of Kanas is also upgrading day by day, and the reception capacity is constantly improving.

4.2 The number of tourists shows obvious seasonal changes

The peak season of tourism in Kanas is mainly in July, August and September. Compared with the statistics of tourist volume in 2017 and 2018, the number of tourists from January to April 2019 has increased dramatically, which is closely related to the increased marketing efforts of winter tourism in Kanas scenic area. To promote the development of winter tourism, Kanas scenic area on the one hand launched a series of snowfield experience and folk culture experience projects. On the other hand, it put out "the origin of human skiing", "China's most beautiful snow country" as the promotion slogan, increased marketing and promotion efforts, expanded the winter tourism market both online and offline, deepening the "Internet+" tourism marketing system and establishing a tourism marketing public matrix to enhance the winter tourism network of Kanas. The spots actively participated in the marketing and promotion activities given by the Department of

Culture and Tourism of the autonomous region and Altai region to enhance the influence of the winter tourism in Kanas.

4.3 Tourism drives local economic development

With the continuous development of tourism in Kanas scenic area and the implementation of various beneficial policies of the scenic area management committee, farmers and herdsmen participation in tourism development step by step, tourism becomes an important industry for them to increase their family income and improve their living conditions. The development of tourism in Kanas has boosted the local economy and raised the income level of local community residents. During the monitoring process, the interviewed employees were satisfied with their jobs in general, especially with the working environment, relationship with colleagues and salary, in which their satisfaction with the current bonus system and vacation system also increased compared with the previous year.

4.4 Uneven distribution of tourism reception facilities

The distribution of the number of beds and tables in the four regions of Kanas scenic area is still extremely uneven. Jiadengyu, as the window of tourist reception, has been occupying the largest proportion of beds and tables, followed by Hemu, Baihaba, and Tiexiang, which has the smallest proportion of beds and tables.

To sum up, the economic dividend brought by the overall tourism development of Kanas is more obvious, and in the future Kanas Scenic Area Management Committee should maintain the continuous growth of the tourism economic development of the Kanas Scenic Area on the one hand, and also focus on the balance of the development of each region and the balance of the interests of each stakeholder.

5 Tourism products and services

5.1 Tourist motivation and purpose

The purposes and motives of tourists visiting Kanas scenic area are diverse, mainly based on sightseeing, leisure, vacation and photography. Compared with 2018,

tourists for the purpose of visiting friends and relatives rose from the 9th to the 5th place in 2019. Scientific expedition rose from the 12th to the 8th place, while company meetings and expedition dropped from the 5th to the 10th place. In general, sightseeing, leisure and vacation as well as photography are still the main purposes and motives of tourists visiting Kanas in 2019, nevertheless, the percentage of tourists with leisure and vacation as the purpose of tourism increased from 45.67% in 2017 to 47.22% in 2018, and to 59.54% in 2019. This change reflects that tourists' impression of Kanas scenic area is transforming, and the demand for tourism products is becoming more leisurely and diversified.

5.2 Tourism products and routes

The scenic area has now formed a diversified tourism product, integrating sightseeing tours, leisure and vacation, folk culture tourism. In addition to the classic tourism lines, outdoor hiking, scientific research, adventure lines and other core tourism products of a scenic area in the past, Kanas scenic area in 2019, with the advantage of winter tourism, proceeded to plan winter tourism lines, focusing on the development of sightseeing, sports, entertainment, performance, festivals and other ice and snow tourism products. Compared with 2018, the scenic area added two short winter tourism lines in 2019, with the products focusing on skiing and ice and snow tourism. The development of winter tourism products and excursion lines enables Kanas to remain attractive to tourists throughout the year, which can reduce the seasonal interference with tourism development, effectively realize the economic benefits of tourism resources and balance the tourism income throughout the year.

It is worth noting that official data has shown that from January to mid-September 2019, Kanas scenic area received 2.451 million visitors, an increase of 36.8% year-on-year, but tourism revenue during this period was 1.51 billion yuan, dropped by 48.64% year-on-year, indicating a decrease in per capita consumption. Although the growth in the number of tourists will promote the evolution of tourist destinations, for tourist destinations with low accessibility and high ecological vulnerability such as Kanas, the rapid growth of tourists may lead to the phenomenon

of over-commercialization and ecological carrying capacity problems. If tourism revenue decreases instead of increasing during this period, it will increase the management pressure of scenic spots.

5.3 Tourism service and quality

The tourist service facilities in the scenic area are mainly around the core tourist attractions (Kanas Lake, Hemu, Jiadengyu and Baihaba). Compared with the past, there is no obvious change in the types of tourist services, but there is a certain improvement in the tourist infrastructure, which can basically meet the needs of tourists in the peak season. Tourist toilets can be further built and improved. In addition, the standardization of tourism services has been further improved due to the implementation of stricter government supervision in terms of tourism service quality.

5.4 Tourism image and publicity

Kanas scenic area has built up the overall tourism image of the “Pure Land on Earth” based on the high-quality natural and humanistic landscapes. The image perceived by tourists is mainly based on natural scenery and ethnic culture factors, and the overall image satisfaction remains high. In the meanwhile, Kanas scenic area has actively promoted its tourism image through festivals, theme promotion activities, media publicity and film communication, etc., achieved the top three attention in national ranking of winter tourism and was selected as one of the “2018 Top 10 Ice and Snow Tourism Cities” by China Tourism Research Institute in the 2018-2019 snow season.

6 Tourism planning and control

6.1 Tourism planning continues to be refined and deepened

On the basis of the successive completion of all levels of planning for important nodes and newly developed areas, the tourism planning and strategy of Kanas scenic area has been increasingly refined in depth from special perspectives. Last year, “Winter Tourism Program of Kanas Scenic Area 2019-2020” and the “Implementation

Plan of Kanas Scenic Area on Implementing Tourism Development and Promoting High-speed Development of Territorial Intelligent Tourism” were completed, focusing on the development of winter tourism. In terms of welfare policy, infrastructure construction, interaction with the masses, promoting employment, strengthening spiritual civilization construction and regulating the management of horse teams, the scenic area development upholds the concept of public participation and community involvement, and focuses on the implementation of “tourism enriching the people” in daily operation and management. In terms of planning and implementation, in conjunction with the objectives proposed in the “Great Kanas Tourism Area Revision and Enhancement Plan”, the number of tourists and tourism revenue have already achieved the mid-term goals. There has been a breakthrough in the construction of tourism products and vigorous development of winter tourism. In the sustainable development of the scenic area, the management committee has further improved the publicity work of “two creations” and the supervision of tourism safety production.

6.2 Good results of tourism control

The management committee protects the benign development of Kanas tourism through measures such as land management, building style, market standardization and management, and construction support, among which the scenic area keeps up with the tide of intelligent tourism. Aspects such as visitor diversion warning and visitor experience are important scenes reflecting the effectiveness of intelligent tourism. In terms of asset management, this year is still an important stage in promoting the supply-side structural reform of the scenic area and the transformation and upgrading of the tourism industry. A number of large-scale projects have enhanced the quality and efficiency of Kanas tourism development. Non-investment construction projects also play a key role in promoting the economic development of the scenic area. In terms of funding, the management of ticket revenue funds was further strengthened to ensure a virtuous cycle of funds for the scenic area. In terms of the implementation and execution of the plan, the implementation of the management committee in 2019 has been effective, among which the 100-day environmental

improvement action is worth continuously promoting. Limited by the objective situation, the progress of the scenic area in terms of comprehensive development, quality improvement and efficiency enhancement are still relatively slow.

6.3 Improvement of internal and external traffic of the scenic area

The year-round opening of Kanas Airport has further improved the accessibility of the external transportation of Kanas, escorting the development of winter tourism. The construction of the railroad in the Tierketi-Jiadengyu section will also further promote the implementation of the long-term planning of Kanas scenic area. The application of the scenic area big data, the implementation of the early warning mechanism for visitor flow, and the operation of bus-oriented large cycle have to some extent eased the pressure on the internal traffic of the scenic area. In addition, the scenic area also provided traffic guarantee for winter tourism through measures such as road clearance and chartered bus products. From a comprehensive point of view, the relief of internal traffic pressure during the peak season is still an urgent issue to be solved.

7 Travel Health and Safety

7.1 Food hygiene and safety

Although tourists come to Kanas more for the natural scenery than for the food. The food has always been the focus of the six elements of tourism. Considering that the local food culture is very ethnic, the food safety in Kanas should not be neglected. The Kanas scenic area has relatively strict requirements from food purchase, processing to production, and regular inspections and education are maintained for local operators, so food hygiene and safety work is relatively adequate.

7.2 Quality of environmental protection

The scenic area has built more supporting facilities to enhance the protection of the environment, while reinforcing the concept of green ecology to local residents and operators; visitors are more satisfied with the quality of the area's natural beauty.

However, local residents are more sensitive to environmental changes in the scenic area. The overall situation of air, noise and water pollution and garbage pollution has begun to improve according to the evaluation of residents in previous years. Environmental education in the scenic area is steadily advancing.

7.3 Community health and wellness

The local management committee attaches importance to the improvement of medical services, but due to the seasonality of tourism bringing certain costs, the improvement of local medical equipment and service capacity will be hindered accordingly, especially in the relatively dense tourist areas. The prevention capacity for major diseases and accidents needs to be improved. The scenic area can consider the differentiated support of medical services for local residents and tourists in future development to ensure the health and safety of the community.

7.4 Tourist travel safety

According to the research, it can be witnessed that tourists coming to Kanas are highly satisfied with the security and other tourism safety in Kanas on account of the scenic area's strong monitoring of all aspects of the six elements in tourism, especially transportation, catering and accommodation. Meanwhile, the friendly scenic guidance deepens the interaction between the scenic area and tourists, leaving a good travel experience for tourists under the premise of ensuring their safety. In terms of public safety, although Kanas scenic area is prone to fire and snowstorm disasters, it has comprehensive measures to deal with disasters and timely formulate annual disaster management implementation plans, shifting from "response" to "protection". For man-made accidents, prevention in advance should be advocated by developing and improving various emergency measures, and conducting regular drills, and strengthening the safety education and legal propaganda for community residents.

8 Tourism resources and environmental protection

Kanas scenic area has superior natural and human resources. The rapid development of tourism in recent years has increased the degree of tourism product

development of regional resources. However, Kanas scenic area has always adhered to the premise of giving priority to conservation, insisted on planning and institutional protection, and strengthened the conservation participation of various stakeholders, so as to achieve sustainable tourism development. Based on the relevant secondary data and field observations, this monitoring also conducted a questionnaire survey on the impact of tourism on the environment, and found that the environmental perceptions of residents and tourists are generally more rational and optimistic.

In terms of natural resources, first of all, Kanas should make specific plans for different ecological environments in scenic areas and implement them, promulgate various regulations related to forest and ecological management to do a good job of hard regulation and protection of ecological environment, and carry out various forms of education and publicity activities to promote residents to consciously protect animal and plant resources. In terms of human resources, it is important to excavate the culture and heritage of traditional human landscape, innovate and revitalize it with tourism, so that human resources can be better carried forward. In the meanwhile, the scenic spot should pay attention to the coordination of visual landscape, gradually demolish all kinds of illegal buildings according to the law, make the architectural landscape style integrating the surrounding environment, and regulate various construction activities.

According to the given index and survey, the environmental quality of Kanas scenic area is currently good. The impact of tourism on the atmosphere, soil and water quality is relatively small. In addition, from this monitoring questionnaire survey, the impact of tourism development on the environment and resources generally outweighs the disadvantages, which is shown by the fact that nearly 90% of the residents say that the sanitary conditions have improved significantly, and over 90% of the residents think that tourism development has promoted environmental education and the protection of flora and fauna to a certain extent; regarding the issues about tourism increasing resource consumption, water quality pollution and noise pollution, nearly half of the residents say they disagree with the given answers. However, more than

50% of the residents agreed that tourism has to a certain extent made more garbage, so the protection of the environment should focus on the problem of garbage disposal.

9 Summary and recommendations

9.1 Kanas tourism summary

9.1.1 Community residents seek diversification as tourism development competition increases

The tourism industry has a very strong nature of service. As local tourism development is maturing and deepening, competition in all aspects will become more intense, and the requirements for tourism service levels will continue to increase. Therefore, by improving the professionalism of tourism service personnel and providing diversified and differentiated tourism services, it helps to enhance competitiveness. From the sample data, the above situation is reflected in the fact that the literacy level of local residents has been improved to a certain extent; the occupations of residents are mainly in the tourism industry, while the specific types of occupations show diversified development. On the other hand, because the pressure of competition in tourism is increasing, if they cannot improve their service quality or seek other ways of development in time, their products or services may be eliminated. It will lead to the gradually widening gap between the rich and the poor of the local residents. In general, the feedback from residents on the impact of tourism development in Kanas is still on the positive side. In terms of economic impacts, most residents agree that tourism has brought more employment opportunities, foreign investment, and tourist spending, and has generally promoted economic development and improved local living standards. In terms of social impact, most community residents believe that tourism development has significantly improved infrastructure such as roads, water and electricity, as well as medical and educational conditions. At the same time, tourism development has also brought about problems such as rising prices and traffic congestion. In terms of cultural impact, the further development of tourism in Kanas has promoted exchanges between local and foreign people and

enriched festivals, but there is still a negative impact of damaging traditional culture. In terms of environmental impact, the vast majority of residents believe that tourism has improved local health conditions, but the negative perception of air, noise and other pollution has increased.

9.1.2 Natural scenery is attractive, but management services and infrastructure impact tourists' willingness to revisit

The structure of domestic visitor in Kanas is relatively scattered, mainly from more economically developed provinces such as Guangdong and Jiangsu, or cities in Xinjiang that are geographically close to each other; among these visitors, middle-aged and young visitors with higher education level and working in companies and institutions account for a larger proportion, mainly because the geographical location of Kanas is relatively remote. Thus, the visitor groups need to have certain economic strength and leisure time to travel. Tourists who come to Kanas usually obtain tourism information from the Internet or publicity among friends and relatives, and choose to conduct sightseeing and leisure activities in summer and autumn by a self-guided way. Tourists' interest in Kanas lies in its beautiful natural scenery and characteristic lodgings, but the current scenic spots can provide them with fewer choices and poorer experiences in terms of tourism transportation, accommodation facilities, catering, souvenirs and other services, which also affects their willingness to revisit.

9.1.3 Market of Ice and snow tourism has increased, and the number of tourists in winter has risen significantly

Kanas is located in the middle section of Altai Mountains in Xinjiang, and its special geographical location determines its climate change with obvious seasonality. June and September are the most beautiful seasons every year, and the number of tourists climbs month by month; as the temperature starts to drop in October, the number of tourists decreases rapidly. However, in recent years, Kanas scenic area has increased the marketing efforts of winter tourism, has made every effort to promote the tourism brand of "Pure Land Kanas and Snow Capital Altai", and actively built the Kanas ice and snow tourism vacation destination. First of all, in terms of tourism

products, Kanas, Jiadengyu Area, Hemu Area and Baihaba Area have launched a series of snowfield experience and folk culture experiences. Secondly, in terms of tourism marketing, with “the origin of human skiing” and “the most beautiful snow village in China” as the promotion slogan, the marketing and promotion efforts were enhanced. The established three-dimensional marketing system was used to promote Kanas to key markets in a targeted manner. The image of “ice and snow tourism resort destination” is promoted to the core market, and the winter tourism market is expanded through online and offline marketing. Lastly, in terms of scenic services and facilities, Kanas scenic area has provided adequate protection in terms of food, accommodation and transportation to ensure the smooth development of winter tourism. Under the influence of vigorous marketing and publicity in all areas and aspects, the number of tourists from January to April 2019 has increased significantly year-on-year, and ice and snow tourism in Kanas has good prospects for development.

9.2 Kanas Tourism Development Suggestions

9.2.1 Create boutique and characteristic tourism products and promote the transformation and upgrading of tourism system

Great Kanas scenic area has rich natural landscapes such as glaciers, snowfields, mountains, lakes, forests and rivers as well as human landscapes showing various minority characteristics. In this context, the main purposes and motives of tourists attracted to the area are sightseeing tourism, leisure and vacation and photography. The existing tourism products of Kanas can be divided into seven categories, sightseeing tourism, leisure and vacation, outdoor sports, folk culture experience, ice and snow tourism, science tourism and special tourism. The construction of tourism product system is relatively complete and rich, which can provide tourists with diversified tourism experience to the greatest extent. Currently, sightseeing tourism products still occupy the mainstream. Although tourists can satisfy the demand for photography during the tour, as well as experience the local minority humanities through home visits initially, the scenic spots still lack tourism products such as in-depth experience and interactive participation. In this context, the leisure and

tourism product system of Kanas scenic area needs to be transformed and upgraded urgently to promote tourists' in-depth experience tour by creating boutique, refined and characteristic tourism products. For example, measures such as traditional festivals, B&Bs with local folklore characteristics, traditional handicrafts to become tourist souvenirs, and folklore performance activities can not only tap the local special cultural connotation and continuously promote the research and development of local cultural tourism products, but also promote the protection and inheritance of local traditional culture. On the other hand, Kanas can develop sports and entertainment tourism products in winter, giving full play to the unique advantages of snow and ice resources in the scenic area, so that tourists can experience the cultural connotations of snow and ice in depth, to further amplify the "Snow Village" brand effect.

9.2.2 Guiding tourists to take the bus at different times to ease the internal traffic pressure

As the general tourism environment in Xinjiang becomes more and more stable, the daily visitor volume of Kanas scenic area gradually rises. There is a queue of 2-3 hours to take the internal buses during the peak hours, which leads to the tourists' dissatisfaction with the transportation. In order to solve the problems of internal transportation during peak hours, Kanas scenic area predicted the passenger flow of the following day through the number of tickets purchased at the scenic spot on the official website, WeChat and other big data platforms, and established an early warning mechanism with four levels of emergency response. In addition, a bus-oriented large-cycle operation mode was adopted to scientifically and reasonably dispatch interval buses according to factors such as the flow of tourists in the scenic area, the distribution of parking lots, the distance between attractions, the distribution of walking areas, and the distribution of tourists at different times. The series of measures still cannot completely solve the transportation dilemma at peak hours. Thus it is recommended that the scenic area at peak hours to further guide tourists staggered bus ride. For example, by cooperating with travel agencies to plan multiple tour routes, leading group tourists to visit different tourist attractions in batches and time periods; for casual tourists, they can appeal to tourists to reasonably arrange their touring time

and stagger their trips through price concessions and real-time display of road blockage.

9.2.3 Protecting and developing snow and ice tourism resources, promote winter tourism development

Kanas Grand Scenic Area is located in the north of Xinjiang, with abundant snowfall and long ice period in winter, both of which are conducive to the development of ice and snow tourism. For now, the shortcomings of Kanas scenic area in developing ice and snow tourism mainly lie in the aspects of inconvenient transportation, lack of human resources and insufficient publicity. In order to promote the development of ice and snow tourism in Kanas, comprehensive coordination and planning should be carried out from multiple subjects, multiple angles and multiple ways. First of all, government departments need to play a macro-control role. Transportation is a necessary condition for tourism accessibility, and the development of ice and snow tourism needs governmental support and supervision. In order to guarantee the operation of winter ice and snow tourism, governmental departments need to carry out unified macro-control. Second, Kanas needs to raise funds through a variety of forms, to develop ice and snow tourism, improve the relevant transportation, catering, accommodation and other supporting services and facilities, online and offline integrated marketing and publicity. All these initiatives require capital investment. Third, establish a brand and improve competitiveness. The main competitors for winter tourism in Kanas scenic area are the traditional ski resorts in the northeast and abroad. Therefore, it needs to establish a brand with characteristics and improve its core competitiveness in order to stand out and attract tourists. Finally, the training of ski tourism-related talents needs to be strengthened. Kanas can make full use of teaching resources in universities to offer ice and snow sports tourism, snowfield construction management and other professional courses, targeted to make up for the lack of talents. At the same time, to a more advanced development of ski tourism in the northeast and abroad, it is necessary to introduce relevant talents, providing a reliable guarantee of talents to develop the ice and snow tourism industry.