

Cognizing and Choosing Model for Rural Tourism Development in Nonoptimal Tourism District: A Case Study of Moutuo Village in Qiang Minority Community, Southwestern China

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Abstract

This paper aims to compare three models in terms of development policies, development potentials and operational mechanism by evaluating, identifying and choosing the best one to meet the needs of tourism development and management in the nonoptimal tourism districts (NTDs). The methods of Participatory Rural Tourism Appraisal and Analytic Hierarchy Process are employed to collect the necessary data and analyze the key issues of three models. According to the analysis, market-oriented rural tourism development model and resource-oriented rural tourism development model are suitable for Moutuo community at the beginning stage of tourism development, while industry-oriented rural tourism development model is potential and beneficial to its further development. Some effective management practices for different models are recommended to overcome the barriers of nonoptimal characteristics and balance the interest of tourism stakeholders. And sustainable development of rural tourism in NTD could come true with the guidance of rational models and polycentric management.

Key words

Moutuo community, Nonoptimal tourism district, Participatory rural tourism appraisal, Rural tourism development model

1. Introduction

More and more urban dwellers would like to visit countryside which can offer them pleasant rurality experiences^[1,2], which promotes the new countryside construction and the improvement of people's living quality in the context of Urban and Rural Integration development^[3]. Meanwhile, some suburban scenery sites lose their attraction gradually for the lack of rurality. Therefore, some tourists prefer to travel in the outer suburb areas, which provide the opportunity for rural tourism development (RTD) in remote districts, especially minority areas.

Due to historical factors and limited conditions, most of the rural districts, particularly the remote minority areas, belong to the nonoptimal tourism district (NTD). NTD, in short of nation-level or world-class backbone of sceneries, and abundant tourist resources, was firstly proposed by a domestic researcher called Chunxiao Xu in 1993^[4]. It is similar to the non-superior regions of tourist resources or foreign researchers' tourism fringe or tourism inhospitable areas^[5-7]. The controversies over this conception are never stopping^[8,9]. Although scientists have not got consensus on the NTD's conception and its spatial distribution and development order, it is generally believed that the NTD refers to the region where the attribute of tourist resources and tourism location is relatively inferior in specific time. Under certain conditions, the nonoptimal characteristics of the region can be altered into optimal ones, which is called compensation and sudden-change phenomenon^[10-12]. Many researches focus on practices with guiding of theories and methods including centre-edge tourism theory, life cycle theory, the tourism location theory, the analytic hierarchy process, fuzzy clustering method and ecological footprint method, which product more useful conclusions^[8-14]. Compared to foreign studies, our researches about NTD concerns more on

qualitative and empirical descriptions but less on quantitative analysis^[13,14]. The important factors concerning community participation, culture preservation and environment protection have not been given enough attention, especially in the minority areas.

In response to the above concerns, this paper attempts to design development models appropriately and discuss issues about balancing interests and formulating development policies to maintain sustainable development in the NTD.

2. Materials and methods

2.1. Study area

Moutuo community with an area of 73.59 km² is located in Moutuo valley of the upstream Minjiang River in Mao County, southwestern China. Its economic and traditional social structures are of a self-sufficient setting whose residents mostly work in the area. Today, the community still depends on the primary industries of farming and animal husbandry which employ about 40% of the labor force, while 25% of the labor forces are engaged in rural tourism, businesses and retail trade. The present lands can not support the increasing population and fulfill their wish of improving living condition. Most of labor force has seasonal employment in tourism from May to October and intermittently go out for work every year. Rural tourism attracts at least 10,000 tourists in 2006 and contributes nearly 75% household income to the practitioners. As a community of minority living together by Qiang (98.8%) and Han people, Moutuo community has relatively abundant national culture and natural resources. And its RTD gains supports

Choosing Moutuo community as a case is not only because of the factors above-mentioned but also its nonoptimal characteristics as following: Firstly, Moutuo community is nonoptimal for its geographical location and inconvenient traffics. It is 142 km away from Chengdu and 248 km from the famous scenery district of Jiuzhaigou, though it locates at the central place of cultural corridor between Tibetan and Qiang. And what's worse is that the geologic disasters and traffic jams frequently happen on its traffic line 213. Secondly, there is considerably seasonal climatic variation for specific location, which leads to the utilization of resources and scenery enjoyment. Furthermore, the environment sensitivity results in the disadvantage of the resources spatial combination and unclear theme. Thirdly, rural tourism in Moutuo community just started in 2000 with low quality of tourism practitioners who have insufficient experience, deficient physical infrastructures and service facilities, which loses its superiority in the aspects of resources superiority, brand recognition and ethic specialty.

2.2. Data Collection

In order to obtain reliable first-hand data, the PRTA is introduced to ensure complete responses and consistency in understanding the survey questions by the interviewees. PRTA is a semi-structural interviewing investigation method widely used in tourism studies in the form of questionnaire and free exchange on focus issues. The information obtained through interview is supplemented with the researchers' knowledge of the area and its tourism offerings, as well as the outsiders' observation of various offerings over time^[15]. Such a research method is considered appropriate for this small and somewhat

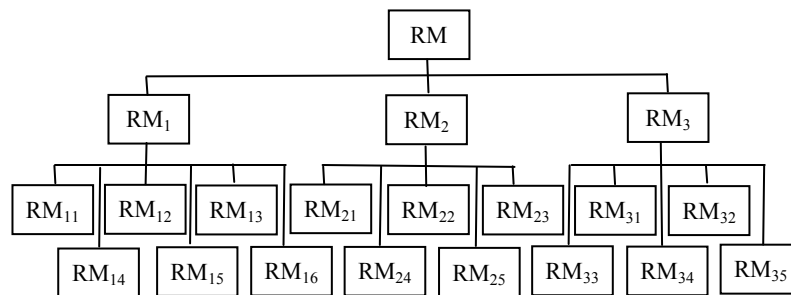


Fig. 1 The three-layer comprehensive evaluation hierarchical structure system

The strings in the textboxes represent the items and the corresponding factors of rural tourism development. RM₁: resource utilization; RM₁₁: geology and landform; RM₁₂: water body resource; RM₁₃: heritages; RM₁₄: biological resources; RM₁₅: folk culture; RM₁₆: climatic resources; RM₂: market demand; RM₂₁: rurality demand; RM₂₂: novelty-seeking demand; RM₂₃: pressure-relieving demand; RM₂₄: health demand; RM₂₅: aesthetic demand; RM₃: related industries; RM₃₁: agriculture; RM₃₂: animal husbandry; RM₃₃: forest and fruits industry; RM₃₄: handcraft; RM₃₅: culture industry.

from both government and community.

isolated community where key informants play various

and often overlapping roles. The questionnaires were carefully designed and the main contents concerned the history, the current situation and the prospect of RTD and were carried out from August to October in 2007. Since there was no systematic first-hand data, we conducted a survey involving related interest groups of RTD of 20 practitioners, 30 tourists, 25 local inhabitants of the village and 5 administrative officers of the local government. At last, 80 copies of effective questionnaires were returned. The sampled interviewees were all above 18 years old of different backgrounds. And also, the investigators held symposium with leaders of the village and local administrative sectors so as to learn policies related to RTD in Moutuo community and collected related statistic documents.

2.3. Data Analysis

The paper uses the AHP as primary analytical method with the assistance of questionnaires surveys. AHP is a multiobjective decision-making analysis method which was proposed by Saaty, a famous American operation scientist, in 1970s^[16]. AHP, which has a high prestige of transforming qualitative questions into quantitative ones, is used to evaluate RTD with comprehensive and complex influencing factors. In order to get an effective and rational result in Moutuo community, a systematic hierarchical structure system that reflects every aspect of local tourism development was required. In this paper, a three-layer comprehensive evaluation hierarchical

Tab.1 The AHP evaluation weights of RTD in Moutuo community

Objective	Item	Weight	Factor	Weight
RM	RM ₁	0.3256	RM ₁₁	0.0448
			RM ₁₂	0.0379
			RM ₁₃	0.0529
			RM ₁₄	0.0714
			RM ₁₅	0.0997
			RM ₁₆	0.0188
	RM ₂	0.4251	RM ₂₁	0.0736
			RM ₂₂	0.0602
			RM ₂₃	0.1142
			RM ₂₄	0.0797
			RM ₂₅	0.0973
	RM ₃	0.2494	RM ₃₁	0.0403
			RM ₃₂	0.0221
			RM ₃₃	0.0534
			RM ₃₄	0.0473
				RM ₃₅

structure system is used (Fig. 1). There are 3 items in the second layer and 16 factors in the third layer.

Each of the second and third layers has its own rational meaning and is chosen according to surveys and 20 local experts. Criteria R₁₁-R₁₆ respectively represent different local tourist resources including geology and landform, water body, biological resources, heritages, folk culture and climatic resources, which are potential and utilizable for tourists. Criteria R₂₁-R₂₅ respectively represents the kind of tourists' demands involving rurality demand, novelty-seeking demand, pressure-relieving demand, health demand and aesthetic demand, which are established according to market demands now and in the future. Criteria R₃₁-R₃₅ respectively represents local industry system including agriculture, animal husbandry, forest and fruits industry, handcraft and cultural industry, which are established according to correlative industries triggered by RTD.

3. Results and discussions

3.1. The development policies of each model for rural tourism

Three models are designed to be chosen for RTD in Moutuo community according to surveys and the evaluation results of AHP. The three models in different oriented value are constructed in terms of fully utilizing local tourist resources. The calculated weight of market-oriented rural tourism development model (Model□) is 0.4251, which is apparently higher than 0.3256 of resource-oriented rural tourism development model (Model□) and 0.2494 of industry-oriented rural tourism development model (Model □) in Tab.1. There is no doubt that Model □ is the best choice to meet tourists' demands according to the appraisal results of AHP. Meanwhile, Model □ and Model □ are better choices for Moutuo community at the early stage of tourism development.

In the third layer, pressure-relieving and aesthetic demands occupy main market demand with the respective weight value of 0.1142 and 0.0973 in Model□, followed by health demand and rurality demand with 0.0797 and 0.0736. The above demands attribute to high ratio of old-aged and urban tourists. For Model□, the folk culture of Qiang makes primary contribution to attract tourists with highest weight value of 0.0997 and does win prior rights of utilization. Secondly, biological resources and cultural heritages get a higher weight value of 0.0714 and 0.0529. So the particular culture and custom in terms of historical and ethical characteristics should be emphasized and utilized. For Model□, cultural industry gets its weight value of 0.0862, followed by forest industry and handcraft industry with their weight value of 0.0534 and 0.0473. Overall, culture-related tourist resources

Tab. 2 The interest demands of the interviewees to RTD in Moutuo community

Questions	Practitioner	Tourist	Local villagers	Administrative workers	Total /percentage
Providing employment opportunity	18[19]*	16[24]	6[23]	5[5]	45(56.25)[71(88.75)]
Protecting environment	15[15]	16[19]	8[11]	2[4]	41(51.25)[49(61.25)]
Utilizing resources	17[17]	19[18]	16[14]	5[4]	57(71.25)[53(66.25)]
Promoting information exchange	18[18]	26[24]	16[14]	5[5]	65(81.25)[61(76.25)]
Advancing cultural spread	16[16]	24[25]	15[13]	3[5]	58(72.50)[59(73.75)]
Providing technical training	18[20]	14[18]	6[23]	4[5]	42(52.50)[66(82.25)]

*The figures in the square bracket are the prospective evaluation of interviewees while the figures before them refers to the evaluation of status quo.

are welcomed by tourists mainly coming from nearby towns and big cities and should be primarily developed.

Well-planned tourism with developing polices, social, economic, and environmental benefits for host communities should minimize the possible adverse impacts^[17]. Hence it is necessary for Moutuo community which has limited human and financial resources to choose Model•and Model•at the first stage and Model □ at the next stage as guiding model of RTD in the fiercely competitive market. It would be more effective and beneficial to achieve its socioeconomic and environmental goals if the community's plans combined with the interest demands and ideas of increasing employment opportunities, preserving local culture and promoting vegetation restoration. In fact, the local government had noticed these points and tried to improve them through grain-for-green program, micro-credit plan, tourism service training and cultural remolding.

3.2. The development potential of each model for rural tourism

The evaluation of the interviewees towards the current state and prospects on RTD are shown in Tab. 2. The interviewees, especially the tourists, show their higher appreciation on positive effects of information exchange and culture dissemination, which respectively cover 81.25% and 72.50% of total samples, accompanying with RTD. Meanwhile, the rural tourist resources cover 71.25% of total samples for its prominent role. The current state evaluation of RTD shows that the prominent rurality and ethnic cultural characteristics have their greatest potential for sustainable development.

When it comes to prospective evaluation of rural tourism, employment opportunity and technology training occupy the first two places and get 88.75% and 82.25% of total samples accordingly. The above phenomenon indicates that the interviewees show great expectation on correlative industries development and

employment demand triggered by RTD, which attribute to the limited land output of community could not provide enough employment opportunity to household labor and improve living quality. Meanwhile, local villagers' expectation of receiving more employment training to compensate their limited knowledge has something to do with it.

The interviewees give their lower support with lower response ratio of 61.25% to environment protection in rural tourism. This reflects interest orientation of interviewees who concern more on welfare improvement and related industries development but less on environmental protection which would promise a sustainable future.

For both current state and prospect evaluation of RTD in Moutuo community, the interviewees with different social backgrounds and personal awareness have different cognition on the direction of industry development and means of resources utilization. The so-called heterogeneous characteristics have been proved^[18]. For example, local villagers concern more on economic development and income increase, while tourists pay more attention to enjoying rurality of countryside and Qiang culture. The complexity of rural tourism affects local awareness and choices of development measures^[17,19]. This needs o reallocate control and access to resources in different models through scientific and effective management for the harmonious coexistence of the various interest groups.

Other studies indicate that community support is vital for RTD and that it is important for a community to keep control of its offerings^[20,21]. In the case, community residents share their offerings with tourists including physical infrastructures and ethnic life styles, which in return offers them more job opportunities and better economic prospect. Studies also indicate that governments can play an active role in tourism developing processes^[21,22]. This is illustrated by the support of local government which has offered funds, information and educational programs for promoting sustainable development and long-term preservation of local cultural assets.

3.3. The development operational mechanism of each model for rural tourism

Because of the common local resources and competitive situation, the three designed models are interacting. The responses of interviewees to rural tourism in Moutuo community are shown in Tab. 3, which reflect the internal and external interaction mechanism of RTD. The community support and tourist image positioning may affect internal operational mechanism of RTD in Moutuo community. 80% interviewees think that RTD not only benefits community development but also promotes related industries development through turning local outputs into commodities, which also enhances local inhabitants' welfare and cultural self esteem. But most interviewees dissatisfied with the situation of environmental protection and RTD level with lower evaluation of 46.7% and 60%, which partly attributes to unobvious tourism image and lower brand recognition. In a word, the localization of local resources and arid-warm climate leads to the limitation of ecological carrying capacity, tourism image and RTD level, which become a challenge of internal operational mechanism of RTD.

Moutuo community inevitably involves in the fierce competition with neighboring regions including Taoping community in Lixian county 30 km away and Luobo community in Wenchuan county 2 km away due to similar tourist resources, common target market and developing orientation, which becomes a major challenge in external operational mechanism. Therefore, it is important for Moutuo community to attain differential choices on promotion strategies, image orientation and developing models and thus conquer regional nonoptimal characteristics and avoid vicious competition. In response to the above concerns, the polycentric management pattern combined with interest demands of stakeholders and regional cooperation should be introduced to regional RTD for multi-win development. There will be an ideal anticipation through rational external operational mechanism of bridging target tourism market and tourism destination, which includes measures of government guidance, enterprise operation and community participation.

4. Conclusions

Understanding the characteristics of NTD and complex inter-relationships of tourism stakeholders is crucial for choosing rational developing models and implementing feasible management strategies to

balance the awareness of conservation and development, which is a common challenge faced by tourism managers or NTD around the world.

Three tourism development models based on common resources and various value orientations are designed according to analysis of PRTA and AHP to make a good promise for local rural tourism. Then the related management issues about the choice of models are discussed and performed by the assessment of PRTA and AHP. As a typical NTD, Moutuo community follows common rules of developing tourist resources with regard to market demand, promoting related industries, shaping tourism features and joining in regional development. For Moutuo community at the primary phase, rural tourism firstly complies with Model A and Model B through attracting tourists by reinforcing rurality and Qiang culture, and then follows Model C through promoting relevant industries and improving life quality of local villagers.

Complicated interest relationships and mutual influences are involved in RTD in NTD and three models are assessed and chosen objectively. The questions are about development policies and potentials, the overlap of operational mechanism and tourism advantage in three models, which is determined by limited resources, community support and benefit gambling. Therefore, to obtain sustainable development of rural tourism in increasingly competitive market, the polycentric management pattern should be employed in the operation of models to ensure the effectiveness of internal development and regional competition [23]. This paper focuses on relevant issues of a case study in RTD at primary stage, but the designed RTD models can provide a sample for the RTD in similar NTD.

Acknowledgements

This research was supported by the Chinese Academy of Sciences (CAS) within the Second Phase of the CAS Action-plan for West Development on "Research on regional differentiation regulation of mountain environment characteristics and the adaptability of ecological restoration patterns in the upstream Minjiang river"(No: KZCX2-XB2-02-03-02) and National Nature Sciences Foundation of China (No: 40771025). We would like to thank all the anonymous reviewers for their hard work.

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Tab.3 Responses of the interviewees to RTD in Moutuo community

Questions	Responses	Practitioners	Local villagers	Tourists	Percentage (%)
Do you feel satisfied with rural tourism?	yes	14	15	16	60.00%
	no	6	10	14	40.00%
Does the rural tourism promote related industries?	yes	18	20	21	78.67%
	no	2	5	9	21.33%
Does the rural tourism protect resources?	yes	8	9	18	46.67%
	no	12	16	12	53.33%
Does the rural tourism bring you benefits?	yes	19	17	-	80.00%
	No	1	8	-	20.00%