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# Systematic Analysis on Factors Affecting the Development of Rural Tourism : A Case Study of Chengdu

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**Abstract:** Based on field survey, the thesis analyzes the key factors affecting development of rural tourism systematically, taking Chengdu as an example. These factors include regional economic development level & leisure tradition, tourist market & traffic, tourist resource, spatial agglomeration and competition of rural tourism, and decision-making behavior. Among them, regional economic development level & leisure tradition and tourist market & traffic are prerequisites for the development of rural tourism which have an impact on tourist's consumption level, consumption custom, operator's investment ability, tourist destination distribution and scale; Tourist resource, spatial agglomeration and competition of rural tourism are restrictive conditions affecting character and distribution of rural tourism; Government's decision-making behavior is of importance for expansion of scale and popularity of regional rural tourism, meanwhile, operators' decision-making behavior includes investment scale and operational strategies, and for operators from the outside, location selection is included additionally. All these decision-making behaviors are subjective conditions for the development of rural tourism.

**Key words:** rural tourism; affecting factors; Nongjiale**CLC number:** Q 149**Received date:** 2003-06-04**Foundation item:** Supported by the 10<sup>th</sup> Five-Year Plan Programme Item of Chengdu Philosophy and Social Science Research and the Knowledge Innovation Program of Chinese Academy of Sciences (KZCX2-SW-319-4)**Biography:** He Jing-ming (1966-), female, Ph. D. candidate, associate professor, research direction: tourism geography and regional sustainable development. E-mail: hejingming@imde.ac.cn

## 0 Introduction

Rural tourism refers to those traveling activities which aim at pursuing natural and humanistic attraction with rurality in rural area<sup>[1]</sup>.

In response to agricultural structure adjustment, rural tourism in China took into shape as a new economic growth point to meet the market demand at the end of 1980s. Though it is developed very late, it is growing with a fast speed. Now, a rural tourism structural frame has shaped up, with the Pearl River Delta, Beijing, Shanghai and Chengdu as a center respectively in south, north, middle and lower reaches of the Yangtze River and southwest China.

The rural tourism started in the beginning of the 1990's in Chengdu and was called as "Nongjiale" (Enjoying yourself in farmers' households) by the local residents. The recreations that Nongjiale provides are mainly enjoying flowers, picking fruits, playing mahjong (one of popular chess games in China), playing cards and drinking tea. Compared with other kinds of tourism, Nongjiale is cheaper and costs 20-30 yuan (about 3 USD) per person a day generally, and is not far from the downtown area and has transport facilities, so it has been one of the popular recreations. Nowadays Nongjiale has spread all over the suburbs of Chengdu and is the epitome of rural tourism in Sichuan Province even in the southwest of China. Taking Chengdu as an example, this thesis analyzes those factors affecting development of rural tourism systematically based on field survey, expecting this will be helpful for development and study of Chinese rural tourism.

# 1 Regional Economic Development Level and Leisure Tradition

Regional economic development level, especially citizen's income level, has a direct impact on citizen's tourism consumption. In the near decade, rural tourism in China has developed fast because economy has developed rapidly and citizens have more incomes and spend more and more money on tourism consumption. In Chengdu, per capita cash income of urban households was 2 254 yuan in 1992 when the rural tourism emerged. At that time, there were only a few small tourist destinations for rural tourists. In 1996, per capita cash income of urban households was 5 701 yuan and rural tourism developed with fast speed. Up to 2002, it reached 8 972 yuan and rural tourism was popular among citizens. There were about 400 regular Nongjiale and more than 800 seasonal ones in Longquanyi District of Chengdu, which accepted 15 million tourists totally within 5 years from 1998 to 2002. The direct receipts reached 210 million yuan. Thus it can be seen that development and expansion of Nongjiale in Chengdu is growing in pace with economic development and citizens' income growth synchronously (Fig. 1).

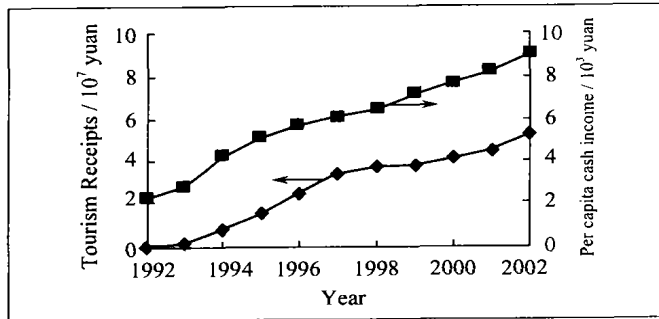


Fig. 1 The increase of rural tourism receipts in Longquanyi District, Chengdu

◆ Per capita cash income of urban households  
 ■ Tourism receipts in Longquanyi District

With increasing of citizen's consumption level, tourists offer higher demands. As the "quantity" of rural tourism is increasing, the scale and grade of rural tourism are also heightening quickly. Taking Nongke Village of Pixian County, the cradle of rural tourism in Chengdu, as an example, development of Nongjiale includes three stages: from 1992 to 1996, almost every farmer was engaged in small-scale Nongjiale operation; from 1997 to 2000, more and more people from other places invested and joined in operation of Nongjiale. Some large-scale Nongjiale

emerged. Since 2001, large-scale business has taken shape after Nongjiale was restructured and merged (Table 1).

Table 1 Development periods of Nongjiale in Nongke Village, Pixian County

Year	Nongjiale/household		Average annual tourism receipts of Nongjiale/10 <sup>4</sup> yuan
	Total	Of which: annual receipts > 25 × 10 <sup>4</sup> yuan	
1992-1996	103	2	5
1997-2000	60	9	18
After 2001	23	14	26

Source: Pixian County Tourism Bureau and field survey.

Moreover, leisure tradition in urban area also affects the scale and speed of rural tourism directly. Being the capital of "Land of Abundance", Chengdu has had a tradition of "enjoying life and leisure" historically, and chatting places such as teahouses are much more than other cities is evidence. At the same time, Chengdu people's consumption concept is different from other major cities. Generally, they prefer to travel to have a leisure time and Chengdu is one of metropolis with the largest number of private car. The leisure expenses consumed in Chengdu are comparatively higher than that in other metropolis at the same economic development level, e. g. Chongqing and Wuhan. Furthermore, people from nearby area also have a tradition to consume in Chengdu. To some extent, this gives an impetus to rural tourism.

In addition, holiday arrangement also has an impact on development of rural tourism. Since 1995, China has carried out a five-workday-a-week system. Furthermore, people can enjoy three long holidays (May first, National Day, and Spring Festival) since 1999. As a result, more and more Chengdu people choose to have a tour during weekend and long holidays. This also facilitates the development of rural tourism.

## 2 Tourist Market and Transportation

Rural tourism concentrates in populated bordering area of a city where there is a stable tourist market. Developed rural tourism areas in China, including Pearl River Delta, Beijing, Shanghai, and Chengdu, have very good tourist markets. For instance, Chengdu has a resident population of 3.46 million and a great deal of floating population, offering abound tourists for rural tourism. Sampling investigation shows that each of (over 2 million) employees and retired people in Chengdu goes

to Nongjiale for 4.46 times annually and total number of tourists coming from Class-I tourist market is 9 million<sup>[2]</sup>. People in bordering cities and prefectures in Sichuan Province, other areas e.g. Chongqing and Tibet also have a tradition to have a tour to Chengdu, who consists of Class-II tourist market.

In addition to a good tourist market, good public

transportation, namely, accessibility is also important for development of rural tourism.

Bordering districts and counties are only ten to tens of kilometers away from downtown area of Chengdu. Major rural tourist destinations are located at both sides of main arterial traffic lines and lateral highway (Fig. 2). For instance, along both sides of Yangxi Highway at Jinniu

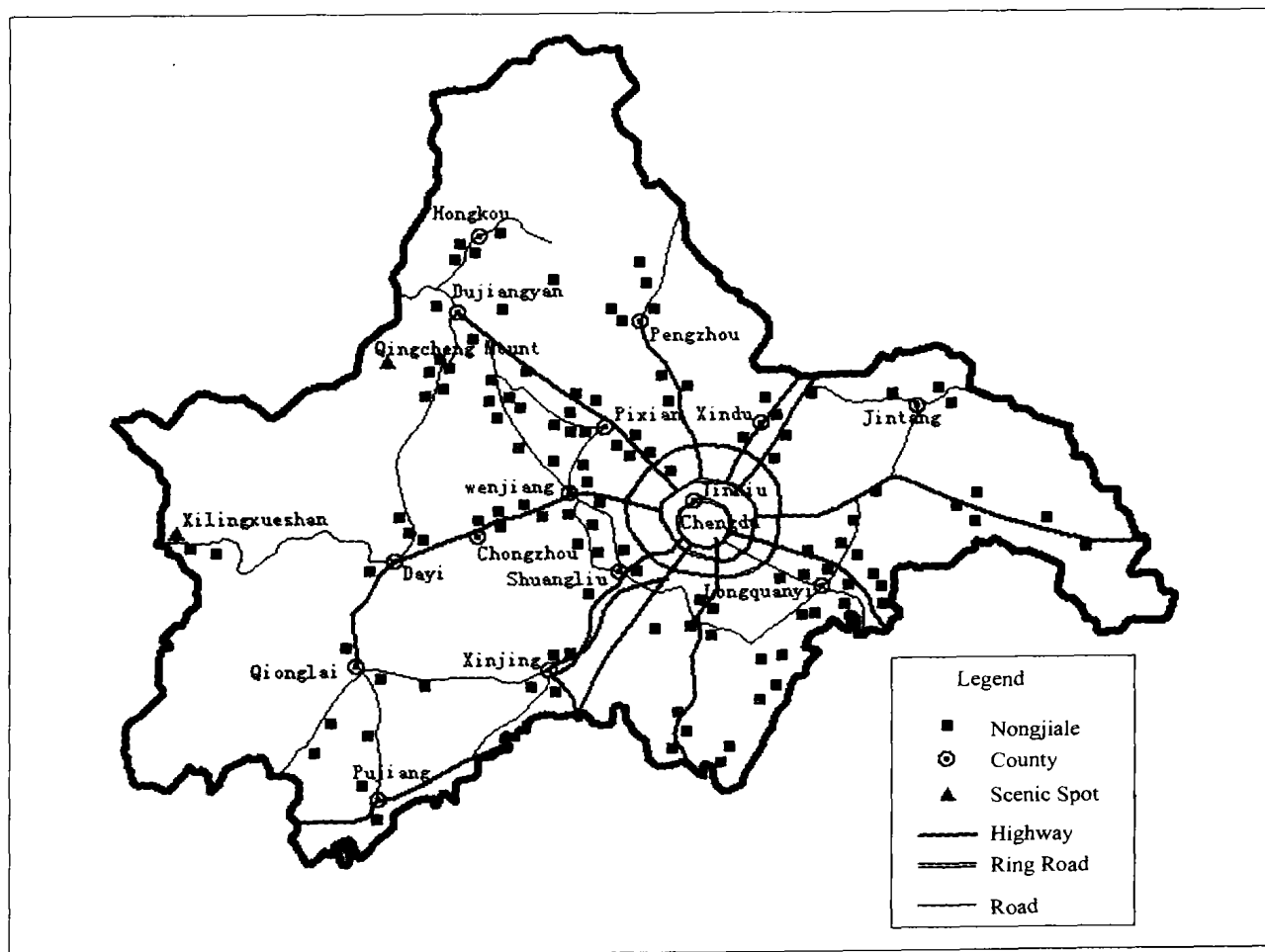


Fig. 2 Sketch map of Nongjiale distribution in Chengdu

District in western suburb of Chengdu, tens of kilometers away from the downtown, there is more than ten Nongjiale. Shuangliu County is only more than ten kilometers away from Chengdu. Along Nanyan Highway and Shuangjiu Highway, a Nongjiale zone has come into being. The renowned Longquanyi District at eastern suburb, known as flowers and fruits, through which Chengdu-Chongqing Express Highway and old Chengdu-Chongqing Highway crosses, is only tens of kilometers away from downtown of Chengdu. The famous Nongke Villiage at Youai Town, Pixian County where 213 National Highway and Chengdu-Guanxian Express Highway goes through, is the further rural tourism spot, only 30

kilometers away from downtown of Chengdu. It is obvious that transportation is a very important precondition for distribution and development of rural tourism.

### 3 Tourist Resources

Tourist resources also have an impact on the model and character of rural tourism. For example, Longquanyi District in southeast Chengdu is a renowned "land of flower and fruit" where has plenty of agricultural tourist resource. It has not only an advantage of fruit production but also a unique landscaping advantage. In each March, Longquanyi becomes a sea of blossoming peach flowers.

From April to December, all sorts of fruit are put into market in succession, meeting demands of various fruit appreciation activities. Its rural tourism development model is characterized by abundant flowers and fruit resources. Similarly, Youai Town of Pixian, the cradle of rural tourism in Chengdu, is also developed on the basis of flower and tree seedling nursery.

Being a "Town of Longevity" nearby the Qingcheng Mountain, one of world culture and nature heritages, Qingcheng Town's rural tourism is combined with medicare, health care, sports and leisure. Depending on beautiful nature, fresh air, and quiet environment, it attracts a large number of retired old people, becoming a "leisure town for grey-haired tourists".

Hongkou Township is a national natural reserve at northwest Dujiangyan, which has shortest distance to Chengdu. It has rich animal and plant resources and lush virgin forest. Having a three-dimensional vertical climate, it is cool in summer. Moreover, its geologic physiognomy of Shexigou Waterfall and Hongkou Gorge

is worthy of scientific research, exploration, and appreciation. Its rural tourism focuses on summer vacation, and such activities as drifting, mountaineering, and exploration.

Huanglongxi Old Town of Shuangliu County, 47 kilometers away from Chengdu, builds up another development model relying on its historic culture of old town, custom & folkways, folk arts, and characteristic mountain and water, attracting a great deal of families.

In addition, Chengdu people's catering culture are famous nationwide. Some citizens go to rural area to enjoy characteristic and healthy rural food. Currently, various foods provided by Nongjiale are one of main factors attracting tourists.

Therefore, characteristic agriculture, landscape, catering, customs and folkways, and festivals are resources and conditions for development of rural tourism in Chengdu. Meanwhile, different tourist resources have formed different development models in various areas (Table 2).

Table 2 A comparison of Nongjiale in typical areas of Chengdu

Locality	Tourist resource	Tourism character	Busy month	Visitor average stay
Longquanyi District	Peachblossom and fruits	Admiring the beauty of flowers and picking fruits	3,5-8,10	1 day
Pixian County, Wenjiang County	Flower trees and potted plants	Admiring the beauty of flowers and potted plants	3-5,10	1 day
Shuangliu County	Food, festival, custom and historic culture	Catering culture and local flavor	Holidays or weekends	1 day
Qingcheng Town, Dujiangyan City	Fresh air and the fame of the home of longevity	The aged leisure	7,8	Over 2 days or all the year round
Hongkou Township, Dujiangyan City	Virgin forest, vertical climate, waterfall and gorge	Summer vacation, drifting, mountaineering and exploration	7,8	Over 2 days

#### 4 Spatial Agglomeration and Competition

Agglomeration refers to the combination of related economic object and social infrastructure in some space. Usually, this spatial agglomeration will bring out beneficial effect. However, if it breaks though a limitation, spatial competition will produce. Here, spatial agglomeration of rural tourism is in the same city.

Supplying model of rural tourism is the material foundation for attracting tourists. Developing scale can be measured according to land size, number of tourist desti-

nations, and amount of investment. The result of mutual action of model and scale decides on the grade and popularity of regional rural tourism.

Agglomeration of a fixed number of tourist destinations not only increases total attraction power in this region, meanwhile, also gives rise to spatial competition. As a result, tourists are shared by a great deal of attractions. We may analyze the spatial competition according to gravity model. Suppose  $A_1$  and  $A_2$  represent two different attraction powers in the same region. Then, the size of competitiveness at tourist source place  $i$  is as below:

$$\frac{T_{i1}}{T_{i2}} = \frac{A_{i1}}{A_{i2}} \left( \frac{D_{i2}}{D_{i1}} \right)^b \quad (1)$$

where  $T_{i1}$  and  $T_{i2}$  are degrees to measure person-times of

the tourist between Tourist place  $i$  and Destination 1 and 2,  $A_1$  and  $A_2$  are degrees to measure the attractive power of Destination 1 and 2,  $D_{i2}$  and  $D_{i1}$  represent the distance from Tourist place  $i$  to Destination 1 and 2,  $b$  is experience parameter.

From Formulation (1), we see that competition between two tourist destinations and Tourist place  $i$  is in direct ratio to their attraction power, while distance from tourist place to tourist destination is in inverse ratio. In the same region, distance factor takes little effect. Therefore, competition among tourist destinations results from attraction power. When a few same-type tourist destinations appear in the same region, most of tourists will choose those top-grade and well-known destinations, instead of low-grade and unknown ones.

Historically, agriculture and economy was developed in Chengdu Plain where had abundant agricultural resources, e. g. flowers and fruits. Now, the Longquanyi

District in southeast Chengdu, is well known because it had already held the "Peach Blossom Festival" long time ago. It is more popular than other places with same flowers and fruit resources, attracting a large number of tourists.

Shufang Village is the cradle of rural tourism in Longquan District. It has begun to operate Nongjiale since 1992. Its business reached the peak during the period from 1996 to 1999. During the "Peach Blossom Festival", the daily number of tourists was more than ten thousand. Almost every household was being engaged in Nongjiale. Since 2000, owing to establishment of Ten-thousand-mu Sightseeing Orchard at Xinglong Town, Hometown of Peach at Shanquan Town, and Ten-thousand-mu High-quality Pear Orchard at Baihe Town, the number of tourist of Shufang Village decreased severely to 100 000 in 2002 from 320 000 in 1999 as a result of furious spatial competition (Table 3).

**Table 3 Visitor arrivals of typical Nongjiale destination in Longquanyi County**

10<sup>4</sup> person

Year	Shufang Village	Ten-thousand-mu Sightseeing Orchard , Xinglong Town	Hometown of Peach, Shanquan Town	High-quality Pear Orchard, Baihe Town
1997	26	2	3	1.5
1998	30	5	6	3
1999	32	8	9	7
2000	21	12	11	8
2001	14	14	12	6
2002	10	13	10	5

Source: Longquanyi District Tourism Bureau and field survey.

## 5 Decision-maker Behavior

Decision-maker behavior includes government's decision-making behavior and operator's decision-making behavior.

### 5.1 Government's Decision-making Behavior

Government's decision-making behavior refers to government's degree of recognition and goodness or badness of macro-management function, which has significant impact on development of regional rural tourism. Why is rural tourism in developed countries so successful? To some extent, it is attributed to the governments of western developed countries paid much attention to it. Similarly, rural tourism in Longquanyi District of Chengdu is successful because local government pays attention and gives policy support to it. For years, local government has invested about 1 million yuan to hold the

"Peach Blossom Festival". From 1998, it planned and publicized "Fruit Appreciation Festival" and imposed no charge for Nongjiale operators. From 2001, it imposed tax officially and returned all taxes to villages and towns in the form of highway renovation, communication facility and parking areas construction. Meanwhile, Tourism Bureau of this district standardized management of Nongjiale operation. All operators must be issued "three certificates" (Business License, Sanitary Permit, and Fire Certificate) and are imposed unified tax. Moreover, the bureau instructed and trained farmers to develop more projects for tourists, building up a good tourism environment and promoting development of local Nongjiale.

### 5.2 Operator's Decision-making Behavior

Most of rural tourism operators are local farmers who make use of their own house or contracted land. Their investment scale and operation level have an obvious impact on rural tourism. For outside operators who

rent land in local place, they must choose optimal location additionally.

Investment scale has a close relationship with operator's economic strength and market expectation. Usually, operators will keep investing constantly during the process of operation. In addition to operator's economic strength, investment scale is also in connection with operator's benefit and market expectation. Generally, operators who gain more benefits are more optimistic and are ready to invest more. For instance, after the Ten-thousand-mu Sightseeing Orchard at Xinglong Town, at suburb of Chengdu was developed, farmers in Gongnong Village are more optimistic to the market prospect. They invested a great deal of money for rural tourism according to their economic strength.

Operation level is also very important for development of rural tourism. Upon investigation, it was found that benefits varied under condition of different operation levels. For instance, though total benefit of Nongjiale at Shufang Village of Chengdu decreased in recent two or three years, Zhang Xiaoping gained more and more bene-

fit year by year. Many households along Yangxi Highway who was engaged in Nongjiale gained little profit. Some even suffered a loss. However, People from urban area earned much profit after renting their Nongjiale. As competition became more furious, more and more people from urban area joined in operation of Nongjiale by renting a land. They gained considerable business incomes because their Nongjiale are large and top-grade (Table 4), e. g. Household A and B at Nongke Village in Pixian County. Only those farmers who once worked outside, visited other places or accepted training are operating large-scale Nongjiale and gained lots of benefits, e. g. Household C and D at Shenxigou Village, Hongkou Township. It can be seen that operation level has significant impact on development of Nongjiale.

Those operators who rent a land for operating Nongjiale have to select a macro-region and micro-location. Idea places are those renowned regions or areas along sides of arterial traffic lines where rural tourism spots are concentrated. To some extent, this further intensifies spatial agglomeration and competition of rural tourism.

Table 4 The tourism receipts of typical Nongjiale in Chengdu

10<sup>4</sup> yuan

Locality	Nongjiale operated by urban people		Nongjiale operated by farmers who once worked outside or were training		Nongjiale operated by farmers who never worked outside or were training	
	A	B	C	D	E	F
Shufang Village, Longquanyi District	13	17	12	5	4	2
Gongnong Village, Longquanyi District	11	7	9	12	3	1.5
Nongke Village, Pixian County	30	8	14	21	2	3
Around Yangxi Highway, Jinniu District	20	8	21	6	4	2.5
Shenxigou Village, Hongkou Township	18	15	31	11	5	3
Wuli Village, Qingcheng Town	7	12	5	4	3	1.2

Notes: A,B,C,D,E,F refer to each Nongjiale household.

## 6 Systematic Analysis on Influential Factors

Rural tourism is affected by subjective factor and ob-source market & traffic condition, which have an impact on tourist's consumption level, consumption custom,

jective factor, and their interrelations are showed as Fig. 3.

Objective factor includes two prerequisites and two restrictive conditions. Two prerequisites are regional economic development level & leisure tradition and tourist operator's investment level, tourist destination distribution and scale. Restrictive conditions include tourism re-

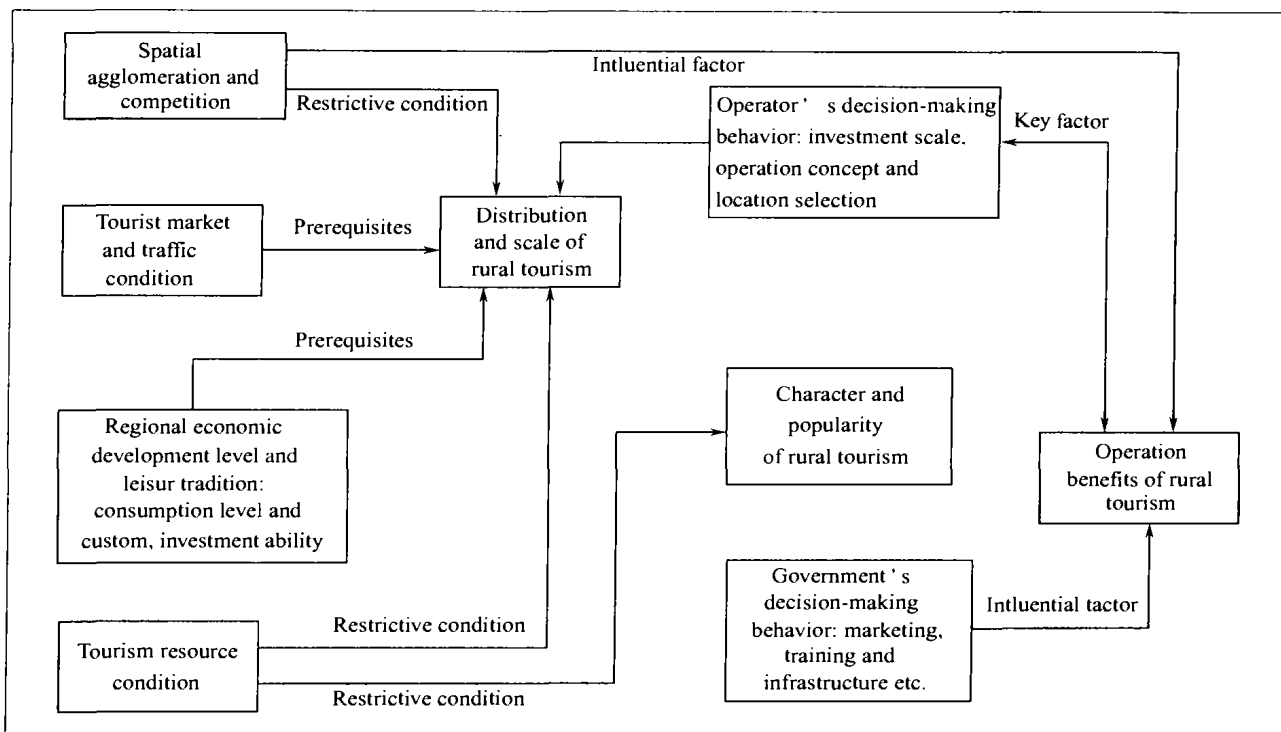


Fig. 3 Systems analysis on factors affecting the development of rural tourism

source condition, spatial agglomeration and competition of rural tourism, which affect character, distribution and operation benefit of rural tourism.

Objective factor is government and operator's decision-making behavior. Government's decision-making behavior includes marketing and management of rural tourism, offering training and supporting infrastructure. They are of importance for expansion of scale and popularity of regional rural tourism. Operator's decision-making behavior includes investment scale and operation level. For outside operators who rent a land in local area, location selection is included additionally. Operation level is a key factor for rural tourism and spatial agglomeration and competition as well as micro-location are also influential factors. Different from farmer's "part-time operation", outside operators who rent a land must invest more with high costs. They can survive only if the number of tourist exceeds minimum quantity. Otherwise, they cannot survive.

Viewing from Chengdu's actuality, operation level, investment scale and micro-location selection have a significant impact on development of rural tourism. Usually,

those Nongjiale with larger investment and higher operation level nearby arterial traffic lines can gain more benefits. In addition, support of government is helpful for increasing of the number of tourist destinations of rural tourism and forming industrial advantages. It also affects operator's benefits directly. To build up a well-known rural tourism product in Chengdu, the government should provide more supports, skill training and preferential loans for farmers.

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