

# The Present Situation and Investigation of Cycling in Sichuan Rural Areas

## --A Case Study on Haitang Village

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**Keywords:** Bicycles; Countryside; Rural sports; Characteristic sports projects.

**Abstract:** By using documentary analysis methods, questionnaire methods, field investigation methods, mathematical statistics and logical analysis, the paper did a research on the bicycle sports participants in Haitang village, including their age, gender, education background, income, exercise time bucket, exercise duration, exercise frequency, motivation and the organizational forms of cycling activities, to find out the problems and give improvement suggestions: reason to guide the villagers to accept the "five development ideas"; to develop low-carbon economy and increase the farmer's income level; to improve the rural tourism industry structure and broaden the channel of the coordinated development of the rural and the urban; sufficient conditions, introduce the cycling competitions into the countryside, step up publicity.

### 1. Introduction

The fifth plenary session of the 18th central committee of the CPC put forward the "five development concepts": innovation, coordination, green, openness and sharing. The development of low-carbon economy, low-carbon city construction and the comprehensive realization of low-carbon life have gradually become the consensus in the society. Bicycles and cycling are getting more attention. Since the end of 2016, it seems that the sharing bicycles has reached the point of "flooding", with all the roads in different cities lined with different colors of sharing bicycles. From this aspect, rural cycling has also played an important role in the development of rural tourism.

### 2. Research Objects and Methods

#### 2.1 Research Objects.

Some cycling participants who are from other places and natives of Haitang village.

#### 2.2 Research Methods.

**Documentary Analysis Method.** Through the platform of the electronic library of Sichuan Agricultural University, the relevant literatures were searched in the CNKI database. The highly correlated literature were analyzed to identify the hitting point.

**Questionnaire Method.** In May 2016 and December 2016, The members of the research group have been to the station of Niu Nian Ping Sightseeing Tea Garden which was set as an investigation point twice, which is located in Taitang village, Zhongfeng town, Mingshan district, Ya'an city. The questionnaire was distributed and investigated based on the premise that the respondents did not repeat the questionnaire during the two surveys. The questionnaires were sent out for 100 copies, 200 copies in total and collected 200 in total. The valid questionnaires were 98 and 95, 193 copies in total.

**Field Investigation Method.** In December 2016, members of the group randomly selected 30 villagers to make a visit, further obtained first-hand data and understood the most authentic thoughts of the grass-roots participants.

**Mathematical Statistics.** Using EXCEL2003 to deal with the collected data, and make multi-angle,

multi-level comparison in order to discover some key problems.

Logical Analysis. Gathering and summarizing the raw data and materials, then analyzing the related problems.

### 3. Analysis and Discussion

#### 3.1 Analysis on Age of Cycling Participants.

Table 1 Age of Cycling Participants

	$\leq 20$	21-30	31-40	41-50	$\geq 51$	Total
The first survey	6	26	42	21	3	98
The second survey	3	21	35	32	4	95
Villagers	9	3	3	4	11	30

As can be seen from Table 1, the age bracket with the largest number of cyclists in the two surveys is in 31-40 years old. Followed by 41-50 years old and 21-30 years old It mainly reflects the high enthusiasm of middle aged people to participate in sports. They have a certain life experience, yearn for freedom, low-carbon, rational, simple lifestyle. There are fewer participants of 20 years old and below. It is mainly because young people are more interested in exciting sports like motorbikes and cars, and less interested in cycling. There are also fewer participants of 50 years old and beyond. It is mainly because of their own lack of confidence in participating in the sport, and they focus more on safety. However the age of the villagers presents the opposite situation. The proportion of participants between the ages of 21 and 50 is relatively small, while those aged 51 and beyond has the highest proportion.

#### 3.2 Analysis on Gender of Cycling Participants.

Table 2 Gender of Cycling Participants

	$\leq 20$	21-30	31-40	41-50	$\geq 51$	Total
The first survey	6	26	42	21	3	98
The second survey	3	21	35	32	4	95
Villagers	9	3	3	4	11	30

As can be seen from Table 2, cycling participants who are from other places and natives of Haitang village are more males than females. This is caused by multiple factors. First, males are more interested in sports than females, and they are more willing to try all kinds of sports. Second, males have better physical quality than females and they have enough physical ability to sustain the sport. Third, males are more likely to get out of the city and go into nature, while females are more willing to spend time in shopping.

#### 3.3 Analysis on Education Background of Cycling Participants.

Table 3 Education Background of Cycling Participants

	$\leq 20$	21-30	31-40	41-50	$\geq 51$	Total
The first survey	6	26	42	21	3	98
The second survey	3	21	35	32	4	95
Villagers	9	3	3	4	11	30

As can be seen from Table 3, the largest number of participants in the two surveys is on undergraduate degree, followed by junior college degree and postgraduate degree , and few in the

education background of high school and below.

### 3.4 Analysis on Monthly Income of Cycling Participants.

Table 4 Monthly Income of Cycling Participants

	2000 and below	2001— 3000	3001— 4000	4001— 5000	5001 and beyond	Total
The first survey	5	11	32	30	20	98
The second survey	3	19	42	18	13	95
Villagers	4	8	3	3	2	30

As can be seen from Table 4, the highest proportion of the participants in the two surveys are in the income range of 3001-4000 yuan, followed by 4001-5000 yuan. Most of the villagers' income is 2001-3000 yuan. This is mainly associated with participants' education and income. Those who have higher education background and have higher income are easier to accept the lifestyle of being close to the nature and the know more about how to live a rational, green, and low-carbon life. In rural areas, the villagers' income is relatively low. Bicycles, as a cheap kind of transportation tools, has an important role in their lives.

### 3.5 Analysis on Exercise Time Bucket of Cycling Participants.

Table 5 Exercise Time Bucket of Cycling Participants (multiple choice)

	Weekdays		Weekend		Total
	Morning	Afternoon	Morning	afternoon	
The first survey	54	62	68	76	98
The second survey	43	70	62	81	95
Villagers	12	21	9	18	30

As can be seen from Table 5, most participants are more likely to participate in the afternoon than in the morning, and their participation over the weekend is higher than during the weekdays. The statistics of the villagers reflects different phenomena. The participation of villagers during weekdays is higher than that of the weekend. A handful of villagers ride bicycles every day but without weekend. This is because they'd like to travel at the weekend. Bicycles is mainly seen as their transportation tool.

### 3.6 Analysis on Exercise Duration of Cycling Participants.

Table 6 Exercise Duration of Cycling Participants

	≤ 1h	1-2h	2-3h	≥ 3h	Total
The first survey	10	15	52	21	98
The second survey	4	11	48	32	95
Villagers	21	9	0	0	30

As can be seen from Table 6, most participants exercise for 2-3 hours at a time, followed by three hours or more. This is mainly because most of these participants are cycling enthusiasts who usually use the weekend time to do cycling exercise near their cities. The distance is relatively far and the time lasts long. For villagers, it is different. They will use bicycles as a transportation tool when they can reach the destination within 0.5h. if there is great distance, they will choose other transportation tools. As a result, few villagers have been cycling for two hours or more.

### 3.7 Analysis on Exercise Frequency of Cycling Participants.

Table 7 Exercise Frequency of Cycling Participants

	Once and less	2-3 times	4-5 times	6-7 times	Total
The first survey	22	43	24	9	98
The second survey	14	38	32	11	95
Villagers	0	3	13	14	30

As can be seen from Table 7, most participants exercise twice or three times a week, followed by four to five times. The villagers are more likely to participate in cycling every week. Most of them can reach four to five times a week, or six to seven times a week. It can be seen that the frequency of using bicycles as a way of exercise is very high, which runs through the weekdays and weekends.

### 3.8 Analysis on Motivation of Cycling Participants.

Table 8 Motivation of Cycling Participants (multiple choice)

	Exercise	Follow the fashion	Relax	transportation	Broaden interpersonal relationship	Other	Total
The first survey	73	9	81	18	56	5	98
The second survey	68	8	86	21	68	1	95
Villagers	21	10	25	27	2	0	30

As can be seen from Table 8, the main motivation for most participants to choose bicycles as the exercise means is to relax, exercise and broaden interpersonal relationship. Villagers are more likely to use bicycles as a tool of transportation and relax themselves.

### 3.9 Analysis on Organizational Forms of Cycling Activities.

From field surveys and questionnaires, it is easy to see that most participants seldom have the habit of traveling alone. They usually invite friends with the same interests, and then gradually expand their interpersonal circle and drive more people to participate in cycling. A small number of participants are also out cycling through local associations. Most of the villagers ride alone, which is related to their lifestyle of treating bicycles only as a transportation tool.

## 4. Conclusion and Suggestions

### 4.1 Conclusion.

The participants of cycling: Age: mostly between 31 and 40; Gender: males are the majority; Education background: mostly undergraduate degree; Income: mostly 3001-4000 yuan; Time bucket: more afternoon than morning; Duration: mostly 2-3 hours; the average exercise frequency: mostly 2 to 3 times per week; the motivation: exercise is the main purpose.

Villagers (Because of the particularity in rural areas, the bicycle is mainly used as a transportation tool.):

Age: mostly 51 and beyond; Gender: males are the majority; Education background: mostly high school and below; Income: mostly 2001-3000 yuan; Time bucket: more afternoon than morning; Duration: mostly in 1 hour; The average exercise frequency: mostly 4 to 5 times per week; The motivation: practicability is the main purpose.

### 4.2 Suggestions.

To Rationally Guide Villagers to Accept "Five Development Concepts". To effectively reduce carbon emissions, the following measures can be taken:

A large number of clean energy sources such as natural gas, hydropower, solar energy, wind energy and geothermal energy are used to replace coal;

To vigorously implement the coal purification technology and provide a good environment for innovation through the policies and regulations. Moreover, to energetically introduce the talents of carbon technology and improve the carbon technology level and capability of relevant professionals through training and other forms.

In view of that there is no uniform industry standard for the development of low-carbon economy in China, the talent advantages of relevant professional scientific research institutions can play a role. They can actively participate in the formulation of low-carbon industry standards to fight for more speaking right.

To Vigorously Develop Low-carbon Economy and Constantly Increase Farmers' Income Level. In the low-carbon tourism economy, the enterprises, including scenic spots, travel agencies and hotels, should actively participate in the construction of low-carbon tourism. In planning and management of scenic spots, the "environment friendly way" should be implemented in experience scenic areas. This includes controlling the number of tourists according to ecological limits, setting up projects and facilities scientifically, and maintaining an "optimal value" between the quality of the environment and the number of tourists; The construction of scenic spot should pay attention to the use of new energy, new materials, new technology and so on; The traditional mode of business operation should be changed, and the low carbonization should be put into every detail of operation management. For example, building transfer center outside the scenic areas and renting low-carbon transportation tools like bicycles for free, etc. At the same time, we should strengthen the education and management of environmental awareness. The hotel is also an important aspect of carbon emission. So it is imperative to build low-carbon hotels as carbon compensation. The construction of low-carbon hotels can be divided into two aspects: the low carbonization of the hotel itself and the implementation of low carbonization service in the process of operation and management. The so-called "low-carbon service" means that hotels should advocate green consumption, take measures to minimize the use of energy, water and living materials, and pay special attention to reduce the use of disposable products. By ensuring that the facilities and services are not reduced, the items in hotels should be used as much as possible. After the items complete their use, the hotel should recycle them and remake them into usable resources.

To Improve the Industry Structure of Rural Tourism and Expand the Coordinated Development Channels of the Rural and the Urban. There are many little-known scenery around the rural areas. Every year a lot of people will take part in recreational sports tourism projects here such as skiing, rafting, hiking, which has formed the good leisure sports tourism consumption market. It has promoted the development of local tourism. Sports tourism has become an important part of tourism industry, which promotes the development of sports industry. The sports tourism industry can no longer blindly follow the traditional development mode, it must set up new ideas to adapt to the new situation. In particular, we should intensify our efforts to publicize the traditional sports of the ethnic groups, and strive to introduce the projects with local characteristics. We should promote sports to merge together with culture and tourism, to create famous brands of sports tourism, so as to attract the attention of the society and improve people's interest in sports leisure tourism of the western region. More and more tourists at home and abroad will be attracted to Chengdu and experience the beauty of the mountains and rivers there. It can also expand the tourist source quantity of western tourism, strengthen the development of western tourism, and drive the rapid development of sports tourism industry.

To Introduce Cycling Competitions to the Countryside, and Step Up Publicity. With the help of developing low-carbon economy and advocating green commuting, we can increase publicity, introduce some cycling sports, and find the positioning of bicycle tours. Special tourism activities will be introduced for the competitions to strengthen the feelings of tourists. Various activities related to cycling can be actively organized to popularize the concept of cycling to the maximum extent.

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