## Regional differences in rural tourism development in Guangdong —Based on the data of 21 cities in Guangdong

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Abstract: In order to study the regional difference degree of rural tourism development in Guangdong Province, this paper constructs the evaluation index system of rural tourism development level in Guangdong. By collecting the data of rural tourism development in Guangdong in 2019, this paper analyzes the regional difference degree of rural tourism in Guangdong by using descriptive analysis and multiple regression analysis. The results of data analysis are as follows: there are still some regional differences in rural tourism resources in Guangdong, and the richness of rural tourism resources in Meizhou, Guangzhou, Jiangmen and Shaoguan is the highest. The living standards of rural residents in Guangdong have improved rapidly, and the differences in rural tourism economic and social support conditions have narrowed. The regional differences of rural tourism ecological conditions in Guangdong are small. There are great regional differences in the development of tourism in Guangdong. The tourism industries in Guangzhou and Shenzhen are developed and highly concentrated. Index "Number of villages with cultural and tourism characteristics", "Urban Rate", "Rural employees", "The proportion of Tertiary Industry in GDP" has significant effect on tourism revenue, while other indicators have no significant effect on tourism revenue. The conclusion is that resources and ecology are the basis of rural tourism development. The rural tourism market in Guangdong has great potential. Market, talents and characteristics are important driving forces to support the development of rural tourism. There are still great differences in the effectiveness of urban and rural tourism development in Guangdong. The research suggests that Guangdong should vigorously dig the characteristics of rural tourism resources between different regions; Guangdong should coordinate the unbalanced development of tourism industry between urban and rural areas; The government should provide good policy support to attract talents and help rural development.

Keywords: rural tourism, regional differences, Guangdong Province

## 1. Introduction

## 1.1 Conceptual Overview

The World Tourism Organization defines rural tourism as "activities in which tourists stay, learn and experience rural life patterns in and around villages (usually traditional villages in remote areas). The village can also be used as a base for tourists to explore nearby areas."<sup>1</sup>The European Union (EU) and the World Organization for Economic Cooperation and Development (OECD) define rural tourism as "tourism activities that take place in rural areas, and further believe that 'Rural' is the core and unique selling point of the overall promotion of rural tourism"<sup>2</sup>. The research of Chinese scholars on rural tourism began in the 1990s. In 2006, the National Tourism Administration of China identified the tourism theme of that year as "2006 China Rural Tourism", which has brought new opportunities for the development of China's rural tourism<sup>3</sup>.Chinese scholars Xiaoli Lu ,Weiwei Liu and Liwei Wang (2017) extracted 16 criteria for the construction of rural tourism concept through quantitative analysis of more than 70 documents covering the concept of rural tourism at home and abroad in recent 20 years, defined rural tourism as "Tourism forms and activities carried out by tourists for the purpose of leisure and learning, based on the rural environment, with rural material and intangible cultural heritage, natural scenery and agricultural activities as the core

tourism resources, urban residents as the main source market and sustainable tourism as the development orientation."<sup>4</sup>

## 1.2 Background of the Study

In 2013, <Opinions of the CPC Central Committee and the State Council on accelerating the development of modern agriculture and further enhancing the vitality of rural development >required to promote the construction of rural ecological civilization and proposed the development of rural tourism and leisure agriculture for the first time. The development of rural tourism in China has developed in a fast pace in last 20 years. At present, rural tourism has become a major component of China's tourism, welcomed by the majority of tourists. According to the rural tourism statistics released by the China Tourism Academy, during 2016 October holiday, the number of rural tourism was 129 million person-time, accounting for 69% of the same period of tourism trips. The

country has become one of the main destinations for tourists to choose their holiday<sup>5</sup>. In February 2022, China Government No. 1 central document, <Opinions of the CPC Central Committee and the State Council on the key work of comprehensively promoting rural revitalization in 2022>, put forward the plan for improving rural leisure tourism, and supported the development of rural primary school and farmhouse characteristic village which farmers directly run or participated in.Bring qualified rural leisure tourism projects into the scope of science popularization base and primary and secondary school student agricultural labor practice base.

Rural tourism is a business type in the process of tourism and agricultural industry integration.Under the background of China's Rural Revitalization Strategy, the development of rural tourism is conducive to the overall development of urban and rural areas, the development of rural economy, the improvement of rural residents' living standards, the increase of farmers' income and wealth, the improvement of rural poverty and the realization of rural sustainable development. According to the data of China Tourism Research Institute, China's rural leisure tourism received more than 3 billion tourists in 2019, accounting for half of China's tourism market; During the Spring Festival, 251 million people traveled in China, of which 38% were rural residents. With the vigorous development of rural tourism, rural tourism resources, economic foundation, traffic conditions and tourism supporting facilities in different regions are different, which leads to differences in the development process of rural tourism in different regions.

#### 1.3 Significance of the Study

Guangdong is an area with rapid economic development in China. In 2019, the regional GDP was 10767.107 billion yuan, the tourism revenue was 1515.795 billion yuan, and the number of overnight tourists was 531.4102 million.As a developed coastal province in China, Guangdong has a huge tourist source market in the Pearl River Delta, strong tourism demand of residents and early development of rural tourism. It has initially formed a rural tourism product system with rich connotation.Driven by tourism poverty alleviation, mass entrepreneurship and innovation, rural tourism in Guangdong has a broader development world<sup>6</sup>.Therefore, selecting Guangdong as the research object of regional differences in rural tourism development in economically developed areas has certain research significance for the study of rural tourism in China.

Through the collation of the existing literature results, it is found that the current research on the development of rural tourism in Guangdong mainly focuses on a certain region or scenic spot in Guangdong , and there are few studies on the differences of rural tourism among different regions, especially for the regional differences in the development of rural tourism in 21 cities in Guangdong, Therefore, it is necessary to make a qualitative and quantitative study on the regional differences of rural tourism development in all prefecture level cities in Guangdong.

#### **1.4 Objectives of the Study**

Through the comparative analysis of the development of rural tourism in 21 cities in Guangdong, the research objectives are fourfold:

Regional differences of rural tourism resources in Guangdong.

Regional differences of rural tourism economic development in Guangdong.

Regional differences of rural tourism social ecological environment in Guangdong.

Regional differences of rural tourism ecological conditions in Guangdong .

Regional differences in the development effectiveness of tourism in Guangdong.

## 2. Data and methods

### 2.1 Index system

On the basis of following the principles of scientificity, comprehensiveness and operability, this paper uses for reference from Zhang Heqing(2012)<sup>7</sup>, Yi Danhui (2015)<sup>8</sup>, Shi Zhicheng(2020)<sup>9</sup>, Guo Wei(2022)<sup>10</sup> and other scholars, this paper constructs the evaluation index system of rural tourism development level in Guangdong Province from the five dimensions of resource conditions, economic conditions, social conditions, ecological conditions and development effectiveness (Table 1).

#### 2.2 Data Source

This paper mainly evaluates the regional differences of rural tourism development in Guangdong in 2019 through horizontal comparison. In order to ensure the authenticity of the empirical data, the relevant data are mainly from the Guangdong Statistical Yearbook 2020, the Guangdong Rural Statistical Yearbook 2020, the statistical yearbooks in 2020 of 21 cities in Guangdong, the government statistical bulletin on national economic and social development, the forestry statistical analysis report and the bulletin on the status of ecological environment; And data released by The Department of Culture and Tourism of Guangdong Province, The Department of Natural Resources of Guangdong Province, The Department of Ecology and Environment of Guangdong Province, The Department of Agriculture and Rural of Guangdong Province, and other government officials. In order to ensure the integrity of empirical data, the moving average method is used to improve individual types of missing data. The data in Tables 2-6 are the data released by the government for 25 indicators in 5 dimensions.

No.	Evaluation Dimension	Secondary Index
1		Number of rural A-level scenic spots
2		Number of national key rural tourism villages and towns
3		Number of high-quality rural tourism routes
4	Resource Conditions	Number of rural B&B demonstration sites
5		Number of villages with cultural and tourism characteristics
6		Number of tourist towns

#### Tab. 1 Evaluation index system of rural tourism development level in Guangdong



7		Per capita disposable income of rural residents(yuan/person)		
8	-	Rural per capita consumption expenditure(yuan/person)		
9	Economy Conditions	The proportion of tertiary industry in GDP (%)		
10		Rural economic output(100 million yuan)		
11		Rural Economic Growth (%)		
12		Population Density (persons/sq.km)		
13	Social Conditions	Urban Rate (%)		
14		Road Density(km/km2)		
15		Rural employees (persons)		
16		Forest Coverage Rate (%)		
17		Green Coverage Rate (%)		
18	Ecological Conditions	Rate of Sewage Treatment (%)		
19		Rate of Consumption Waste Treatment (%)		
20		Air quality compliance rate (%)		
21		Tourism Earnings(100 million yuan)		
22		Growth (%)		
23	Development Effectiveness	Number of Overnight Tourists(10000 person-times)		
24		Business Revenue of Hotels Service(10000 yuan)		
25		Business Revenue of Catering Service(10000 yuan)		

## Tab. 2 Rural Tourism Resource Conditions in Guangdong 2019

NO.	City	Number of rural A-level scenic spots	Number of key villages and towns for rural tourism	Number of high- quality rural tourism routes	Number of rural B&B demonstration sites	Number of villages with cultural and tourism characteristics	Number of tourist towns
1	Guangzhou	26	3	14	6	23	2
2	Shenzhen	6	0	6	8	5	0
3	Zhuhai	4	1	7	6	9	2
4	Shantou	4	2	10	5	14	1
5	Foshan	12	2	9	7	13	1
6	Shaoguan	32	3	14	7	17	4
7	Heyuan	17	2	10	8	14	2
8	Meizhou	32	4	13	10	16	4
9	Huizhou	29	3	11	6	14	2
10	Shanwei	12	1	8	0	10	4
11	Dongguan	7	3	7	0	9	3
12	Zhongshan	12	1	5	5	9	1
13	Jiangmen	26	4	9	8	15	4
14	Yangjiang	9	1	8	0	10	3
15	Zhanjiang	12	3	13	4	16	1
16	Maoming	20	2	9	0	12	3
17	Zhaoqing	24	3	13	5	13	4
18	Qingyuan	32	1	11	5	14	2



19	Chaozhou	5	1	6	0	9	2
20	Jieyang	10	1	10	0	10	2
21	Yunfu	12	0	7	2	7	3

Tab. 3 Rural Tourisn	I Economy	<b>Conditions in</b>	Guangdong,	2019
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NO.	City	Per capita disposable income of rural residents (yuan/person)	Rural per capita consumption expenditure (yuan/person)	The proportion of tertiary industry in GDP	Rural economic output (100 million yuan)	Rural Economic Growth
1	Guangzhou	28867.90	22521.90	71.62	446.31	3.18
2	Shenzhen	None	None	60.93	48.16	5.72
3	Zhuhai	29069.30	22573.00	53.84	105.31	1.60
4	Shantou	17735.30	15373.10	48.01	224.32	2.67
5	Foshan	31503.40	21822.50	42.32	319.56	4.49
6	Shaoguan	16940.10	13864.30	53.16	286.78	3.88
7	Heyuan	16030.30	13437.20	54.35	189.44	5.61
8	Meizhou	16447.20	14145.70	50.30	360.66	3.39
9	Huizhou	23027.40	18387.40	43.16	328.08	1.78
10	Shanwei	16304.70	13422.80	48.59	246.77	4.64
11	Dongguan	35904.50	27720.60	43.16	43.98	9.22
12	Zhongshan	35121.60	24750.60	48.91	104.61	-4.53
13	Jiangmen	19873.30	13643.50	48.94	459.25	4.91
14	Yangjiang	18331.90	14603.20	46.36	403.52	0.58
15	Zhanjiang	17343.00	12730.10	46.48	937.90	3.33
16	Maoming	18482.20	14450.90	47.53	914.44	3.47
17	Zhaoqing	19217.00	12510.30	41.68	590.06	4.89
18	Qingyuan	16523.80	14039.30	51.22	430.18	3.77
19	Chaozhou	16359.60	13588.00	41.94	166.28	3.64
20	Jieyang	15675.40	12997.60	52.15	292.95	3.84
21	Yunfu	16646.20	12867.50	50.26	277.33	2.71

Data Description: due to the complete urbanization of Shenzhen, there is no relevant data for the variables "per capital

disposal income of rural residents" and "rural per capital consumption expenditure".

Tab. 4 Rural Tourism Social Conditions in Guangdong, 2019

NO.	City	Population Density (persons/sq.km)	Urban Rate	Road Density $(km/km^{2)}$	Rural employees
1	Guangzhou	2111	86.46	1.89	3908707
2	Shenzhen	6728	99.52	0.37	29161
3	Zhuhai	1165	90.72	1.64	269931
4	Shantou	2576	70.44	0.83	1907282
5	Foshan	2148	95.00	1.40	1090600
6	Shaoguan	165	57.39	0.92	1635026
7	Heyuan	198	46.50	1.06	1484282
8	Meizhou	276	51.49	1.19	1827941
9	Huizhou	430	72.12	1.16	1883039
10	Shanwei	620	55.20	1.14	1470210



11	Dongguan	3441	92.10	2.14	1127060
12	Zhongshan	1895	88.40	1.50	1504022
13	Jiangmen	487	66.71	1.00	1876755
14	Yangjiang	323	53.61	1.32	1239201
15	Zhanjiang	555	43.96	1.67	3241767
16	Maoming	561	44.81	1.65	2664275
17	Zhaoqing	281	48.63	0.96	1478716
18	Qingyuan	204	53.50	1.23	1646115
19	Chaozhou	845	65.80	1.68	1109147
20	Jieyang 1159		51.23	1.40	2295412
21	Yunfu	327	42.92	1.14	1269488

## Tab. 5 Rural Tourism Ecological Conditions in Guangdong, 2019

NO.	City	Forest Coverage Rate	Green Coverage Rate	Rate of Sewage Treatment	Rate of Consumption Waste Treatment	Air quality compliance rate
1	Guangzhou	41.60	45.50	97.00	100.00	80.27
2	Shenzhen	39.80	43	97.72	100.00	90.96
3	Zhuhai	32.22	46.87	96.62	100.00	86.58
4	Shantou	35.50	43.31	97.02	98.00	95.30
5	Foshan	20.65	45.09	99.90	100.00	78.90
6	Shaoguan	74.20	74.67	59.61	100.00	92.60
7	Heyuan	70.00	42.66	83.10	100.00	97.80
8	Meizhou	74.35	41.89	96.68	100.00	98.90
9	Huizhou	61.71	41.32	97.78	100.00	95.30
10	Shanwei	51.11	37.66	96.90	100.00	94.52
11	Dongguan	37.40	35.86	90.20	100.00	78.08
12	Zhongshan	23.09	44.75	98.50	100.00	78.90
13	Jiangmen	44.62	45.17	97.25	100.00	77.00
14	Yangjiang	57.72	41.83	96.11	100.00	91.00
15	Zhanjiang	24.15	43.96	96.68	100.00	92.10
16	Maoming	55.80	43.03	94.21	100.00	98.90
17	Zhaoqing	70.83	40.99	98.30	100.00	84.10
18	Qingyuan	69.3	40.60	95.78	100.00	95.20
19	Chaozhou	59.69	32.34	89.16	100.00	95.60
20	Jieyang	50.33	44.15	90.21	98.90	95.30
21	Yunfu	67.15	42.20	99.45	96.51	96.40

## $Tab.6\ Tourism\ Development\ Effectiveness\ in\ Guangdong\ ,\ \ 2019$

NO.	City	Tourism Earnings (100 million yuan)	Growth (%)	Number of Overnight Tourists(10000 person-times)	Business Revenue of Hotels Service(10000 yuan)	Business Revenue of Catering Service (10000 yuan)
1	Guangzhou	4454.58	11.14	6773.13	1993311	8494257
2	Shenzhen	1715.17	6.58	6718.04	2050963	11169666
3	Zhuhai	541.53	16.17	2603.90	894122	990731
4	Shantou	568.42	6.35	2344.52	219430	1127446
5	Foshan	891.86	10.22	1932.87	529838	2927989
6	Shaoguan	512.09	13.04	2004.62	125030	398732

the influence degree of 25 indicators in 5 dimensions on tourism income from the data of 21 cities in Guangdong, finds out the

indicators that have the greatest impact on tourism income, and

3. Results and Discussion

3.1 There are still some regional differences in rural tourism

resources in Guangdong. Meizhou, Guangzhou, Jiangmen

and Shaoguan have the highest abundance of rural tourism

obtains the data analysis results.

7	Heyuan	357.66	12.89	1940.82	117353	369767
8	Meizhou	550.02	9.06	2395.69	102383	483818
9	Huizhou	574.26	14.77	2992.43	378342	1612340
10	Shanwei	172.58	6.60	971.50	89059	611660
11	Dongguan	574.16	8.46	2301.64	614187	4655105
12	Zhongshan	303.78	3.29	1496.27	214280	1084263
13	Jiangmen	690.52	17.67	2992.59	234434	1266913
14	Yangjiang	349.39	13.50	1630.69	70073	511720
15	Zhanjiang	601.23	17.68	2845.43	214694	2546587
16	Maoming	476.09	11.80	1551.29	181149	1494993
17	Zhaoqing	340.82	5.52	1434.04	139785	1002104
18	Qingyuan	377.36	9.00	1391.41	180707	503229
19	Chaozhou	398.23	29.99	2629.47	45240	473105
20	Jieyang	362.75	9.89	2354.50	168517	587906
21	Yunfu	345.46	20.59	1836.17	61661	317494

## 2.3 Method

## 2.3.1 Descriptive analysis

This paper uses 25 indicators from 5 dimensions to describe the degree of regional imbalance of rural tourism in Guangdong . Descriptive analysis indicators include coefficient of variation, mean value, standard deviation, minimum value and maximum value, which are used to represent the degree of regional dispersion of rural tourism development in Guangdong.

## 2.3.2 Multiple regression analysis

Through multiple regression analysis, this paper explores

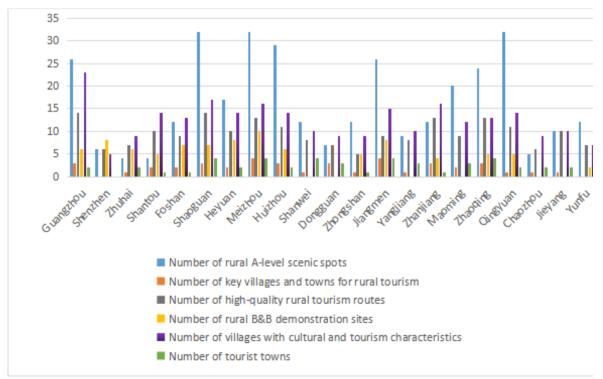


Fig.1 Rural Tourism Resource Conditions in Guangdong

resources.

According to the statistics in Figure 1 and table 7, among the six indicators of rural tourism resource conditions, Meizhou has the largest "number of rural A-level scenic spots", with 32. Meizhou and Jiangmen have the largest "number of national key rural tourism villages and towns", with 4 each. The "number of high-quality rural tourism routes" is the largest in Guangzhou and Shaoguan, with 14 each. The "Number of rural B&B demonstration sites" is the largest in Meizhou, with 10. Guangzhou has the largest "Number of villages with cultural and tourism characteristics", with 23. Five cities ranked first in the "Number of tourist towns", they are Shaoguan, Meizhou, Shanwei, Jiangmen and Zhaoqing, with four in each city. Among the six indicators, Meizhou ranked first in four indicators, and Guangzhou, Jiangmen and Shaoguan ranked first in two indicators. From the perspective of regional distribution, there are some regional differences in rural tourism resources in Guangdong. Rural tourism resources are mainly concentrated in the northern, Eastern and coastal cities of Guangdong, and the cities with higher urbanization rate, such as Shenzhen and Zhuhai, have fewer rural tourism resources.

## 3.2 The living standards of rural residents in Guangdong have improved rapidly, and the differences in rural tourism economic conditions and social conditions have narrowed.

From the data analysis in tables 3, 4 and 7, although there are regional differences in economic conditions and social conditions of rural tourism in Guangdong, the degree of regional differences is narrowing.

On the one hand, among the indicators of social conditions, the regional difference of population density is the largest. This is because Shenzhen has the highest population density, but the urban rate of Shenzhen has reached 99.52%, which means that Shenzhen is close to complete urbanization. Cities with high population density and urban rate are mainly concentrated in the Pearl River Delta, which is in line with the characteristics of population agglomeration to economically developed areas. However, from the perspective of coefficient of variation, the coefficient of variation of urban rate and road density is at a low level compared with other indicators, which means that Guangdong pays more attention to infrastructure construction. The regional difference of rural employees is close to the regional difference of resource indicators, which means that the development of rural tourism resources promotes the local employment of rural population.

On the other hand, in the indicators of economic conditions, the coefficient of variation of Per capita disposable income of rural residents and rural per capita consumption expenditure is relatively small compared with other indicators, reflecting that the regional difference of rural residents' income and expenditure level in Guangdong is gradually shrinking. The coefficient of variation of "the proportion of tertiary industry in GDP" is the smallest among all economic condition indicators, indicating that there is little regional difference in the development of tertiary industry in Guangdong. The top three cities in rural economic output value are Zhanjiang, Maoming and Zhaoqing, which are all cities in the West and northwest of Guangdong. Dongguan has the lowest rural economic output value, but Dongguan ranks first in the three indicators of rural residents' per capita disposable income, rural per capita consumption expenditure and rural economic growth rate, indicating that the living standard of rural residents in Dongguan is the highest.

## 3.3 The regional differences of rural tourism ecological conditions in Guangdong are small.

From the data analysis in Table 5 and Table 7, it can be seen that the ecological conditions of rural tourism in Guangdong support very well. Among the 21 cities in Guangdong, 18 cities have a Rate of Consumption Waste Treatment of 100%, and the other three cities have a Rate of Consumption Waste Treatment of more than 96%. The coefficient of variation of Rate of Consumption Waste Treatmen is only 0.86, with almost no difference. The air quality compliance rate is also the second index with the smallest difference among all indexes, and its coefficient of variation is only 8.15. The coefficient of variation of sewage treatment rate is 9.17; The coefficient of variation of greening coverage is 17.59; The coefficient of variation of forest coverage is 33.84. Even if there are regional differences in forest resources, which is related to the geographical conditions and distribution characteristics of forest resources in Guangdong, the regional differences in green coverage are small. It can be seen that Guangdong attaches great importance to forest resources protection and ecological environment protection. Therefore, there is little regional difference in the ecological conditions of rural tourism in Guangdong.

## 3.4 There are great regional differences in the development of tourism in Guangdong . Guangzhou and Shenzhen have developed tourism industry and high degree of agglomeration.

According to the data analysis in Table 6 and Table 7, there are great regional differences in the development effectiveness of tourism in Guangdong, which is the group of indicators with the highest degree of difference among all indicators. The coefficient of variation of Tourism earnings, Business Revenue of Hotels Service and Business Revenue of Catering Service is greater than 100. The regional difference of tourism earnings growth is similar to that of other index groups. This set of indicators shows that 21 cities in Guangdong are vigorously developing tourism. However, due to the high dependence of tourism on service facilities, service talents and tourism resources, the development effectiveness of tourism is better in cities with concentrated resources, talent agglomeration and abundant resources. In terms of the growth rate of tourism earnings, the cities with a growth rate of more than 10% in 2019 are Chaozhou, Yunfu, Zhanjiang, Jiangmen, Zhuhai, Huizhou, Yangjiang, Shaoguan, Heyuan, Maoming, Guangzhou and Foshan. These fast-growing cities are rich in rural tourism resources. Among them, the overall development rate in western Guangdong is more than 10%, which shows that the development of rural tourism in western Guangdong has achieved remarkable results.

# **3.5 Index** "Number of villages with cultural and tourism characteristics", "Urban Rate", "Rural employees", "The proportion of Tertiary Industry in GDP" has significant effect on tourism revenue, while other indicators have no significant effect on tourism revenue.

The data from Table 2 to Table 6 are imported into SPSS 26.0 for multiple regression analysis to explore the impact of 25 indicators on tourism earnings. After calculation, it is found that among the 25 indicators, only "number of villages with cultural and tourism characteristics", "urban rate", "rural employees", "the proportion of tertiary industry in GDP" have a significant impact on tourism earnings, and the significance of these four indicators is

less than 0.05. See Table 8, Table 9 and Table 10 for detailed data. The significance of other indicators is greater than 0.05, which means that the impact of other indicators on tourism earnings is not significant. Therefore, it can be concluded that the tourism

earnings of Guangdong is affected in resource conditions, economic conditions and social conditions, but the impact of all indicators of ecological conditions on tourism income is not significant.

Variable	Mean	St. Dev.	Coefficient of Variation	Maximum	Minimum
Reso	ource Conditions	8			
Number of rural A-level scenic spots	16	9.69	59.31	32	4
Number of key villages and towns for rural tourism	2	1.17	60.14	4	0
Number of high-quality rural tourism routes	10	2.68	28.18	14	5
Number of rural B&B demonstration sites	4	3.20	73.03	10	0
Number of villages with cultural and tourism characteristics	12	3.93	31.88	23	5
Number of tourist towns	2	1.17	49.32	4	0
Ecor	iomy Conditions	5			
Per capita disposable income of rural residents (yuan/person)	21270.21	6619.37	31.12	35904.50	15675.40
Rural per capita consumption expenditure (yuan/person)	16472.48	4569.94	27.74	27720.60	12510.30
The proportion of tertiary industry in GDP	49.76	6.77	13.61	71.62	41.68
Rural economic output (100 million yuan)	341.71	234.60	68.66	937.90	43.98
Rural Economic Growth	3.47	2.48	71.69	9.22	-4.53
So	cial Conditions				
Population Density(persons/sq.km)	1261.75	1516.43	120.18	6727.91	164.58
Urban Rate	65.55	18.66	28.46	99.52	42.92
Road Density(km/km2)	1.30	0.39	30.11	2.14	0.37
Rural employees	1664673.19	848379.29	50.96	3908707.00	29161.00
Ecole	ogical Condition	S			
Forest Coverage Rate	50.53	17.10	33.84	74.35	20.65
Green Coverage Rate	43.66	7.68	17.59	74.67	32.34
Rate of Sewage Treatment	93.72	8.59	9.17	99.90	59.61
Rate of Consumption Waste Treatment	99.69	0.85	0.86	100.00	96.51
Air quality compliance rate	90.18	7.35	8.15	98.90	77.00
Develo	pment effectiver	iess			
Tourism Earnings(100 million yuan)	721.81	888.69	123.12	4454.58	172.58
Growth (%)	12.11	5.93	48.96	29.99	3.29
Number of Overnight Tourists(10000 person-times)	2530.52	1471.07	58.13	6773.13	971.50
Business Revenue of Hotels Service(10000 yuan)	410693.24	560838.83	136.56	2050963.00	45240.00
Business Revenue of Catering Service(10000 yuan)	2029991.67	2760826.28	136.00	11169666.00	317494.00



#### Tab8. The impact of economic conditions on tourism earnings

Coefficients<sup>a</sup>

		Unstandardized Coefficients		Standardized Coefficients			95.0% Confidence Interval for B		Collinearity Statistics	
Model		в	Std. Error	Beta	t	Sig.	Lower Bound	Upper Bound	Tolerance	VIF
1	(Constant)	-6194.554	1088.618		-5.690	.000	-8529.406	-3859.701		
	Per capita disposable income of rural residents (yuan/person)	.045	.090	.338	.498	.626	149	.239	.039	25.348
	Rural per capita consumption expenditure (yuan/person)	.015	.137	.076	.108	.916	279	.309	.036	27.731
	The proportion of tertiary industry in GDP	103.703	20.246	.758	5.122	.000	60.281	147.126	.830	1.205
	Rural economic output (100 million yuan)	1.074	.631	.281	1.702	.111	280	2.427	.667	1.499
	Rural Economic Growth	54.057	49.328	.153	1.096	.292	-51,741	159.856	.935	1.069

a. Dependent Variable: Tourism Earnings(100 million yuan)

#### Tab 9. The impact of social conditions on tourism earnings

	Coefficients									
Unstandardized Coefficients			Standardized Coefficients			95.0% Confider	nce Interval for B	Collinearity	Statistics	
Model		В	Std. Error	Beta	t	Sig.	Lower Bound	Upper Bound	Tolerance	VIF
1	(Constant)	-2139.134	734.756		-2.911	.010	-3696.746	-581.521		
	Population Density (persons/sq.km)	.120	.143	.205	.839	.414	183	.423	.373	2.679
	Urban Rate	27.382	12.250	.575	2.235	.040	1.412	53.352	.335	2.983
	Road Density(km/km2)	-334.531	415.061	147	806	.432	-1214.421	545.358	.664	1.506
	Rural employees	.001	.000	.774	4.318	.001	.000	.001	.690	1.449

a. Dependent Variable: Tourism Earnings(100 million yuan)

### Tab10. The impact of resource conditions on tourism earnings

		Coemcients									
		Unstandardized Coefficients		Standardized Coefficients			95.0% Confidence Interval for B		Collinearity Statistics		
Model		В	Std. Error	Beta	t	Sig.	Lower Bound	Upper Bound	Tolerance	VIF	
1	(Constant)	-497.062	887.507		560	.584	-2400.575	1406.451			
	Number of rural A-level scenic spots	-12.394	33.367	135	371	.716	-83.959	59.170	.298	3.359	
	Number of key villages and towns for rural tourism	-244.181	260.614	323	937	.365	-803.143	314.780	.332	3.011	
	Number of high-quality rural tourism routes	-109.092	137.744	329	792	.442	-404.522	186.339	.228	4.394	
	Number of rural B&B demonstration sites	25.768	75.083	.093	.343	.737	-135.270	186.806	.539	1.855	
	Number of villages with cultural and tourism characteristics	250.588	103.857	1.109	2.413	.030	27.837	473.339	.186	5.362	
	Number of tourist towns	-111.916	224.980	148	497	.627	-594.450	370.619	.446	2.244	

Coefficients<sup>a</sup>

a. Dependent Variable: Tourism Earnings(100 million yuan)

## 4. Conclusion

## 4.1 Resources and ecology are the foundation of rural tourism development

From the results of the above data analysis, it can be seen that to develop rural tourism, rural tourism resources and rural ecological environment are the basis for the development of rural tourism. Guangdong attaches importance to the construction of ecological environment and encourages cities to create a large number of excellent rural tourism resources, which provides a solid resource and ecological foundation for the high-quality development of rural tourism in Guangdong. The high-quality rural tourism resources in Guangdong are mainly concentrated in eastern and northern Guangdong, and the tourism income of cities in these two regions increased rapidly in 2019, which shows that under the background of Rural Revitalization and supported by good resource conditions and ecological conditions, rural tourism is gradually becoming a preferred way for tourists, and the tourism development in areas rich in rural tourism resources began to accelerate.

## 4.2 The rural tourism market in Guangdong has great potential

According to the data of 2019, the tourism development of 21 cities in Guangdong has achieved good results, with the highest growth rate of tourism earnings of nearly 30%, and the growth rate of tourism earnings of 12 cities is more than 10%, more than half. The average growth rate of tourism earnings in 21 cities in Guangdong is 12%, and the tourism industry is developing rapidly. From the perspective of residents' living standards, according to the data in the Statistical Yearbook of Guangdong Province in 2019, the per capita disposable income of residents in Guangdong was 39014.3 yuan/person in 2019; The per capita disposable income of

urban residents is 48117.6 yuan/person; The per capita disposable income of rural residents is 18818.4 yuan/person. The improvement of residents' living standards releases a strong demand for tourism. Therefore, the market potential of rural tourism in Guangdong is very huge. On the one hand, the huge consumer groups in densely populated areas can quickly reach rural tourism destinations through a perfect road network; On the other hand, the living standards of rural residents in Guangdong have been greatly improved, the per capita disposable income and per capita consumption expenditure of rural residents have increased greatly, and the regional differences have gradually narrowed, which will also become an important market of rural tourism.

# 4.3 The market, talents and characteristics are the important impetus to support the development of rural tourism

The results of multiple regression analysis show that the tourism earnings of Guangdong in 2019 is significantly affected by four indicators: "number of villages with cultural and tourism characteristics", "urban rate", "rural employees", "the proportion of tertiary industry in GDP", which means that the market, talents and characteristics are three important driving forces for the development of rural tourism. Guangdong is rich in rural tourism resources, seashore, mountain forest and a complete range of rural culture. Vigorously excavating local culture and characteristics is conducive to the differentiation and sustainable development of rural tourism. Perfect infrastructure construction and dense road network in Guangdong ensure the accessibility between the market and rural tourism resources. Talent is the foundation and pillar of industrial development. The improvement of rural living standards, the improvement of rural ecological environment and the convenience of rural life will promote the rural population to obtain local employment and return to the countryside from the city, which provides industrial talent support and better intellectual support for the development of rural tourism.

## 4.4 There are still great differences between urban and rural tourism development in Guangdong

Although there are some regional differences in resources, economic, social and ecological conditions of rural tourism in Guangdong, there are still huge regional differences in the effectiveness of urban and rural tourism development. On the one hand, the cities with the best performance in various indicators of tourism development in Guangdong are basically concentrated in the Pearl River Delta, because this region is an area with relatively good and rapid market, resources, talents and economic development. Whether it is the attraction of talents, the construction of tourism service facilities and the vitality of economic development, urban areas have greater advantages than rural areas. In addition, there are also great regional differences in economic development between the Pearl River Delta and western, Eastern and northern Guangdong. Therefore, it still needs a long way to go for Guangdong to narrow the gap between urban and rural development through Rural Revitalization and the development of rural tourism and other rural industries.

## 5. Suggestion

## 5.1 Guangdong should vigorously explore the characteristics of rural tourism resources between different regions

Guangdong Province is rich in rural tourism resources, with complete types and rich categories.Due to the different regional characteristics of Guangdong, in order to avoid the phenomenon of homogenization and vicious competition, Guangdong should vigorously dig the regional rural local characteristics and integrate rural tourism resources with the idea of "tourism +". Characteristics are the only way out for the sustainable development of rural tourism. In the process of creating characteristics, we should enrich the business forms of rural tourism, take characteristics as the main line and business forms as the starting point, so that the characteristics of rural tourism can be presented through rural tourism industry projects, and make rural characteristics become the vitality of the sustainable development of rural tourism.

## 5.2 Guangdong should coordinate the unbalanced development of tourism industry between urban and rural areas

Guangdong Province should pay attention to the development effectiveness of rural tourism and reduce the imbalance of regional development. The development of rural tourism serves both ecological protection and economic and social development. We should take into account the economic, social and ecological benefits of rural tourism destinations. At the same time, we should pay attention to the role of market orientation, enhance the market attraction and competitiveness of rural tourism destinations in different regions, form regional differentiated development, optimize the structure of rural tourism products, change the traditional mode of relying solely on sightseeing, Improve development effectiveness and supporting efforts in the environmental system of rural tourism development in Guangdong.

## 5.3 The government should provide good policy support to attract talents to help rural development

The development of rural tourism is inseparable from the support of talents, who are important development assistance. The government can provide policies to promote the development of rural tourism and encourage the implementation of rural tourism projects. Rural tourism can attract local and foreign talents. At the same time, the government should also introduce policies to retain rural talents. Preferential supporting policies can be introduced through housing, medical treatment, education and other aspects to retain talents serving the countryside, so as to help the revitalization of the countryside and promote the development of rural industries.

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