

Study on New Ways of Tourism Co-operation and Development in Dian-Qian-Gui Region

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Abstract: This paper takes Dian-Qian-Gui ethnic areas tourism co-development pathway as the research object and puts forward a new pathway of regional tourism co-development - construction of an intercommunication and mutual integration tourism platform. The platform incorporates the ideas of ‘points’ and ‘mutual recognition of provident fund’ to stimulate tourists' re-consumption and improve their satisfaction. With the deepening of cooperation and friendship between regional governments, the idea of this paper can be extended to the whole country, even the world, so that more and more regions will join the regional tourism co-development group and push the tourism industry to a new height.

1. Introduction

Regional tourism co-development has become an important trend in the development of tourism in the world, and countries in North America, Western Europe and Southeast Asia have achieved good results through regional co-operation. In China, regional tourism synergistic development in the forefront of the ‘Yangtze River Delta’, ‘Pearl River Delta’, ‘Bohai Rim’ three major regions ^[1]. The concept of synergism was first proposed by the German physicist Hermann Hacken, and was introduced into tourism research around the 1970s, involving regional tourism cooperation, tourism development, tourism product promotion and marketing, etc. ^[2-3]. The earliest Chinese study to introduce the theory of synergism into tourism research was Zhang Lingyun's study on the synergistic development of civil aviation-related sectors and tourism-related sectors ^[4]. Since then, research results in the field of tourism synergistic development have become more and more abundant in the context of the Chinese government's efforts to promote barrier-free tourism and regional collaborative construction and tourism alliance policies ^[5]. The research mainly involves five aspects: definition of conceptual connotation ^[6-7], theoretical foundation ^[8-9], synergistic modes and realization paths ^[10-12], and measurement of the degree of synergistic development and influencing factors ^[13-15].

Dian-Qian-Gui is the abbreviation of Yunnan, Guizhou, and Guangxi, and the three provinces have great similarities in geography, ethnic culture and socioeconomics. In China's economic ranking, ‘Yunnan-Guizhou-Guangxi’ belongs to the economically backward areas, but it has rich natural tourism resources and humanities tourism resources. With the increase of national tourism

development, the annual tourism revenue of the three provinces has been increasing continuously, which has provided a strong impetus for China's comprehensive poverty alleviation. Currently, the three provinces have carried out a very large number of tourism co-operation projects, increasing exchanges in terms of sharing tourism resources, co-branding, market co-construction and co-organization of activities, and promoting the degree of synergistic development of tourism among them. To make the tourism synergistic development of the three provinces move to a new height and obtain more tourism dividends to promote the local economic, cultural, and social development, this paper chooses to carry out the research in terms of synergistic mode and realization path.

The follow-up arrangement of this paper is as follows: Section 2 introduces the foundation of tourism synergistic development in Dian-Qian-Gui region. Section 3 introduces a new model of tourism synergistic development. Section 4, a short case demonstration. Section 5, a summary of the thesis work.

2. Research Basis of Dian-Qian-Gui Tourism Synergistic Development

Dian-Qian-Gui ethnic area is in the transition zone from Yunnan-Guizhou Plateau to Guangxi Basin. Due to the limitation of natural geographic environment, there are special difficulties in the regional development, and it is the depression of economic development in Southwest China. Tourism research in the three provinces can promote local economic construction and improve people's living standards. In 2004, Wang Jing proposed a variety of integration modes to research and develop karst landscape tourism products for the characteristics of karst landscape in Dian-Qian-Gui region. These models include regional integration model, management linkage integration model, brand integration model, investment and financing strategy integration model, marketing consortium franchise integration model and tourism area forum research model^[16]. In the same year, Lai Peng analysed the potential and advantages of the three provinces in terms of economic development, resource utilization, and industrial cooperation from the perspective of regional economics, and put forward suggestions to promote regional economic integration and coordinated development^[17]. In 2005, Zhang Jian put forward four measures to solve the problem of inter-administrative tourism co-operation, including the adjustment of administrative divisions, the natural region-type tourism planning, the innovation of inter-region tourism products, and the creating a barrier-free tourism market^[18]. In 2010, Huang Dazu emphasized the historic opportunities brought by the western development for Dian-Qian-Gui region and suggested the construction of Dian-Qian-Gui tourism collaboration area, which can further expand and strengthen tourism through cooperation in co-creating tourism brands, thus promoting the rapid development of Dian-Qian-Gui border ethnic minority economies^[19]. In 2011, Lv QiuMan and Lu Wei, based on the basic situation of the combination of tourism resources as a background, and put forward opinions and suggestions on the development of tourism resources in Baize City^[20]. In 2013, Chen Wei et al. constructed a model for the integrated development of traditional sports and culture industry of ethnic minorities based on the characteristics of traditional sports and cultural resources of ethnic minorities in Dian-Qian-Gui region. By excavating and collating the traditional sports and cultural resources of ethnic minorities, combined with the development trend of modern culture industry, the inheritance and innovation of traditional sports and culture of ethnic minorities are promoted, while the development of related industries is facilitated^[21]. In 2017, Dong Yidan carried out a study on the mechanism of cross-regional joint development of tourism in Dian-Qian-Gui region^[15]. In 2023, Bai Qingping and Liu Wei conducted a study on the tourism co-development of Dian-Qian-Gui from the perspective of sports tourism^[22]. In 2023, Bai Qingping and Liu Wei conducted a study on the co-development of tourism in Dian-Qian-Gui region from the perspective of sports tourism^[22]. The above studies have theoretically shown the way to the synergistic

development of tourism in Dian-Qian-Gui ethnic areas.

The tourism co-operation among the governments of the three provinces of Dian-Qian-Gui can be traced back to 2003, when Yunnan put forward the ‘Co-operation Intentions on Tourism Development in Yunnan, Guizhou, and Guangxi Provinces’, but due to several factors at that time, such as the economy, administrative planning and other factors, the co-operation effect was not obvious. With the continuous development of China's economy, the three provinces have also gained the input of more funds from the state. Especially in recent years, the governments of the three provinces have carried out cooperation in many areas, for example, in June 2017, a seminar on the creation of China Yunnan-Guizhou-Guangxi Ethnic Cultural Tourism Demonstration Zone in the three provinces was held in Nanning, where a consensus was reached to build a health and wellness tourism line and to jointly push forward the construction of Dian-Qian-Gui high-speed rail travel belt. In September 2019, the Kunming-Nanning-Guiyang and the Honghe-Guilin-Qiannan ‘3 3’ CPPCC Inter-regional Consultative Meeting on Cultural Tourism Promotion was held in Guiyang, and the governments of the six places signed the ‘Cooperative Framework Agreement on Accelerating the Integration and Development of the Cultural Tourism Industry in the Six Municipalities of Kunming, Nanning, Guiyang, Honghe, Guilin, and Qiannan’. 2022 July, the Joint Meeting of the Political Chairpersons of the Seven Municipalities of the Old Revolutionary Regions of the Left and Right Rivers of the Dian-Qian-Gui Region was held in Xingyi, Guizhou. It was the ninth meeting of the Joint Meeting, which carried out joint consultation on the theme of ‘Cultivating Agricultural Brands with Mountainous Characteristics and Promoting High-Quality Development of the Old Revolutionary Areas of the Left and Right Rivers’.

The collaborative development of tourism in Dian-Qian-Gui Region has achieved a wealth of results in terms of both academics and practical governmental co-operation, which has laid a solid foundation for subsequent tourism research.

3. New ways of Dian-Qian-Gui Region tourism synergistic development

In Section 2, we introduced the foundation of tourism co-development in Dian-Qian-Gui region, and the governments of the three provinces are strongly supportive of regional tourism co-development. The deep friendship among the three provinces can be traced back to the ‘Western Development Strategy’, ‘Pan-Pearl River Delta Regional Co-operation’, and ‘Yangtze River Economic Belt Development Strategic Plan’, ‘Pearl River-West River Economic Belt Development Strategic Plan’. The synergistic development of regional tourism requires, first, that regional governments attach great importance to it, introduce policies, cooperate fully, and recognize each other. From this perspective, the governments of Dian-Qian-Gui region have absolute advantages. Based on the existing foundation, we propose a new way to promote the degree of collaborative tourism development in Dian-Qian-Gui region.

3.1. Build Dian-Qian-Gui tourism system

Through years of cooperation, Dian-Qian-Gui region have reached an unprecedented level of attention, cooperation, and recognition in tourism co-operation. To go to a deeper level for the synergistic development of regional tourism in the three provinces, there is an urgent need to set up a long-term and effective platform for regional interoperability and mutual integration. The term ‘platform’ refers to a tourism system based on the Internet, which is able to integrate hotels, attraction tickets, transport, tour guide services, special products and other resources of Dian-Qian-Gui region, enhance tourists' travel experience, promote the development of tourism economy of the three provinces, and bring regional tourism synergistic development to a new height, which is referred to as Dian-Qian-Gui tourism system, or ‘DQGT’ for short. Different from the current

tourism service platforms in the market (e.g., Ctrip, Where to Go, Flying Pig Travel, etc.), DQGT draws on the concepts of ‘Supermarket Points’ and ‘Mutual Recognition of Provident Funds’. ‘Supermarket points’ means that after purchasing goods from supermarkets, you will get corresponding points, which can be exchanged for corresponding goods after reaching certain conditions. The idea from the psychological guide customers to lock consumption, stimulate consumption, consumption, increase supermarket profits. ‘Mutual recognition of provident funds’ is the recent years the real estate industry recession government issued a rescue policy, that is, personal provident fund can be transferred across provinces or for different places provident fund loans, the policy effectively alleviates the dilemma of the regional real estate economy. Currently, the main cities that support ‘mutual recognition of provident funds’ are Wuhan, Nanchang, Changsha, and Hefei. The idea of ‘mutual recognition of provident funds’ is very similar to the idea of ‘collaborative development of regional tourism’. By integrating the ideas of ‘Supermarket Points’ and ‘Mutual Recognition of Provident Funds’ into the tourism industry, it can stimulate national consumption and promote the development of the tourism industry. The main ideas of the DQGT system are shown in Figure 1:

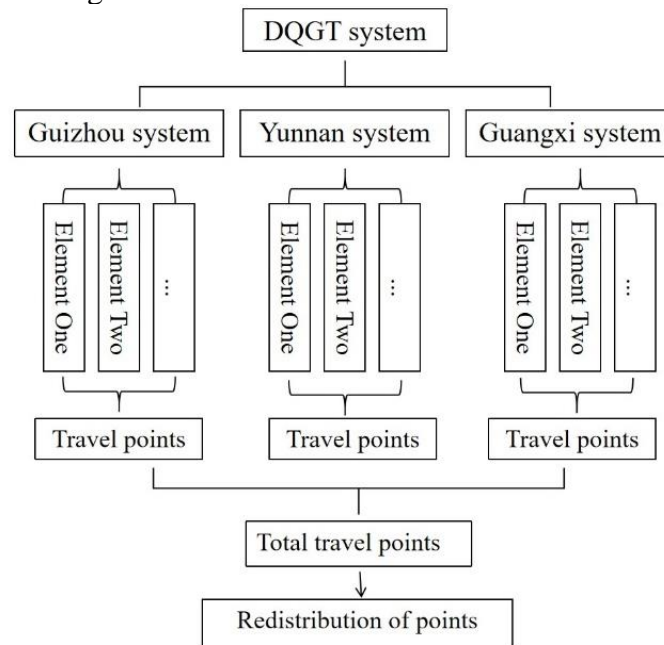


Figure 1: Main idea content of DQGT system

As shown in Figure 1, the DQGT system contains three subsystems, Guizhou system, Yunnan system, and Guangxi system. Each subsystem contains multiple elements. The elements here refer to tourism products, such as scenic spot tickets, hotel accommodation, special snacks, etc. The purchase of tourism products generates corresponding tourism points, and different tourism products correspond to different values of points. Different tourism products in different regions have different values for different points, mainly related to the local economic level. The points of the three sub-systems are converted into the total points of the DQGT system according to the economic level of each region, and the total points are converted into the system balance according to a certain ratio, which can be used for secondary tourism consumption.

The integration of ‘supermarket points’ and ‘mutual recognition of provident funds’ into the DQGT system can encourage tourists to come to Dian-Qian-Gui for secondary tourism consumption, increase the local economic income and improve the living standard of the residents.

3.2. Conversion of factor points

The elements in the text refer to tourism products, in such tourism products as scenic spot tickets, specialty products, wine point accommodation, tour guide services, some are mandatory consumer goods, such as scenic spot tickets, and some are consumer goods of choice, such as specialty products, and the points generated by the two kinds of products should be set at different ratios. In response to the national strategy of poverty alleviation and rural revitalization, and to improve the economic income of residents, we suggest that the ratio of mandatory consumer goods and choice of consumer goods should be set at 0.3:1 to encourage tourists to buy local specialty products. On the issue of the conversion ratio between tourism product prices and points, for the convenience of conversion, we adopt 1:1. For example, Mike's one-day trip from Beijing to Xijiang Thousand Households Miao Village in Guizhou cost 90 RMB for admission tickets, 180 RMB for taking photos in Miao costumes, and 480 RMB for purchasing special snack commodities. According to the ratio rule we set up, Mike's points in Guizhou system are $90 \times 0.3 + 180 \times 1 + 480 \times 1 = 687$. The mode of points can stimulate Mike's second trip to Guizhou or Yunnan and Guangxi, which has the effect of stimulating tourism consumption and locking tourists.

Although Dian-Qian-Gui region have many similarities, but also have their own tourism resources, so there can be differences in the determination of the elements. For the tourism product categories included in the same element need to be determined in conjunction with the actual local situation. For example, for the same specialty products, Guizhou has Moutai Wine, Lao Gan Ma, Duyun Mao Jian Tea; Yunnan has Pu'er Tea, Yunnan Rice Noodle, Wenshan Panax Ginseng; and Guangxi has Guilin Rice Vermicelli, Liuzhou Snail Vermicelli, and Yongfu sweet fruit of Siraitia Grosvenor.

3.3. Interchange of subsystem points

Although the three provinces of Yunnan-Guizhou-Guangxi belong to the same region of backward economic level, the inconsistency of development strategies adopted by the national and local governments has led to differences in the economic level of each region. When measuring the economic level of a region, GDP per capita is often used as a measure. The GDP per capita of Dian-Qian-Gui region in the past 10 years is shown in Table 1:

Table 1: GDP per capita in Dian-Qian-Gui, 2012-2022 (unit: yuan)

Year	Guizhou	Yunnan	Guangxi
2022	20164	28954	26300
2021	19458	27161	25209
2020	17860	24555	22120
2019	16769	23223	21237
2018	15354	20880	19627
2017	13605	18486	17790
2016	11792	16369	16116
2015	10541	14960	14797
2014	9173	14041	13587
2013	7973	12825	12448
2012	6742	11097	11303

As can be seen from Table 1, among the three provinces, Yunnan's economic level is slightly higher than that of Guizhou and Guangxi, and Guizhou is the lowest among the three provinces. Analysing the proportional relationship of per capita GDP of the three provinces in 2012-2022, it is

about 1:1.4:1.3 (Guizhou is 1, Yunnan is 1.4, and Guangxi is 1.3). Based on this, we set the point exchange ratio of the Guizhou system, Yunnan system, and Guangxi system to 1:1.4:1.3. For example, 687 points generated by Mike in Guizhou are equivalent to 962 points generated in Yunnan. The total points of the DQGT system are calculated using the following formula:

$$Z = a_1 * A + a_2 * B + a_3 * C \quad (1)$$

Where Z denotes the total DQGT system integral, A denotes the Guizhou system integral, B denotes the Yunnan system integral, and C denotes the Guangxi system integral. a_1, a_2, a_3 are 1, 0.71, and 0.77, respectively.

3.4. Conversion of Points into Balance

In all the industries where the points system is implemented, points are currently used to exchange for coupons or commodities. In order to stimulate tourists' consumption and enhance their satisfaction, the total points of DQGT system can be used in three ways: the first one is to convert them into shopping coupons of corresponding amount; the second one is to exchange them for tourism products after the points reach the corresponding amount; and the third one is to convert them into the amount of money that can be withdrawn according to a certain ratio. In daily travelling, we may only go to certain scenic spots once, so the third mode of use can solve the problem of not wanting to shop and not being able to reach the threshold of redeeming the points for products and enhance the satisfaction of travelling. In the first mode of use, to facilitate the conversion, we suggest adopting the ratio of 100:1 to convert points, for example, 5,000 points can be exchanged for shopping coupons in the amount of 50. In the second mode of use, the limit of the number of points needs to be set according to the value of the replacement goods. In the third mode of use, to stimulate tourists to make secondary consumption, it is recommended that the ratio be set at 300:1. For example, if the points generated from travelling are 3,000, they can be exchanged for 30 RMB shopping coupons, but if they are withdrawn, they can only be exchanged for 10 RMB. This mode can stimulate tourists to make secondary consumption and can also enhance tourists' travel satisfaction and promote the rapid development of local tourism.

4. Simulation Case

To elaborate the idea of the new model of regional tourism co-development in this paper in more detail, we take a simple case to demonstrate and illustrate the DQGT system.

Example: Mike's family of three travelled in Dian-Qian-Gui region for five days. On the first day of travelling in Guangxi, the consumption is 1200 RMB for scenic spot tickets, 300 RMB for bamboo raft ride, 158 RMB for accommodation and 580 RMB for buying special products. The second day travelled to Guizhou, and the third night left Guizhou for Yunnan. During the time in Guizhou, the consumption was: 1,500 RMB for scenic spot tickets, 580 RMB for taking photos of ethnic costumes, 138 RMB for accommodation, and 4,800 RMB for special products. During the two days in Yunnan, the scenic spot tickets were RMB 1,600, ethnic costume photo shoots were RMB 680, accommodation was RMB 168, and special products were RMB 420.

According to the idea in the article, the points generated by Mike's family of three in the Guangxi system are 1,938, Guizhou system points are 5,968, and Yunnan system points are 1,748. The total points in the DQGT system are about 8,701, which can be exchanged for 87 RMB shopping coupons or corresponding commodities, and if Mike wants to withdraw the cash, he can only withdraw 29 RMB. This would cost Mike 58 RMB compared to purchasing the item again. Psychologically, Mike is likely to make a second purchase.

5. Conclusions

Regional tourism co-development has become a new direction for the development of the tourism industry, and how to build a new model of regional tourism co-development is the focus of current scholars. This paper takes Dian-Qian-Gui ethnic areas as a demonstration point and proposes a new model of regional tourism co-development - the construction of a tourism platform of regional interoperability and mutual integration, and the main ideas of the tourism platform are elaborated in detail in the paper. It is worth mentioning that this paper chooses Dian-Qian-Gui region as the study area because there are many years of close co-operation and friendship between the governments of the three provinces, and as the co-operation among the three provinces increases, the elements in the system will be gradually enriched and the system will become more and more perfect. Similarly, with the deepening of the co-operative relationship between the various regions of the country, the ideas in this paper can be extended to the whole country, even the whole world, and more and more regions will join in the regional tourism synergy to promote the prosperous development of the tourism industry.

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