

# Research on the Competitiveness Evaluation of Rural B&B Cluster Based on GEMS Model——Taking Pengzhou Longmen Mountain Jianjiang River Valley Eco-tourism Area as an Example

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**Abstract.** In the context of rural revitalization, the rural B&B industry demonstrates notable dynamism and exhibits a tendency towards clustering. Using the GEMS model, the competitiveness of the local rural B&B industry cluster is evaluated at four levels: foundation, enterprise, market and environment. The findings indicate that the rural B&B industry cluster in the Pengzhou Longmen Shan Jinjiang Valley Eco-tourism Area exhibits certain competitive advantages. However, there is potential for enhancement at the market and enterprise levels. Consequently, recommendations for promoting the sustainable development of the cluster are proposed.

**Keywords:** Rural B&B industry cluster, Competitiveness, GEMS Model.

## 1. Introduction

The opinions of the Central Committee of the Communist Party of China and the State Council on the learning and application of the experience of the Project of "Ten Thousand Villages Demonstration and Ten Thousand Villages Renovation" "to effectively promote the overall revitalisation of rural areas (2024 No.1) The document of the Central Committee indicates that there is a need to accelerate the construction of a modern rural industrial system that integrates agriculture, culture and tourism. Furthermore, it suggests the implementation of a project that will facilitate the deep integration of rural culture and tourism. Additionally, the document proposes the promotion of the construction of rural tourism agglomeration areas, which it defines as villages. Finally, it recommends the promotion of the standardized development of rural B&B and the specific deployment of measures to improve the quality. Rural B&B is distinguished by a lengthy industrial chain, robust driving force, and favorable impact on farmers and wealthy farmers. It plays a pivotal role in advancing rural economic growth, safeguarding and perpetuating rural culture, repurposing idle resources, augmenting farmers' income, and fostering prosperity. While domestic scholars have conducted research on rural B&B from a sociological and economic perspective, focusing on aspects such as its conceptualization, development strategy, service characteristics, legal standards, spatial layout and other factors, there is a need for further research on the industrial competitiveness of rural B&B clusters. This paper employs the GEMS model to undertake a quantitative analysis of the industrial competitiveness of the rural B&B cluster in the Pengzhou Longmen Mountain Jianjiang Valley Eco-tourism Area. The objective is to identify the factors that constrain the development of the rural B&B cluster and to propose strategies to enhance the competitive advantage of the rural B&B cluster in the Jianjiang Valley Eco-tourism Area of Pengzhou. The findings are intended to inform the decisions of the government and enterprises.

## 2. Overview and Research of Relevant Theories

### 2.1. Industrial clusters

Industrial cluster first appeared in people's field of vision since 1920s. In 1990, Porter [1] first put forward the concept of "industrial cluster", and thought that industrial cluster refers to the group consisting of enterprises, specialized suppliers, service providers, financial institutions, manufacturers of related industries and other relevant institutions, etc. Compared with western

developed countries, domestic industrial cluster research started late and developed slowly, mainly in two stages of imitation and adjustment [2]. At this stage, the research on industrial clusters focuses on connotation, causes, evolution mechanism, competitiveness, and cluster upgrading, and is mainly based on the type of research objects such as agricultural industrial clusters [3], tourism industrial clusters [4] [5], and digital industrial clusters[6].From the point of view of research methods, qualitative research still dominates, but quantitative research increases significantly [7], and econometric statistics, structural equation modelling, case studies and so on are the main methods.

## 2.2. Rural B&B industry cluster

In July 2022, the Guiding Opinions on Promoting the High-quality Development of rural B&B was used to clearly define the concept of rural B&B for the first time: rural B&B refers to the small-scale accommodation facilities that provide tourists with experience of local nature, culture and production and living style by utilizing relevant resources such as rural residential houses and the owners participate in business services. Since the implementation of the rural revitalization strategy proposed by the 19th National Congress of the Communist Party of China, along with the modernization transformation of rural development and governance, the favorable policies of governments at all levels, the penetration of platform economic business model, the transformation of social public life concept and other factors jointly drive the development of rural B&B to enter the dividend period [8]. In 2023 No.1 Document of the Central Committee, Opinions of the State Council on Doing Well the Key Work of Promoting Rural Revitalization in 2023, it is mentioned that“continue to support the advantageous and characteristic industrial clusters”and point out that“promote the quality upgrading of rural residential accommodation”.

As for the definition of rural B&B industry cluster, scholars have developed the definition mainly from the angles of its formation scale and local characteristics [9] and the competitive advantage of integration with relevant industries [10]. In consideration of the development trend of clear division of labor, multiple levels and wide distribution as a special tourism industry integrating market demand and regional characteristics [11], this study defines rural B&B cluster as a comprehensive, diversified and integrated rural tourism exosphere with rural B&B as the core, which can effectively guide and promote the concentration of capital, talents, information, technology, service and other elements to rural areas and form a powerful gathering energy. Can resist external impact and reduce internal consumption, producing regional economic effects, promote the joint development of more rural industries [12]. At present, the research on rural B&B industrial cluster mainly focuses on the formation and influence of B&B cluster [13], spatial characteristics and influencing factors [14], development problems and solutions [15]. However, there is still research space for quantitative analysis of rural B&B industrial cluster, especially the analysis of industrial competitiveness of rural B&B cluster, which can be further explored.

## 3. Current situation of rural B&B cluster development

The foreign rural B&B started earlier and developed rapidly, and has entered the mature stage of development. The UK's rural B&B has now created a variety of characteristic tourism brands such as "ecological brand", "pastoral brand" and "retire brand", and has held various leisure activities based on its own resource advantages such as rural fairs or horticultural fairs to promote the development of its own rural economy. Based on the development of agricultural tourism, the rural B&B cluster in France has come into being. At present, a rural tourism industry cluster covering food, housing, transportation, entertainment, shopping and other multi-functional and wide fields has been formed in the cluster area. In Asia, Japan is one of the countries with the most mature development of the B&B industry. The prosperous economy of Japan in the 1970s drove the mass leisure tourism industry, and B&B started to rise and entered the stage of rapid development.

In July 2022, the Ministry of Culture and Tourism and other ten ministries and commissions jointly issued the Guiding Opinions on Promoting the High-quality Development of Rural B&B, carrying

out overall planning and system standardization for the development of rural B&B. On the premise of respecting the will of farmers and complying with the plan, rural collective economic organizations are encouraged to develop rural B&B and establish rural B&B cluster through registration of companies, establishment of cooperatives, and participation of villagers in shares. China's rural B&B industry has been transforming and upgrading from the independent B&B to the brand, chain and cluster of B&B to the cluster of Bobin response to the state's attention to the development of rural B&B industry cluster, Chengdu Municipal Bureau of Culture, Broadcasting, Culture, Radio, and Tourism jointly issued the Notice of Chengdu Tourism B&B Management Measures (for Trial Implementation) in January 2023, together with 17 departments including the Internet Information Office of the CPC Chengdu Municipal Committee, the Municipal Public Security Bureau, the Municipal Bureau of Planning and Natural Resources, and the Municipal Housing and Construction Bureau, to provide policy support for the healthy and sustainable development of Chengdu tourism B&B industry.

Taking Pengzhou City in Chengdu as an example, through actively promoting the development of rural Bobbitt will become the leading industry and economic growth support. The rural B&B industry has begun to take shape and its brand popularity has gradually become prominent. The government has demarcated 6 towns suitable for the development of rural B&B industry in the area, and put them into the industrial park to build an industrial cluster dominated by rural B&B Longmen Mountain Jinjiang River Valley Eco-tourism Area. The core scope of the first phase of the resort includes Pan long Village, Shimen Village, Enchanting Community and Fencing Nanchang Town, with a total area of about 9 square kilometers. There is one national key village for rural tourism, one Fustian tourist B&B, two AAA forest scenic spots and two intangible cultural heritage projects. According to the data, the tourist reception volume of Pengzhou City has increased from 15.28 million person-time in 2017 to 17, 559, 300 person-time in 2022. The growth rate was 30.06%, and the total tourism income increased from 4.65 billion yuan in 2017 to 10.101 billion yuan in 2022, with an average annual growth rate of 19.97%. By the end of 2022, the tourist area has built 56 rural residential accommodation facilities with special features, such as "do nothing" brand, and the public service supporting facilities and infrastructure construction are increasingly improved. Different from the extensive, scattered and low-end farmhouse and "food+accommodation" hotels in the past, Longmen Mountain Jinjiang River Valley Eco-tourism Area is mainly characterized by rural residential accommodation. Ten residential accommodation settlements are planned to be built in the park. At the same time, the government of Pengzhou City, with the industrial park as the unit, has concentrated on introducing a number of well-known brand B&Bs in China, supporting local B&Bs with excellent quality, and cultivating a batch of small and fine characteristic B&Bs.

## **4. Analysis on the Competitiveness of Rural B&B Industry Cluster**

### **4.1. GEMS model**

The GEM model was proposed by Tim Pad with greater emphasis on Porter's diamond model, which is primarily utilised for the assessment of regional industrial cluster competitiveness. The GEM model comprises three factor pairs: Groundings, Enterprises and Markets. The aforementioned three factors can be classified into the following six categories: resources, facilities, suppliers and related auxiliary industries, structural strategy and competition of enterprises, local market and external market. These constitute the first-level index. Under this index, several second-level indexes are listed, representing the evaluation of industrial cluster competitiveness. These are based on the influence of each factor on competitiveness.

The development of rural B&B is inextricably linked to external factors, including the local government's development concept and the policy innovation environment [16].

Consequently, this study incorporates environmental factors into the GEM model, adopting the GEMS model proposed by Liu Guoxin [17]. For a detailed illustration, please refer to Figure 1:

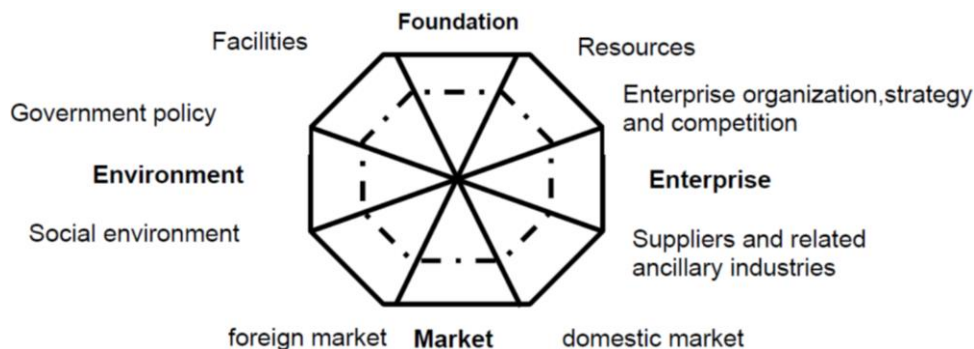


Figure 1. GEMS Model

4.2. Selection of indicators

Based on the actual situation of the case in Pengzhou City, and consulting the opinions of relevant experts, and referring to the research of Hu Yurang et al. [18], Liu Zhongyan et al. [19] and Li Beili [20], the evaluation indicator system of competitiveness of rural B&B cluster with 8 first-level indicators and 22 second-level indicators is finally constructed. See Table 1 for details:

Table 1. Evaluation system of industrial competitiveness of rural B&B cluster

| target level   | normative layer           | sub-normative level                                     | programme level   |
|--|---------------------------|---|---|
| on the basis of GEMS modelling Industrial Competitiveness of Rural B&B Cluster rating system | infrastructural           | resource (such as manpower or tourism)                  | B&B Location Conditions   |
|  |                           |   | Human resources for B&B   |
|  |                           |   | Attractiveness of B&B resources                                     |
|  |                           | installation  | capital market  |
|  |                           |   | General infrastructure improvements                                 |
|  |                           |   | Degree of sophistication of specialized facilities in B&Bs          |
|  | corporations              | Institutions, strategies and competition in enterprises | Number of B&Bs, size  |
|  |                           |   | Profitability of B&Bs   |
|  |                           |   | Level of innovation in B&B  |
|  |                           | Suppliers and related ancillary industries              | entertainment industry  |
|  |                           |   | catering industry   |
|  | Market (also in abstract) | domestic market   | retail trade  |
|  |                           |   | Domestic B&B Market Size  |
|  |                           | international market                                    | Prospects for the development of the domestic B&B market            |
|  |                           |   | International B&B Market Size                                       |
|  | matrix                    | government policy                                       | International B&B Market Outlook                                    |
|  |                           |   | Administrative measures to regulate the operation of the B&B market |
|  |                           |   | Rationality of the development plan for the B&B industry            |
|  |                           | social environment                                      | Government's publicity strategy for B&B development                 |
|  |                           |   | Local security situation  |
|  |                           |   | Cultural quality of the population                                  |
|  |                           |   |   |

### 4.3. Determination of weight

The index weight is very important to the evaluation result and affects the proportion and importance of the index in the evaluation system. In determining the weight, the actual situation and needs shall be considered to ensure that the evaluation is objective and accurate. The analytic hierarchy process (AHP) is a qualitative and quantitative, systematic and hierarchical analysis method, which has the advantages of system and flexibility.

This paper designs a questionnaire according to the index, and invites 8 experts and scholars in the tourism field to grade the designed index according to the degree of importance. Among them, 1 point represents that the competitiveness of the sub-index is at the lowest level, and 10 points represents that the competitiveness is at the highest level. According to the scoring result, SPSSAU is used to effectively clean, classify and summarize the data, construct the judgment matrix of industrial competitiveness of rural B&B cluster, and then determine the weight of each index.

### 4.4. Measurement of industrial competitiveness of rural B&B cluster

#### 4.4.1. Calculate index element score

Considering the particularity of the business subject of the B&B industry, and the main survey group of the previous measurement of industrial competitiveness was mainly the operators and managers of relevant industries, from February to May 2024, Pengzhou was investigated through field visit and telephone contact.

The employees of the B&B industry in the Longmen Mountain Jianjiang River Valley Eco-tourism Area conducted a questionnaire survey, the results of which are presented in the following table (Table 2):

**Table 2.** Completed Residential Bays in the Longmen Mountain, Stream and River Valley Eco-Tourism Area

| Town   | Number of completed B&B (homes) | Number of "Happy accommodation, excellent accommodation and excellent accommodation" (homes) | Number of enterprise-type B&B (homes) |
|--|---------------------------------|--|---------------------------------------|
| Total  | 56                              | 24   | 32                                    |
| Bai Lu Town  | 9                               | 4  | 5                                     |
| Longmen Mountain Town  | 15                              | 8  | 10                                    |
| Tongji Town  | 15                              | 4  | 3                                     |
| Osmanthus Town   | 15                              | 6  | 12                                    |
| Gexianshan Town  | 2                               | 2  | 2                                     |
| Cf. Characteristic Industry Development Department of Management Committee of Longmen Mountain Jianjiang River Valley Eco-tourism Zone |                                 |  |                                       |

In this study, 56 questionnaires were distributed, of which 50 were effectively recovered, representing an effective recovery rate of 89.29%. Respondents were invited to score the indicators of the B&B industry in the Pengzhou Longmen Mountain Jianjiang Valley Eco-tourism Area on a scale of 1 to 10, with 1 representing the lowest level of competitiveness and 10 representing the highest. The original data for measuring the competitiveness of the B&B industry in Pengzhou Longmen Mountain Jianjiang Valley Eco-tourism Area have been collected, and the GEMS model has been used to calculate the factor scores. Please refer to Table 3 for further details:

**Table 3.** An analysis of the industrial competitiveness of a rural B&B cluster in the Pengzhou Longmen Mountain Jianjiang Valley Eco-tourism Area

| considerations            | key constituent   | Measurement indicators  | Indicator weights | Indicator averages | score |
|---------------------------|---|---|-------------------|--------------------|-------|
| infrastructural           | resource (such as manpower or tourism)                  | B&B Location Conditions   | 0.1423            | 6.66               | 6.56  |
|                           |   | Human resources for B&B   | 0.1931            | 6.36               |       |
|                           |   | Attractiveness of B&B resources                                   | 0.1931            | 6.72               |       |
|                           |   | capital market  | 0.4716            | 6.54               |       |
|                           | installation  | General infrastructure improvements                               | 0.5618            | 6.50               | 6.51  |
|                           |   | Degree of sophistication of specialized facilities in B&Bs        | 0.4382            | 6.52               |       |
| corporations              | Institutions, strategies and competition in enterprises | Number of B&Bs, size  | 0.3191            | 6.52               | 6.41  |
|                           |   | Profitability of B&Bs   | 0.2986            | 6.68               |       |
|                           |   | Level of innovation in B&B  | 0.3823            | 6.12               |       |
|                           | Suppliers and related ancillary industries              | entertainment industry  | 0.3219            | 6.42               | 6.34  |
|                           |   | catering industry   | 0.4918            | 6.20               |       |
|                           |   | retail trade  | 0.1863            | 6.56               |       |
| market (also in abstract) | domestic market   | Domestic B&B Market Size  | 0.6253            | 6.40               | 6.43  |
|                           |   | Prospects for the development of the domestic B&B market          | 0.3747            | 6.48               |       |
|                           | international market                                    | International B&B Market Size                                     | 0.5392            | 3.84               | 3.68  |
|                           |   | International B&B Market Outlook                                  | 0.4608            | 3.50               |       |
| matrix                    | government policy                                       | Regulating the operation of the B&B market administrative measure | 0.4014            | 6.44               | 6.48  |
|                           |   | Rationality of the development plan for the B&B industry          | 0.2739            | 6.36               |       |
|                           |   | Government's response to B&B development communication strategy   | 0.3248            | 6.62               |       |
|                           | social environment                                      | Local security situation  | 0.4159            | 6.58               | 6.55  |
|                           |   | Cultural quality of the population                                | 0.3057            | 6.54               |       |
|                           |   | Local entrepreneurial culture                                     | 0.2784            | 6.52               |       |

#### 4.4.2. Measure of comprehensive competitiveness

In the GEMS model, the two elements corresponding to each factor can be substituted for each other. For example, the abundance of resources in industrial clusters can compensate for the lack of facilities; strong domestic demand can offset the deficit in the international market; the advancement of suppliers and auxiliary industries can facilitate the development of new B&B products, thereby enhancing the competitiveness of the industry; the advantage of the government policy environment can offset the problems in the social environment. Accordingly, when assessing the competitiveness of a factor pair, the mean value of the corresponding two elements can be employed as the GEMS factor pair evaluation score. The scores for each factor pair are as follows:

$$\text{Base: SCORE (resources, facilities)} = \frac{(R_1+R_2)}{2} = 6.53$$

$$\text{Enterprises: SCORE (corporate strategy, structure and competition, suppliers and supporting industries)} = \frac{(R_3+R_4)}{2} = 6.38$$

Markets: PAIRSCORE (domestic markets, international markets) =  $\frac{(R_5+R_6)}{2}=5.06$

Environment: PAIRSCORE (government policy, social environment) =  $\frac{(R_7+R_8)}{2}=6.51$

GEMS =  $2.5 \times \sqrt{(R_1 + R_2) \times (R_3 + R_4) \times (R_5 + R_6) \times (R_7 + R_8)} = 370.42$

#### 4.4.3. Analysis of Results

##### (1) basic factor analysis

In Pengzhou Longmen Mountain Jianjiang Valley Eco-tourism Area, the competitiveness score of resource elements in rural B&B clusters is 6.56, ranking the first among the eight factors. B&B in rural area is a relative dependence on local natural resource, human resources and capital market. Stronger industry, the development of B&B is affected by the resource base, there will be similar or adjacent relationship in geographical space. Pengzhou Longmen Mountain Jianjiang River Valley Eco-tourism Zone has unique natural resources such as snow mountain and river valley as well as cultural resources such as history and culture. Meanwhile, Pengzhou City People's Government, Management Committee of Longmen Mountain Jianjiang River Valley Eco-tourism Area and relevant foreign capital take the lead in strategic cooperation, all of which provide a strong guarantee for the resource base of local rural residential accommodation.

From the perspective of the supply of production factors of the rural B&B industry, the facility construction provides a space carrier for the development of the rural B&B industry cluster. Good infrastructure and special facilities construction of the B&B industry will inevitably accelerate the rural B&B industry cluster and the flow of external resources. The competitiveness of the rural B&B cluster in Pengzhou Longmen Mountain Jianjiang Valley Eco-tourism Area is 6.51, ranking the third. According to the Statistical Yearbook of Pengzhou City in 2023, Pengzhou City will make new breakthroughs in the total length of water supply pipeline, comprehensive production capacity of water supply and the density of water supply pipeline in built-up area in 2022. The traffic improvement project was implemented, and 60 km of county-level third ring road was built. At the same time, Pengzhou City vigorously implemented the improvement project of traffic interconnection. The third ring road, the first county-level city in the whole province, has been built, with a total length of 25.2 km. 60 km of new (rebuilt) rural roads. The construction of public service supporting facilities and infrastructure in Pengzhou City is improving day by day. Meanwhile, Longmen in the rural B&B lodging in the eco-tourism area of Shanxi-Jianjiang River Valley, there are 24 B&B of "happy stay, excellent stay and fine stay", accounting for 43% of the total B&B. The overall quality of the local B&B is high, and the reception facilities are relatively complete, which is the basic guarantee for the high-quality development of the B&B industry.

##### (2) enterprise factor analysis

The organization, strategy and competition score of competitive enterprises of rural B&B cluster in Pengzhou Longmen Mountain Jianjiang Valley Eco-tourism Area is 6.41, among which the B&B innovation level score is the lowest, which is 6.12. From 2018 to 2022, the cumulative number of rural B&Bs in Pengzhou steadily increased from 23 to 56, with an obvious trend of cluster development. However, Pengzhou Longmen Mountain Jianjiang River Valley Eco-tourism Zone still needs to be improved in terms of corporate profitability and innovation level. Therefore, Pengzhou City can introduce large-scale well-known rural B&B enterprises, introduce B&B butlers, optimize the structure of rural B&B industry, and enhance the driving capacity of leading enterprises in rural B&B cluster industry. At the same time, Pengzhou City should also strengthen the innovation of the B&B industry and service according to the demand of tourists, so as to improve the experience and satisfaction of the tourists to the rural B&B, thus promoting the public praise of the local rural B&B industry.

The score of suppliers and related auxiliary industries is 6.34, which is the seventh of the eight factors, indicating that the rural B&B cluster industry in Pengzhou Longmen Mountain Jianjiang Valley Eco-tourism Area is relatively insufficient in terms of the number of suppliers and relevant auxiliary industries such as entertainment industry, catering industry and retail industry, and the

overall service quality is low. Pengzhou government needs to take effective measures to vigorously promote the development of rural tourism suppliers and auxiliary industries through industrial planning and implementation of preferential policies, so as to further improve the accommodation experience of tourists.

### (3) market factor analysis

The competitiveness of industrial clusters in Pengzhou Longmen Mountain Jianjiang River Valley Eco-tourism Area was 5.06, and the score was the lowest. The domestic market score is 6.43, and the international market score is 3.68. It is indicated that the main tourist sources of rural tourism industry in Jianjiang Valley Eco-tourism Area of Longmen Mountain in Pengzhou are domestic tourists, and the international market still has a large expansion space. At present, the living standard of residents in our country is constantly improving, and the market demand of rural B&B is increasingly vigorous. Driven by such huge demand, villages across the Rural B&B industry cluster are developing rapidly. However, due to the lack of long-term planning and positioning, the main products and target markets of rural tourism in most regions are facing intense homogeneous competition. Pengzhou Longmen Mountain Jianjiang River Valley Eco-tourism Area can cope with the competition from other areas around Chengdu and other areas in China through precise positioning, differentiated competition and product innovation. At the same time, we should pay attention to the development trend of the international market and gradually expand the international market share.

### (4) Analysis of environmental factors

The comprehensive score of environmental factors is 6.51, and the score of local social environment of Pengzhou Longmen Mountain Jianjiang River Valley Eco-tourism Area is 6.55. The local area has superior natural environment and good social and cultural environment, which lays a foundation for the development of rural B&B cluster industry. The score of government policy environment is 6.48. Pengzhou Municipal Government has not only issued a series of policy measures to encourage and standardize the development of the B&B industry, but also put forward the development idea of "Lighting up the countryside and talking about the world with art" from the perspective of the whole area, so as to further promote the brand construction of rural B&B in Pengzhou City and enhance the reputation of the city. On this basis, Pengzhou Longmen Mountain Jianjiang River Valley Eco-tourism Area can actively promote the integration of B&B and art, and attract more tourists to experience the cultural charm of Pengzhou by holding various cultural and artistic activities, so as to promote the development of rural B&B cluster industry to a higher level.

## 5. Study Conclusions And Discussion

### 5.1. Research Conclusion

Through the analysis of the competitiveness of the rural B&B cluster in the Jianjiang Valley Eco-tourism Area of Longmen Shan, Pengzhou, we can find that the competitiveness of the industrial cluster lies in the middle of GEMS, and there is still much room for improvement. It can be further improved in terms of market factors and enterprise factors. The market is to expand the international market share, make full use of the local B&B resource advantages and promote the internationalization of the rural B&B brand through precise positioning, differentiated competition and product innovation. In the aspect of enterprises, by guiding suppliers and related auxiliary industries to be incorporated into the B&B industry cluster in a mutually beneficial way, and with the aid of industrial planning and implementation of preferential policies, industrialization operation with scale economy effect can be formed.

### 5.2. Research Contribution

#### 5.2.1. theoretical significance

First of all, this paper evaluates and analyzes the industrial cluster of B&B from the perspective of the competitiveness of the industrial cluster, and widens the research dimension of the industrial



cluster of B&B. In recent years, scholars at home and abroad have made a lot of research on the service industry, such as rural B&B, industrial cluster, etc., and have made effective exploration on rural B&B cluster, which is a new industry. However, there is a small amount of literature on the whole, mainly focusing on the promotion strategy, formation mechanism, distribution pattern and influencing factors of B&B cluster, and the evaluation, analysis and research on industrial competitiveness are relatively weak. Secondly, this article aims at the B&B industry cluster to carry out the research, has enriched the research system of the industry cluster. As an emerging form of business, with the corresponding industrial practice of scale, clustering and branding, B&B tourism not only conforms to the strategic background of rural revitalization, but also shapes high-quality tourism products [21]. The traditional theoretical understanding and analytical framework of existing research on tourism industry cluster research is relatively limited, and attention to emerging industry cluster types needs to be improved [22-23]. Therefore, this study enriched the tourism industry set the research system of the group provides a new way of thinking and a new direction for the research of the rural B&B cluster.

### 5.2.2. Practical significance

This study provides practical enlightenment for promoting the scientific development of rural B&B clusters and for the government to accelerate the cultivation of new rural B&B clusters. First, provide advice and suggestions for the development of rural B&B. On the one hand, it is helpful to put forward specific suggestions for the development of rural B&B. The research found that the local B&B industry in Pengzhou City has an obvious agglomeration trend. By introducing large-scale well-known rural B&B enterprises and introducing innovative ways such as B&B butlers, the positioning of B&B can be precisely positioned, the differential competitiveness can be improved, and the sustainable development of the local B&B industry can be promoted. On the other hand, it is helpful for the government to issue relevant policies to tap the endogenous power of rural development, clarify the focus of future development of Pengzhou B&B industry, and provide a solid guarantee for the development of rural B&B through measures such as assisting the development of suppliers and auxiliary industries, deepening industrial planning and implementing preferential policies. Second, to provide theoretical guidance for rural revitalization. As a key to the development of rural tourism, rural B&B is an important content in the field of rural tourism, in the hope of promoting rural revitalization through the development of rural B&B [24]. Therefore, this study provides theoretical guidance for the coordinated development of rural tourism and rural revitalization, and for promoting the efficient utilization of rural regional tourism resources and rural revitalization to a certain extent.

### 5.3. Deficiencies and Prospects

This study has certain limitations. First of all, this study only selects Pengzhou, a rural B&B development zone, as a case site, which lacks a certain representativeness. In the future, it is necessary to enrich the types of research sites, select different case sites of rural B&B, and conduct analogy analysis on different dimensions of its competitiveness level to verify the universality of the results of this study and achieve the effect of "competitiveness" comparison and evaluation. Secondly, the evaluation system lacks certain adaptability. The development of industrial cluster agglomeration process is affected by a variety of factors [25]. In this study, four factors of foundation, enterprise, market and environment are analyzed based on GEMS model. In the actual survey, it is found that the dimension of "foreign market" is poorly reflected in the rural B&B industry. In this study, this dimension is included in the evaluation system, lacking of certain adaptability, and further optimization and modification shall be comprehensively considered in the follow-up.

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