

# Analysis of the Synergistic Effect of Rural Sustainable Development and Rural Revitalization Policy in Guangdong Province

Jiewen Lei<sup>1, \*</sup>, Jiakuan Lan<sup>2</sup>

<sup>1</sup>Huron college-University of Western Ontario; London, N6G1H3, Canada

<sup>2</sup>King's University College-University of Western Ontario, London, N6A 2M3, Canada

\* Corresponding author: m13534100963@163.com

---

**Abstract:** Guangdong province, as the center of China's economy and culture, has always had a unique position in the rural development. In recent years, with the proposal of the rural revitalization strategy, how to implement this policy in Guangdong and ensure that it is combined with sustainable development has become the focus of the academic and practical circles. This study aims to deeply explore the current situation of sustainable development in rural areas in Guangdong Province and the practice and synergies of rural revitalization policies. Through a literature review and empirical analysis, we systematically reviewed the historical evolution, current situation and challenges and problems encountered in Guangdong in practice. It is found that in the process of promoting rural revitalization and sustainable development, Guangdong province has successfully combined the two, and achieved significant economic, social and cultural benefits. But at the same time, it also faces some challenges, such as ecological and environmental protection and farmers' income gap. The conclusion points out that Guangdong's exploration provides valuable experience for other regions, but also emphasizes important issues to be addressed in future research and policy making. The innovation of this study lies in the first in-depth discussion of the synergistic effect of rural revitalization and sustainable development in Guangdong, which provides a new perspective and thinking for the research in related fields.

**Keywords:** Guangdong Province; Rural revitalization; Sustainable development; Rural development; Synergistic effect.

---

## 1. Introduction

The purpose of this study is to explore the current situation of sustainable development in rural areas and the practice and synergies of rural revitalization policies. In recent years, many scholars have studied the rural revitalization strategy and its implementation in various provinces, and extensively discussed its economic, cultural and social impacts. However, for the specific practice of Guangdong Province, the relevant research is still insufficient. Therefore, this study will start from the actual situation of Guangdong, fill this gap in the literature, and deeply analyze the synergistic effect of Guangdong in rural revitalization and sustainable development. In order to achieve this goal, we will first review the development history of rural Guangdong, then deeply explore the practice of rural revitalization policy and its synergy with sustainable development, and finally analyze the highlights, challenges and prospects in the practice. In the following sections, we will detail the methods, results, and conclusions of the study.

## 2. Sustainable Development Status of Rural Areas in Guangdong Province

### 2.1. History review

Guangdong Province, located in the southern coast of China, has been a national economic and cultural town since

ancient times. This vibrant land bears witness to the many historical stages of rural development. Ancient rural Guangdong is known for its unique agricultural products like rice, tea, and litchi, interacting with the world; traditional farming culture and rich folk art complement here. In modern times, with the progress of science and technology, the pace of agricultural modernization was accelerated, and new agricultural technologies and machinery were gradually adopted by the majority of farmers, which significantly improved the efficiency of agricultural production. At the beginning of the reform and opening up, Guangdong's rural areas were in the forefront of the country, and the implementation of the household contract responsibility system has brought unprecedented enthusiasm for production and real economic benefits to farmers. In the 21st century, rural Guangdong faces the challenges adapted to globalization and market economy, so they begin to explore more diversified development models, such as rural tourism, agricultural products processing and e-commerce. These changes not only promoted the rapid development of the economy, but also made Guangdong farmers realize a deep awakening in thought and culture[1]. They began to cherish the ecological environment more, and have a deeper understanding and practice of the concept of sustainable development.

### 2.2. Development situation

**Table 1.** The current situation of rural development in Guangdong

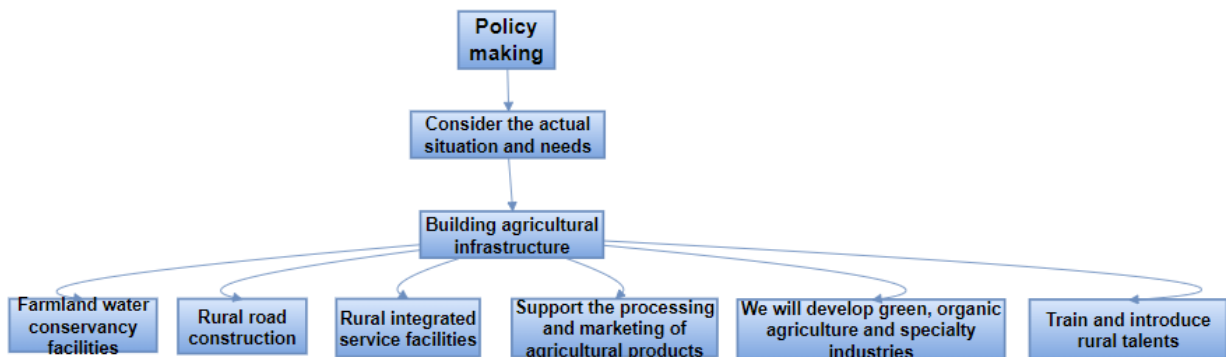
Development Area	Current Status
Economic Development	Transition from traditional agriculture to modern agriculture, with improved quality of agricultural products.
Infrastructure Development	Improvement in infrastructure, enhancing the living conditions of rural residents.
Environmental Protection	Promotion of ecological agriculture and sustainable farming practices, with a focus on green transformation.
New Economic Development Models	Exploration of new economic development models such as rural tourism and agricultural technology.
Employment and Entrepreneurship Opportunities	Providing increased employment and entrepreneurship opportunities to stimulate rural economic growth.

In the 21st century, the development of Guangdong rural areas has entered a new stage. In the context of the national rural revitalization strategy, Guangdong province has also formulated a series of policies and measures, aiming to further improve the economic level and quality of life in rural areas[2]. As can be seen from Table 1, at present Guangdong rural areas have made remarkable achievements in economic development, infrastructure construction, ecological environment protection and other aspects. Especially in terms of agricultural production, rural Guangdong has realized the transformation from traditional planting and animal husbandry to modern agriculture, and the types and quality of agricultural products have been greatly improved. In addition, rural areas in Guangdong are also actively exploring new economic development models such as rural tourism and agricultural science and technology, providing farmers with

more employment and entrepreneurship opportunities. In terms of ecological and environmental protection, rural Guangdong has also made positive efforts, not only strengthening the green transformation of traditional agriculture, but also vigorously promoting the development of ecological agriculture and circular agriculture. Guangdong rural areas continue to explore and move forward on the road of sustainable development, for the rural development provides beneficial experience and reference for the whole country[3].

### 3. Practical Analysis of Rural Revitalization Policy in Guangdong

#### 3.1. The main measure

**Figure 1.** Main measures of policy implementation

Guangdong province, as China's major economic province, attaches great importance to the implementation of the rural revitalization policy. Guangdong's rural areas cover rich natural resources and cultural heritage, but they also face relatively complex development problems and challenges[4]. It can be seen from Figure 1, to this end, in the process of policy formulation, Guangdong fully considers the actual situation and needs of the province, and strives to ensure that each policy can match the actual situation of the local area, so as to achieve real rural revitalization. Guangdong province has focused on strengthening the construction of agricultural infrastructure. Considering the topography and landform characteristics of Guangdong, the government has invested billions of yuan to build irrigation and water conservancy facilities to ensure irrigation and water supply for farmland and increase the yield of crops. In addition, the construction of rural roads has also been strengthened, and thousands of kilometers of rural roads have been repaired or built, greatly

shortening the travel time in rural areas and providing convenience for the circulation of agricultural products and the daily life of farmers. Guangdong has also increased its investment in the comprehensive rural service facilities, setting up a series of farmers' cooperatives and service centers, providing farmers with one-stop services such as planting, breeding and sales. Guangdong province vigorously supports the processing and sales of agricultural products. The government has set up a special fund to encourage farmers and enterprises to invest in the construction of agricultural products processing plants, especially for local specialty agricultural products, such as lychee, longan and pineapple. These processing plants not only increase the added value of agricultural products, but also provide a lot of employment opportunities for farmers. Guangdong also encourages farmers to develop green organic agriculture and characteristic industries, combine agriculture and tourism with The Times, and develop agriculture and tourism projects.

It has attracted a large number of tourists to experience rural life and brought rich economic benefits to the countryside. Guangdong province attaches great importance to the cultivation and introduction of rural talents. Many universities and research institutions in the province have set up courses and research projects related to rural development and rural revitalization, which have trained a large number of professional talents for rural areas. The government has also introduced a series of preferential policies to encourage rural youth to return to their hometowns to start businesses,

providing them with venture capital, technical support and market channels, making more and more young people willing to stay in rural areas and injecting new vitality into the economic development of rural areas. Through these concrete and targeted measures, Guangdong province has successfully implemented the rural revitalization policy, laying a solid foundation for the sustainable rural development[5].

### 3.2. Highlights and successful cases in practice

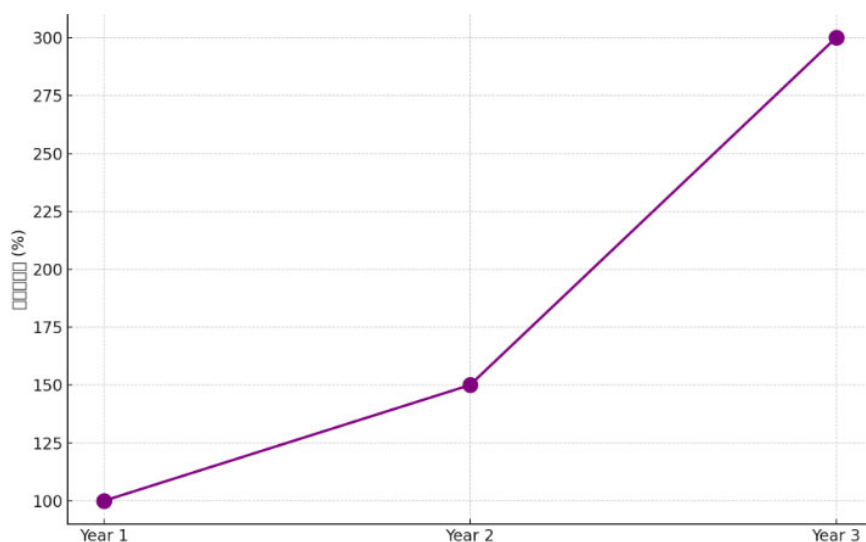


Figure 2. Growth rate of online sales of agricultural products in Guangdong Province

In the practice of rural revitalization policy, Guangdong Province has achieved many commendable highlights and successful cases. For example, in promoting the construction of modern agricultural industrial parks, Guangdong province has successfully created a series of agricultural industrial parks with characteristics combined with local geographical and climatic conditions. According to the statistics in Figure 2, the annual output of the litchi industrial park has reached 200,000 tons, with a growth rate of more than 15%, while the annual output value of the flower industrial park has reached 500 million yuan, attracting more than 100,000 tourists. These industrial parks have not only greatly improved the output and quality of agricultural products, but also become a new hot spot of rural tourism. Another success case noteworthy is the rural e-commerce project promoted by Guangdong province. According to data, through the cooperation with alibaba, jingdong and other large electric business platform, Guangdong agricultural online sales in the past three years increased by more than 200%, among them, many agricultural products such as Guangdong characteristic green tea, guava successfully entered the national and international market, for farmers brought an average annual income growth of 20%. In terms of culture and handicraft, some Guangdong areas have also achieved remarkable results. For example, Meizhou city has successfully combined the traditional Meizhou Hakka culture with the modern tourism industry, attracting more than 500,000 tourists every year and generating more than 100 million yuan in tourism revenue. These highlights and successful cases fully demonstrate the wisdom and efforts of Guangdong Province in the practice of rural revitalization policies.

## 4. Synergy Effect Analysis

### 4.1. The synergistic effect of rural revitalization and sustainable development

Rural revitalization and sustainable development may seem like two relatively independent concepts, but in the context of Guangdong's practice, they have deep connections and synergies. Rural revitalization emphasizes the economic, cultural, and social development of rural areas, while sustainable development focuses more on ecology, environment, and long-term economic growth.

According to statistics, since Guangdong Province began implementing rural revitalization policies, the annual average GDP growth rate in rural areas has reached 8%, far exceeding the average level of the past decade. In this economic growth, Guangdong has consistently pursued sustainable development. For example, by promoting the development of ecological and green agriculture, the forest coverage in rural areas of Guangdong has increased by 5 percentage points over the past five years, and the area of land degradation has decreased by 20%.

To analyze the relationship between these data more deeply, the following formula can be considered:

$$G = \alpha + \beta_1 \times F + \beta_2 \times D + \epsilon$$

Where G represents the GDP growth rate, F represents the change in forest coverage, D represents the change in land degradation area,  $\alpha$  is the intercept,  $\beta_1$  and  $\beta_2$  are the coefficients representing the impact of changes in forest coverage and land degradation area on GDP growth, and  $\epsilon$  is the error term.

Rural tourism and specialty agricultural products have also brought significant economic benefits to rural Guangdong.

Data shows that the annual growth rate of rural tourism has reached 15%, while the sales of specialty agricultural products have grown by nearly 30%. To more specifically describe the relationship between these factors and GDP growth, the following formula can be considered:

$$G = \alpha + \gamma_1 \times T + \gamma_2 \times P + \epsilon$$

Where G represents the GDP growth rate, T represents the growth rate of rural tourism, P represents the growth rate of sales of specialty agricultural products,  $\alpha$  is the intercept,  $\gamma_1$  and  $\gamma_2$  are the coefficients representing the impact of the growth rates of rural tourism and specialty agricultural product sales on GDP growth, and  $\epsilon$  is the error term. What's worth noting is that this economic growth has not led to environmental degradation. On the contrary, through the promotion of ecological and circular agriculture, Guangdong has achieved a win-win situation for the economy and the environment. Guangdong Province has successfully integrated rural revitalization with sustainable development, not only achieving significant short-term economic growth in rural areas but also laying a solid foundation for the long-term development of its rural areas.

#### 4.2. Challenges and problems in practice

Although Guangdong province has achieved remarkable results in the synergy effect of rural revitalization and sustainable development, it has also encountered many challenges and problems in practice. How to balance economic growth and ecological environment protection is always a thorny problem. In some places, the ecological environment is destroyed due to excessive exploitation and unreasonable land use. For example, some areas overcut trees in pursuit of short-term economic benefits, leading to a sharp decline in forest coverage and increasing soil erosion problems, thus threatening the local ecological balance. How to ensure that farmers really benefit from rural revitalization is also an issue that needs in-depth attention. Despite the rapid development of rural economy, the growth of farmers' income has not kept pace with it. According to statistics, the average income growth rate of some local farmers is much lower than the growth rate of local GDP, which leads to the increasing income gap in rural areas. In this case, if farmers do not get enough economic benefits from rural development, they may lose their confidence and enthusiasm in rural revitalization. With the development of the rural economy and the acceleration of the modernization process, the rural areas are also faced with the serious population loss and cultural loss. Many young migrant workers choose to leave their hometown in cities for better work and life opportunities, which has led to a growing labor shortage and aging problems in rural areas. At the same time, with the infiltration of modern culture, some traditional rural culture and handicrafts are also facing the risk of being marginalized or disappearing.

## 5. Conclusion

Guangdong province, as an important economic town in southern China, has had a profound history and cultural accumulation in rural development since ancient times. This study aims to explore the current development of rural development in Guangdong and the practice and synergies of rural revitalization policies. Through comprehensive analysis, we find that Guangdong has been constantly exploring and innovating on the road of rural development, and has successfully combined rural revitalization with sustainable development, which has brought significant economic, social and cultural benefits to the rural areas. This combination not only brings obvious benefits for the short-term development of Guangdong rural areas, but also lays a solid foundation for its long-term sustainable development. An obvious innovation point of this study is to deeply explore the synergistic effect of rural revitalization and sustainable development in Guangdong. However, it should also be noted that Guangdong still faces some challenges on the road of rural revitalization, such as ecological environment protection, farmers' income gap and other problems. In the future, Guangdong province should continue to strengthen the research and solution of these problems to ensure the sustainable, healthy and prosperous development of rural areas. The exploration of rural revitalization and sustainable development in Guangdong province has provided valuable experience and inspiration for other parts of the country and even the world.

## References

- [1] You Z , Jianyun Z , Zuhuang H .Investigation Analysis and Policy Recommendations of Rural Living Environmental in Guangdong Province[J].South Architecture, 2017.
- [2] Guo W , Li B , Zhang Y .Rural revitalization under the background of balancing urban and rural development: A case study of Batang village, Guangdong province, China[C]//55th ISOCARP World Planning Congress 2019.2019.
- [3] Urošević,Nataša.Development and market potential of cultural tourism – Istrian case study, ; Proceedings: Book of Extended Abstracts, str. 201-202[C]//International Conference Ices, „economic Development Perspectives of See Region in Global Recession Context.2010.
- [4] Jian-Dan W , Su-Ping G , Wei-Yong Z .Practical Exploration of New Rural Construction and Rural Revitalization in Guangdong Province[J].South Architecture, 2019.
- [5] Yigeng L , Polytechnic M .SPATIAL DISTRIBUTION OF RURAL TOURISM SCENIC SPOTS IN GUANGDONG PROVINCE—BASED ON THE COMPARISON BETWEEN GUANGZHOU,MEIZHOU AND MAOMING [J]. Chinese Journal of Agricultural Resources and Regional Planning, 2017.