

Research on Green and Low Carbon Integrated Development of Agriculture and Tourism in Yibin City under Rural Revitalization

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Abstract

Promoting the green and low-carbon integrated development of agriculture and tourism is an inevitable requirement for implementing the rural revitalization strategy, and has practical significance in promoting rural ecological, industrial, and cultural revitalization. Through on-site investigation of the current situation of green and low-carbon integrated development of agriculture and tourism in Yibin City, it was found that the main problems of green and low-carbon integrated development of agriculture and tourism in Yibin City are inadequate ecological environment protection, relatively extensive development mode, lack of innovation in tourism products, and lack of consensus on low-carbon collaborative governance. To address the above issues, optimization measures should be taken from five dimensions: institutional supply, technological innovation, product development, industrial linkage, and collaborative governance, in order to enhance the quality and efficiency of the green and low-carbon integrated development of agriculture and tourism in Yibin City.

Keywords

Rural Revitalization; Integration Of Agriculture And Tourism; Sustainable Development

Introduction

In 2017, the 19th National Congress of the Communist Party of China first proposed the strategy of rural revitalization, emphasizing that ecological revitalization is an important support for rural revitalization. In 2020, the General Office of the Ministry of Ecology and Environment, the General Office of the Ministry of Agriculture and Rural Affairs, and others jointly issued the "Guiding Opinions on Consolidating the Achievements of Poverty Alleviation through Ecological Revitalization and Further Promoting Rural Revitalization (2020-2022)", which pointed out the need to effectively practice the concept of "green mountains and clear waters are as valuable as mountains of gold and silver", adhere to ecological priority and green development,

and promote agricultural upgrading, rural progress, and farmers' prosperity through green development. In 2023, the State Council Information Office released the white paper "Green Development in China in the New Era", proposing to actively develop new formats such as ecological agriculture, leisure agriculture, and rural tourism, and to use green development as a new engine for rural revitalization.

In recent years, the research on green and low-carbon integrated development of agriculture and tourism has attracted widespread attention from the academic community. Previous studies have shown that promoting the green and low-carbon integrated development of agriculture and tourism has higher value than traditional agriculture in terms of industrial prosperity, ecological livability, improved governance, and increased income[1]. However, there are also development constraints such as insufficient overall planning, infrastructure shortage, and weak management awareness[2]. To achieve green development of leisure agriculture tourism, it is necessary to take the path of brand expansion, differentiated competition, integrated development, quality victory, and green development[3]. By promoting advanced environmental protection and low-carbon technologies, establishing a low-carbon environmental protection technology utilization system, and effectively improving the quality of the ecological environment[4].

The existing research results have provided theoretical references and practical guidance for the green and low-carbon integrated development of agriculture and tourism. This study will take Yibin City as the research area to further explore the practical significance, existing problems, and optimization paths of green and low-carbon integrated development of agriculture and tourism in Yibin City under rural revitalization. It is of great significance to improve the level of rural ecological civilization construction in Yibin City, achieve ecological benefits for the people, and promote the ecological and ecological industrialization development of rural industries in Yibin City, and assist in rural revitalization.

1. The practical significance of green and low-carbon integrated development of agriculture and tourism in Yibin City under rural revitalization

1.1 Improving the rural ecological environment and assisting in the revitalization of rural ecology

During the 14th Five Year Plan period, China's ecological civilization construction has entered a critical period with carbon reduction as the key strategic direction. At this stage, it is urgent to promote the green and low-carbon integrated development of agriculture and tourism in Yibin City, achieve synergistic efficiency in reducing pollution and carbon emissions, and transform the improvement of ecological environment quality from quantity to quality. From the perspective of ecological benefits, the green and low-carbon integrated development of agriculture and tourism is a tourism development approach that develops and utilizes tourism resources based

on the principles of low energy consumption, low pollution, and low emissions, achieving efficient resource utilization, low consumption, and minimizing environmental impact[5]. Therefore, promoting the green and low-carbon integrated development of agriculture and tourism in Yibin City is conducive to forcing rural residents to enhance their awareness of environmental protection, deepen their awareness of greening the living environment[6], and minimize the occurrence of behaviors that damage the rural ecological environment, such as excessive exploitation of natural resources and excessive use of agricultural materials. This is beneficial for Yibin City to improve the rural ecological environment, reduce greenhouse gas emissions, and promote rural ecological revitalization.

1.2 Promote industrial transformation and upgrading, and assist in the revitalization of rural industries

The strong correlation and weak boundary characteristics of the tourism industry have a positive effect on promoting the deep integration and development of rural tertiary industries. On the one hand, Yibin City utilizes its abundant tourism resources to promote the green and low-carbon integrated development of agriculture and tourism, which will inevitably improve local infrastructure and related supporting facilities such as transportation and accommodation. This will drive the development of industries such as transportation, catering, and accommodation, and give rise to more complex business models, promoting the coordinated growth of multiple economic formats. On the other hand, under the revitalization of rural areas, the development model of "tourism+industry" green and low-carbon integration has become the mainstream trend of upgrading and developing the tourism industry. The catalytic effect of tourism on traditional agriculture, industry and other industries continues to strengthen, and it plays an important role in promoting the integration of rural tertiary industries. Therefore, from the perspective of industrial economy, the green and low-carbon integrated development of agriculture and tourism in Yibin City is conducive to forming a composite industrial relationship based on the primary industry, supported by the secondary industry, and highlighted by the tertiary industry, which helps to revitalize rural industries.

1.3 Activate distinctive cultural resources and assist in the revitalization of rural culture

The revitalization of rural culture requires the promotion and inheritance of characteristic cultural resources such as folk culture and agricultural culture in the countryside through dynamic forms. As a green and low-carbon integrated development model of agriculture and tourism that combines artistic, green, and experiential features, it provides a feasible path for revitalizing rural cultural resources and promoting rural cultural revitalization. Yibin City has created recreational areas with a strong artistic atmosphere, such as colorful flower fields, rice field paintings,

tea sea terraces, rice field mazes, and folk culture parks, by cleverly borrowing rich natural landscapes; Alternatively, by utilizing technologies such as virtual reality and augmented reality, experiential tourism projects such as rural trains and 3D wheat field rafting can be created; Organizing agricultural carnival events, including exhibitions and sales of characteristic agricultural products, creative agricultural experiences, etc., not only helps to enhance the aesthetic value and attractiveness of agricultural landscapes, but also injects new vitality into enriching the connotation and cultural experience of rural tourism.

2. Problems in the Green and Low Carbon Integrated Development of Agriculture, Tourism and Tourism in Yibin City under Rural Revitalization

2.1 The speed of integrated development continues to accelerate, but the development mode is relatively extensive

The speed of green and low-carbon integrated development of agriculture and tourism in Yibin City continues to accelerate, but the development mode is relatively extensive. The phenomenon of pursuing economic benefits solely based on input-output orientation is common. The main manifestations are: firstly, excessive development of tourism resources, non intensive use of land, repeated construction of high-energy consuming projects, and insufficient protection of the ecological environment and excavation of traditional folk culture, which have led to a decline in subsequent development momentum. Secondly, the integrated development plan lacks scientific rigor. The special planning for rural tourism in various regions is not coordinated with the regional unified planning, and the phenomenon of blind investment and development by operators often occurs, lacking agglomeration and scale effects, resulting in insufficient integration of rural tourism resources. Thirdly, the construction of low-carbon tourism facilities and supporting facilities in rural areas is not yet perfect, and the reception capacity and level are not high. In addition, the accessibility of urban and rural transportation is poor, and the scattered scenic spots increase the energy consumption of tourism transportation, which is not conducive to the low-carbon development of rural tourism.

2.2 The scale of integrated development continues to expand, but the ecological environment is facing pressure

With the continuous increase of disposable income of residents, the demand for tourism consumption has also grown, but the huge flow of tourists has brought tremendous pressure to the rural ecological environment. The reception volume of some popular attractions exceeds the ecological threshold, facing the severe challenge of a sharp increase in carbon emissions due to their scale growth. The main manifestations are: firstly, the significant increase in infrastructure construction in some rural tourist destinations has had varying degrees of impact on vegetation

protection, wildlife migration, and so on. Secondly, some rural tourism destinations adopt the "enclave style" tourism development model to promote the development of rural tourism. However, in the industrialization of tourism management, the development capital monopolizes rural tourism resources, with the principle of maximizing profits and neglecting ecological environment protection, resulting in the non intensive use of a large number of rural resources and worrying issues of energy conservation and emission reduction. Thirdly, with the rapid increase in the number of self driving tours, the carbon emissions of rural tourist destinations have increased, increasing the pressure on ecological environment protection, and its negative externalities cannot be ignored.

2.3 Rural tourism resources are abundant, but tourism products lack innovation

Innovation in tourism products is a continuous driving force for the development of the tourism industry. Although Yibin City has abundant rural tourism resources, problems such as lack of innovation, serious homogenization, and weak cultural connotations in tourism products are still prominent. The main manifestation is that some scenic spots do not maintain a strong "rural image" and have a tendency towards "de agriculturalization". In the process of green and low-carbon integrated development of agriculture and tourism, it is difficult to get rid of the vicious circle of "homogenization" thinking. There is low-level price competition among tourism products in adjacent regions, which leads to intensified industry competition, decreased profits, and increased market risks. Secondly, many rural tourism plans and product designs lack the integration of local culture, local customs, and other historical and cultural elements. The lack of distinctive features and innovative models makes it difficult to meet the growing demand for high-quality and diversified tourism among tourists. Thirdly, most rural tourist attractions lack a good tourism environment, and there are few green and low-carbon projects available for consumption experience. The development of low-carbon tourism is facing the dilemma of product shortage.

2.4 Low carbon promotion and education continue to advance, but consensus on collaborative governance is weak

Although Yibin City has introduced corresponding policies to continuously promote low-carbon publicity and education, the overall awareness of low-carbon environmental protection among the general public is still relatively weak at this stage. This is partly due to the single form and channel of low-carbon publicity and education for the general public, which has not yet formed a consensus for active participation in low-carbon development. Especially in terms of transportation and accommodation, some tourists have weak environmental protection concepts and awareness of energy conservation and emission reduction, and phenomena such as littering and

energy waste occur frequently. Green and ecological modes of transportation still do not dominate. On the other hand, it stems from the inadequate mechanism for coordinating and distributing interests in rural tourism communities. Due to factors such as insufficient capital, information, and skills, local residents are marginalized in multiple aspects of rural tourism development, unable to share the actual dividends brought by rural tourism development, resulting in weak enthusiasm and sense of responsibility for participating in rural low-carbon tourism governance, which is not conducive to the development of rural low-carbon tourism economy.

3. Optimization path of green and low-carbon integrated development of agriculture and tourism in Yibin City under rural revitalization

3.1 Optimizing institutional supply for low-carbon development of rural tourism through mechanism innovation and encouraging low-carbon travel

Reducing the carbon emissions of rural tourism requires institutional and mechanism innovation in various aspects such as tourism spatial planning, tourist consumption behavior guidance, and carbon sequestration capacity cultivation. One is that the government should increase investment in low-carbon infrastructure construction, formulate low-carbon preferential policies, sort out energy-saving and emission reduction lists for various links and fields of rural tourism, and avoid short-term behaviors that pursue economic benefits and waste rural resources. The second is to establish a compensation and incentive mechanism for low-carbon tourism in rural areas. On the one hand, we will deepen the reform of "streamlining administration, delegating powers, and improving services", stimulate market vitality, and enable more market entities to participate fairly in tourism industry innovation, model innovation, and service innovation. On the other hand, accelerate the establishment of incentive mechanisms for low-carbon technology innovation to obtain sustained development momentum. Thirdly, enterprises should accelerate the reform of low-carbon management system, adhere to the concept of ecological civilization, promote low-carbon technological innovation, develop low-carbon tourism products, enhance low-carbon service innovation, and guide tourists to low-carbon tourism.

3.2 Continuously promoting the transformation and upgrading of rural tourism industry through low-carbon technological innovation

Deepening lean services through technological innovation, improving the quality of tourism products, and enhancing tourism experience are the necessary paths for the development of low-carbon tourism. Firstly, all rural tourist attractions in Yibin City should fully utilize smart technology to reduce the cost of tourism development and management, and strive to find application scenarios for low-carbon technology,

promote the clean transformation of the energy structure of the tourism industry, and weaken the negative impact of rural tourism development on the ecological environment. The second is to use technological innovation to support the construction of online interactive platforms, fully activate rural tourism resources, accelerate the flow of rural resources, strengthen rural ecological restoration, and enhance the carbon sequestration capacity of ecosystems. The third is to promote the construction of an innovative system for low-carbon tourism in rural areas, vigorously promote resource-saving and environmentally friendly integrated technologies, cultivate low-carbon agricultural industrial parks, low-carbon agricultural tourism demonstration zones, etc. Improve the quality of rural tourism product supply through low-carbon technology.

3.3 Leading the green and low-carbon development of rural tourism products with new development concepts

The green and low-carbon transformation of rural tourism is an important measure to promote high-quality development of agriculture and rural areas. In the future, Yibin City will strengthen the leading role of the new development concept in the development of low-carbon rural tourism products, ensuring that the development of rural tourism products can be orderly promoted on the low-carbon track. Firstly, it is necessary to design rural tourism products with a low-carbon concept, shifting from pursuing scale to pursuing quality, strengthening the connections between different tourism products, and enhancing the comprehensive functions and overall efficiency of the tourism product system through chain building, chain supplementation, and chain extension, forming agglomeration and synergistic effects. Secondly, we need to rely on the ecological construction of rural tourism scenic spots and tourist resorts to enhance the carbon sequestration capacity of rural tourism communities. Finally, product development should highlight regional cultural characteristics. Integrating local cultural characteristics into rural tourism products to enhance tourists' experience and highlight the original ecology of rural tourism products.

3.4 Promoting the integrated development of rural industries through the linkage of agriculture, industry, commerce, culture, and tourism industries

The mutual benefit between agriculture and tourism is an objective requirement for rural revitalization, which can significantly improve the high-quality development level of agriculture[7]. To develop low-carbon tourism in rural areas, we need to establish a new model of integrated development of agriculture, commerce, industry, culture, and tourism, guided by the concept of "tourism+" and guided by the structural reform of the agricultural supply side, in order to broaden the ideas for industrial development. Efforts will be made to strengthen, build, supplement, and extend the rural tourism industry, achieving a transformation from point to line and from

line to surface. To this end, Yibin City needs to strengthen planning guidance, rely on characteristic agricultural resources, develop characteristic cultural industries and rural tourism carriers such as agricultural parks, rural complexes, and characteristic towns, achieve the mutual penetration of "big tourism", "big agriculture", "big culture", and "big commerce", reconstruct new spaces for rural production, ecology, life, and culture, and form an integrated pattern of coordinated development of rural industries.

3.5 Establishing a benefit sharing mechanism to promote collaborative governance of rural tourism communities

Establishing a collaborative governance mechanism involving multiple parties is the institutional guarantee for the long-term development of low-carbon tourism in rural areas. Firstly, we need to explore the establishment of a mechanism for sharing benefits, fully mobilize the enthusiasm of all stakeholders to participate, reverse the lack of participation of rural tourism community residents and the disorderly governance of rural areas, and promote the formation of a consensus on low-carbon development of rural tourism. Secondly, the green and low-carbon development of rural tourism must be developed and managed in a sustainable manner, combining the construction of rural tourism infrastructure with community building. While promoting the development of rural tourism, it is necessary to continuously improve the environment and quality of life of rural tourism communities. Thirdly, we need to increase the overall low-carbon education efforts in society, attach importance to cultivating green, low-carbon and environmental awareness among tourism managers, practitioners, villagers and tourists in promoting low-carbon tourism, and awaken the public's awareness of low-carbon tourism and the formation of low-carbon values.

4. Conclusion

Promoting the green and low-carbon integrated development of agriculture and tourism in Yibin City under rural revitalization has a positive effect on improving the rural ecological environment, promoting industrial transformation and upgrading, and revitalizing characteristic cultural resources. It is of great significance to assist in the revitalization of rural ecology, industry, and culture. In the future, Yibin City should optimize the institutional supply for low-carbon development of rural tourism through mechanism innovation, continuously promote the transformation and upgrading of rural tourism industry through low-carbon technology innovation, lead the green and low-carbon development of rural tourism products with new development concepts, promote the integrated development of rural industries through the linkage of agriculture, industry, commerce, culture and tourism industries, and establish a benefit sharing mechanism to promote collaborative governance of rural tourism communities in the process of promoting green and

low-carbon integrated development of agriculture, industry and tourism. Collaborate on the above five paths to enhance the quality and efficiency of green and low-carbon integrated development of agriculture and tourism in Yibin City.

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