Research on the Planning and Design of Leisure Agriculture Industrial Park under the Background of Rural Revitalization

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Abstract. With the increasing level of socio-economic development in China, the development of the rural economy has touched the hearts of the Central Party and the whole country, and for this reason, the strategy of rural revitalization was born. With the continuous efforts of rural management services and people in various parts of China, we have gradually explored a road of rural specialty industries that integrate agricultural cultivation, product processing, tourism and leisure experience. The paper takes the planning and design of leisure agriculture industrial park as the research object, and explains the corresponding planning and design principles. The current problems in the planning and design of some rural leisure agriculture industrial park projects in China are discussed, and the specific ideas and methods of planning and design are explored based on the research of these problems, hoping to make some contributions to the development of rural revitalization in China.

Keywords: rural revitalization, leisure agriculture industrial park, planning and design.

1. Foreword
In recent years, China has studied and implemented the rural revitalization strategy in order to promote the economic development of the countryside and improve the level of development of the market economy. To this end, the State has created a quality platform for the development of the rural economy by increasing financial investment, encouraging social capital investment, guiding industrial integration and encouraging talents to return to their hometowns. As urbanization continues to accelerate and people's living standards become higher and higher, the key words such as "nature", "leisure" and "ecology" represented by the countryside attract a large number of urban people to consume in the countryside, which is obviously an important opportunity for the development of rural revitalization. At present, many regional villages in China are actively developing leisure agriculture industrial parks that integrate agricultural cultivation, recreation and tourism, and the planning and design of such industrial parks will largely determine their benefits and development potential. Therefore, it is necessary to discuss the planning and design ideas of leisure agriculture industrial park from several perspectives.
2. Problems in the planning and design of leisure agriculture industrial parks

2.1. Serious homogenization

The key to attracting consumption in leisure agriculture industrial parks lies in the countryside features, however, the planning operators of some rural leisure agriculture industrial parks in China lack the exploration and attention to local characteristics, blindly learn from the development models of other regions, and want to replicate the success of these industries. In this process, there are some villages that ignore local natural conditions and blindly introduce foreign agricultural and sideline products, and some villages even ignore local history and folk culture, forcing cultural concepts and products that are incompatible with local characteristics. Such an industrial park may attract some consumption for a short period of time, but it is not conducive to the long-term development of the local industry [1].

2.2. Lack of sound planning

The leisure agriculture industrial park is a systematic project, which should be in line with the characteristics of rural industries and also form a diversified industrial mechanism. However, some leisure agriculture industrial parks lack long-term planning and blindly build after drawing up goals. Whether it is land planning, environmental improvement or industrial operation and management, they all have strong blindness. In some parts of China, the planning of rural leisure agriculture industrial parks has been changed repeatedly, which not only leads to a large amount of waste of resources, but also dissipates the enthusiasm of relevant entrepreneurs, which is extremely unfavorable to the development of rural industry.

2.3. Serious ecological and landscape damage

The key to attracting consumers to rural leisure agriculture industrial parks lies in good natural ecological environment and charming natural scenery, but some project planning developers neglect the protection of natural ecology and idyllic landscape, resulting in the destruction of rural ecological landscape. In particular, in some areas, agricultural land is heavily occupied, forests are cut down and rivers are polluted in order to develop rural tourism projects. Obviously, such a situation is contrary to the core requirements of the rural revitalization strategy and does not meet the goal of the long-term development of rural leisure agriculture industrial parks [2].

3. The basic principles of planning and design of leisure agriculture industrial park

3.1. Highlight the characteristics

Through the above discussion, it can be found that the key point of the operation and development of leisure agricultural industrial park lies in attracting consumption. No matter agricultural and sideline products or tourism and leisure products, only with characteristics can they be attractive. From a market perspective, unique rural scenery, attractive agricultural and sideline products and distinctive rural experiences are all keys to improving the market competitiveness of leisure agriculture industrial parks. Therefore, in the planning and design of the leisure agriculture industrial park, the characteristics of the local natural environment and agricultural plantation industry should be fully considered. For example, fengjie in Chongqing has famous scenic spots such as Kuimen and The Small Three Gorges, and agricultural and sideline products such as "Fengjie Navel orange". Therefore, the planning and design of leisure agriculture industrial park in this region can start from these two aspects. From this point, it also can be found that the use of local characteristics can to a large extent in the brand building, marketing and promotion to obtain a certain word-of-mouth advantage, to a greater extent to improve the feasibility of the project. At the same time, under the background of rural revitalization strategy, government departments and social funds in various regions of China are more willing to encourage the development of industries with local characteristics, so highlighting the characteristics will help to get more policy and financial support [3].
3.2. Principle of economy
In general, even with strong government and social funding support, the planning and design of leisure agriculture industrial parks should still pay attention to the principle of economy. On the one hand, the principle of economy is the key to reduce the investment risk of leisure agriculture industrial park projects, and on the other hand, it is also the core concept more suitable for the scientific development of rural industries under the current rural revitalization strategy in China. For this reason, in terms of the planning and design of leisure agricultural industrial parks, it is not necessary to pursue high, new, expensive, luxurious and large, but to optimize the allocation of resources and reduce project risks in combination with local actual conditions.

3.3. Principle of environmental harmony
The development of leisure agriculture industrial parks must not be at the expense of the natural ecological environment of the countryside. As a matter of fact, nature, ecology and leisure are the core competencies of the business development of leisure agriculture industrial parks. Therefore, when developing leisure agriculture industrial park projects, it is necessary to take into account local conditions and make full use of the natural topography and natural environment of the area to create projects that can bring people closer to the ecology and nature. In addition, the focus on the principle of environmental harmony in the planning and design of leisure agriculture industrial parks also highlights the important position of the countryside in the cause of ecological protection in China, which deserves sufficient attention.

3.4. The principle of unity in diversity
From the perspective of the characteristics of the modern market economy, the planning and design of the leisure agriculture industrial park needs to focus on the richness of the product content. The single industry model carries higher business risks and is also not in line with the core concept of our rural revitalization strategy. Therefore, the planning and design of the leisure agriculture industrial park needs to fully consider various factors to achieve the maximum use of rural resources. To this end, the value of rural agricultural and sideline products, natural scenery, and folk culture should be deeply explored, and industrial models that integrate the consumption of farmers’ products, experiential education, and folklore recreation should be introduced to improve the attractiveness and competitiveness of the project [4].

4. Analysis of planning and design ideas and strategies of leisure agriculture industrial park under the background of rural revitalization

4.1. Integrating local characteristics and positioning functions well
Under the background of rural revitalization strategy, the planning of leisure agriculture industrial park in any countryside needs to be preceded by the functional positioning of the industrial park project. To this end, planning, design and development personnel need to conduct a comprehensive survey of the local natural environment, industrial characteristics, folk culture, etc., explore relevant features, and select one feature as the core positioning point of the industrial park. For example, the Bishi Town in Miluo City, Hunan Province is a famous dragon fruit producing area in China. There are a large number of dragon fruit concentrated planting areas and a large number of private planting areas. As a result, the relevant local planning and design team has identified a plan for a leisure agriculture industrial park project with dragon fruit planting and production and sales as well as dragon fruit park tourism, experience and education as the core. Meanwhile, yuchi Mountain, a local 5A-level scenic spot, is utilized to build a three-dimensional leisure and tourism industry system by combining the red tourism town - Bishi Town.
4.2. Design the park according to the characteristics of the environment

In the design segment of the leisure agriculture industrial park, a suitable design plan should be constructed in the order of general design and special design. In terms of overall design, the site should be divided according to the local natural environment and site conditions, and the functional area should be planned in combination with the functional positioning of the project. For example, in the overall design of the dragon fruit leisure agriculture industrial park in the Bishi town mentioned above, the design team took the existing local dragon fruit plantation as the basis and divided the site into two areas, north and south, using the existing centralized dragon fruit plantation area, farm and warehouse in the north area to establish a boutique brand dragon fruit plantation immersive experience industry, integrating project contents such as dragon fruit sales, park tourism and agricultural production experience. The south zone mainly develops rice cultivation, farm vegetable cultivation, aquaculture and other local cash crop cultivation industries, and uses the rivers and lakes in the south zone to create an industrial zone that integrates leisure, tourism and entertainment.

In terms of special design, it includes infrastructure design, landscape design, ecological design, etc. In terms of infrastructure, based on the characteristics of the park, the carriageway, pedestrian paths and sightseeing trails are reasonably divided to meet basic traffic needs. At the same time, the park is equipped with toilets and rest rooms for tourists, snack points, featured product exhibition area, park guide plate, and duty room for safety management. In terms of landscape design, on the one hand, it is necessary to combine local characteristics and rationally plan man-made landscapes that highlight local characteristics and coexist harmoniously with the local environment. On the other hand, it is necessary to reasonably transform the local natural landscape and make use of plants with local characteristics to create an ecological and harmonious natural landscape [5].

4.3. Highlight folk culture and create special brands

Under the modern rural revitalization strategy, the inheritance of folk culture is also a crucial link. Nowadays, rural areas are the main inheritance places of folk culture all over China, and the planning and design of leisure agriculture industrial parks need to take the initiative to inherit these precious folk cultures. On the one hand, the unique folk culture is used to enrich the industrial content of the leisure agriculture industrial park, improve its attractiveness and create a more viable rural industrial brand; on the other hand, the centralized cultural display and the provision of a folk culture immersion experience environment help to achieve the protection and inheritance of rural folk culture. For example, Daoming town in Sichuan is the hometown of bamboo weaving in China. The area has a stunning bamboo sea scenery in terms of natural landscape and bamboo weaving products with various characteristics in terms of special industries. In the planning and design of the leisure agriculture industrial park in the area, the designers first created a very distinctive bamboo weaving townscape in the landscape design of the industrial park through the extensive application of the art of bamboo weaving. Secondly, in the bamboo weaving town, the cultural origin of Daoming bamboo weaving is displayed to tourists through paintings, video explanation and on-site demonstration, etc., and its characteristics in traditional culture and folk art are also publicized. In this way, successfully attracted thousands of tourists to visit, further experience our national bamboo weaving art and culture, to create our country in recent years very well-known bamboo weaving brand. Obviously, this has laid a solid foundation for promoting the long-term development of local industry, economy and culture.

5. Conclusion

To sum up, under the background of the rural revitalization strategy, the development of rural industries in various regions of China has ushered in precious opportunities. However, influenced by traditional concepts and business models, there are some problems in the planning and design of some rural leisure agriculture industrial parks, which not only fail to give full play to their industrial advantages, but also have a negative impact on the local natural ecology. For this reason, the planning and design of leisure agriculture industrial park needs to fully understand the local characteristics, reasonably use the advantages of local natural ecology, special industries and folk culture, make the overall functional
orientation of industrial park, through scientific overall design and special design, make prominent industry characteristics, the fusion of various elements of diversity in unity of industrial projects. Only in this way can we better promote the rapid development of rural industries, promote cultural heritage and advance the diversified development of rural economy, and contribute important forces to the effective implementation of the rural revitalization strategy.

Acknowledgments
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References
[1] Liu D. Research on architectural landscape planning and design of Chongzhou forest pan in the context of rural revitalization strategy [D]. Sichuan: Sichuan Normal University, 2019.
[2] Bai Junhao. Research on the application of landscape shaping methods in modern agricultural industrial parks--taking the recycling agricultural industrial park in Anzhou District, Mianyang City as an example [D]. Sichuan: Southwest University of Science and Technology, 2019.
[3] Yin Z. H., Hu T., Wan Z. W., et al. Research on the planning and design of leisure agriculture industrial park in the context of rural revitalization [J]. Jiangxi Agriculture, 2019 (18): 75 - 76.
[4] Special research report on building modern agricultural industrial parks in Guizhou province to lead the drive of rural revitalization strategy and poverty alleviation [J]. Leisure agriculture and beautiful countryside, 2018, 000 (008): P.39 - 47.
[5] Xin Jun, Feng Hao, Li Juan. Modern agricultural industrial park helps revitalize the countryside -- An example of modern agricultural industrial park in Qixia City, Shandong Province [J]. Agricultural research and economic management, 2020 (2): 36 - 40.