Research on the Development and Industrialization of Leisure Agriculture Resources in Henan Agricultural Cultural Heritage Sites Based on Computer-aided Technology

Maolin Li1,*

1College of Forestry, Xinyang Agriculture and Forestry University, China, 464000

*Corresponding author e-mail: limaolin99@hotmail.com

Abstract. As an extension and extension of traditional agriculture, leisure agriculture has higher added value than traditional agriculture. It is a combination of agriculture, agro-processing industry and service industry integrating tourism, leisure and sightseeing. As one of China's major agricultural provinces, Henan's rational development of agricultural leisure culture industry is an important and effective way to keep up with the pace of China's agricultural industry modernization. This paper analyzes the potential advantages of Henan's vigorous development of agricultural culture and leisure industry based on computer-aided technology, and puts forward suggestions and countermeasures for the construction of leisure agriculture in Henan agricultural cultural heritage sites, aiming to provide useful reference and reference for the development of leisure agricultural resources and industrialization in Henan province.

Keywords: Henan Province, Agricultural Culture, Leisure Agriculture, Computer-aided Technology

1. Introduction

As a large agricultural province, Henan has the characteristics of a large amount of cultivated land, dense population and less per capita cultivated land. As a major grain-producing province in China, relying solely on food for economic benefits has been unable to meet the needs of Henan farmers to gradually improve their quality of life. Therefore, improving the land use efficiency of Henan and developing the agricultural-related industrial chain have become an important channel for Henan to develop agricultural economy. In recent years, the development of cultural industries has made some new agricultural culture and leisure industries such as farmhouses and ecological parks a new focus of economic growth. This new type of industrial model can not only improve the economic benefits of the land, but also bring the life and cultural gap between urban and rural residents closer, with
multiple benefits. Therefore, the research on the development of agricultural culture and leisure industry in Henan has academic value and practical value[1].

2. The potential advantages of Henan's vigorous development of leisure agriculture in agricultural cultural heritage sites

2.1. Superior natural conditions

Henan is located in the plain, the land is vast and fertile, the four seasons are distinct, suitable for planting a variety of vegetables, fruits, ornamental plants and food crops, which provides a good natural condition for the development of agricultural culture and leisure industry in Henan. The vast and fertile land enables the development of various forms of cultural and leisure industries, such as farmhouses, ecological planting and ornamental gardens, and experiential farms. With distinct four seasons, we can plant different crops, flowers, vegetables and fruits in different seasons, develop more categories of agricultural culture and leisure industry, and attract tourists to consume for many times in four seasons. Henan also has a dense population and a large number of surplus labor force, which makes the development of agricultural culture and leisure industry needs a large number of service personnel more adequate. In addition, Henan also has a number of mature scenic spots with rich cultural deposits and historical value, including Shaolin Temple, Longmen Grottoes, and Shanghai Garden during the Qingming Festival. Relying on these scenic spots to develop the relevant agricultural culture and leisure industry, it should have stronger attraction and richer commercial value.

2.2. Have a rich cultural heritage

Henan not only has vast land and dense population, but also has quite rich cultural resources. Henan has a variety of world cultural heritage, from oracle to folk minors, from paper-cutting to wooden board paintings, from silk flowers to stone carvings. These cultural heritages include not only historical monuments, but also the inheritance of folk culture. Rich and diverse culture makes Henan develop agricultural culture and leisure industry with unique cultural resources. The experiential tourism project is a tourist hotspot in recent years. As a large province with a long history and rich cultural heritage, Henan can develop different types of experiential cultural leisure industry in different towns and villages. This cultural leisure industry is naturally a farmhouse. The agro-ecological park and farm experience are the main forms. These agricultural culture and leisure industries can also form a unique and innovative tourism project through the cultural elements that are unique to Henan's unique historical sites and world intangible cultural heritage. With more and more tourist attractions and the development of agricultural experience-based ecological parks, in order to have strong competitiveness, Henan needs to make full use of its rich cultural heritage. I also have others, and others who I don’t have, only To do this, we can satisfy the tourists' curiosity and attract more tourists to come to consume. Incorporating culture into the development of the agricultural culture and leisure industry can make this industry have the possibility of sustainable development[2]. Table 1 is a table of quality standards for leisure agricultural resources.

| level | Scoring interval | Resource characteristics |
|-------|-----------------|--------------------------|

Table 1. Leisure agricultural resource quality rating scale.
3. Principles for the development of leisure agricultural resources in agricultural cultural heritage sites in Henan province

3.1. Ecological protection principle

The development of leisure agricultural resources should not be at the expense of the ecological environment. In accordance with the principle of equal emphasis on economic development and green development, no matter what form of leisure agriculture project, the integrity of the local farmland ecosystem should be ensured. In the planning, the environmental impact and damage factors of human activities should be fully considered. Ensure the balance between leisure agricultural activities and ecological environment, realize the production and living environment in which people and nature live in harmony in the leisure agriculture project, and pursue sustainable development.

3.2. Regional principle

Henan is a large agricultural province with abundant agricultural resources and significant differences. Therefore, when planning the development of leisure agricultural resources, we must do a good job in the preliminary research work to clarify the different geographical advantages of the counties and cities in the province. Only in the planning can we develop the development direction and strategy of leisure agricultural resources in different regions. We must not blindly follow the trend and avoid developing leisure agriculture projects that do not reflect local characteristics. One of the core competitiveness of leisure agriculture is locality and regionality. The beautiful natural scenery and geographical environment and agricultural culture with unique geographical characteristics are the key to attracting the attention of urban tourists[3].

4. Analysis on the innovation and development of leisure agriculture industrialization in agricultural cultural heritage sites in Henan province

4.1. Create a new farmhouse leisure industry

Farmhouse is a form of relatively mature agricultural culture and leisure industry. It mainly uses folk customs, folk customs and folk labor as the main consumption content. By building a small farmhouse with local characteristics, and burning local specialties based on local agricultural products, coupled with a unique farm work experience, this has a strong appeal to those living in the city. At the same time, the unique folk customs also have unique commercial value, and its personalized product content has strong appeal to tourists from all over the country and even around the world. There are many towns and villages in Henan, and their customs, eating habits and
cultivated crops are different. This provides a good foundation for the construction of farmhouses with different local characteristics in Henan[4].

4.2. Create a multi-structure agricultural ecological park

In Henan, there are many villages where fruit farmers or flower farmers have contracted land on a large scale, and planted a variety of fruits and vegetables as well as ornamental flowers and plants. These crops can not only achieve commercial returns through the sale of fruits, but also gradually develop their more diversified business value, the most feasible of which is the construction of experiential crop ecological parks. That is to say, the orchard, the garden, and the botanical garden are regarded as an ornamental experience area, and the agricultural culture consumption items with the theme of viewing can be launched at the stage of flowering and fruiting of these crops. Figure 1 shows the type of leisure agriculture sightseeing park and its functional orientation.

![Figure 1. Leisure agriculture tourism park type and function orientation.](image)

4.3. Create a new consumer experience estate

China is a traditional agricultural country with a so-called pastoral complex in the hearts of Chinese people. If living and working in the city is to strive for a richer material life and satisfy the material needs of the self, then the longing for the farmhouse, folk traditions and home cooking is the spiritual needs of many people. Therefore, experiential farms have become a new type of agricultural cultural industry development. For example, residents in the city can contract a piece of land on a farm in the country, have time to plant it at will, occasionally go to the farm for watering, picking during the harvest season, and usually the owner of the farm will take care of it. This kind of agricultural culture and leisure industry, which is derived from the farm experience type of online game QQ Farm, can be said to be very attractive to urban residents. For rural residents who have a large amount of land and free time, they will not only be able to obtain more lucrative income, but also enhance the value of land use in this way[5].

5. Conclusion

In general, the study on the development and industrialization of leisure agriculture resources in Henan agricultural heritage area is of great economic and cultural significance to Henan, a large
agricultural province. In order to develop the cultural and leisure industry, Only by combining computer-aided technology with continuous innovation can the competitiveness and commercial value of these industries continue to increase. To develop leisure agricultural resources, it is necessary to follow computer-aided technology. The development of leisure agricultural resources in Henan needs to adhere to the concept of sustainable development and meet the needs of consumers. The development of agricultural culture and leisure industry in Henan needs constant innovation to create a new industrial structure[6].

Acknowledgements

1. The Humanities and Social Sciences Research Project of the Chinese Ministry of Education in 2017 (No. 17YJCZH090);
2. The Humanities and Social Sciences Research Project of Henan Education Department, China in 2018 (No. 2018-ZZJH-431);
3. The Research Project of Henan Social Sciences Federation and Economic League Association in 2017 (No. SKL-2017-962)

References

[1] Wang Lili. Research on the Development of Leisure Agriculture Industrialization in China: Review and Enlightenment[J]. Chinese Journal of Agricultural Resources and Regional Planning, 2016, 37(1): 207-212.

[2] Zhuang Ting, Zeng Fangfang. Research on Leisure Agriculture Development Strategy of Youxi Ancient Ginkgo Agricultural Cultural Heritage Site[J]. Rural Economy & Technology, 2017, 28(1): 73-75.

[3] Lin Lei, Zeng Fangfang. Research on Leisure Agriculture Development of Gutian Tremella Agricultural Cultural Heritage Site in Fujian[J]. Rural Economy & Technology, 2017(23).

[4] Tang Feifei. Research on the development strategy of jasmine culture resources in Fuzhou from the perspective of leisure agriculture [D]. Fujian Agriculture and Forestry University, 2016.

[5] Zhang Yanming. Research on the Development and Industrialization of Leisure Agriculture Resources in China[J]. Village Science and Technology, 2017(9):19-20.

[6] Sakae Yamamura, Haruo Ito, Hiroyuki Masuda. Three-dimensional Analysis of Double-sided Linear Induction Motor with Composite Secondary[J]. 1979(2).