

3rd International Conference on Advances in Materials, Mechatronics and Civil Engineering (ICAMMCE 2018)

Environmental Symbiosis and Cultural Integration——The study of Ecological Agriculture Leisure Planning in Peixian Huxi County

Junhong Ru¹ Xiaodong Cao² Hao Zhang¹

(¹Shenyang Jianzhu University, ²Shenyang Lvmeng Construction Consulting Co., Ltd; Liaoning; Shenyang; 100168)

Key words: environmental symbiosis; eisure planning; culture fusion

Abstract: The Peixian huxi County farm is a modern farm of the nature of collective management retained in the time of the planned economy. It is also a breeding base for hybrid rice in China. Under the macro background of the transformation of modern agriculture and the development of rural tourism, ecological agriculture leisure has undoubtedly become a new force in the tourism industry. As many sightseeing farms are springing up, how to stand out on a large number of sightseeing farms by unique ecological resources and environmental advantages will be the key to the success of this project. The main purpose of this paper is how to build an ecotype recreation and sightseeing farm with environmental symbiosis and culture, and discuss it in the aspects of planning.

1. Macro Background of the Development of Agricultural Leisure Sightseeing Tourism

1.1 The Transformation Drive of Modern Agriculture

With the development of agricultural modernization, at this stage, attention is paid to the cultivation of new business entities and the service system for agricultural socialization. The development of agricultural scale, specialization, and intensive development has become a new focus and direction for agricultural development. Based on the existing agricultural models and guided by the market demand, the agricultural structure will be optimized to improve the quality and safety of agricultural products. At the same time, it attaches importance to the application of science and technology in agricultural production, emphasizes the rational use of ecological environmental resources, and comprehensively enhances the production capacity of agriculture. The emergence of agricultural leisure sightseeing tourism provides a broad prospect for development and a good market benefit for modern agricultural transformation.

1.2 Driving Demand for Sightseeing

Under the background that "green" and "ecology" have gradually become universal values, the integration of agriculture and tourism has gradually become a new development trend. Sightseeing agriculture has naturally become the optimal choice today, led by "green economy". Eco-agricultural leisure tourism is a combination of traditional agriculture and modern tourism. On the basis of satisfying crop output, functions such as recreation, entertainment and knowledge are a new type of tourism model. First of all, the fast-paced life and mechanical work methods make people in urban life have a strong desire to get close to nature and stay away from the embarrassment. This is enough to provide a huge customer base for eco-agricultural leisure tourism; secondly, basic agriculture The optimization of industrial structure has brought tremendous power and opportunities to the expansion of agricultural functions. As a new emerging industry that is ecologically, socially and economically coordinated, agricultural recreation is a reflection of the higher forms of agricultural development, which has driven the development of ecological agriculture. The development of the tourism industry has opened up a huge space for development. In the end, a high standard of living, more leisure time, and improved cultural quality of the entire nation have shifted people's interest from simple visual viewing to more interactive experiences. Activities, harvesting knowledge and happiness in the interaction, which is precisely the unique characteristics of ecological agriculture leisure tourism, that is, the coexistence of viewing and experience.



2. Route Exploration: Planning Measures to Improve the Space Quality of Tourism Parks

2.1 Overall Layout of Environmental Symbiosis

2.1.1 Planning Concept of Respecting Nature

Eco-agricultural leisure tourism can attract tourists because it has its own leisure, tranquility and vastness that the city does not have. Therefore, in the overall layout of the park planning, it is necessary to retain its own characteristics as much as possible. The vast majority of cultivated land in the park has been planted with rice, and the lotus planting has also begun to take shape. This has resulted in the planting layout of "rice" and "height" and the aquaculture pattern supplemented by fish ponds (see Figure 1 for overall aerial view). Therefore, planning is based on the basic principles of respecting nature and symbiosis with the environment. It does not change the overall layout as much as possible, but only combs the boundaries, enhances quality, and incorporates creativity on the basis of the original, trying to achieve a harmony with the environment and not Lost space experience.



Figure 1. Overall aerial view of the planting layout of "rice" and "height"

2.1.2 Appropriate Resource Allocation

Crops have their own growth cycle and naturally alternate. A large area of paddy fields has become an unavoidable issue in design. It is necessary to preserve the original attributes of paddy fields and also to work hard on tourism. As the old saying goes: "Spring has flowers and autumn months, and summer has cool wind and winter and snow". It can be seen that the scenery of tourism viewing should also be different with the changes of seasons. In this project, rice and rapeseed flowers are interplanted to ensure tourism. Resources come from nature and have their own characteristics. Under the principle of ensuring symbiosis with the environment, planning highlights the viewing experience. The rich resources of rice fields, planning to weaken its food properties, improve its cultural properties, rely on a variety of cultural ideas, increase tourism value, and promote the development of tourism economy. In collaboration with the rice field paintings allow visitors to truly feel the grandeur and wonder of the rice field paintings, allowing visitors to experience the joy of exploration through the sea of rice fields. Heavy cultural heritage has given creative rice fields endless material. The combination of historical stories and farming rice fields will surely become the most beautiful historical representation (see Figure 2).



Figure 2

Rape Huatian has a good landscape ecological environment, planning and creating a romantic sea of wedding photography, outdoor wedding venues, and wedding services. The proposed Huatian viewing tower will enable visitors to not only stay in the sea of flowers, but also to ascend to the fullest view of the flower field. At the same time, it is also possible to provide tourists with leisure facilities based on good ecological conditions. Gorgeous rape blossoms fueled by love, filled with happiness, sharing the taste, alone and happy as the public music, life is a happy event to share with friends and family.

2.1.3 Platform Construction Approaching Nature

Fish ponds and lotus ponds have begun to take shape in the park. In what ways can they be incorporated into the tourism system without affecting their own value? First of all, the lotus pond is a landscape in itself, but the problem is that it can only be viewed from a distance and cannot be "closed". The design choice is to use lotus trees to make landscaping in the lake ponds. The lotus plants are planted on the vast surface of the pond and pond, showing the blue sky and the green sea. Rough and magnificent landscape. At the same time, constructing a wooden plank road and viewing viewing platform in Hetang will enable visitors to enjoy the beauty of Hetang from multiple angles. And plan the bamboo row tour, the bamboo raft swinging lotus pond, enjoy a pool of incense floating, singing a song of the lotus pond. "The mud does not stain, and the demon does not demonize" but also become famous throughout the ages. In terms of cultural expression, the proposed Lotus Display Gallery will allow visitors to more systematically understand more than one hundred kinds of treasures of the treasures through a combination of text and pictures, achieving certain popularization goals.

2.1.4 The Construction Mode of Integration into the Environment

Compared with lotus ponds, fish ponds have a relatively large scale. If they are all included in the tourism system, they will inevitably lead to the reduction of their own economic value. Therefore, planning to select a small number of fish ponds near Hetang as a tourism and tourism design site. In this way, it is possible to connect the sightseeing and recreation sites into an area, which facilitates the organization of the management and tour lines, and also achieves the balance between economic benefits and ecological benefits. After having relatively good natural conditions, considering a variety of factors, it was decided to plan a water fishing village project on the fish pond surface. From the farm's point of view, fresh fish in fish ponds can be used as raw materials for aquatic fishing villages, increasing the sales of their own fish ponds; from the point of view of tourists, they can fish or pick their own foods, eat at ease and increase their fun (see Figure 3). To add construction projects to the Eco-Agricultural Leisure and Tourism Park, the most important thing is to consider the symbiosis between the buildings and the environment, and to make the tourists more familiar with nature, the architectural layout should be flexible, scattered as far as possible, and present a free form. Therefore, timber framed homes became the first choice. The timber frame can not only give people a homeland atmosphere, but also get rid of the oppressive environment like steel and forest in the city, and can also satisfy the design intention of being as hydrophilic and flexible as possible.



Figure 3 Moonlight Effect Picture

2.2 Project Planning for Cultural Integration

With the continuous improvement in the material quality of life, people's attention to the spiritual world has been greatly enhanced, and the creation and continuation of cultural atmosphere has become the focus. Eco-agricultural leisure and sightseeing tourism, on the basis of traditional natural sightseeing tourism, is a way of learning in harmony with nature, but it is also a deeper understanding of natural and traditional attitudes. Sightseeing agriculture is a new tourism model based on traditional agriculture and modern tourism, with multiple functions of leisure, entertainment and cognition, which can meet the diversified needs. The same type of planning project, the natural conditions are almost the same, the event planning is also very similar, how to stand out among many similar projects, become the key point of this design. The profound cultural heritage is the source of endless vitality in the park, and it is also the sustenance of the spiritual world that people continuously expands. Therefore, the implantation of culture has become the only way to improve the quality of the park. The question is how to transform intangible culture into tangible existence. At this point, the design starts with the initial project planning, uses project planning that are fused with culture, and tries to make cultural tangible attempts on multiple levels and from multiple perspectives.

2.2.1 The Concept of Combination of Motion and Static

The consumers of eco-agriculture and leisure tourism use the office workers for the purpose of relaxation and relaxation in the surrounding cities. For different groups ' preferences, different culturally compatible project planning schemes should be adopted. " One movement, one static, and one static and one static ". Therefore, planning to deal with the relationship between " quiet " and " move " is one of the key points, that is, the relationship between cultural perception and cultural experience. In the design of venues, we must focus on the interpretation of " quietness ". " Static " in the leisure industry is a reflection of the leisurely life of the rural family. This quiet and relaxing space and place are the core of consumer demand. The " movement " in leisure agriculture is mainly reflected on the experience of recreational recreation and agricultural production, and the " moving " activities are in the " quiet " pastoral scenery. In this way, the desire for urban residents to return to nature and the basic needs for relaxing their minds and minds were met. At the same time, the residents ' demands for knowledge of practical culture were also realized. This extended the time of recreation and played a significant role in the promotion of secondary consumption.

2.2.2 Multi-perspective Cultural Perception

Peixian County, which the park is located in, it has a long history and abundant natural and humanistic resources. It is the hometown of Liu Bangzhi and the land of the Han Dynasty. It is known as the "prehistoric enclave and the emperor's hometown ". Dahan culture has a long history. "Big winds rise from the sky, Weijia Nene returns home, Anda warriors keep the Quartet.". A song "The Wind Song "reveals Liu Bang's ambivalence towards his hometown and his ambition to hunger and thirst. From the viewing point of view, the park has planned a creative rice fields painting project, taking the rich history of the Han Dynasty as the content, using the vast rice fields as the canvas, and using colorful rice seeds to present a magnificent historical and cultural scroll for visitors. The viewing platform and high-altitude cableway is set up, and the scenery of rice field paintings is high, allowing visitors to visually achieve shock and at the same time mentally

complete the perception of culture.

The long history of farming civilization has a profound cultural heritage. Advocating a cultivating career and living in harmony with nature in order to achieve the pursuit of the highest realm of "Heaven and Man" is the way to get along with nature in traditional culture. This is in line with today's philosophy of harmonious development, not predatory natural resources. use. From the viewpoint of science popularization, Huxi Farm serves as a national hybrid rice breeding base and produces high quality rice seeds. Planning and construction of a hybrid rice exhibition trade hall, integrating exhibition, scientific research, and education into one, systematically displaying the development history of Huxi Farm and hybrid rice breeding techniques, taking into account the exchange of existing technologies and discussions and research and development of emerging technologies. The project park is not only used as a base for breeding hybrid rice, but also can be an incubator for the research and development of new hybrid rice technology (see Figure 4).



Figure 4 Hybrid rice dealer view

2.2.3 Multi-level Cultural Experience

At the level of cultural experience, the design is based on people. From the perspective of tourists, when tourists are no longer bystanders, but by the protagonist, they will certainly have a deeper understanding of the cultural connotation and will have a deeper memory. Therefore, the park planned the Han Culture Wedding Plaza in the Fanxi Huahai Area, relying on the Hantai Gaotai and Huahai. Visitors can wear Hanfu clothes to perform the wedding ceremony and experience the charm of the Han culture. The large-scale parent-children's outdoor reality shows is quite popular, and the arrangement of the program is mostly related to the agricultural experience. The children and parents are allowed to come into close contact with the animals or experience farming, and in the process of experiencing traditional labor, they can increase the culture of farming. Understanding The fun of farming culture practice is incomparable to pure text and picture recognition. The project plans to build a farm experience base and a youth training base. It plans to incorporate parent-child activities and young people's outreach training into the experience of farming culture, educate and entertain, and increase physical fitness while improving the understanding of farming culture. At the same time, some fields have been divided and private farmland has been claimed, allowing visitors to personally cultivate and experience agricultural practices such as transplanting, weeding and harvesting (see Figures 5 and 6).



Figure 5 Daoxiang large canteen effect



2.3 Ecologically Sustainable Construction Mode

The planning and construction of the entire park is based on the concept of sustainable development. The purpose is to balance the economic and ecological benefits. The model of circular agriculture was applied to the planning and design of the park, and the principle of " reduction and reduction, reuse of existing resources, recycling of waste, and control of production process " was adopted to protect cultivated land and improve quality of the purpose of transformation. The treatment of straw returning and conservation tillage are the core technologies to achieve the best form of clean consumption. The agricultural products produced will return to the earth after being fully utilized. Realize the organic combination of planting land and cultivated land. Straw, livestock manure and other agricultural solid wastes are recycled as efficiently as possible and the quality of agricultural products is improved. The park adopts arable land to produce agricultural products and straw. The straw is simply treated to form feedstuffs for the farmed animals. The agricultural products and animal feeds are for human consumption. The manure and part from the straw produced by the humans and animals together go into the septic tank to form organic fertilizer, which is returned to the farmer. The way of farmland achieves organic combination of land and land (see Figure 8 for a schematic diagram of public toilet's).

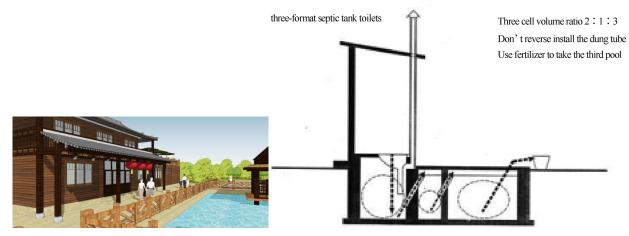


Figure 6 Figure of a fishing village

The sewage treatment station adopts the combined combined biological filter-high load artificial wetland combined process technology, and the final effluent of the treated sewage can reach Class I B standard (GB18918-2002). After the preliminary purification of domestic sewage into the catchment pool, the pump is automatically raised to the combined type compound biological filter. During the full contact with the biofilm, the contaminants are gradually adsorbed by the microorganisms and slowly degraded; the effluent part flows back to the catchment tank after precipitation. The other part enters the constructed wetland system, and further filters and removes organic matter, nitrogen, and phosphorus under the coordinated action of fillers, soils, and plants, and releases the water after reaching the Level 1 B standard. The "three-format" septic tank technology used in public toilets.

3. Conclusion

The optimized layout and new production of traditional agriculture make agriculture, nature, science and technology, leisure, and environmental protection mutually integrated and create the best model for ecological, economic and social benefits. The eco-agricultural leisure and tourism parks planning and design to emphasize the concept of environmental symbiosis; optimizes the structure and perfects the system as the basic means; takes the integration of culture and deepens the connotation as the value orientation; and takes the promotion of energy level and harmonious harmony as the goal orientation. Under the premise of sustainable development, we strive to



achieve environmental symbiosis and cultural integration in many aspects. Any design should be based on the principle of protecting the existing ecological environment, upgrading the transformation as a means, and taking environmental symbiosis as the ultimate goal; combining intangible culture with tangible projects can not only promote the traditional cultural spirit, but also enable the project itself to arrive. A new height enhances its own connotation. Environmental symbiosis is the essential requirement for optimizing the design structure, and cultural integration is the only way to improve design quality.

References:

- [1] Wang Guoli, Luo Haifeng, Chen Mingchun, Li Qiumin, Hong Bingbing, Planning and Design of Sightseeing Agricultural Ecological Park, "Ecological Environment", 2005(3)
- [2] Xin Yanping, Windy, (J) Reading and Appreciation.
- [3] Xia Xueyi, on the value and inheritance of Chinese farming culture, (J) "Ancient and modern agriculture" 2010 No. 3
- [4] Liu Qianqian, the connotation, characteristics, development status, problems, and suggestions of the new type of agricultural management subject, (J) Economic Research Guide 2014 25