Research on Interactive Design Strategy of Agricultural Landscape and Parent-child Project

Jie Qiu^a, Wenbo Zhang^b

College of art and design, Wuhan Textile University, Wuhan 430073, China a2452950741@qq.com, b599094248@qq.com

Keywords: Agricultural Landscape; Parent-child Tourism; Interactive Design; Resource Utilization.

Abstract: This paper will study and sum up the current status of agricultural resource utilization and the current status of Parent-child projects, and offers interactive design suggestions and decisions on agricultural landscape design and Parent-child projects. The Parent-child projects are integrated into agricultural landscape design, and through the effective utilization of agricultural resources, sustainable design of project development, further improvement of supporting services and facilities, promotion of agricultural industry and tourism are grasped, moreover, it also improves the Parent-child relationship and perfects the Parent-child education system.

1. Strategic Significance of Agricultural Parent-child Projects

With the improvement of people's living standards and the rapid development of social market economy, the plans of agricultural landscape extension projects are also developing rapidly. China's agricultural travel industry has contributed to economic development and has greatly enriched the spiritual and cultural life of consumers; moreover, it also faces some problems in development, for example: projects lack target, development is unsustainable, attach importance to resource utilization and look down on cultural experience, and the supporting service and facilities are not perfect, etc. The state has successively introduced relevant laws and regulations to guide and support agricultural development, and relevant departments are also strengthening the management and standard of the tourism industry. Nowadays, due to economic development and enrichment of cultural life, consumers' demand for high-quality tourism is becoming stronger. Therefore, when vigorously developing agricultural resources, scientific and reasonable social and cultural integration projects seem very necessary, while scientifically and sustainably developing resources, and people's increasingly diversified living needs can be met.

The country fully liberates "two-child policy", which gives unlimited development potential to the Parent-child industry, and the country and society pay more attention to the development of children's industry. With the development of economy and the improvement of living standard, it has become a healthy and popular way for parents to accompany their children to travel outdoors and integrate into nature. However, in the current boom of Parent-child tourism, there is little space for children to experience nature; there are too few Parent-child products with real educational significance, parents are usually in the subordinate position, lack participation and interaction.

The Parent-child projects are injected into natural agriculture, and provide families in the city with a Parent-child tourism strategy that is close to nature, feels the rural scenery, learns agricultural knowledge, and inherits agricultural culture. The comprehensive development of natural agricultural resources, the rational use of agricultural landscapes, and the optimization of production, ecology, and life "three-life function" structure, the interaction between Parent-child projects and agricultural landscapes has promoted rural economic development, moreover, it also brings social benefits in many aspects.

2. Development and Current Situation of Resource Utilization of Agricultural Landscape

The report of 19th CPC National Congress proposes to implement the rural revitalization strategy, we must adhere to the prior development of agriculture and rural areas, According to the general requirements of industrial prosperity, ecological livability, civilized rural customs, effective governance, and affluent living[1], we should establish and improve the system mechanism and policy system of urban-rural integration development, accelerate the modernization of agriculture and rural areas, and promote the construction of beautiful villages to the construction level of humanistic spirit. As a large agricultural country, China has abundant agricultural resources, but there are still some shortcomings in the construction of agricultural landscape, the diversified utilization of agricultural resources, and the inheritance and application of agricultural cultural.

2.1 Development and Current Situation of Agricultural Natural Landscape in China

Industrial civilization has developed to this day, due to excessive commercialization and industrialization, the habitat environment has gradually deteriorated, people and nature have gradually separated, and the ecological and aesthetic attributes of agriculture itself have gradually faded, at present, agricultural landscape is changing from "bottom-up" to "top-bottom" construction mode. In the past, the construction of crops was voluntarily constructed by farmers based on their own needs natural landscape resources; they build spontaneously under their own understanding.

Nowadays, the original traditional rural and field environment has been damaged to varying degrees, and most of the agricultural parks have not formed a unified style and overall characteristic landscape style; the configuration mode of agricultural plants has not reached a unify in function and form; the agricultural-related facilities are not perfect, and the drainage system lacks maintenance; the phenomenon of disorderly stacking and building in the park is serious, and the old farmland buildings lack maintenance, there is no systematic environment shape around ancient trees; there is no complete lighting system and waste yard in agricultural park, public service facilities and supporting facilities of farmers' life are lacking; there is more natural greening in farmland and surrounding areas, but unified design and protection are scarce, utilization effect is poor, and open public activity space is lacking; cultural protection awareness is weak, many rural local historical customs have been forgotten.

2.2 Development and Present Situation of Extended Use of Agricultural Resources

Agricultural landscape is an important material resource, which plays an important role in urban social and economic development and ecological environment construction. In recent years, the development of agricultural industrialization in China makes agriculture not only has the production function, but also has the landscape resource attribute function to improve the regional ecological environment and the quality of habitat environment. With the rapid development of China's economy, the people's work pressure is increasing gradually, and the pollution of urban habitat environment is serious, so people's demand for leisure, sightseeing and tourism is increasing, and the agricultural landscape resource utilization modes of leisure and tourism emerge as the times require.

Agricultural landscape is a diversified form of land landscape, which is composed of the surrounding natural environment, agricultural activities and rural settlements these natural, historical and cultural factors. Agricultural landscape resources are the ecological complex where creature and nature live in harmony based on natural landscape, it has the value of appreciation, experience, education and other development value [2]. Making good use of agricultural resources can not only stimulate the local economy, increase the income of farmers, improve the living environment of local people, bring the nature feeling to consumers, but also make the agricultural ecological environment get better protection in the rational use. However, the development and management time of agricultural landscape resources in China is relatively short, and there are still many unreasonable aspects in the development and utilization of agricultural landscape resources, there are few systematic studies on the use of agricultural landscape resources.

3. Interactive Designs of Parent-child Projects and Agricultural Landscape

"Interaction" is to the action between two or more parties that can influence each other. Interconnection is a concept closely connected with interaction, it is the interaction in the same system, the union of multiple simple interactions may constitute an amazing complex interaction. In short, interaction is not only exchange and interaction, but also interconnection and integration. The interaction design of Parent-child projects and agricultural landscape are reflected in the interaction of business model, place, landscape form, function and landscape node, the design main body is "human", here, "human" is the children of Parent-child.

3.1 Introduction of Agricultural Interactive Activities and New Model of Parent-child Tourism Project

The interaction between the Parent-child projects and the agricultural landscape emphasizes the two-way nature of the landscape; the key points are the interaction between children and adults, between people and agriculture, and between people and nature. Production education and life entertainment in agricultural Parent-child projects can be directly communicated through interaction, such as sowing, picking, harvesting, processing, etc., or the activity type can be improved appropriately, and interactive expression can be used to form a more attractive interactive experience.

The interactive strategy of Parent-child projects can be reflected by the establishment of venue theme activities, different types of activities are set up in the venue in accordance with age, we can explain different levels of knowledge for children, respectively, use the original ecological materials to make their own favorite products. For example, leisure and entertainment activities, a number of activities in the agricultural park are developed, entertainment facilities are set. Since children like new things, there are many recreational facilities with agricultural elements, which should be updated constantly. Fruit and vegetable picking activities, in the process of picking, let children experience picking and understand the joy of fruits and vegetables. Education and science popularization activities in ecological farm nature class make children experience the process of planting and understand the growth of plants.

3.2 Agricultural Parent-child Cultural Exchange, Interactive Design of Landscape Place

The place in the landscape is a combination of space and characteristics which is composed of natural environment and artificial environment under specific environmental conditions, it has integrity and functionality. In a certain area, the place of agricultural Parent-child project landscape endows the atmosphere and characteristics of the place agricultural landscape through the interaction of natural elements, human elements and event elements, and highlights the cultural connotation through the overall place.

The integration of Parent-child project and agricultural landscape has the nature of production and tourism, the space, function, style and composition elements of the place are all carriers to express Parent-child and agricultural culture. The production place and living place in farming culture can be directly reproduced in the landscape; it can also be expressed as the connotation and sign of Parent-child culture in the landscape through extraction, quotation, etc. to realize the interaction between culture and landscape.

Respecting the original natural environment of landscape, retaining valuable natural landscape elements and reasonably using landscape design, these concepts be should followed, this is the recognition and respect for the inherent value of nature, which not only avoids irreparable damage to the original ecosystem, but also greatly reduces the investment cost.

The agricultural landscape in the Parent-child project includes natural and artificial materials. natural materials are consciously preserved in the design of landscape places, agricultural resources can also be used as part of the landscape, crops can be directly used in the place landscape greening, landscape materials are used as carriers to indirectly express the morphological characteristics of various elements of agricultural culture. The artificial materials are mainly to meet the needs of customers and the design concept of the project, for example, we should consider popular science

education for children in the planting, the safety of water environment, the roads select anti-skid materials, and landscape sketch meets experience Interaction.

3.3 Optimize Traditional Agricultural Facilities and Improve the Function of "Three Life" of Agriculture

Under the current situation of imperfect farming facilities, the traditional agricultural facilities need to be transformed and improved. The facilities in the Parent-child agricultural project can be divided into farming facilities, maintenance facilities, entertainment facilities and public service facilities.

Traditional farming facilities are practical but lack of beauty, they can be transformed from the external form under the background of Parent-child projects, external beautification is conducted without affecting its function, such as decorating mascot patterns, painting bright colors, and pasting soft materials on the surface, so as to make them have theme and security. Under the principle of interaction, the facilities such as partition and fence in farmland are transformed into functional landscape, which not only plays the role of maintaining farmland, but also can be changed at will, and it has entertainment. In the drainage system, it is necessary to strengthen the drainage of underground ditches, set up multiple drainage points, and make full use of the natural infiltration of greening to avoid the water and flooding of the road area, etc.

Entertainment facilities should not only pursue children's interests and happiness, safety problems are important. The principle of convenience, durability and hygiene should be followed in material selection. Without the use of potentially toxic elements, the synthetic material must be strong enough to avoid cracking, consider the surface treatment of rough or uneven materials, and it reduce the injury possibility to children during the treatment process.

4. Social and Economic Benefits of Agricultural Landscape Interaction Strategy

From the social angle, the involvement of Parent-child projects in the resource utilization of agricultural landscape has aroused people's understanding for agricultural history, review of traditional culture, make parents and children go into nature, understand nature and learn nature, and make the modern Parent-child concept continue to inherit, moreover, arouse people's awareness for ecological protection, help promote ecological harmony, it embodies the significance of double scientific education of environmental protection and cultural heritage.

From the economic perspective, the combination of agricultural landscape design and Parent-child projects promotes the transformation of the traditional agricultural production mode dominated by single material supply into the Parent-child agricultural park as the material supply base, seamless integration of various agricultural links and tourism products forms a strong agricultural and tourism industry chain, and a circular business model is formed, so as to improve the production efficiency of agricultural industry and development speed of economic circular. This is not only the market demand, but also the inevitable result of agricultural transformation and eco-tourism development.

References

- [1]. Huang Jun. Four Paths of Rural Revitalization[J]. People's forum, 2018 (17): 80-81.
- [2]. He Jiahuan, Wei Xinliang. Research on Development of Resource Utilization Mode of Agricultural Landscape[J]. Rural Economy and Science-Technology, 2018,29 (01): 22-25.
- [3]. Fu Hongdan. The Development and Evaluation on Leisure Agricultural Resources[J]. Chinese Journal of Agricultural Resources and Regional Planning, 2016, 37 (05): 213-217.
- [4]. Zhang Limeng, He Yu, Qiu Yijia. Research on Parent-child Landscape Design in Sightseeing Agricultural Park -- Take Dengfeng Colorful Sightseeing Agricultural Park as an Example[J]. Liaoning Urban and Rural Environmental Science & Technology, 2016, 36 (03): 42-46.