### Research on the Design of Aging-friendly Agricultural Tourism in Constructing Vibrant Countryside Through Demand Interaction

Yanbo Yu<sup>1</sup>

#### **ABSTRACT**

Since the 19th National Congress of the Communist Party of China, rural revitalization has become an important development policy and strategy of the country, and has achieved significant results through long-term development. Rural revitalization has entered a new stage of development. In the face of the current aging problem in society, it is of great significance to conduct in-depth research on the relationship between villagers' demand levels and the construction of rural vitality in the process of designing rural tourism for aging, in order to enable villagers to participate deeply in rural development and achieve rural revitalization. This article is based on the hierarchy of needs theory to study and analyze the new problems and difficulties encountered in the current development of rural revitalization. Through the design of aging-friendly agricultural tourism, it helps rural elderly rebuild their relationships, reshape their cognition, alleviate the current situation of lack of spiritual life for the elderly, gradually realize their self-worth needs in the process of participating in rural development, establish a sense of self-worth identification, and get rid of marginalized value experiences, which are conductive to stimulating development momentum from within the countryside, and building dynamic and modern villages through demand interaction.

**Keywords:** Rural revitalization, Aging-friendly agricultural tourism, Demand interaction, Value reshaping.

### 1. INTRODUCTION

The strategy of rural revitalization, which adheres to the priority development of agriculture and rural areas and accelerates the modernization of agriculture and rural areas, is a hotly debated topic in academia and society at this stage. The comprehensive victory in the anti-poverty has opened a new chapter in rural revitalization, and with it a new stage of development and new challenges.

## 2. ANALYSIS OF PROBLEMS IN THE DEVELOPMENT OF RURAL REVITALIZATION

In the process of development of the rural areas, the problem of insufficient internal motivation for its sustainable development is becoming more and more prominent, with the serious problem of population aging, the continuous reduction of the rural population and agricultural laborers, as well as the fact that few rural residents have the will to spontaneously invest in the strategy of rural revitalization, which leads to the lack of vitality within the countryside and the stagnation of the countryside. Even if more external support is provided for rural revitalization, it cannot be effectively improved, especially in the field of agricultural tourism. Nowadays, utilizing abundant agricultural resources to develop tourism products in rural areas has become an important means of attracting tourists. However, in the actual process of agricultural tourism experience, there is very little direct interaction between rural areas and tourists. Tourists unilaterally experience the ecology and agriculture of rural areas without sufficient feedback, self-entertainment, and lack deep spiritual satisfaction. Due to the lack of interactive communication, tourists are unable to experience

<sup>&</sup>lt;sup>1</sup> Zhuhai College of Science and Technology, Zhuhai, Guangdong, China

<sup>&</sup>lt;sup>1</sup>Corresponding author. Email: yyb1103281349@zcst.edu.cn

the significance of rural development, the hardships of agricultural cultivation, and the value of farmers to national development from agricultural tourism. There is always a spiritual barrier between rural areas and the outside world. The sense of estrangement between rural areas and the outside world can be attributed to the sense of estrangement between people. Villagers lack the willingness and channels to communicate, and tourists cannot feel the vitality and enthusiasm from rural revitalization, unable to fully integrate. The weak humanistic atmosphere seriously affects the development of agriculture and tourism.

To achieve urban-rural integration and balanced development, in addition to investing in basic needs such as systems, construction, education, and healthcare, it is also necessary to strengthen villagers' awareness of opening up to the outside world, tap into potential high-level needs, stimulate behavior, and ultimately enable villagers to enhance their social attributes, gain respect and recognition, and realize their own value in external exchanges, especially for rural elderly people. In this era that emphasizes experience and interaction, the agingfriendly design of agricultural tourism should build a bridge between the countryside and the outside world, help rural elderly rebuild relationships and reshape cognition in the development process of rural tourism, gradually realize their self-worth needs, establish a sense of identity towards selfworth, and get rid of marginalized value experiences. This will help stimulate development momentum from within the countryside and build a vibrant countryside.

## 3. DEFINITION OF VIBRANT COUNTRYSIDE

What is vitality? Modern Chinese Dictionary defines vitality as "vigorous vitality", "vividness in action, thought, or expression", "full of youthful spirity", etc. These characteristics describe the true connotation that rural revitalization should give to countryside.

At present, rural revitalization endows countryside with vitality including policy vitality, cultural vitality, ecological vitality, and talent vitality. To ensure the sustainable development of rural revitalization, it is necessary to fully leverage the unique advantages of countryside, integrate culture, landscape, leisure, and agriculture, inject energy into rural development, and attach importance to rural humanistic characteristics, create rural humanistic characteristics, stimulate

vitality from the bottom, and promote the common prosperity of rural material and spiritual aspects. The vitality of countryside should be reflected in the coordinated development of various aspects, the gathering of strength, and the planning of a sustainable development path. Sustainable development requires improving the efficiency of rural resource utilization, avoiding resource waste, and generating a continuous stream of power from within. The resources here are not only cultural, landscape, and agricultural resources, but also human resources. People are the key to development. There is a must to effectively improve the subjective initiative of villagers, fully tap their own value, mobilize the dual vitality of body and spirit, empower rural revitalization, and provide fresh blood for rural development.

Rural revitalization, as an effective way of mass innovation, requires both the guidance of professional talents and the active integration of villagers. It also requires making changes in consciousness and cognition, emphasizing social participation, valuing social attributes, reshaping their own value. The cultivation of this ideology is closely related to the vitality of rural revitalization and development. The elderly population accounts for a large proportion of the rural population. Against the backdrop of the continuous increase in the number of elderly people in rural areas and the overall decline in the vitality level of the village, it is necessary to fully tap into the value of the elderly and add momentum to the development of rural revitalization. The community transformation in the process of rural revitalization and development provides a pleasant living environment and social place for the elderly, providing spiritual satisfaction and to some extent alleviating the current situation of the elderly's lack of spiritual life. However, this spiritual satisfaction is limited to the internal provision of countryside, and at the same time, this "internal spiritual supply" has not received corresponding vitality output, which has little help for the sustainable development of countryside. Part of the agingfriendly design focuses on the construction of materials, simplifying spiritual satisfaction into material supply, ignoring the division of demand levels, and lacking the thinking of meeting highlevel needs. It will not stimulate the generation of elderly demand behavior, making it difficult to unleash vitality from within the countryside to support rural development. Therefore, age-friendly design should fully consider the satisfaction of the needs of the elderly and the ways to meet their

needs. Through design as an interactive communication medium, the elderly can obtain more spiritual supply from external and social sources, effectively respond to the needs of spiritual life, and enhance their sense of self-worth. This helps the elderly clarify their life goals, generate initiative and spontaneous behavior, desire to have more communication with the outside world, and harness their residual energy to build a vibrant countryside.

# 4. PROMOTING INTERACTION AND BUILD VITALITY IN COUNTRYSIDE THROUGH DEMAND

To achieve the goal of building a vibrant countryside, demand interaction is essential. Demand interaction refers to the desire of rural communities as a whole, or individual villagers to communicate and interact with others during the development process. As a necessary condition for development, demand is a verb and interaction is a noun; It also represents the mutually reinforcing and satisfying relationship between certain behavioral purposes of countryside or villagers driven by their will, demand is a noun and interaction is a verb. Demand generates behavior, behavior stimulates interaction, interaction generates vitality, and vitality nurtures demand. Driven by demand interaction, rural development will achieve a virtuous cycle. In the experience of agricultural tourism, promoting interaction and building vitality through demand requires a clear understanding of the needs of all parties, how to generate interaction, and what kind of feedback can be given. This is the core issue of agricultural tourism development and has become a key focus for rural sustainable development.

The three important roles in the development of agricultural tourism are rural areas, villagers, and tourists. It is necessary to clarify the needs of the three parties in order to target them, find ways to meet their needs, and promote interaction. Firstly, for countryside, there is currently an imbalance in development between urban and rural areas, with inadequate allocation and utilization of production factors and resources in countryside. This has led to difficulties in upgrading and transitioning agricultural tourism consumption to the middle and high-end consumption levels, resulting in a longterm stagnation at relatively low consumption levels, and the continuous expansion of urban and rural consumption levels. The ways to promote the

integration of urban and rural production and consumption, and enhance the visibility and influence of rural areas, become the main demand point in rural areas. Secondly, for villagers, especially the elderly in the village, through the transformation of the rural ecological environment, the quality of life of some elderly people has been improved, and they have received certain material satisfaction, but they still lack spiritual fulfillment. In order to alleviate the mental life difficulties of the elderly and rebuild their self-worth identity, on the basis of insisting on external communication, through the design of aging friendly agriculture and tourism, it is necessary to construct a work activity space for the elderly, enabling them to re-enter social social life, re-establish connections, ultimately meet their needs for realizing self-worth, and change their perception of self-worth. Finally, for tourists, more and more people are beginning to favor leisure agriculture and rural tourism. From tangible to intangible, from material to spiritual, agricultural tourism is no longer just about sightseeing and experiencing rural characteristics. Based on rural and agricultural civilization, tourists' consumption needs are shifting towards higher spiritual satisfaction. The spiritual satisfaction emphasized by tourists requires a sound team, rich and diverse activities and service content to support, and more importantly, the unique connotations of rural history, culture, stories, intangible cultural heritage, etc. to create a rural brand and let people feel the vitality and enthusiasm of the countryside. In this process, how to effectively build a spiritual channel between villagers and tourists will directly affect the satisfaction of the agricultural tourism experience.

The upgrading of consumption levels in countryside, the integration of urban and rural areas, and brand promotion can be met by tourists. The self-value identification and social relationship reconstruction of elderly people's needs can be met by tourists. Tourist needs for sightseeing agriculture experience, parent-child humanistic education, and emotional value services can be met by villages and villagers. In this way, mutual needs form a closed loop. With the help of the aging-friendly design of agriculture and tourism as a platform, the three parties have also had more communication and interaction due to their respective needs, deepening mutual understanding, breaking down intergenerational barriers, and alleviating communication barriers.

# 5. PRACTICE OF AGING-FRIENDLY DESIGN FOR AGRICULTURAL TOURISM WITH THE GOAL OF DEMAND INTERACTION

## 5.1 Environment Renovation of Rural Agricultural Production and Breeding

Agricultural production and breeding are important components of the development of agricultural tourism. Due to the long production and breeding cycles and high barriers to entry, it is difficult for ordinary tourists to experience the complete process. The existing agricultural tourism experiences are mostly sightseeing, camping, and picking. These traditional experience methods can no longer meet people's growing spiritual needs and cannot bring long-term effective attraction.

Tourists only interact superficially with the rural environment, lacking in-depth cultural exchange. In this process, rural elderly people, who play an important role, did not participate and their importance was not fully reflected. After conducting multiple field investigations, it is found that through the improvement of the living environment, some village buildings have been repaired, but there are still abandoned houses, and the breeding area is still in the state of simple brick and soil wooden houses, which seriously affects the overall appearance of the countryside in terms of vision and smell. Therefore, the key to the agingbreeding friendly transformation of the environment lies in providing a high-quality breeding environment for the elderly with pleasant senses, good hygiene, and convenient operation through agricultural production and breeding that belongs to rural characteristics. At the same time, it attracts tourists to stay by actively interacting and providing meticulous services. Through agricultural breeding, it promotes communication and exchange between residents and tourists, bringing a richer experience of agricultural tourism spirit.

From the perspective of meeting high-level needs, the aging-friendly transformation of the breeding environment should, on the one hand, meet the needs of rural elderly people to realize their self-worth. By creating rural agricultural tourism characteristics through agricultural breeding, it can drive economic development. The agricultural labor achievements and scientific and educational services of the elderly can be recognized by tourists and society, effectively establishing a sense of self-worth recognition,

getting rid of marginalized value experiences, and alleviating the current situation of spiritual life deprivation. On the other hand, it is necessary to meet the social and self-esteem needs of tourists. The key to meeting social and self-esteem needs is to strengthen emotional communication between people. Through the transformation of agricultural production and breeding environments, using agricultural tourism experience as an interactive medium, emotional communication will have a carrier, which can effectively narrow the distance between rural areas and tourists, and between the elderly and tourists. On the basis of active interaction, villagers can provide agricultural tourism services to tourists more naturally. Tourists can feel the care, attention, and respect given by the countryside and villagers, and fully integrate into the unique rural culture, thus forming a deep cultural exchange in spirit.

The new breeding environment should not only improve the level of modern breeding, but also expand the production chain through various interactive forms and sales methods, so that the elderly can easily raise and obtain more economic benefits. The interaction and sales methods should refer to the existing pet experience point model, while meeting the interests of tourists, there is also a necessity to highlight the importance and scientificity of agricultural production and breeding, and integrate scientific and educational concepts into agricultural tourism activities. Taking poultry farming environment as an example, improvements need to be made in the following aspects:

- Styling issues. Most of the existing rural breeding sheds have simple structures and abrupt appearances, which cannot integrate with the unique rural culture and seriously affect the overall appearance of the countryside in terms of visual perception. Therefore, in the design, it is necessary to incorporate cultural elements of rural characteristics and maintain a unified style. ("Figure 1")
- Smell issues. Due to the narrow streets and uniform heights of houses in countryside, natural winds are difficult to circulate. In addition, inadequate cleaning can cause the sheds to produce a special odor of poultry, which is unfriendly to villagers and tourists and makes them stay away. In order to attract tourists to stop and generate positive interaction, it is a must for the breeding shed to have a good sensory experience and enhance olfactory perception.

- Interaction issues. Most breeding sheds are designed with metal fences, and the cold and aloof atmosphere caused by the captive feeding method cannot stimulate effective interaction enthusiasm among tourists. This suppression and estrangement will only keep tourists away. Therefore, for the design of rural breeding sheds, it is necessary to fully reflect respect for life, including respect for animals and respect for humans. It is also necessary to provide better living environments for animals and better interactive experiences for humans. The breeding shed should be easy to observe the internal activities and hygiene issues of poultry, remove the metal fence design, and liberate mental repression. Communication without emotional barriers can stimulate tourists' enthusiasm, stop and stay, form more direct and positive interactions with animals and villagers, and thus stimulate demand and services, promoting economic development.
- Vitality issues. In hot summers or cold winters, birds can have a smaller range of outdoor activities and their state will remain low, losing vitality. When designing a feeding shed, designers can expand the activity space of birds from a vertical perspective, design activity supports, while maintaining stable temperature inside the shed and alleviating

- negative states of birds, in order to have better interaction with people. ("Figure 2")
- Science and education issues. On the basis of providing positive interaction in the agricultural breeding process, there is a must to fully consider the scientific and educational connotations contained in agricultural tourism. The transformation of agricultural breeding environment should combine agricultural science and education with tourism resources, providing tourists with a living experience area that integrates rural sightseeing, educational research, agricultural experience, and ecological science popularization. Villagers, especially the elderly in the village, need to actively integrate into it, using the cute image of young birds to attract tourists to stop, and teaching basic scientific breeding methods to fully interact with tourists, so that tourists can feel the significance of development, experience hardships of agricultural breeding, attach importance to the value of farmers for national development, give villagers enough recognition and respect from the bottom of their hearts, gradually meet the needs of rural elderly to realize their selfworth, establish a sense of self-identity, and get rid of marginalized value experiences.



Figure 1 Design details of chicken coop scheme.



Figure 2 Chicken coop design. (Designer: Yang Ziyi)

### 5.2 Innovative Inheritance of Rural Culture

Rural traditional culture, folk art, and intangible cultural heritage are indispensable and important contents in the development history of China. Among them, mythological stories, as a classic cultural form, gather people's rich imagination and wisdom, and condense a new interpretation of life. It is precisely because of the existence of mythological stories that people today can focus on history and summarize the cultural and artistic creations of humanity in search of answers. Inheriting and developing rural traditional culture is of great significance for continuing history, promoting civilization development, enhancing cultural confidence, and building a cultural powerhouse. However, these classic stories are disappearing at an alarming rate and are almost lost. The effective way to save traditional culture is to endow them with commercial value through design methods, allowing these abstract mythological stories to circulate in the market and people's lives in a visualized state. This requires using rural revitalization as a platform and the design for the aging of agriculture and tourism as a path to shape the characteristics of rural agriculture and tourism, create rural cultural brands, and tell rural stories well.("Figure 3")

To do a good job in inheriting rural culture, it is necessary to pay attention to cultural disseminators, cultural inheritors, and innovative ways of inheritance. Taking the inheritance of mythological stories as an example, the disseminators are the elderly in the village, who witness the development of the countryside and absorb many cultural connotations of the countryside. The stories passed down from generation to generation are their unique rural imprints. The inheritors are the children in the village and foreign tourists, among whom the children in the village are the main audience for mythological stories. Mythical stories accompany them as they grow up, serving as an emotional bond between them and the countryside, and as a memory code for them to recall the countryside. For foreign tourists, they are an excellent carrier for the dissemination of rural traditional culture. The inheritance of rural traditional culture cannot rely solely on internal personnel in the countryside. The coverage is small, the dissemination speed is slow, and the ideal effect cannot be achieved. At this time, more external vitality is needed, through word of mouth and point-to-point communication, to give rural stories stronger vitality and attract more inheritors to join in. Innovative inheritance methods require the use of aging-friendly designs in agriculture and tourism to closely connect communicators and inheritors, starting from their respective needs and utilizing modern experiential methods to encourage more

people to participate in rural cultural construction and stimulate rural vitality through cultural connotations.





Figure 3 Visual Design of "Cowboy King Legend" in Wangshan Village, Zhuhai.

The aging-friendly design of agricultural tourism should serve as a carrier for spreading traditional culture, allowing more elderly people in rural areas to participate in public activities and gain new social roles, telling rural stories well, guarding rural history, constantly rebuilding selfworth cognition, and establishing cultural confidence. If traditional culture is to be deeply rooted in people's hearts, strengthening sensory stimulation is an important way to retain memory points. Firstly, in terms of visual aspects, abstract characters in mythological stories should be concretized. Visualization is the top priority for doing a good job in inheritance. There is a must to integrate traditional mythological stories with original IP designs, analyze the historical background, character identities, key elements, and popular IP toys in mythological stories in recent vears. Through extensive appreciation POPMART and similar trendy toy products, designers will study the design points of various aspects in the Q-version image, so that the appearance of the characters can be loved by young consumer groups and children, and create agricultural tourism characteristic cultural and creative products. ("Figure 4") Secondly, in terms of touch, based on the integration of mythological stories and original IP design, traditional rural handicraft manufacturing should be combined with trendy toys to promote rural characteristic

handicraft products. Rural elderly people can pass on handicraft techniques through handicraft markets, handicraft making activities, parent-child classrooms, etc., connecting various experiences, contents, and knowledge, and linking rural areas with tourists through a deeper knowledge chain. In the process of driving consumption upgrading, tourists can gradually deepen their understanding of mythological stories and feel the charm of mythological stories through personal experiences. Finally, in terms of auditory experience, in addition to the visual and tactile experiences mentioned telling and dissemination above, the mythological stories require the integration of auditory experience. Through activities such as parent-child classes and handicraft production, the elderly in the village can tell mythological stories to tourists from their own perspectives. After tourists understand the background of the story, they will form new self-interpretations based on their cognition. By combining IP images and handmade activities, they can continuously create "new" mythological story content and give mythological stories new vitality. At the same time, tourists will deeply feel the rich cultural heritage of rural areas and the important role of rural elderly. The value incentives given by tourists to rural elderly will further stimulate their enthusiasm to participate in activities and achieve self-value reconstruction. Rural areas, villagers, and tourists

work together to establish a harmonious and interactive atmosphere of mutual understanding. Through the interaction of various factors such as perspective, touch, and hearing, a complete and rich

set of agricultural tourism cultural examinations will create a unique rural cultural brand and help promote rural revitalization and development.



Figure 4 The Legend of Cowboy King "clay handmade model. (Designer: Chen Hengzhan)

### 6. CONCLUSION

At present, a single form of agricultural tourism experience is no longer able to keep up with the development pace of rural revitalization. In the future, the development of agricultural tourism should emphasize demand interaction strengthen the cultivation of internal motivation. In the process of agricultural tourism development, it is necessary to fully tap into the potential value of rural elderly people, continuously establish a sense of value identity for the elderly, stimulate development motivation from within countryside, and build a dynamic countryside. Through demand interaction and sustainability, people can jointly promote the high-quality development of agricultural tourism design for aging.

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