Technological Innovation Problems and Countermeasures of Rural Tourism in Zhejiang: A Case Study of Tengtou Village, Ningbo City

Jianqiang Hu, Liao Jiang, Lin Wan, and Jiaqian Si

Abstract—The provincial rural tourism in Zhejiang is still on a developing and lifting stage. Therefore, there is desperate need of a technical innovation executing on Zhejiang rural tourism. Takeing Tengtou Village as a typical case, the article conducts a in-depth investigation on the three aspects of rural tourism technical innovation, namely, products innovation, management and service innovation, and marking innovation, and also hopes there is a guiding to the other parts of the rural tourism.

Index Terms—Tengtou village of Zhejiang Province, rural tourism, technical innovation.

I. INTRODUCTION

Rural tourism is a kind of traveling activity that occurs in non-urban areas where supported by rural cultural landscapes (agricultural producing and rural settlements), and relied on local farmers as business units providing service for tourists (most are urban residents) [1]. Because it carts to the need of changing demands of city visitors and building a harmonious new countryside, rural tourism has developed rapidly all over the country in recently years. Due to its developed regional economy, its mature tourism market, the abundant tourism resources and advanced infrastructure, Zhejiang is equipped with good conditions for rural tourism.

The rural tourism in Zhejiang Province started early and has being developed fast. By the end of 2010, the Zhejiang province reported a total development of 2,710 rural tourism villages, 14,672 viable farm units, 87,659 industry practitioners, tourism reception of 55,508,400 visitors, and annual business income reached 5,443 billion yuan [2]. On the whole, however, the provincial tourism is still on a developing and lifting stage, there are still many problems such as tedious tourism product and less deep digging on cultural connotation of rural and so on

Therefore, there is a desperate need of technical innovation executing on Zhejiang rural tourism to extend its life cycle, enhance its competitiveness, and ultimately realize the maximization of economic, social and environment benefits. This article selects a typical rural tourism village in Zhejiang ---Tengtou Village as an empirical study subject to develop in-depth analysis.

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II. THE DEVELOPMENT SITUATIONS OF RURAL TOURISM OF TENGTOU VILLAGE

Tengtou village is the outskirts of Fenghua under Ningbo, is located in a coastal area in China's eastern Zhejiang Province. 27 kilometers away from ningbo city, state-level scenic xikou 12 km. It has 343 households with 817dwellers in total and Immigration 6500. It has successively won some 70 titles and honors such as the Global Ecology Top 500 by the UK in1997 and the national environmental education base by the SEPA in 1997 and in 2001 is evaluated national AAAA tourist area. In 2009, Tengtou received 1.19 million tourists, with the tourism ticketing revenue reaching 26.3 million yuan, and even break through 36 million yuan in 2010. In 2010, Tengtou Village is approved by the national AAAAA tourist scenic spot, in addition, was chosen to be the only village in the world to join the UBPA of the World Expo 2010[3]. With the influence of the world expo and the publicity, Tengtou Village set up the experience a demonstration site, also known as the "world expo tourism year". As the model of rural low carbon tourism, Ningbo Tengtou UBPA rural tourism did a beneficial attempt in sustainable development [4], [5]. On the whole, however, the provincial tourism is still on a developing and lifting stage, there are still many problems as the following: tedious tourism product and less deep digging on cultural connotation of rural, vacancies in macro-level management and insufficient in industrial development design, a particular thorny in resource development and environment protection[6]; extensive operation management and service facilities and quality should be improved; lacking of market development capabilities, unified brand and marketing system has not yet formed, etc.

III. THE CONSTRUCTION OF TECHNOLOGICAL INNOVATION PATTERN OF RURAL TOURISM

Technological innovation refers to the entrepreneurs to seize the market opportunities for commercial profit by re-organizing production conditions and factors to make a high efficiency and low cost management system. By producing new products, exploring new markets, they can have access to new sources of supply of raw materials or semi-finished products to establish a new business organization, which include science and technology, organizations, business and finance [7]. Take this as the conference, the technological innovation of rural tourism mainly refers to the combination of new scientific and

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technological means, cultural creativity and regional characteristics of rural tourism and tourists' demand, which will increase the technology content to provide new tourism programs, open up new tourism source market, and provide new services. It will also involve the activities such as technology development, project planning, service management and product marketing. This paper argues that technological innovation of rural tourism mainly includes three aspects: product innovation, management and service innovation, and marketing innovation. The technological innovation of rural tourism is shown in Fig. 1.



Fig. 1. The technological innovation of rural tourism

IV. THE STUDY OF POLICY OF TECHNOLOGICAL INNOVATION IN RURAL TOURISM OF TENGTOU VILLAGE

A. The Technological Innovation of Rural Tourism *Products*

Technological innovation of tourism is a two-way process, which begins in tourism market and returns to the tourism market as well. Alternatively, we can say it is tourism-market-oriented and focuses efficiency. on Moreover, the symbol of a successful rural tourism technological innovation is the realization of the commercial value of tourism product [8]. Therefore, technological innovation of rural tourism products must take ecological environment resources as a foundation, market as guidance, innovation a means and study the demand of tourists' and tendency of tourism market promptly. It should also pursue the principles of "newly", "wonderful", "beautiful", and "happy" and grasp the market tendency of tourism from sightseeing to vacation taking from visiting to participation. Moreover, the technological innovation of village tourism should provide new village tourism products around six tourism elements of "eating", "housing", "moving", "visiting", "shopping", "entertaining", which will improve the life cycle of tourism products and promote the sustainable development of village tourism.

At present, the key points of technological innovation of rural tourism in Zhejiang province is on the transformation and upgrading of products, extending from surface consumption to deep consumption and evening entertainment in villages.

1) The transformation and upgrading of products

Presently, the rural tourism products in Zhejiang is still in early stage of development, that is, it mainly takes the forms of agritainment, rural restaurants, theme parks and farms, and cultural village, all of which develop in the form of low-cost, culture and participation. To achieve the further developing rural tourism, we must take hold of main tourism products and implement innovation unceasingly by utilizing the strategy of product transformation and upgrading. In order to realize product's transformation and upgrading, we should not only strengthen the exploration of tourism products' connotation, the development of new products, the study of products' category, but also speed up the positive application of research results by connecting theoretical research and practical development, which will achieve the transformation of scientific technology to the productive force. Looking from the tourists' demands and the self-development trend of the rural tourism products, the further development of transformation and upgrading of village tourism will focus on products, mountain vocational entertainment products, etc.

2) Extending from surface consumption to deep consumption

The expanding of rural tourism consumption from surface to depth is, on one hand, the manifestation of upgraded tourists' demand in that tourists' attending rural tourism does not mean low consumption, on the contrary, tourists still have the impulse and demand form high-class consumption; on the other hand, it is the inevitable result of the depth exploration of rural tourism products. Compared with traditional tourism products, the depth exploration of rural tourism products will bring more fun and joy and more anticipations to customers. It means higher tourism efficiency. Therefore, the increase of expense in a certain range will be acceptable and understandable by tourists. At the same time, the depth of product development often means an increase in development cost, which inevitably will lead to the upgrading of consumption level. This is also an effective way to realize the new rural construction and improve the rural economy income.

In order to realize the consumption in rural tourism to be expanded from surface to depth, we should not only strength the development of high-level rural tourism products, but also implement urban fashion consumption elements into rural tourism, so that we can further develop the consumption of rural tourism.

3) The exploration of evening entertainment in villages

There are generally only day activities in some traditional rural tourism products. However, with the innovation and development of new village tourism products such as rural communities, rural holiday tourism, country clubs, there appears an increasing phenomenon of tourists' staying overnight in village, which also increases the demand from tourists form leisure and recreational activities at night in villages. Although at present, there is an increase of evening activities of rural tourism such as bonfire party, village night walking. Generally, it still belongs to low level of leisure and recreational activities. The further development of rural tourism in Zhejiang needs to strengthen the products of evening leisure and recreational activities and tourism programs to alleviate the current situation of evening activities in village being sole. By doing this can we meet tourists' demand for village night walking and evening leisure activities.

B. The Technological Innovation of Management and Service in rural Tourism

The technological innovation of management and service in rural tourism mainly includes the innovation of management system and the improvement of service means pertinent to tourism such as transport, communication, accommodation, sightseeing, entertainment, safety, supervision, tourism business and handling complaints.

1) The innovation of organizational system

Mainly refers to the creation of incentive mechanism for Tengtou village communities' participation in the innovation. It includes the following aspects.

a) To participate in the planning and decision-making process about rural tourism development

Rural residents of Tengtou village should be involved in the establishment of local rural tourism, planning and formulating specific strategies for realizing the goal of rural tourism object.

b) To participate in the training of skills related to tourism

It includes three aspects approximately: the first is the education about tourism, the second is education about environment awareness and the third is the training about tourism service skills and management knowledge.

c) To participate in the protection of rural natural and cultural environment

Rural communities of Tengtou village need to establish certain channel to reflect the environmental requirements of the rural population, let them participate in the making of rural environment policies, and taking part in the operation of environmental organization, which will in the end form a good social atmosphere of ecological environment protection.

2) The innovation of management pattern

3) The innovation of tourism infrastructure

To strengthen the comprehensive construction of tourism facilities, Tengtou village should attach special importance to the following tow aspects:

- a) Improving the transportation and health facilities
- b) Improving the waste processing system
- 4) The technological innovation of tourism service

Rely on the ideas of tourism service innovation to promote the tourism service quality and level as well as accelerate the pace of agritainment of Tengtou tourism development in rural Zhejiang.

- a) The innovation of service pattern
- b) The construction of village indication system

5) The innovation of environment and resources protection

A good ecological environment is the important foundation for the development of village tourism and sustainable development of social and economy [9]. Therefore, we must maintain a good ecological environment in the process of tourism development and movement. In addition, the sustainable development of rural tourism can be achieved by paying attention to environment and tourism resources protection.

C. The Technological Innovation of Village Tourism Marketing

1) Image planning and orientation

The image of rural of Tengtou tourism consists of the following four dimensions, that is, the basic level, chancing level, explicit level, and promoting level. Each level is the base for next level that constitutes a "tower" shape model of rural tourism image [10]. rural tourism image orientation refers to the strategic design of tourism brand based on the precise summary of core tourism resources of rural area in order to occupy a unique position in the target tourists' mind. The description of rural of Tengtou tourism theme image should be objective, accurate and comprehensively demonstrate the geographical characteristics of tourism places of rural. At the same time, it should take full account of the situation and the needs of the target market preference.

2) Information dissemination

Along with the growing tendency of information networking, rural of Tengtou village tourism in Zhejiang should carry out the Internet marketing vigorously. Today's Internet is no longer limited to simple functions such as data and image demonstration, but expands to new functions which include e-commerce, virtual tour. Of course, taking into consideration the actual situation, some farmers can still take marketing and traditional media advertisement as important means of complement. In addition, they can cooperate with travel agencies to carry on the selling and promotion of village tourism products by applying GIS technology. GIS technology enrolls computer graph and database together, combines the geological location of rural tourism with related characteristics.

It can provide decision-making reference for the tourists while selecting the best travel route, which opens the door of convenience for the expanding of the market of rural tourism in Zhejiang.

V. CONCLUSION

Rural tourism demonstrates a great vitality, broad prospect and deep progress potential in the economic and social development of Zhejiang province. Rural tourism and new rural construction are interactive and mutual-promoted [11]. We must address the current problem existing in the rural tourism in Zhejiang; vigorously implement technological innovation to inject new vitality into rural tourism. By realizing scientific management, expanding customer market, extending life cycle, enhancing comprehensive competition, we can build a demonstration pattern of rural tourism-driven new rural construction to provide a reference for other areas' rural tourism and new rural construction.

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REFERENCES

- [1] D. Tang, "On Chinese Vacation," *Business and Management*, vol. 177, no. 7, pp. 71-74, 2006.
- [2] J. Hu, L. Jiang, Q. Zheng, and G. Wan, "Model Innovation of Village Resort—Leisure-oriented Service Economy Trends and Management," *Ecological Economy*, vol. 3, no. 222, pp. 121-123, 2010.

- [3] T. Zou, "The Pattern and Policy Orientation of Village Tourism Promoting New Rural Construction," *Journal of Fujian Agriculture* and Forestry University (Philosophy and Social Science Edition), vol. 11, no. 3, pp. 31-34, 2008.
- [4] C. Lin, J. Zhe, and H. Feng, "Tourism Industry to "International Standard," *China's Weekly Economy*, vol. 10, 2008.
- [5] Y. Fan, "Technological Innovation of Village Tourism in Zhejiang Province," *Economic Forum*, vol. 20, pp. 19-21, 2008.
- [6] M. Deng, "Technological Innovation of Village Tourism in Huanghou Village, Wuming County, Guangxi Province," *Anhui Agricultural Science*, vol. 37, no. 11, pp. 5089-5090, 2009.
- [7] Q. Xu, "On the Depth Exploration of Tourism Products in Zhejiang Province," *Zhejiang Agricultural Science*, vol. 2, pp. 236-237, 2009.
- [8] J. Wu and X. Zheng, "The Development Problems and Counter measures of China's Village Tourism," *Journal of Guilin Institute of Tourism*, vol. 3, pp. 8-9, 2004.
- [9] Joint Research Group of Ecological and Harmonious Country-the world. "Ten Big Enough toRural Harmonious Head Revelation of the Construction of New Countryside," *Today*, vol. 22, pp. 46, 2007.
- [10] Low Carbon World Expo. "Ningbo Head Village," Science, no. 10, 2010.
- [11] Q. Zhou, "A Great Village-Zhejiang Fenghua Tengtou Village Construction New Socialist Countryside," *China's Collective Economy*, 2009.