

## Research on the Spatial Evolution of Tourism-Oriented Rural Settlements: Take the Xiaochanfangyu Village, Dongshuichang Village, Maojiayu Village in Jixian County, Tianjin City as Examples

**Authors :** Yu Zhang, Jie Wu, Li Dong

**Abstract :** Rural tourism is the service industry which regards the agricultural production, rural life, rural nature and cultural landscape as the tourist attraction. It aims to meet the needs of the city tourists such as country sightseeing, vacation, and leisure. According to the difference of the tourist resources, the rural settlements can be divided into different types: The type of tourism resources, scenic spot, and peri-urban. In the past ten years, the rural tourism has promoted the industrial transformation and economic growth in rural areas of China. And it is conducive to the coordinated development of urban and rural areas and has greatly improved the ecological environment and the standard of living for farmers in rural areas. At the same time, a large number of buildings and sites are built in the countryside in order to enhance the tourist attraction and the ability of tourist reception and also to increase the travel comfort and convenience, which has significant influence on the spatial evolution of the village settlement. This article takes the XiangYing Subdistrict, which is in JinPu District of Dalian in China as the exemplification and uses the technology of Remote Sensing (RS), Geographic Information System (GIS) and the technology of Landscape Spatial Analysis to study the influence of the rural tourism development in the rural settlement spaces in four steps. First, acquiring the remote sensing image data at different times of 8 administrative villages in the XiangYing Subdistrict, by using the remote sensing application EDRAS8.6; second, vectoring basic maps of XiangYing Subdistrict including its land-use map with the application of ArcGIS 9.3, associating with social and economic attribute data of rural settlements and analyzing on the rural evolution visually; third, quantifying the comparison of these patches in rural settlements by using the landscape spatial calculation application Fragstats 3.3 and analyzing on the evolution of the spatial structure of settlement in macro and medium scale; finally, summarizing the evolution characteristics and internal reasons of tourism-oriented rural settlements. The main findings of this article include: first of all, there is difference in the evolution of the spatial structure between the developing rural settlements and undeveloped rural settlements among the eight administrative villages; secondly, the villages relying on the surrounding tourist attractions, the villages developing agricultural ecological garden and the villages with natural or historical and cultural resources have different laws of development; then, the rural settlements whose tourism development in germination period, development period and mature period have different characteristics of spatial evolution; finally, the different evolution modes of the tourism-oriented rural settlement space have different influences on the protection and inheritance of the village scene. The development of tourism has a significant impact on the spatial evolution of rural settlement. The intensive use of rural land and natural resources is the fundamental principle to protect the rural cultural landscape and ecological environment as well as the critical way to improve the attraction of rural tourism and promote the sustainable development of countryside.

**Keywords :** landscape pattern, rural settlement, spatial evolution, tourism-oriented, Xiangying Subdistrict

**Conference Title :** ICCAUP 2017 : International Conference on Computer-Aided Urban Planning

**Conference Location :** Miami, United States

**Conference Dates :** December 14-15, 2017