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## Assessing the Bearing Capacity of the Environment in the Target Villages of Tourism (Case Study: Kang Village)

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### 1. Introduction

In recent decades, the growth and development of the tourism industry and its adoption as one of the major economic activities by developed and developing countries and competition for major tourism destinations in order to attract tourists has led planners to increase tourism revenues (Farrel & Mation, 2002). In recent years, rural tourism has been considered as a tool for achieving economic, social and recreational growth. Rural tourism promotes economic growth, creates diversity and stability in employment, dynamics of trade and industry, expands opportunities for income-generating activities, creates new markets for agricultural products, and expands the base of a regional economy. Although rural tourism has been considered as one of the strategies of rural development in recent years, the level of environmental vulnerability in tourism target villages is still high for tourism development and is not well prepared (Munar, 2002). On the other hand, the rapid growth of the tourism industry in the last half century has led to increasing pressure on the environment. Studies have shown that prioritizing the economic benefits of tourism development has undermined the principles of sustainable development in different areas and has put the environment at risk (Mexa & Coccossis, 2004). Therefore, one way to reduce environmental pressure is to determine the capacity of different tourism areas and to determine the amount of space required by users based on this capacity. Determining the amount of space required for each user depends on various factors, and the most important is the number and the type of tourists and travelers who use tourist sites for different purposes. The number of tourists allowed to enter the place is also determined by the capacity of the tourist complexes. Among the main purpose of this research is to determine the amount and number of tourists in terms of environmental potential of Kong village.

### 2. Materials and Methods

The research methodology is applied in terms of purpose and is descriptive and analytical. Data collection was done in both library and field formats and field studies were conducted through observation and interview with villagers. In the present study, three

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types of physical, real and effective acceptance capacity were used to measure the capacity of tolerance in Kang village. According to observations and field studies, the most important limiting factors for tourists in the Kang village are estimated to be climatic characteristics. In this study, 4 factors including severe sunshine, number of frost days, highest maximum temperature above 30 ° C. The highest minimum temperatures below 5 ° C were considered as the main constraints of the region for tourism development. This research was carried out in the tourism area of Kang village, in Khorasan Razavi province, 29 km southwest of Mashhad city with 160 hectares with latitude of 59° 11'85 east longitude and 36° 20'59 north latitude in a mountainous position. This region is located in the north of Nangarhar village and in other directions among the Binalood mountains and is temperate and has mild summers and cold winters. This range has many highs and lows and ranges in altitude from at least 1200 meters to up to 3300 meters. The dominant slope of the region is between 25-35%. The area has high tourism values in terms of diverse mountain landscapes, lush valleys and gardens and natural landscapes.

### **3. Result and Discussion**

As it was mentioned in the specialized studies of tourism feasibility study and for loading of tourism activities, one of the important issues in this field is the capacity of tolerance or acceptance of the area which has to be studied from both physical and human dimensions. The number of visits per day to the village is due to the attractions available in the village under study based on interviews with local managers. Finally, based on the maximum daily minimum temperature below 5° C for the village, about 90 days has been set. Tourism capacity of Kong village is estimated at 52,240 people per year, taking into account the stated environmental and climatic conditions.

### **4. Conclusion**

In the process of planning the development of the tourism industry, identifying the appropriate areas for tourism development and leisure time, categorizing and prioritizing and ultimately determining the levels of equipment according to their functions and functional status is very important. In fact, the planning of tourism areas should take into consideration the type of tourists, their preferences, the types of resources and attractions of the regions, market segmentations, and so on. The study area is a type of centralized tourism with the aim of providing diversified services to tourists in Kang village. The most important tourism resources of the region have been the beautiful natural landscape, the surrounding altitudes, the existence of gardens in the area, the existence of two permanent rivers, the enjoyment of indigenous culture, historical and stepping-stone habitats and so on. Due to the type of tourists that are mainly regional and come from Mashhad to this village, the needs and limitations of tourists and the amount of facilities required have been discussed. According to the surveys, these facilities mainly include accommodation, catering, services, recreation and more. In this study, in order to calculate the physical tolerance capacity of the tourism area of the village, this amount was estimated to be 1536,000 people per year considering the hours of tourist presence and required space the amount of effective tourism bearing capacity was calculated,

taking into account the maximum physical capacity, environmental constraints and available tourism services and facilities, which was calculated as 303015.

Based on the calculations made for the study area, the physical capacity of tourist acceptance in the target village of Kang tourism is 1536,000 persons per year. It should be noted that according to the field studies and interviews with local managers, the number of tourists visiting the village during the year is about 96,000, with a large difference in physical reception capacity and actual number of visitors, indicating that the village Kang still has a high physical capacity to attract tourists. Also, in terms of actual bearing capacity, the number of tourists was 52,240 people per year, well above the current number of visitors (96,000). Thus, the effective bearing capacity was calculated to be 303,015 persons per year, which is more than the current number of visitors. But the important point is that since the physical reception capacity of the area is calculated only on the basis of area, it cannot be a criterion for rural planning and tourism but because of the actual reception capacity, tourism constraints and effective reception capacity, facilities and services available. The results are somewhat closer to reality and more effective in rural planning.

**Key words:** Actual Tolerance Capacity, Physical Acceptance Capacity, Effective Tolerance Direction, Kang Village, Torghabeh & Shandiz County

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