

## punjab geographer



A PEER REVIEWED AND REFEREED JOURNAL OF APG AND ISPER INDIA



October 2019

## ASSESSMENT OF TOURISM CARRYING CAPACITY IN SELECTED DESTINATIONS OF COLD DESERT AREA OF KINNAUR DISTRICT, HIMACHAL PRADESH

### **Doctoral Dissertation Abstract (2019)**

Author: Ravinder Jangra Supervisor: Dr. S.P. Kaushik

Professor

Department of Geography, Kurukshetra University, Kurukshetra

The present study seeks to estimate the tourism carrying capacity of selected destinations in cold desert area of Kinnaur district of Himachal Pradesh. These destinations have the potential to emerge as a hub of tourist activities in near future. The unplanned development of infrastructure has affected the natural aesthetic attractions of these destinations and created a situation of losing recovery capacities of ecosystem. The estimation of Tourism Carrying Capacity (TCC) will help to establish mechanisms leading to the participation of tourists connected to the high altitude areas of Kinnaur district. It will thereby contribute to development of eco-friendly tourism proposals that would be important for the welfare of Kinnaur district.

### **Study Area**

Kinnaur district is situated in the northeastern part of Himachal Pradesh between 31°05'50" and 32°05'15" north latitudes and 77°45'00" and 79°00'35" east longitudes near the Indo-China border. Due to limitations on the part of researcher, Chitkul, Kalpa and Nako are the major tourist destinations selected for the present research work.

### **Objectives of the Study**

Keeping in mind the tourism planning and sustainable tourism development, the present study aims to achieve the following objectives:

- to analyze the trends and seasonality of tourism in Kinnaur district;
- to evaluate the physical and social carrying capacity of the selected tourist destinations by examining the perception of the host communities about tourism development in the study area;
- to assess the existing basic and tourism related infrastructure and impact of tourism pressure on the environment at the selected destinations;
- to examine the tourist's perception about tourism development in the study area;
- to make suggestions for sustainable and eco-friendly tourism in the high altitude mountain areas of the district.

### **Database and Methodology**

Study is primarily based on primary sources of data collected through survey of individual respondents and focused group interviews carried out during the month of June in the year 2016. However, relevant data are

also collected from secondary sources to fulfill the objectives of the study. A simple random sampling method is applied to collect the data from domestic as well as foreign tourists. A total of 280 questionnaires, about 80 tourist samples have been collected from each selected tourist destination. In addition, 40 samples have also been collected from Reckong-Peo, the district headquarter of Kinnaur which is the major center of tourism. The assessment of tourist carrying capacity is carried out by adopting the model developed by Cifuentes (1992). Similarly, parking capacities are calculated by adopting the standards given by the Indian Road Congress (IRC). To evaluate the perceptions of the local population, different methods i.e. skewness and kurtosis, principal component analysis (PCA), mean ranking, analysis of variance (ANOVA) and radar diagram has been adopted. For the measurement of tourism pressure, indices like Tourism Pressure Index (TPI) and Tourism Density Index (TDI) were used. Also, the nonparametric Mann-Whitney U-test as well as Kolmogorov-Smirnov test has been applied to evaluate mean differences between different samples i.e. national or international tourists.

### Organization of the Material

The present study is composed of ten chapters. First chapter deals with introduction of research problem and related issues. Second chapter looks into the theoretical and conceptual framework of the study. Third chapter provides details about the sources and types of data, methodology of their collection and utilization. Chapter four deals with the trend of tourism development at diverse levels and seasonality of tourist arrivals in the study area. It also outlines possible strategies for tourism development. It has been observed that Kinnaur emerged as an alternative tourist destination to Srinagar after the advent of militancy in the

state of Jammu and Kashmir during 1989-90. The "Home Stay Scheme" and "Helli Taxi" introduced by the government of Himachal Pradesh boosted the tourism industry in Kinnaur district.

Chapter five assesses the physical, real and effective carrying capacity of selected tourist spots. As per calculations, Physical Carrying Capacity (PCC), Real Carrying Capacity (RCC) and Effective Carrying Capacity (ECC) of selected nine tourists spots in Kinnaur is 64835, 9595 and 5928 persons respectively. Snowfall and landslide are the major constraints, apart from the insufficient parking facilities at all selected tourist destinations. It is found that the present status of tourism activity in the study area is highly under exploited vis-a-vis its carrying capacity is still in its infancy stage of tourism. Sixth chapter deals with the resident's perception towards tourism. The results indicate that most of the respondents are in favor of tourism and there is no evidence of negative feelings towards tourists. In fact, residents wish to see an increase in the level of tourism. They do not perceive that tourism has induced changes in their customs, traditions, social behavior and moral standards.

Chapter seven deliberates upon the infrastructural facilities and needs of the tourists. National highway-22 is the lifeline and major mode of accessibility to and within Kinnaur district. However, it has been featured as one of the most 'deadliest road' in the world. The transport facilities just fulfill the requirement of local people and the frequency of services is low from the tourism development perspective. Furthermore, the facilities for tourist and travel agencies are not sufficient and need to have more trained and registered tourist guide. The annual occupancy rate has been highly under capacity and during peak months occupancy exceeds the limit due to seasonal

characteristics of tourism. Tourists are not satisfied with the facilities of banking and ATMs, whereas the availability of medical services and security facilities has been considered fairly well.

Chapter eight provides a brief account on the impacts of tourism development on the land environment. It has been observed that dense vegetation has decreased while area under sparse vegetation has increased and the interest of local community has shifted towards commercial agriculture, mainly, apple cultivation and little bit towards tourism industry during the period of 1991-2016. The number of hotels have almost doubled, but the land under tourism infrastructure (hotels, home stay, camping) has not recorded significant change. The overall analysis indicates that still,

there has no negative impacts on destinations due to tourism growth; due to its initial stage of tourism development.

Chapter nine focuses on tourist's perceptions towards impact of tourism development. Study reveals that tourists have not perceived any type of pollution and societal barriers. Besides, they perceived that natural magnetisms and socio-cultural milieu of destination attract large number of tourists. The tourists perceive that Kalpa and Chitkul have large potentials to emerge as top tourist destinations in Kinnaur district. Finally, the last chapter includes the conclusions and recommendations of this research that have been drawn on the basis of the analysis and inferences obtained from the overall study of the selected destinations.

# punjab geographer

