



‘Impact Assessment of Carrying Capacity on Tourism Value Chain’

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Abstract

The carrying capacity is the comprehensive and complete tool for managing and controlling problems arising due to uncontrolled and over tourism destinations. This article aims to highlight the impacts of carrying capacity on tourism value chain at Kerwa tourism destination, Bhopal, India. Impacts have been assessed through focus group interview and survey methods. Results of the assessment suggested that obtained impacts results of carrying capacity over Kerwa catchment area lie in “very high impact” category and hence, this is quite important to maintain the carrying of the all the tourism destination in order to establish effective tourism value chain and leading towards sustainable tourism development.

Keywords: Carrying Capacity, Tourism Development and Impact assessment

Introduction

Foreign exchange has a major value in economic development in India and now a days tourism becomes one of the main source. India is a rich country having its own various historic places and its glorious diversities. The Central part of India is filled with variety of natural diversities and is one of the main core points of attraction for the tourists. We find diversities in human culture, animal community and natural ecosystem as well in this middle part of our country. In this context, Buckley (1999) mentioned that undisturbed ecosystems, their works and animal communities are main holders of clean air, water and healthy environments. These are also one of the major attracting factors of tourists in many destinations. If we look into factors influencing tourism and is found that environmental facts are the most sensitive among them. Tourism can be stated as an economic activity having multiple sides and environmental factors are interacted intimately and that’s a reason it may called as a framework of two way process.



State of tourism also plays a vital role in system tourism. On one hand, environmental resources offer one in every of the essential 'ingredients'; an important production issue, for the assembly of the traveler products; the natural and/ or artificial setting for the traveller to get pleasure from, live in, and relax, and on the opposite hand, tourism produces a range of unwanted by-product, that square measure disposed, on purpose and accidentally, to and modify the environment, the case of negative environment externalities (Briassoulis, 1992). The fast however unplanned exploitation and utilization of those resources produce a risk of losing their recovery capacities, destroying the fundamental functionalities among business enterprise areas (Nghi et al., 2007). The conception of 'carrying capacity' as a guide to the management of business enterprise is of a lot of interest. Whereas it's helpful to acknowledge limits to the carrying capability of natural areas used for business enterprise, the conception isn't a simple social control tool. Dissimilar carrying capacities could apply to totally different characteristics of a business enterprise website and carrying capacities might not be separate or outlined (Tisdell, 1998). Despite these disqualifications, it's vital to require under consideration the interactions between business enterprise and different variables at a website, like the standard.

Review of Literature

The carrying capacity concept is not new and is using since long time in wildlife management, and Dasmann in 1945 (Wall, 1983) used first time for assessing the capability of the forests for grazing by animals. Later on, in the beginning of 1960 the concept was used recreationally and the aim was to determine the ecological disturbance from the utilization (Lucas, 1964; Wagar, 1964). It is stated within the literatures that Carrying capacity is the sum-total of the fruitful and assimilative capabilities of that definite ecosystem, in relation to its usage. The natural atmosphere has the potential of manufacturing a given output flow of merchandise and absorbent a given input flow of wastes. This balance defines the strain limits at intervals that the system will compensate and still come back to its original condition. The uncontrolled growth of travellers and tourism activities within the areas of natural beauty and historical significance is exhausting the terribly resources that remodel a section into a tourist destination (Bhattacharya and Banerjee, 2003). The concept of tourism carrying capacity has been wide used for guiding protection and ecotourism connected selections, and also permitting the recreational activities were included at intervals within the natural areas in arranged and organized method which will generate least impact (Carr, 2000; Frascchetti et al., 2002; Gossling, 2002; Coccossis and Mexa, 2004).



Carrying capability is usually quoted as a framework within which the aim of decisive the scope of tourism in an exceedingly destination will be achieved (Hunter and inexperienced, 1995; Inskip, 1991; O'Reilly, 1986; WTO, 1993). Luc, (1998) outlined the tourism carrying capability as “The maximum number of people that use tourism site without unacceptable effect on environmental resources while meeting the demand of tourists”. The determinants of carrying capacity are like; (i) its ability to soak up the tourist development before negative consequences are felt by the host community, and (ii) by the extent of tourist on the far side that traveller flows can decline as a result of the destination space ceases to satisfy and attract those (Saveriades, 2000). .

These areas have numerous researches studies that propose the concern of carrying capacity approaches to moderate the impacts because of specific tourism actions (Davies and Tisdell, 1995; Rios-Jara et al, 2013). Recently, the tourism carrying capacity has concentrated and evidences, demonstrating that the tourism carrying capacity can be a section of a really effective strategy to deal with no. He had focused on maintaining the destinations carrying capacities.

Impact of carrying capacity on Tourism Value Chain

For assessing the full tourist carrying capability with reference to tourism activities in Kerwa geographic area, the primary important gauge is to limit the packing capability of every element considering the likelihood, recent and future impacts relevant to the sector then to approximate the importance worth of every component in an exceedingly consolidated ecological unit as CIV by the specialists. The experts' opinion and results therefore obtained from the Delphi survey through chronological stages which resulted within the classification of indicators (Impacts) and helps in making the baseline questionnaire to check with the material world as on the sector (results from neutral survey). The list of indicators and their impacts therefore known has been listed. The ultimate list of indicators therefore known from the experts' survey and enforced for stakeholders' survey is established on the descriptive and RII values for indicators in every category. Few of the indications were missed from the stakeholders' survey tool, that were either stratified terribly low or area unit merged/ lined in alternative constituent. Tourism value chain would get manage and operated with the help of maintaining carrying capacity over tourism destinations.

In order to measure the impacts of carrying capacity on tourism value chain, Researcher has conducted one sample t-test and Gap analysis and results are computed in table 1



Table 1 Results of One sample t – test for impacts of carrying capacity on tourism value chain

Group	N	Hypothesize Mean	Mean	S.D	Mean Difference	t-ratio	p-value
Tourism Stakeholders	150	25	20.25	0.861	04.75	121.11	0.000**

Source- Primary Data

Table 1 shows that sample mean of total tourism stakeholders’ (N=150) agreement is 20.25 and value of hypothesize or population mean is 25 (test value) and mean difference of 04.75 between them and value of S.D., t-ratio, and p value are 0.861, 121.11 and 0.000 respectively. Hence, p value is 0.000 ($p=0.000 < 0.01$) which is less than 0.01 and 0.05 therefore there is a significant mean difference between sample and hypothesize or population mean of total tourism stakeholders (N=150) agreement towards impacts of carrying capacity on tourism value chain. Further, table 2 shows the level of agreement category of tourists’ satisfaction towards existing impacts

Table 2 Level of agreement towards impact of carting capacity on tourism value chain

Mean Scores	Agreement
5-10	Low
11-15	Average
16-20	High
21-25	Very High

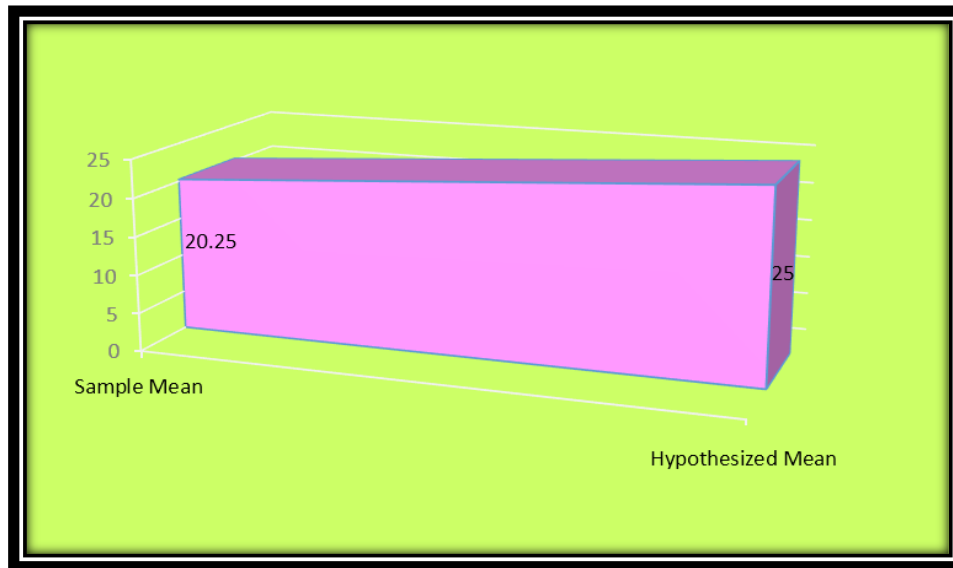


Figure 1 Area Graph of agreement of tourism stakeholders towards impact of carrying capacity on tourism value chain

From table 2 and Graph 1, it is clear that carrying capacity has significant and very high impact on tourism value chain over the tourism destinations.

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