The Social Perspective of Tourism in Review of Sustainability and Carrying Capacity: A Synthesis of Observations and Convictions

K L Ajay*, Deleep Devasia† and Sanoop Kumar PV‡

Abstract

Tourism is an authoritative branch in the socio-economic expansion in present-day epochs, backing diverse ways and reinforces the inter-connected processes. The development of tourism prompts changes, directly or indirectly in the social atmosphere of a destination. Changes in the social and economic fabric of particular towns, regions and even countries can be attributed directly to the advent of tourism and tourists. In light of these aspects, the social carrying capacity approaches involve using attitudes and tolerance levels of the host population to set limits on tourism development. This paper is a theoretical approach that throws light to the sociological perception of tourism with respect to carrying capacity thereby integrating the contemplations and criticisms regarding this subject.

Keywords: Introduction

Restrained as a drive chastised social activity, tourism, is a substantial constituent in the economy of several countries. As a vivacious and escalating comprehensive industry, tourism plays a

* Department of Futures Studies, University of Kerala, Palayam, Thiruvananthapuram, Kerala, India; 1213jay@gmail.com
† Department of Futures Studies, University of Kerala, Palayam, Thiruvananthapuram, Kerala, India; deleepd@gmail.com
‡ Department of Futures Studies, University of Kerala, Palayam, Thiruvananthapuram, Kerala, India
critical part as a source of income as well as a means of livelihood for sundry in the locality. Tourism is an imperative spur of the socio-economic development in the contemporary times, subsidizing in manifold ways and reinforces the inter-connected processes. The World Tourism Organization (WTO) claims that tourism is presently the world’s prevalent industry with annual revenues of over $3 trillion dollars. Figures direct that tourism industry will magnify over years. According to WTO, the international tourist arrivals worldwide will reach 1.5 billion by 2020 (Bhatia, 2001). Tourism also makes a notable stimulus to the development of social and political understanding. Travel fosters a restored kinship among people with assorted regimes. It is thus a vital contrivance for motivating cultural exchanges and international cooperation. The understandings added through travel have a philosophical repercussion upon the life of the individual as well as the society. This paper is a theoretical approach that throws light to the Sociological perception of tourism with respect to carrying capacity thereby integrating the contemplations and criticisms regarding this subject.

Burkhart and Medlik (1974) have classified the definition of tourism into two groups namely; the conceptual and technical definitions (Batta, 2000). While the conceptual definitions elucidate the essential nature of tourism as an activity, the technical definitions provide the typologies of tourists and constituents of tourism activity. There are also holistic definitions, which highlight the impacts of tourism on the environment. Mathieson and Wall (1982) created a good working definition of tourism as “the temporary movement of people to destinations outside their normal places of work and residence, the activities undertaken during their stay in those destinations, and the facilities created to cater to their needs.” Jafari defines tourism as, "the study of man away from his usual habitat, of the industry which responds to his needs, and of the impacts both he and the industry have on the host’s socio-cultural, economic and physical environments” (Bhattacharya, 2005). The definition introduced the new dimension: namely the impacts of tourism development on the host environment. The elements of tourism are identified as tourists, geographical components, an industrial component, and various interactions with the broader environment. Tourism should be seen as the interaction between
supply and demand; the development of a product to meet a need. It is this interaction which introduces economic, environmental, socio-cultural and other effects.

During the transformation stages of tourism, it was seen a smokeless industry in initial stages of the 70s, habitually reliant on using the natural and cultural resources of a destination as attractions for visitors. Tourism was a mass-oriented phenomenon where many destinations experienced rapid development in an unplanned and casual manner to accommodate the enormous incursion of tourists, that resulted in the erosion of both the physical and social status of destinations. The development of tourism prompts changes, directly or indirectly in the social atmosphere of a destination (Saveriades, 2000). Changes in the social and economic fabric of particular towns, regions, and even countries can be attributed directly to tourism. According to renowned journalist John Simpson (2002), as tourism continues to grow and represents a major source of income for individuals, groups, and countries, the question of sustainability and integrity must be addressed in a structured and responsible manner.

The study of tourism as a sociological specialty rather than merely as an exotic, marginal topic emerged only in the 1970s with Cohen’s (1972) typological essay and MacCannell’s (1980) first theoretical synthesis. Since the mid-1970s, the field has grown rapidly, which is attested by the publication of a series of treatises and reviews. (Young, 1973; Turner & Ash 1975; MacCannell 1976; Noronha 1977; de Kadt 1979) and general collections of articles (Smith 1977, 1978; Cohen,1979; de Kadt 1979; Lengyel, 1980; Graburn 1983) [From Cohen’s The sociology of tourism: approaches, issues, and findings."Annual review of sociology (1984): 373-392]

Tourism: A socio-psychological standpoint

Sociological research on tourism falls naturally into four principal issue areas: the tourist, relations between tourists and locals, the structure and functioning of the tourist system, and the consequences of tourism (Cohen,1984).Research on Tourists primarily addresses the demographic and socioeconomic
characteristics of tourists (e.g. Burkhart & Medlik, 1974); the frequency, purpose, length, and type of trip; and the nature of tourists’ destinations and the kinds of activities undertaken. Though, of rather limited sociological relevance in themselves, such data are important resources for secondary analysis, enabling scholars to identify the trends in modern tourism (Scheuch, 1981). The tourist-local relationship is, to varying degrees, embedded in and regulated by two sociocultural systems: a native system, which is invaded by tourism, and the emergent tourist system itself. The principal evolutionary dynamics of the relationship consist of a transition from the former to the latter. Doxey (1975) proposed a general evolutionary model of change in locals’ attitudes toward tourists consisting of four stages: euphoria, apathy, annoyance, and antagonism, which is well stated in his Irritation Index Model.

Socio-economically, the tourism system hinges on a group of national and increasingly transnational corporate actors such as airlines; travel companies, travel agencies, and tour operators, hotel chains; international travel organizations (e.g. International Association of Travel Agents (IATA) and IUOTO); and various governmental and intergovernmental organizations (Matthews, 1978; Young, 1973, Cleverdon, 1979; Dunning & McQueen 1982). Sociologists and anthropologists have studied the dynamics of the tourist system mainly on the regional and local levels. The “genetic approach” was pioneered by Forster who drew attention to the processual nature of tourism, which “creates a type of ‘cumulative causation’, and ultimately a new economic base” as it penetrates a new area (Apostolopoulos, 2013).

Sustainability and Carrying Capacity: Concepts, Thoughts, and Dimensions

Discussion of the impacts of tourism and the tourism development often leads to the question of sustainability and carrying capacity. It is quite essential to understand the interaction and applicability of Sustainability and Carrying Capacity in the context of tourism, especially in the environmental, economic and socio-cultural backdrops. While considering the tourism industry, the need to adopt a “sustainable” approach is exacerbated by its fragility and sensitivity to change, its multi-sectoral nature, and its marked
dependence on the quality of the host environment and communities; ‘tourism which degrades any elements of host communities and nations threatens its own future’ (Manning, 1999). Twining-Ward stresses this point further, raising the issue that tourists tend to be attracted to the more vulnerable and sensitive areas, where Hardin’s ‘Tragedy of the Commons’ concept is all too familiar (Twining-Ward, 1999) and management responsibility may fall into many different hands as highlighted by a report of the UNEP and WTO (2005) on sustainable tourism and its impacts on socio-economic-environmental fabrics.

Many of the current problems of tourism stem from the pressure of numbers of tourists (Ahmed, 2001). The idea of carrying capacity springs from the notion of quality, since it is implied that when capacity is exceeded, quality is reduced. In the tourism industry, the unprompted and inadvertent usage of destinations has resulted in the mass annihilation of fragile ecosystems, scarce infrastructure, pollutions which in turn deteriorate the tourism structure. Studies are being conducted that examine the behavior of tourists, the establishments that respond to the requirements of travellers, and of the impacts on the economic, physical and social wellbeing of the host communities (Mathieson & Wall, 1982).

The concept of carrying capacity was introduced in biology to describe the limit that a species population attains, given the ecological confrontation indigenous to its locality. The early sixties witnessed considerable research attention concentrating to the social aspects of capacity. The idea of carrying capacity determines the tolerable level of use or change for a resource beyond which cause the significant degradation of that resource. The thought of carrying capacity has engrossed a surplus of explanations in the background of outside recreation. The question of carrying capacity was raised as early as 1936 (Stankey, 1981), but despite the evolution of an extensive literature on recreational carrying capacity the basic conceptual framework has not changed (Sowman, 1987). The Encyclopedia of Ecotourism defines carrying capacity as “the amount of tourism-related activity that a site or destination can sustainably accommodate; often measured in terms of visitor numbers or visitor-nights over a given period of time, or by the number of available accommodation units; management
techniques such as site hardening can be employed to raise a site’s carrying capacity” (Weaver, 2001). In his ‘Tourist-Area Life Cycle’ (TALC) model of the evolution of tourism development, Butler (1980) introduces the notion of ‘carrying capacity’, proposing that at any tourist destination there is a ‘limit’ to tourist numbers, beyond which they are a detriment to the future viability of the area as a tourist attraction. Many of the criticisms of Butler’s model have questioned the interpretation of carrying capacity (Haywood, 1986; Prideaux, 2000) and the fact that it is limited to the destination area. Carrying capacity, in the context of tourism in general, refers to the ability of a site or region to absorb tourism use without deteriorating (Cooper, 1998).

The concept of social carrying capacity is derived from the ideas of community-based tourism planning and sustainability. Here the level of tolerance of the host population for the presence and behavior of tourists in the destination area, and/or the degree of crowding users (tourists) are prepared to accept from others (other tourists). It attempts to define the levels of development which are acceptable to the host community residents and businesses. Social carrying capacity is stretched when the native inhabitants of a destination no longer want visitors as their interference will destroy the environment, damaging the local culture, customs, and behavior. All definitions of recreational carrying capacity incorporate two central aspects: First, the bio-physical component, relating to the integrity of the resource-base which implies some threshold or tolerance level after which further exploitation or use may impose strains on the natural ecosystem; and second, the behavioral component, reflecting the quality of the recreational experience (Mitchell, 1979; Wall, 1982).

Actually, there are a number of schools of thought which view carrying capacity differently. Baud-Bovy& Lawson (1977) quote a definition of carrying capacity, as the ‘number of user-unit use-periods, that a recreation site can provide (each year) without permanent biological and physical deterioration of the site’s ability to support recreation and without appreciably impairing the quality of the recreation experiences (Saveriades, 2000). Mathieson and Wall (1982), defined carrying capacity by considering the physical impact of tourism on a destination, from the
environmental and experiential aspects, as ‘the maximum number of people who can use a recreational environment and without an unacceptable decline in the quality of the recreational experiences. On the other hand, Shelby and Heberlein (1987) proposed a rather generic definition of carrying capacity, as ‘the level of use beyond which impacts exceed levels specified by evaluative standards. The concept of recreational carrying capacity has diffused into studies of tourism due to the increasing concern for the negative impacts of tourism and the realization that destination areas display cycles of popularity and decline (cycle theories).

O’Reilly (1986) describes two schools of thought concerning carrying capacity. The first school of thought envisages tourism capacity as the ability of the destination area to absorb tourism before negative impacts of tourism are felt by the host community. The emphasis, thus, is placed on the number of tourists that are wanted and that can be absorbed, rather than on the number of visitors that want to or can be persuaded to come to an area (Young, 1973). The second school of thought, which emanates from the cycles theories considers tourism carrying capacity as the level beyond which tourists wow’s will decline because certain capacities, as perceived by the tourists themselves, have been exceeded. Therefore, the destination areas cease to satisfy and attract the tourists, and hence they seek alternative destinations. On the other hand, different interest groups hold different opinions about the level of use that the concept of carrying capacity can sustain. For these groups, carrying capacity is a concept ideally suited to designated natural areas (parks, wilderness areas) where boundaries are established and policies are implemented and use is restricted or redistributed by one managing authority.

Social Aspects and Carrying Capacity: Some key observations

Saveriades (2000), in his work, Establishing the social tourism carrying capacity for the tourist resorts of the east coast of the Republic of Cyprus, signifies the carrying capacity of a destination is determined (i) by its ability to absorb tourist development before negative impacts are felt by the host community; and (ii) by the
level of tourist development beyond which tourist wow's will decline because the destination area ceases to satisfy and attract them. The paper sheds light on the concept of carrying capacity and its importance as a management tool in tourism planning and development, and secondly, to assess the carrying capacity of a region in terms of sociological capacity thresholds. This study concentrated on the indigenous population as the receiver of the reciprocal effects chooses of the interaction with tourists. The study established that the carrying capacity of a region is neither fixed nor static, but one which changes with time and the volume of tourism and one which can be manipulated by management techniques and controls. The carrying capacity findings should be used to facilitate the process of continuous monitoring of tourism by making adjustments to plans as needed. This will ensure that tourism development is carried out within the context of the optimum overall capacity level, thus ensuring its sustainability.

Faulkner and Tideswell (1997) describe a framework which has been designed for a comparative study of the social impacts of tourism in destination communities along the eastern seaboard of Australia. The framework is tested through an application to a case study involving one of Australia’s most well-known seaside resorts, the Gold Coast. While the Gold Coast survey of resident reactions revealed some relationships between variations in perceptions of tourism’s impacts and background characteristics such as involvement in tourism, residential proximity to tourist activity and period of residence, the most notable feature of resident reactions in this case is the generally positive view of tourism’s role in the region. On the basis of these destination oriented works, the authors concluded that the altruistic surplus phenomenon observed in urban planning research may apply to tourism. In the tourism context, the altruistic surplus concept suggests that individuals tolerate any downside effects of tourism they might experience personally because they recognize the broader community-wide benefits of this activity.

The Gold Coast study also suggests that, contrary to the Doxey scenario, residents in large-scale mature tourist destinations do not become more antagonistic towards tourism. The positive view of tourism among Gold Coast residents overall, and the marginal
variation in opinion irrespective of such background variables as the period of residence, place of residence and involvement, suggests that the altruistic surplus factor may apply to tourism. It also suggests that, contrary to the Doxey model's prediction relating to changes in the pattern of resident reactions over time, some communities adapt to tourism and, therefore, develop a resilience which enables impacts to be accommodated.

Another study by Wang et.al. (2006) (Resident’s attitude towards tourism development: A case study of Washington NC) examined the relationship between socioeconomic and demographic attributes of local residents and their attitudes toward tourism in Washington, NC, a small community where tourism is in its development stage. Resident’s attitudes toward tourism were measured by adapting 20 items from the Tourism Impact Attitude Scale developed by Lankford (1994). Factor analysis resulted in a 2-factor solution. Findings indicate that age, gender, and community attachment do not have relationships with the two factors, but education is associated with one of the factors, and perceived personal benefit has strong positive relationships with both factors. The study reinforced the need for further research on factors influencing resident’s attitudes toward tourism during a destination’s preliminary development stage.

The study findings support previous assertions that educating local residents about the potential benefits of tourism are critical in obtaining their support for tourism, enhancing their involvement in the industry, and achieving sustainable community development. It also provides empirical evidence to support the assumptions associated with the Irridex model and Social Exchange Theory. Additionally, the study findings provide a glimpse of resident’s attitudes toward tourism in the study area. It indicates that most respondents are favorable, at least initially, toward tourism. In particular, the findings supported previous assertions that educating residents about the potential benefits of tourism are critical in obtaining the political support for tourism in enhancing residents' involvement in the industry, and in achieving sustainable community development.

The paper, Residents’ attitudes to tourism development: the case of Cyprus (Akis et.al,1996) examines the perceptions of Greek and
Turkish Cypriot residents towards coastal tourism development. Although Butler’s hypothesis – that there will be an inverse relationship between the level of tourism development and perceived impacts for the worse on the social, economic and environmental status of the host community – is largely confirmed, a significant proportion of uncertain responses in the less developed area surveyed lead the authors to suggest a modification of the Butler hypothesis.

The aim of the study titled Carrying capacity model applied in coastal destinations by Jurado et al., (2013) adapts the social carrying capacity model to a mature coastal destination in Spain - ‘Costa del Sol’. The empirical findings from this paper provide an indicator that allows us to establish that the proportion of tourists who perceive over-crowding are predisposed to leave the destination. A cluster analysis was performed to better understand how overcrowding is being perceived by the tourists. The socioeconomic characteristics of the tourists and the factors that may influence the capacity thresholds are also analyzed. The generated data guided a scientific debate on the overcrowding problems and the growth limits. Another study (Rajan et al., 2013) gives a comprehensive idea on both the sustainability of coastal areas and prerequisites for carrying capacity based development in tourism destinations. The concept of carrying capacity has received considerable attention as a result of increasing anthropogenic pressure in certain natural environments. Much consideration has recently been given to an increase in coastal population, with the implication that the carrying capacity of the world’s coast is finite, and such consideration forms part of several coastal management initiatives. The authors view the ecosystems, typically stressed by development activity along the Indian coastal areas, as particularly vulnerable to socio-economic driving forces. The planning and management of coastal tourism can be improved through more careful understanding of social and ecological systems and their linkages, with a view to ensure a development that lasts not only for tourism but also for the host destination.
Conclusion

In a sociological perspective, carrying capacity is used as a generic term to include both the levels of tolerance of the host population as well as the quality of the experience of visitors to the area. It can be defined as the maximum level of use (in terms of numbers and activities) that can be absorbed by an area without an unacceptable decline in the quality of experience of visitors and without an unacceptable adverse impact on the society of the area (Saveriades, 2000). The sociological carrying capacity approaches involve using attitudes and tolerance levels of the host population to set limits on tourism development. Doxey (1975) suggested that the reciprocating impacts of hosts and visitors may be converted into varying degrees of host irritations depending on the volume of tourism, and the threat it poses to the way of life in the host communities. The degree of the host irritations tends to change with time and follows a cycle similar to those of destinations (Butler, 1980).

The residents of tourist destinations go through stages of euphoria, apathy, irritation and antagonism. The actual level of irritation arising from contact between hosts and visitors is determined by the degree of mutual compatibility. We have reviewed some of the major observations in the social aspects of tourism that converge the areas of sustainability and carrying capacity. The present-day tourism research approaches set the social-behavioral factors of the community at the bottom-most priorities or they even sideline it totally. The outcome of this may be the exceeding of the social carrying capacity limits, which in turn causes the worsening of the destination as well as its tourism. Social bigotry of natives occasionally can be the single contributory reason which can torpedo the other types of carrying capacities or even slay the success of tourism development in a destination. Hence, an integrated Research and Development strategy should be adopted by the authorities to retain and develop the social sustainability of tourist destinations.

References

Ahmed, B. (2001). *Sustainable Beach Resort Development* (Doctoral
dissertation). Virginia Polytechnic Institute, and State University.


Cleverdon, R. (1979). *The economic and social impact of international tourism on developing countries*.


Doxey, G. (2016). A causation theory of visitor-resident irritants:
Methodology and research inferences. In Travel research Association.


