Residents’ Attitudes toward Tourism Development and Impacts in Koti-Kanasar, Indroli, Pattyur Tourism Circuit of Uttarakhand State, India

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Abstract: Indian Himalaya is characterized by tourism potential which provides good opportunity for economic development in long run. Considering vast potential for tourism development, Koti-Kanasar, Indroli, Pattyur circuit of Uttarakhand has been identified as an area for rural tourism promotion by Indian Ministry of Tourism. Since the circuit is in involvement stage of development, it is important to ensure sustainable development of tourism for which understanding of residents’ attitude is very essential. This study examined attitude of residents towards tourism impacts and influence of demographic attributes on their attitude. The study reveals that infrastructure facilities, design and package of rural tourism products, skill development programs for stakeholders and specific marketing campaigns are essential to tourism development. Findings indicate that residents understand the extent of tourism impacts in their mountainous region with respect to economic, social and environmental dimensions. Study also reveals that although locals want to increase tourism gains with corresponding effort to reduce consequences deprived, their perceived impacts of tourism vary across their demographic variables.

Keywords: Rural Tourism; Local Residents; Attitude; Tourism Impacts.

Las actitudes de los residentes hacia el Desarrollo del Turismo y su impacto en Koti-Kanasar, Indroli, Puttur Circuito Turístico de Uttarakhand Estado, la India

Resumen: Himalaya indio se caracteriza por el potencial turístico que ofrece una buena oportunidad para el desarrollo económico de largo plazo. Teniendo en cuenta un gran potencial para el desarrollo turístico, Koti-Kanasar, Indroli, circuito Pattyur de Uttarakhand ha sido identificado como área para la promoción del turismo rural a través del Ministerio de Turismo de la India. Puesto que el circuito está en la etapa de desarrollo, es importante para garantizar el desarrollo sostenible del turismo para el que es muy esencial la comprensión de la actitud de los residentes. Este estudio examinó la actitud de los residentes hacia los efectos y la influencia de los atributos demográficos en su actitud de turismo. Un estudio revela las instalaciones de infraestructura, diseño y envases de productos de turismo rural, programas de desarrollo de habilidades para los interesados y campañas de marketing específicas son esenciales para el desarrollo del turismo. Los hallazgos indican que los residentes a comprender la magnitud de los impactos del turismo en su región montañosa en las dimensiones económicas, sociales y ambientales. Estudio revela también que, aunque los lugareños quieren aumentar las ganancias del turismo con el correspondiente esfuerzo para reducir las consecuencias privadas, sus impactos percibidos de turismo varían a través de sus variables demográficas.

Palabras Clave: El Turismo Rural; Los Residentes Locales; La Actitud; Los Impactos del Turismo.

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1. Introduction

India is synonymous with great culture, unique civilization, glorious history, ancient traditions and natural attractions. The country’s diversity, rich cultural heritage, art and architecture, historical, culinary, religious and spiritual association, and many more opportunities continue to draw in tourists from all over the world. Its twenty-nine states and seven union territories are filled with various tourism attractions which entice all kinds of tourists across the globe. Uttarakhand state, commonly known as Devbhoomi (the land known for its association of Hindu Gods and Goddesses since time immemorial) is located in the northern part of the country sharing international boundary with Nepal and Tibet (China) in the north, Himachal Pradesh state in the west and north-west, Uttar Pradesh state in the south and Nepal in the east. Uttarakhand is a multi-destination state of India with a variety of tourism resources. Its cultural heritage, nature, wildlife, pilgrimages, yoga and meditation, peaks and forests, valleys, glaciers, rivers, flora and fauna, the religious Hindu pilgrimage places Badrinath and Kedarnath, the world heritage site Nanda Devi Biosphere Reserve, the first national park of India - Jim Corbett National Park, temples and 18th and 19th centuries built buildings give wide exposure to

Figure I: Roadmap of Koti-Kanasar-Indroli-Pattyur Circuit
visitors about its socio-cultural and natural background (Bagri et al, 2010). Both domestic and foreign tourists visit different parts of this state almost the whole year and the tourist traffic is consistently increasing in the region.

Situated at a distance of 121 kms from Uttarakhand state capital Dehradun and 380 kms North-East from national capital New Delhi, the Koti-Kanasar, Indroli, Pattyur tourism circuit is unique in its natural surroundings and have all the qualities to attract tourists, potential to successfully compete with other Himalayan destinations and generate a substantial volume of income to local people. The circuit provides enough opportunities for trekking, hiking, rock climbing, eco-walk, bird watching, photography, nature trailing, adventure sports and many other nature based recreational activities to quench the desires of tourists. Tourism related activities in the area have grown rapidly over the past years and the circuit has potential to become the tourist hub of the region. Considering the vast potential for rural tourism development, the circuit has been identified as an emerging area for ecotourism promotion by Ministry of Tourism, Government of India (Bagri et al, 2013). Koti-Kanasar, has got the privilege to have some of the oldest and thickest deodar (Cedrus deodara) trees of Asian subcontinent. The people of this area are commonly known as Jaunsaris (a local tribe). The Jaunsaris claim to be the descendants of Pandavas of the Mahabharat period i.e; 1200BC to 1000BC as suggested by archaeologists on the basis of thermo luminescence dating method on painted grey-ware pottery (Lal, 1955).

In the vicinity of Devban Medicinal Plant Conservation Area, Indroli village has two famous temples: Mahakali (dedicated to Hindu Goddess Durga) and Mahasu (dedicated to one of the forms of Hindu god Lord Shiva). Tiger falls and Devban are other major tourist attractions. Situated at an alleviation of 2100m from the sea level, Pattyur is the most distant located village. The main attractions of this village are mountain meadows at Mundali which has potential for snow skiing during winter season. Mundali can be approached by covering a trekking distance of five kilometers from Pattyur village or can be accessed by covering 39 kms by road from Chakrata town. Owing to its natural attractions and cultural heritage, tourism opportunities in the region is growing rapidly and much of the people of towns of Uttarakhand and nearby states have started to visit these places for camping, adventure sports and nature based recreational activities, eco-walks, trekking trail, bird-watching, rock climbing, viewing organic farms, apple orchards and Medicinal Plant Conservation Area.

### Table I: Number of Tourists Arrivals

<table>
<thead>
<tr>
<th>Year</th>
<th>Uttarakhand State</th>
<th>Chakrata</th>
<th>Koti-Kanasar, Indroli, Pattyur Circuit</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>22041037</td>
<td>36943</td>
<td>29554</td>
</tr>
<tr>
<td>2010</td>
<td>30333288</td>
<td>59560</td>
<td>47651</td>
</tr>
<tr>
<td>2011</td>
<td>26070907</td>
<td>61673</td>
<td>49338</td>
</tr>
<tr>
<td>2012</td>
<td>26951884</td>
<td>65054</td>
<td>52037</td>
</tr>
<tr>
<td>2013†</td>
<td>20038811</td>
<td>38636</td>
<td>21574</td>
</tr>
</tbody>
</table>


† In 2013, a very low flow of tourist was recorded due to natural disaster occurring in Kedarnath and other parts of Uttarakhand state.

As per the statistics updated by the Uttarakhand State Tourism Development Board, it seems that present tourism circuit doesn’t cater to a good number of tourist arrivals (table I). Since the rural tourism circuit has moved from preliminary or exploration phase to involvement phase, it seems imperative to create infrastructure such as roads, accommodation units, interpretation centers and museums showcasing the natural and cultural heritage in order to increase the number of tourist arrivals. Appropriate designing and packaging of rural tourism products, developing and conducting skill development programs for stakeholders and creating activity specific marketing campaigns are considered essential for further tourism promotion. With this article we aim to demonstrate the importance of residents’ attitude and their demographical characteristics in promoting tourism and developing tourism related activities in an emerging tourism destination. The sequence of the study
is organized as follows. First, the literature review is discussed. In addition, hypothesis pertaining to
the relationship between residents’ demographical characteristics and perceived tourism impacts are
developed based on literary information obtained from related literature. The description of research
methodology, questionnaire development, and data collection process are discussed in the next section
followed by empirical results, discussion and conclusion.

2. Literature Review

Over the years rural tourism has been identified as an important ‘niche’ in the tourism literature
to ensure economic and socio-cultural development (Kuuder et al., 2013). Geographical locations,
microclimatic conditions, existence of water, natural vegetation and wildlife, geomorphologic structure,
local cuisines, festivals and pageants, traditional agricultural system, local handicrafts, regional dress
culture, historical events and people, heritage appeals, architectural variety, folk dances and artistic
activities form a major base for rural tourism (Catibog-Sinha and Wen, 2008; Kiper, 2011). It contributes
to conservation of biodiversity, sustains the well-being of local people, involves responsible action on
the part of tourist and the tourism industry, promotes small and medium tourism enterprises, requires
lowest possible consumption of natural resources, entails the learning experiences (Kiper, 2011).

Over the past several years a number of studies have been carried out in Europe, Australia, New
Zealand, the South Pacific, Asia, Africa and America to examine the attitudes of local residents towards
tourism and its impact on local community (Ap and Crompton 1993; Haralambopoulos and Pizam,
1996; Andereck and Vogt 2000; Kayat 2002; Sirakaya et al, 2002; Harill, 2004; Jurowski and Gursoy
2004; McGehee and Andereck, 2004; Andereck et al., 2005; Petrzalka et al., 2005; Zhang et al., 2006;
Dyer et al., 2007; Lepp, 2007; Sharma, et al., 2008; Diedrich and Garcia-Buades 2009; Marzuki, 2009;
Rastegar, 2010; Brida et al., 2011; Nunkoo and Ramkissoon, 2011; Vargas-Sanchez et al, 2011; Deery et
al., 2012; Nunkoo and Gursoy, 2012; Dimitriadi et al, 2013; Seyfi et al. 2013; Simão and Mósso, 2013;
Snyman, 2014). However, little is known about attitudes of local community for tourism development
in India. In Indian context, studies of Rao et al. (2003), Bagri and Mishra (2005) and Singh, Mal and
Kala (2009) in Nanda Devi Biosphere Reserve, Singh and Mishra (2004), Kuniyal and Vishvakarma
(2012) in Kanha, Nagarahole, and Ranthambore in India and Chitwan in Nepal, Chand and Vivek
(2012) in Manali, Bagri et al. (2013) and Gupta and Prakash (2014) in Garhwal Himalaya attempted
to examine the attitude of local residents towards rural tourism. In context of Uttarakhand, however,
only few studies (Rao et al., 2003; Bagri and Mishra, 2005; Singh, Mal and Kala, 2009; Bagri et al.,
2013; Gupta and Prakash, 2014) were found to have examined the attitude of residents in relation to
tourism development.

These authors have explored that attitudes tend to fall into three basic categories: economic, socio-
cultural and environmental. A comprehensive review of studies suggests that each tourism impact
category includes positive and negative effects and sometimes residents’ attitude are contradictory. The
economic impacts of tourism are mainly perceived by residents as a mean to generate job opportunities
for local communities, develop local economy, increase investments in the area and improve tax revenue
earnings, personal income, and economic quality of life (Haralambopoulos and Pizam 1996; Sirakaya et al,

Conversely, on the negative side, residents seem to perceive an increase in prices of goods and services
thus increasing cost of living and an unequal distribution of the economic benefits (Haralambopoulos

The environment, a central theme of tourism, continues to be an important subject of debate in a time
when the global policy is aimed at ecological problems such as pollution, depletion of natural resources
and deforestation (Kuvan and Akan, 2005). In view of this, the potential of tourism activities in achieving
the objectives of environmental preservation and conservation have been widely studied (Jurowski and
Gursoy 2004; Andereck et al. 2005). Such studies demonstrate that residents favor tourism promotion
because it initiates the creation of more parks and recreation areas, improves the quality of roads and
public facilities, stimulate environmental conservation awareness and does not contribute to ecological
decline. However, tourism can cause significant environmental damage because it is often developed in
areas that have attractive but fragile environments (Andereck and McGehee, 2008). Tourism also causes
traffic congestion, parking problems, disturbance and destruction of well-preserved flora and fauna,
illegal construction of buildings such as accommodation and dining units, air and water pollution, and littering (Jurowski and Gursoy 2004; Andereneck et al. 2005; Jago et al. 2006).

Researchers also suggested that tourism can also impact positively towards socio-cultural aspects of local residents and community by increasing community services, recreational and cultural facilities, performing and participation in cultural events and festivals, cultural exchanges, meeting interesting people, learning about the world and exposing community to new perspectives (McCool and Martin 1994; Brunt and Courtne 1999). Tourism also plays an important role in social and cultural preservation, rejuvenation of traditional culture and promotion of indigenous arts and crafts industries in the region. On the other hand, some studies have identified certain concerns regarding loss of traditional cultures and values, increase in crime, drugs and alcohol abuse, sudden hike in the cost of accommodation and the waiting time to deliver services (Haralambopoulos and Pizam 1996; Andereneck et al. 2005; Martin 2008; Diedrich and Garcia-Buades 2009). Tourism also causes a change in local people habits, daily routines, social lives, beliefs, and values. Puczkó and Rátz (2000) have emphasized about unplanned tourism development that can lead to a negative change in destinations’ socio-cultural and physical characteristics.

There have been several other factors identified as influencing residents’ attitudes towards tourism such as age (Tomljenovic and Faulkner 1999; Cavus and Tanrisevdi, 2003; McGehee and Andereneck, 2004; Pappas, 2008), education (Iroegbu and Chen, 2001), gender (Mason and Cheyne, 2000; Harrill and Potts, 2003; Pappas, 2008), income (Snaith and Haley, 1994; Pappas, 2008), community attachment (Lankford and Howard, 1994; McCool and Martin, 1994; Snaith and Haley, 1994), economic role of tourism (Andereneck, et al., 2005; Huh and Vogt, 2008), economic reliance on tourism (Madrigal, 1995; McGehee and Andereneck, 2004), involvement in decision making (Madrigal, 1995; Kayat, 2002), knowledge about tourism (Lankford and Howard, 1994; Andereneck, et al., 2005), length of tourist stay (McGehee and Andereneck, 2004) and personal benefits from tourism (McGehee and Andereneck, 2004; Andereneck, et al., 2005). Since individuals’ needs, understanding and attitudes are generally influenced by their demographical characteristics, these characteristics are considered as major factors that shape their attitudes and perceptions towards further development.

Furthermore several theoretical frameworks including Irridex’s Model of Doxey (1975) explains that attitudes of locals change over time, becoming more negative as tourism development and tourism flux increase. The stages of this model are: enthusiasm, apathy, annoyance and antagonism. Butler (1980) model explains the evolution of destination through the stages of exploration, involvement, development, consolidation, stagnation, and decline or rejuvenation. As per the prevailing situation the present tourist circuit comes under apathy stage of Irridex’s model or involvement stage of Butler model. Tourism evolution in present tourism circuit requires mutually acceptable policies and strategies in order to consolidate related stages of destination life cycle. In order to attain effectiveness in development policies and maintain destination life cycle, efforts are to be initiated to examine and analyze the attitudes of local residents. The present study, thus, seeks to add to the literature of rural tourism by investigating the attitudes of residents of Koti-Kanasar, Indroli, Pattyur circuit towards tourism.

3. Objectives

- To examine the status of existing hardware and software components of tourism.
- To determine attitude of local residents towards economic, socio-cultural and environmental impacts of tourism.
- To examine the relationships between residents’ demographic attributes and their attitude toward impacts of tourism.

4. Hypothesis Development

It is observed that individual age of local people has played a determining role in residents’ attitude toward impact of tourism development on community. Studies of Cavus and Tanrisevdi (2003) and Harrill (2004) found a significant relationship existing between age and attitude, as older residents were likely to have more negative attitude toward tourism development. Studies of Anthony (2007) and Wang and Pfister (2008) have found that younger respondents held more positive attitudes towards tour activities. This may be because many younger people have better education background than older
Residents’ Attitudes toward Tourism Development

people and poor inclination towards nature tourism. Rastegar (2010) argued that younger residents of tourist destinations show high expectations of tourism, while older residents look at it with more doubt because of the cultural changes that tourism may bring to the area. Conversely, Tomljenovic and Faulkner (1999), McGehee and Andereck (2004), Zhang (2006) and Snyman (2014) found older residents more positive about tourism than younger residents. Considering these issues into consideration, the first hypothesis was framed to examine the relationship between age and perceived impacts of tourism.

**H1:** The perceived impacts of tourism do not differ across the age of local residents.

In view of gender’s perception towards tourism impacts, Mason and Cheyne (2000) found that even though female residents recognized positive tourism impacts, they had a tendency of being against tourism development than men when examining perceived negative tourism impacts. Petrzalka et al. (2005) and Wang and Pfister (2008) noted both gender differences in resident attitudes towards benefits of tourism. Their study determined that comparatively women perceived greater benefits from tourism than that of men. In contrast, the study of Harrill and Potts (2003) studied in context of Charleston, South Carolina, USA, who noticed that gender plays an important predictor while examining perceived economic benefits of tourism. They concluded that women seem to be more negatively disposed towards tourism development than men. Similarly, Iroegbu and Chen (2001) found that male and college-educated were most likely to support tourism development and perceived positive impacts of tourism. Therefore, the second hypothesis was framed as:

**H2:** The perceived impacts of tourism do not differ across the gender of local residents.

Educational level with outside exposure also seems to affect residents’ attitudes toward tourism impacts. Past studies have found that increased educational level impacted positively on attitudes towards tourism (Teye et al. 2002; Shibia 2010; Snyman, 2014). It is because educated people seem to be more familiar or aware of the potential benefits than those with less educated mass. In his study in Washington, Wang and Pfister (2008) concluded that education level of local residents is positively associated with perceived benefits of tourism. In one of Manali based research work located in the western part of Himachal state of India, Chand and Vivek (2012) found that there is a strong and positive association between education and sustainable tourism development. However, Milman and Pizam (1988) noted that residents’ support for tourism does not vary significantly among different educational levels. In view of this, third hypothesis was designed to examine the relationship between educational level and perceived impacts of tourism.

**H3:** The perceived impacts of tourism do not differ across the educational level of local residents.

5. Research Methodology

Six villages namely, Koti, Kanasar, Devban, Indroli, Pattyur, and Mundali, were selected for the research work because these settlements were the major tourist destinations of the circuit and were receiving the satisfactory numbers of tourist arrivals. The population of the study composed of local residents and was selected by using both the convenience and snowball sampling techniques. As the number of people living in the rural areas is relatively small, snowball method was identified as the most appropriate sampling measure for generating an appropriate sample size. Each prospective participant was initially approached and invited to participate and a total of 200 local residents participated in the study. The sample work was undertaken from June to August 2012. A questionnaire consists of two sections was structured for the purpose of measuring the attitude of local residents towards tourism development and its perceived impact on community. As indicated in literature review, many studies support that age, gender and level of education of local residents are considered as crucial factors for the creation of significant differences in the perceived attitude towards tourism impacts. Thus, in the first section, basic details about local residents, which include gender, age, education level and occupation, were obtained. The second section included 22 items that were related to the existing
tourism initiatives and attitude of local residents towards economic, socio-cultural and environmental impacts of tourism in five-point Likert-scale where ‘1’ indicates strongly disagree and ‘5’ indicates strongly agree. The existing literature helped in the preparation of the second section of questionnaire and included questions were selected based on related studies of residents’ attitude towards tourism impacts in emerging tourist destination. Specifically, it was based on the research works of Teye et al. (2002), Cavus and Tanrisevdi (2003), Harrill (2004), McGehee and Andereck (2004), Andereck, et al. (2005), Dyer et al. (2007), Andereck and McGehee (2008), Wang and Pfister (2008), Brida et al. (2011). Some questions were then modified by the researchers in order to focus on specific information about the present destination.

Informal discussions were also employed to get a better understanding of attitudes and perceptions of local residents towards tourism impacts. Discussions provided local residents the opportunity to express their opinions without restraints. The pilot study was carried out to ensure reliability and validity of the instruments and the data to be collected therein. The initial questionnaire was given to a group of referees to judge its validity according to its contents, the clarity of its items meaning, and suitability to avoid any misunderstanding and to assure its linkages with the main study objectives. In order to validate the reliability, questionnaires were initially distributed to 30 residents, representing 15% of the total sample size of the study population. The value of Cronbach’s alpha was found to be 0.874, which suggested an acceptable level of reliability of the research instrument. Data thus received was systematically arranged, tabulated and analyzed. Analysis of data was performed using SPSS version 20.

6. Results

6.1. Demographic Profile

The demographic characteristics of respondents shown in table II reveals that 14% respondents were less than 18 years, 38% were within the age group of 18 - 35 years, 35% were from 36 - 50 years and the remaining were above 50 years. The analysis indicates that males dominate the sample with 60% representation by them. The men were more informed than women and were more willing to share their views. 13% individuals interviewed were illiterate, 38% were metric pass, 12% obtained 10+2, 24% were graduates and 13% had obtained graduate qualification. The poor representation of higher educated sample resulted because of low level of education percentage. The sample was split almost evenly between married and unmarried with the majority of individuals interviewed being married. The analysis indicates that farming (50%) and animal husbandry (45%) were the primary occupation of the local residents.

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Variables</th>
<th>No. of Respondent</th>
<th>Indicators</th>
<th>Variables</th>
<th>No. of Respondent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>Below 18</td>
<td>28</td>
<td>Gender</td>
<td>Male</td>
<td>120</td>
</tr>
<tr>
<td></td>
<td>18-35</td>
<td>76</td>
<td></td>
<td>Female</td>
<td>80</td>
</tr>
<tr>
<td></td>
<td>36-50</td>
<td>70</td>
<td>Marital Status</td>
<td>Married</td>
<td>102</td>
</tr>
<tr>
<td></td>
<td>Above 50</td>
<td>26</td>
<td></td>
<td>Unmarried</td>
<td>98</td>
</tr>
<tr>
<td>Education</td>
<td>Illiterate</td>
<td>26</td>
<td>Occupation</td>
<td>Farming</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>Metric</td>
<td>76</td>
<td></td>
<td>Animal husbandry</td>
<td>90</td>
</tr>
<tr>
<td></td>
<td>10+2</td>
<td>24</td>
<td></td>
<td>Other</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Graduate</td>
<td>48</td>
<td>Numbers of Respondents</td>
<td>200</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Post Graduate</td>
<td>26</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
6.2. Residents’ Attitude

Table III projects the perceived impacts of tourism and it was measured by 22 impacts factors categorized into three major categories namely economic, socio-cultural and environmental impacts. The results of mean indicate that some items have stronger effect on the community than others, while some of them were positive and negative. Respondents perceived that tourism would improve the economic conditions of local residents (3.11), may provide job opportunities (3.98), and play a significant role in the economy of the community (2.99). However, it was perceived that tourism have not attracted investment opportunities (2.82) and better shopping facilities (2.13).

Table III: Residents’ Attitude

<table>
<thead>
<tr>
<th>Impacts</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>a. Economic Impacts</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tourism has positive impact on the income</td>
<td>3.11</td>
<td>1.21</td>
</tr>
<tr>
<td>Tourism has improved job opportunities</td>
<td>3.98</td>
<td>0.66</td>
</tr>
<tr>
<td>Tourism industry attracts investment opportunities</td>
<td>2.82</td>
<td>1.18</td>
</tr>
<tr>
<td>Tourism has caused increased prices</td>
<td>2.58</td>
<td>1.31</td>
</tr>
<tr>
<td>Tourism sector plays a major role in local economy</td>
<td>2.99</td>
<td>1.12</td>
</tr>
<tr>
<td>Better Shopping opportunities</td>
<td>2.13</td>
<td>0.94</td>
</tr>
<tr>
<td><strong>b. Socio-Cultural Impacts</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tourism has improved the destination image</td>
<td>2.88</td>
<td>0.50</td>
</tr>
<tr>
<td>Tourism has improved public infrastructure</td>
<td>4.00</td>
<td>1.13</td>
</tr>
<tr>
<td>Tourism has negative impact on local traditions</td>
<td>3.41</td>
<td>1.61</td>
</tr>
<tr>
<td>Tourism has improved the living standard of local community</td>
<td>3.40</td>
<td>0.55</td>
</tr>
<tr>
<td>Tourism accelerated social evils</td>
<td>3.48</td>
<td>1.34</td>
</tr>
<tr>
<td>Meeting tourists enhance the valuable experiences of locals</td>
<td>3.83</td>
<td>0.50</td>
</tr>
<tr>
<td>Tourism is potential to strengthen and rejuvenate local values</td>
<td>4.12</td>
<td>0.69</td>
</tr>
<tr>
<td>Tourism offers opportunities for financial incentives</td>
<td>3.63</td>
<td>1.24</td>
</tr>
<tr>
<td>Tourism has enhanced the opportunities for cultural exchange</td>
<td>2.58</td>
<td>1.31</td>
</tr>
<tr>
<td><strong>c. Environmental Impacts</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tourism has increased the problem of garbage disposal</td>
<td>2.82</td>
<td>1.18</td>
</tr>
<tr>
<td>Tourism is the major cause of the illegal construction</td>
<td>2.13</td>
<td>0.94</td>
</tr>
<tr>
<td>Tourism development results the loss agricultural fields</td>
<td>1.15</td>
<td>0.36</td>
</tr>
<tr>
<td>Tourism leaves negative impact on the natural environment</td>
<td>2.52</td>
<td>1.34</td>
</tr>
<tr>
<td>Tourism leads to traffic congestion and pollution</td>
<td>3.09</td>
<td>1.20</td>
</tr>
<tr>
<td>Tourism encourages heritage and environmental conservation</td>
<td>3.11</td>
<td>1.19</td>
</tr>
<tr>
<td>Tourism negatively affects the quality of life</td>
<td>2.35</td>
<td>1.34</td>
</tr>
</tbody>
</table>

Concerning socio-cultural impacts of tourism, respondents believed that tourism development strengthens, rejuvenates and commercializes local customs, traditions and folk arts(4.12), improves the conditions of public facilities/infrastructures (4.00), provide incentives to local people to stay in the area (3.63) and is also helpful in enhancing the standard of living of local residents (3.40). Respondents
also thought that meeting with tourists from different parts of the country and the world would be a valuable experience and mutual opportunity to understand and exchange the ideas and thoughts of respective society. On the other hand, the residents perceived that tourism development may negatively erode the values, social traditions and culture (3.41) and increase the ugly behavior including thefts, alcoholism, and drug abuse (3.48). With respect to environmental impacts, respondents perceived that tourism development may negatively affect the mountain environment by traffic congestion and pollution (3.09), increasing litter and garbage (2.82), construction of illegal buildings (2.13) and adversely influencing the habitat’s flora and fauna (2.52). On the positive side, local residents considered that sustainable tourism development and promotion would be an added value for the heritage and environmental conservation (3.11).

6.3. Demographic Profile and Tourism Impacts

There have been considerable factors identified as influencing residents’ attitudes toward tourism. The demographic characteristic of the residents is one of the determinant factors that generally influence the attitude towards emerging impacts. Notable works in this direction include Iroegbu and Chen, 2001; Cavus and Tanrisevdi, 2003; Harrill and Potts, 2003; McGehee and Andereck, 2004; Andereck, et al., 2005; Petzelka et al., 2005; Anthony, 2007;Rastegar, 2010;Snyman, 2014 who have examined the relationship between perceived impact of tourism development and demographical characteristics of local people. Bearing these issues in mind, the present study examines the influence of demographic factors of local residents on their perceived impacts of tourism development.

One-way ANOVA analysis was carried out with the assumption that the perceived impacts of tourism do not differ across the age of local residents. From the table IV, it is noticed that calculated value of F (3, 196) is greater than the tabulated value of F (2.60, α = 0.05) for economic and socio-cultural impacts. The observed p-value (Sig. = 0.00) is well below the chosen alpha of 0.05 (0.00 and 0.008). However, in case of perceived environmental impacts of tourism, calculated value of F (3, 196) is less than the tabulated value of F (2.60, α = 0.05) and the observed p-value (Sig. = 0.697) is above the chosen alpha of 0.05. Hence the null hypothesis is rejected in case of economic and socio-cultural impacts, indicating that there is a significant difference in the age of sampled residents in terms of economic and socio-cultural impacts of tourism. Whereas the null hypothesis is accepted, indicating that there is no significant difference in the perceived environmental impacts across the age of respondents.

<table>
<thead>
<tr>
<th>Impacts</th>
<th>&lt; 18</th>
<th>18-35</th>
<th>36-50</th>
<th>&gt; 60</th>
<th>F Value</th>
<th>p Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economic</td>
<td>2.9643</td>
<td>2.8728</td>
<td>3.0143</td>
<td>2.8718</td>
<td>6.745</td>
<td>0.000</td>
</tr>
<tr>
<td>Socio-Culture</td>
<td>3.4762</td>
<td>3.4357</td>
<td>3.5016</td>
<td>3.5641</td>
<td>4.014</td>
<td>0.008</td>
</tr>
<tr>
<td>Environmental</td>
<td>2.4388</td>
<td>2.4624</td>
<td>2.4327</td>
<td>2.4945</td>
<td>0.479</td>
<td>0.697</td>
</tr>
</tbody>
</table>

One-way ANOVA analysis was also carried out with the assumption that the perceived impacts of tourism do not differ across the gender of local residents. From the table V, it is evident that calculated value of F (1, 198) is less than the tabulated value of F (3.84, α = 0.05) for economic and socio-cultural impacts and the observed p-value (Sig. = 0.00) is above the chosen alpha of 0.05 (0.088 and 0.093). However, in case of environmental impacts, calculated value of F (1, 198) is greater than the tabulated value of F (3.84, α = 0.05) and the observed p-value (Sig. = 0.003) is well below the chosen alpha of 0.05 (0.003< 0.05). Hence the null hypothesis is accepted, showing that there is no significant difference in the economic and socio-cultural impacts across the gender of respondents. Whereas, in case of environmental impacts the null hypothesis is rejected, revealing that there is a significant difference in the gender perception on environment impacts of tourism.
Residents’ Attitudes toward Tourism Development

Table V: Perceived Tourism Impacts with Gender of Respondents

<table>
<thead>
<tr>
<th>Impacts</th>
<th>Mean</th>
<th>ANOVA</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
<td>F Value</td>
<td>p Value</td>
</tr>
<tr>
<td>Economic</td>
<td>2.92</td>
<td>2.98</td>
<td>2.945</td>
<td>0.088</td>
</tr>
<tr>
<td>Socio-Culture</td>
<td>3.49</td>
<td>3.44</td>
<td>2.847</td>
<td>0.093</td>
</tr>
<tr>
<td>Environmental</td>
<td>2.48</td>
<td>2.37</td>
<td>8.843</td>
<td>0.003</td>
</tr>
</tbody>
</table>

Df = 1, 198; F Value = 3.84 and p Value = 0.05

One-way ANOVA analysis was also carried out with the assumption that the perceived impacts of tourism do not differ across the education level of local residents. Table VI indicates that the calculated value of F (4, 195) is less than the tabulated value of F (2.37, α = .05), but the observed p-value (0.427) is above the chosen alpha of 0.05 for perceived economic impacts. However, the calculated value of F is greater than tabulated value and the observed p-value is less than the chosen alpha of 0.05 in case of socio-cultural and environmental impacts. Hence the null hypothesis is rejected in case of socio-cultural and environmental impacts, making a significant difference in the educational level and socio-cultural and environmental impacts of tourism. Whereas the null hypothesis is accepted, showing that there is no significant difference in the perceived economic impacts across the educational level of respondents.

Table VI: Perceived Tourism Impacts with Education of Respondents

<table>
<thead>
<tr>
<th>Impacts</th>
<th>Mean</th>
<th>ANOVA</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Illiterate</td>
<td>Metric</td>
<td>10+2</td>
<td>Graduate</td>
</tr>
<tr>
<td>Economic</td>
<td>2.90</td>
<td>2.96</td>
<td>2.89</td>
<td>2.95</td>
</tr>
<tr>
<td>Socio-Culture</td>
<td>3.43</td>
<td>3.45</td>
<td>3.49</td>
<td>3.54</td>
</tr>
<tr>
<td>Environmental</td>
<td>2.48</td>
<td>2.44</td>
<td>2.63</td>
<td>2.35</td>
</tr>
</tbody>
</table>

Df = 4, 195; F Value = 2.37 and p Value = 0.05

7. Discussion

Owing to its cultural ecology, Koti-Kanasar, Indroli, Pattyur tourist circuit offers opportunities of various kinds of tourism activities and shows potential to successfully position itself as an emerging rural tourism destination. The tourism potential can be reaped by promoting basic amenities and properly highlighting the area in tourist market. Tourist sightseeing activities in the area have grown rapidly over the past one decade, especially in and around Koti-Kanasar that serves as the base for most visitors. Being in the close proximity to the tourist market, the study circuit has potential to become the tourist hub but offers limited attractions. Therefore, new tourist products should be developed to add value and appeal to a wider range of tourists. Considering the tourist potential, researchers propose a variety of tourism related activities for the niche tourist market which includes nature and community-based tourism, local villages, nature trails, local historical temples, culturally and architecturally rich settlement patterns, adventure activities like trekking and hiking, bird watching, nature photography and educational trips. These should suitably be incorporated into offered tourist packages with a variety of other activities.

It was also found out that majority of the local residents were aware of and feel proud of ecotourism destination status, granted by Ministry of Tourism, Government of India. As on date there is a gradual increase in tourist arrivals resulted in the employment opportunities. In context of level of satisfaction of residents with existing tourism development, the majority of residents feel satisfied with current
tourism development activities performed by various stakeholders. They believe that tourism is the best alternative for local residents for gaining economic benefits. Researchers have noticed that the level of satisfaction among local residents about the nature of development coming up nowadays is positive and locals believed that these efforts would change their villages in terms of adequate road and transport facilities, opportunities of jobs, improvement in economics conditions and publicity of their areas, culture and traditions. However, local residents were annoyed with the government’s apparent poor performance. Survey of the area and interaction with the residents make it evident that very less work has been done for the development of roads, capacity building, installation of solar plants and lighting, waste disposal, signage for the convenience of tourists etc, though provision of funds was made for its development.

While evaluating tourism infrastructure, all the villages lack primary amenities which is the major constraint in circuit tourism promotion. Although all major areas of tourism potential in Uttarakhand state have been upgraded in terms of transportation and accommodation, still there is serious dearth of easy accessibility, sufficient accommodation units, hygienic eateries, well equipped visitor interpretation centres, hygienic rooms for tourists and site museum showcasing the natural and cultural heritage. Besides Chakarata-Kanasar link road, most of other roads leading to tourist attractions are in poor state. As most of the tourist attractions are part of the forest department, it’s major connecting roads could not get a facelift without proper permission from forest department. Problem of local transportation still persists and the desired tourist locations can be covered only by hiring jeeps or light motor vehicles. Researchers opined that effective synergy between forest department and public works department may ensure proper road maintenance enabling visitors to experience hassle free travel to tourist destinations. Another major constraint is the availability of accommodation units. In the name of accommodation, Forest Rest Houses (FRHs) are the best available option for accommodating the arriving visitors. Four FRHs are on operation and can be booked through the Divisional Forest Officer and rest of the touristic arriving over there may pitch their tents on available camping sites. It is most ironic that each FRH provides merely two bed rooms and that too are booked in advance and poor tourists on not finding accommodation remain helpless except to return back to Dehradun - the only touristic town with all amenities and facilities. A couple of log huts are also available for the Indian Forest Service probationary at Kanasar and Budher. Uttarakhand state forest department is required to increase the bed capacity for the nature enthusiasts interested to stay at destinations like Devban, Budher and Mundali.

The outcome of field survey and close interaction with other stakeholders further revealed that in 2002, forest department had constituted an Eco-Development Committee (EDC) with the cooperation of local villagers to properly utilize and conserve existing forest resources. The MOU signed between Uttarakhand Forest Department and EDC says that 40% of the total earnings from the existing FRHs shall go to EDC members to meet the recurring expenses. The duties and responsibilities of EDC members are to provide guide services, escorting and luggage handling to visitors, besides running FRHs. In compliance to this, five percentage of the total earnings of EDC members from camping is to be remitted in favor of forest department as a token of fee for utilizing forest resources for tour purposes. However, poor coordination continuously persists between Forest Department and Regional EDC. The low level of participation of EDC members has been primarily attributed to the low volumes of tourist arrival as well as untimely payment of 40% share to EDC members by the department concern. A transparent system is expected to come into existence shortly and this may enhance the possibility of local people participation for community based ecotourism.

Residents of the study circuit felt that tourism development activities would bring both, positive and negative impacts in economic, socio-cultural and environmental aspects. Some respondents had strong reservation that local residents do not enjoy benefits from the industry to a great extent as quite a large number of local people are engaged in seasonal jobs including transport facilitators, food service providers, agri-based products and cultural performers etc. A resident of Indroli eco-circuit zone expressed his feelings differently and stated that, “Although the job here is not very good for us, it is enough; because we have nothing, only energy…so this job fits me.” Another respondent was of the view that, “We have no other special skills, and no educational qualification, so we people are satisfied to go with small eatery.” However, most of the respondents expressed their displeasure over the nature of tourism jobs available for them. Their major concern was not only low paid compensation for their hard work and ability, but the nature of job they are asked to accomplish.

One of the residents categorically stated that locals solely depend on agriculture and tourism because of not having any further means for their livelihood. In the same line, another resident shared his
thoughts almost in the same way, by putting the responsibility of tourism development on the shoulders of old age persons in the absence of youths, who have migrated to urban areas in search of bread and butter, is not the right approach to promote tourism. He further anticipated that Koti-Kanasar tourism circuit should be developed quickly in order to check outmigration of local youths. A few local people had deep concerns about its negative aspects. A resident of Kanasar region is apprehensive about the loss of cultural heritage once the present form of tourism takes place. The ancestral villages may lose the very heritage of local traditions and cultural milieu. In recent years, efforts have been made to initiate tourism development plan but ironically local residents have suffered many negative impacts.

Residents also had reservation how increased flow of tourists have increased the costs of living. One of the residents advocated that once agriculture land was undertaken for tourism infrastructural facilities, there is a possibilities of facing reduced food production as well as increased living standard.

Local residents also believed that tourism promotion would strengthen, rejuvenate the product life cycle of tourist attractions by improving the conditions of public facilities such as roads, accommodation, way side eateries, electricity, water, public convenience facilities and finally helping them to improve their standard of living. There is also a small segment of locals that perceived positive side of tourism which is going to change their life. Meeting with local people of existing villages was a valuable experience and opportunity to understand their culture and to get an insight into the heritage of their culture and tradition. Few residents considered tourism as an effective way to make the people aware about their traditions and customs worldwide. Residents also considered that tourism development would be an incentive for the socio-cultural conservation of community and would provide motivational factor for local people to stay in the area. Although the study circuit is in the involvement stage, local residents also perceive that there is a possibility that the young mass may mingle with tourists and lose their traditional values. Villagers of Pattyur village have developed apprehension about tourists arriving in surrounding villages and their interaction with locals may erode the local culture. They were also afraid about adolescent likely to change their mindset and beliefs on being in contact with strangers. Some of the residents assumed that the study circuit is conservative in nature and therefore, may not be fully compatible for tourism promotion. Due to the closed culture, locals are not used to deal with tourists especially foreigners, and they may react aggressively with them which may result in demarketing of area.

Tourism development is a double-edged sword for local communities, and in view of this, tourism has both positive and negative impacts on environment. Surprisingly, a small number of residents hardly have any concerns about environmental changes as in their opinion these are very common elements in tourism promotion. One resident stated, "If we can earn money, it doesn’t matter that our environment is damaged a little". Some of the residents considered that the development of tourism is a potential way to increase residents’ environmental awareness. On the other hand, few respondents were apprehensive about the use of their agriculture fields for camping sites if the tourist arrivals increased in due course of time. Issues such as traffic congestion, pollution, overcrowded destination, increasing garbage, construction of cemented structures changing local landscape were also pointed out by residents.

The study also examined perceived impacts of tourism development and promotion across the demographic characteristics of local residents. The study revealed that residents of different age group perceived diverse economic and socio-cultural impacts of tourism on the community. These results are consistent with the studies of Cavus and Tanrisevdi (2003), Harrill (2004), McGehee and Anderreck (2004), Anthony (2007) and Wang and Pfister (2008). Contrary to the studies of Harrill and Potts (2003), Petrzela et al. (2005) and Wang and Pfister (2008), the results showed that there was no significant difference in the economic and socio-cultural impacts across the gender of respondents. However, the attitude towards environmental impacts varied across male and female respondents. Findings also revealed that irrespective of educational level, all local residents had similar attitude towards economic impacts of tourism. Residents attitude towards socio-cultural and environmental impacts were little diverse. These results are consistent with the studies of various researchers including of Teye et al. (2002), Wang and Pfister (2008), Shibia (2010), Snyman, (2014) who attempted to understand the attitude of local residents towards tourism impacts in developing and under-developing tourism destinations.

A focus on systematic infrastructure development, provision for conservation of environment and culture, imparting soft skills, rationalizing social welfare schemes and increasing local linkages from tourism operations would go a long way in improving local community attitudes towards tourism. Handful of residents believed that the community should be involved in the development and planning
process. Quite a few had suggested that residents should not be involved in the participative process, their reasons being that it was not realistic for government to listen to everyone’s suggestion, which is quite time consuming and an inefficient process. Partnership among all relevant stakeholders in the areas, including government, tourism promotion boards, non-governmental organizations, local community and local tourism industry should be synergized to ensure that all contribute actively in the planning and management of emerging tourism opportunities. Community participation and support should be encouraged and obtained in order to determine strategies and activities which are beneficial and supportive to the requirements, conditions and culture of the community. Considering residents as a social object, tourism development authorities should respect them and tourism planners should involve them in the tourism planning, seek for their opinions, give priority to them in jobs and strengthen their tourism knowledge and abilities. The examination of residents’ attitude as a platform for communication is necessary for developing effective plans and helps to manage this emerging rural tourism destination. Careful strategy for planning and management of tourism are strongly needed in order to ensure that it is developed on a right path, and hence the opportunities and benefits it can offer to the locals and other concerned stakeholders, could be increased.

Considering these issues in mind, accommodation, eaters operators, visitor interpretation centre, museum showcasing the natural and cultural heritage are needed to be developed in order to increase the number of tourist arrival. A wide range of programs should be conducted to increase tourism awareness, customer understanding, inter-alia sector support and government involvement in conservation of flora and fauna and skills development of concerned stakeholders for sustainable tourism development. Tourism development agencies and local communities must collectively work together to enlarge tourism attraction area, improve roads and public facilities, invest more to enhance the attractiveness of rural tourism products and to attract tourists to stay longer and give them a safe and comfortable rural experience.

8. Conclusion

This research was taken in response to the calls for timely tourism impact research in emerging tourism destination of rural India. This study was conducted to gain a better understanding of residents’ attitude and provide useful information and suggestions for establishing baseline data of tourism impacts and lead to holistic development. The circuit is characterized by poorly developed tourism products, particularly in terms of accommodation, catering and basic infrastructure facilities. Local community along with concerned stakeholders must promote effective tourism system for attracting good numbers of tourists. Results of the study are useful in general for further growth since the local residents understand the extent of tourism impacts. The beneficial economic impacts of tourism have led the locals to financial prosperity, employment opportunities and better standard of living, but quite a large number of them were apprehensive about its negative outcomes. Community is keen to promote tourism and increase tourism gains with a corresponding effort to reduce the consequences deprived by tourism. Incidentally, different demographical characteristics have diverse attitude towards economic, socio-cultural and environmental impacts of tourism. It was observed that older residents were less positively disposed towards tourism and possibly resists changes in economic and social areas because of their traditional mentality. Male and female residents directly or indirectly involved in tourism industry advocated tourism promotion for economic and social benefits whereas in environmental context, male displayed negative or neutral attitudes towards tourism development. Educated residents showed positive attitudes towards tourism impacts and were supportive for tourism development. This may indicate that the higher educated residents tend to have higher positive perception towards the areas improvement in terms of image, facilities and infrastructure improvement as well as cultural promotion.

Concerning to the destination life-cycle model, the responses of local residents confirm that the present tourism circuit is in apathy stage (Irridex’s model) or involvement stage (Butler model) of destination life cycle as quite a large number of people openly expressed enthusiasm of tourists visiting the destination. These findings can assist government, tourism development authorities, policy makers and potential entrepreneurs and other stakeholders in the implementation of tourism development strategies. Forest and Wildlife department of Uttarakhand state should constantly watch environmental and ecological aspects and should maintain the standard level of facilities for tourists and impose appropriate methods to limit the number of tourist arrivals. Properly monitored tourism development and promotion may contribute to economic empowerment of the local residents in terms of tourism education, training and
jobs, better standard of living; psychological empowerment by giving a certain level of pride regarding community; socio-cultural empowerment by strengthening, rejuvenating and exchanging culture and traditions and bringing the members of community closer; and political empowerment by active participation. Managing host community expectations, through an understanding of local residents’ attitudes under changing economic, socio-cultural and demographic conditions, will lead to more efficient, reasonable and sustainable tourism development. This multifaceted approach can address socially desirable, economically viable and environmentally sustainable tourism.

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Residents’ Attitudes toward Tourism Development

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