

# An Empirical Study of Residents' Attitudes for Sustainable Tourism Development in Himachal Pradesh

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**Abstract** *Strategically it is immensely beneficial to planners to get acquainted with the resident's perceptions. It will lead to better utilization of resources and greater involvement of residents, paving way for the sustainability of future tourism development. A model to understand these perceptions was created using concepts from the literature. Factor analysis and Structural Equation Modeling (SEM) was used to analyze the data collected from the residents. The results reveal that there is a strong correlation between the satisfaction of resident's community and their perceptions regarding the impact of tourism on environment.*

**Keywords:** *Sustainable Tourism, Socioeconomic Impacts, Resident Attitudes, Responsible Tourism, Tourism Management*

## INTRODUCTION

Over the international tourists arriving in India during the period January-April 2019 were 39,35,293 as compared to 38,60,871 in January-April 2018 registering a growth of 1.9%. 2018 numbered 10.56 million, registering a growth rate of 5.6% over the corresponding period in the previous year. In 2017 come to 10.18% million, record an increasing rate of 15.6% over the corresponding period in the previous year. During 2016, FTAs (Foreign Tourist Arrivals) were 8.8 million with a growth rate of 9.7% over 2015. In the year 2016, Non-Resident Indians (NRI) among the (ITA) constituted a sizeable chunk of as many as 5.77 million with a growth rate of 9.7% over 2015. ITAs include both FTAs and Arrivals of Non-Resident Indians (NRIs). In the year 2016, there were 14.57 million International Tourist Arrivals (ITAs) in India, with a growth rate of 9.7% over 2015. Through the Tourism Foreign Exchange Earnings was 1.4% during the period of 2017 amounting to Rs.1,80,379 crore and with a growth of 17% over the corresponding period of the previous year. The FEEs from tourism in terms of rupees during 2016 were put at Rs.1,54,146 crore with a growth rate of 14.0%. Many scholars have widely acknowledged the economic

benefits and have opined that distribution of benefits among stakeholders in traditional tourism development is seldom fair and equitable. Environmental and cultural costs do come with benefits that are borne by the stakeholders (Mortz, Ray & Jain, 2005). This indicates that shifting from this traditional tourism model towards sustainable tourism development necessitates the distribution of benefits and costs in an equitable and fair manner. Local residents are significant stakeholders whose participation is crucial towards sustainable tourism as opined (Jamal & Getz, 1995).

In 2006, the Sustainable Tourism Study Group was constituted to bring together several stakeholder groups to carry out a study on sustainable tourism development in Himachal Pradesh (DBEDT, 2006a). Twining-Ward and Butler (2002) in Samoa revealed with the help of a Model developed for adapting as per the needs of Himachal Pradesh to manage sustainable tourism initiatives (Fig. 1). Further, the model suggested how various indicators such as economic, social, and environmental can be monitored over time and tourism's impacts could be calculated (DBEDT, 2006a). Furthermore, DBEDT (2006a) opined that the land has higher precedence over stakeholders' short-term interests (Sheldon et al., 005). See Fig. 1.

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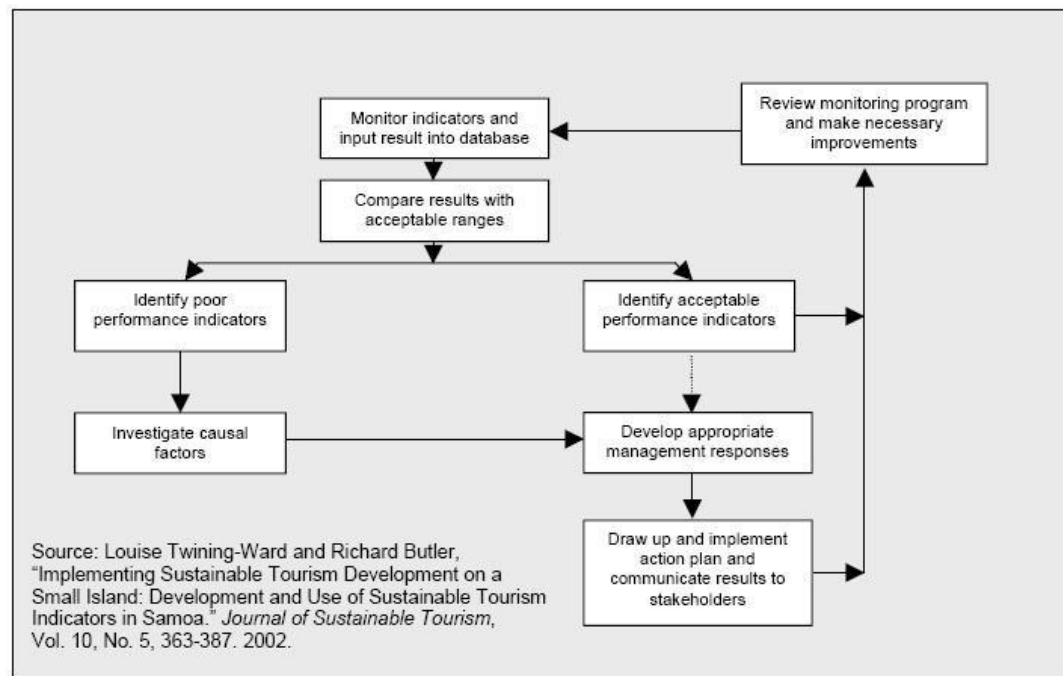


Fig. 1

Many Indian states are more inclined toward development of sustainable tourism especially Himachal Pradesh. In fact, tourism is appreciated as an economic engine for the development of state. Himachal Pradesh has been a core sector of the economy for several decades. Tourism sector contributed over 6.6% to its GDP during 2017 and is expected to reach about 18% by the end of 2022. The state is famous for its Himalayan landscapes and popular hill-stations. The state attracted about 19.6 mn tourists in 2017, which is close to 3 times the size of its population. The state recorded the highest increase of 16.09 million in domestic tourists' arrival and 356000 in foreign tourists during 2018. Ironically, the rapid increase in tourist traffic has also increased the burden on resources in the state that has led to rise in prices and scarcity for energy, water, and land. Oki and Brasher (2003) revealed that cap rock aquifers are vulnerable to pollution from over-pumping from the island's groundwater source. Urbanization is responsible for change in the character of the natural environment by affecting native species habitat and is very tough, slow and costly to diminish the adverse impacts of development of a particular area. It is imperative on the part of the residents of Himachal Pradesh to make all possible efforts to make tourism move sustainable as it would help balance the demand for natural resources between residents and tourists. Eventually it has become vital to study the understanding of residents' perceptions to ensure the distribution of the economic, social, environmental costs and benefits of tourism that will aid and support the growth of tourism development sustainably (Twining-Ward & Butler, 2002). The objective of this research is to, understand the "residents' attitudes for sustainable tourism development in Himachal Pradesh".

## LITERATURE REVIEW

During last two decades many scholars have turned towards sustainable tourism development as this area has increased the concern of local residence beside environment. In fact, triple bottom line in tourism has attracted many scholars to suggest timely measures. Tourism development in relation to environmental issues and costs is the relevant bases for strength of destination use deal return programmed for the benefit of all stakeholders and having several positive environmental impacts that is helpful for tourism planning preventing far more environmental costs (Cohen, 1978). Many tourism scholars (Butler, 1980; Christensen & Beckmann, 1998 & Gössling, 2002) the cumulative impact of tourists on the environment and demand for resources also rise. Leisure travelers are more lenient while on vacation that raises demands for resources per capita (Warnken et al., 2004). The leaders could bring economic rewards who perceive the tourism activities and tend to have the higher tendency of being involved in capacity building of their communities viz a viz in context to development of tourism and may bring negative impact to environment (Fariborz & Ma'rof, 2009). Singh and Mishra (2004) while examining the social, economic and environmental dimensions of the green tourism suggested awareness programs to minimize biophysical and human vulnerabilities and risks in mountain regions. In the local community participation in any project, 'opinion leaders' may be consulted for community's benefits from the project while other 'official leaders' value the success of such projects (Kibicho, 2008).

Sustainable development can be achieved by maximising local population involvement (Jensen, 2010). In same vein Nunkoo, et al. (2010) figured that insertion of various variables in behavioral models could help in enhancing predictive power in elaborating the attitudes towards tourism and even result in support for the industry. Richa (2007) revealed the concept of overcrowding of tourism like in case of nature-based tourism and highlighted the status of nature-based tourism and a comparison between these states is drawn further. Tourism activity is one of the best ways for conservation and development of the local residents (Bansal & Gautam, 2007). Hwansuk et al. (2010) suggested some important components of sustainable tourism such as community participation, environmental sustainability and long-term planning for tourism.

Matarrita-Cascante et al. (2010) evaluated the social, economic and environmental sustainable practices that have been made possible via community agencies and further suggested to enable community agencies through proper participation, communication, and tolerance. An approach to assess sustainable tourism development for protected areas and communities is a feasible model (Marlies & Breda, 2000). Moreover, local social interaction elements are necessary for the achievement of sustainable tourism practices. Ko and Stewart (2002) opined that resident satisfaction is closely related to 'perceived positive and negative' tourism impacts. Tourism development is inclined to community satisfaction through the perception of tourism impacts. Mohammed (2007) results state that local people have more favorable attitudes towards tourism development indicators. Further, Lepp Andrew (2008) shows that residents' attitudes depended on those events which took place long before the introduction of tourism. Further suggesting that tourism is fruitful to identify the multitude of factors that is influenced by residents' attitudes and implications for sustainable tourism development. Further, the study expose three mechanism of sustainable tourism, environmental sustainability, continuing planning, community contribution and within tourism, are significantly connected to support for tourism and to the negative and positive impacts of tourism (Choi & Murray, 2010). Many scholars (Bramwell, 2006; Twining-Ward & Butler, 2002, Bramwell, 2006) perceived that judgment is based on cultural, environmental, and economic impacts; how wealth is produced and dispersed; and the virtual power among the stakeholders. In similar vein Dyer, et al. (2007) Stakeholders' cooperation is necessary for sustainable tourism; otherwise, only the most powerful will benefit. thus to keep stakeholders satisfied with tourism development and their community, the environment and culture must be taken care of (Ahn et al., 2002; Hjalager, 1996). Some scholars (Dyer et al., 2007; Cavus & Tannisevdi, 2003; Faulkner & Tideswell, 1997; Liu, Sheldon & Var, 1987 and Harrill, 2004) pointed out that resident in mass tourism destinations such as Hawaii' depends on tourism for their standard of living.

Thus, tourism development usually involves a trade conflict between economic benefits and environmental or cultural costs, residents try to downplay the negative impacts and emphasize the economic gains to maintain satisfaction with their community. Therefore, residents with the maximum economic gains are the greatest supporters of the tourism industry. The study option that residents' unconstructive attitudes towards tourism development is when the progress process controlled by planners (Cavus and Tannisevdi, 2003). Therefore, when residents perceive that the costs of tourism exceed the benefits, feelings of resentment and irritation towards tourists start simmering, leading to lower community satisfaction (Doxey, 1975; Faulkner & Tideswell, 1997; Ko & Stewart, 2002) on the other hand when residents are consulted in tourism planning they tend positive towards Tourism (Cavus & Tannisevdi, 2003). Choi and Sirakaya (2005) suggested that sustainable tourism promotes growth with some negative environmental impacts although these can be minimized by measures. Further, costs on tourism can be audited; advantages may be assessed for all the stakeholders (Warnken et al., 2004; Wen, 1998). Many scholars have recognized that by accommodating carrying capacity of tourism destination is helpful for making sustainable development (Butler, 1980; Gössling, Peeters, Ceron, Dubois; Cohen, 1978; Christensen & Beckmann, 1998; Ahn et al., 2002; Patterson, & Richardson, 2005). Himachal Pradesh is a very popular and charming destination with well-developed tourism infrastructure and facilities (Tabatchnaia-Tamirisa et al., 1997). Sheldon, et al. (2005) the state has sufficient infrastructure for both residents and tourists, although its natural attractions make the state lucrative place for tourists. Simultaneously rising tourist arrivals may yield benefits to the residents (Tabatchnaia-Tamirisa et al., 1997). Further, M. Chand and Vivek (2012) study opined that the sustainable tourism development future preparation should consider the inclusion of local residents. Similarly, DBEDT (2006a) suggests the need to conserve land, better coordination between state and country transportation authorities for the improve tourism management system in the state. In recent years certain studies have been conducted to analyse the residents' perceptions towards sustainable tourism development (Wall, 1997, Okazaki, 2008; Andereck et al., 2005; Choi & Sirakaya, 2005; Cole, 2006; Saarinen, 2006; Johnson et al., 1994; Pizam, 1978; Ritchie, 1993; Robson & Robson, 1996; Liu et al., 1987; Liu & Var 1986; Sirakaya et al., 2001; M. Chand and Vivek, 2012; Teye et al., 2002; Upchurch & Teivane, 2000). However, these studies have been conducted by western researchers with meager aspects on Indian context. In fact, understanding residents' attitudes towards sustainable tourism development requires more elaborative and comprehensive study especially in the context of Himachal Pradesh. Recognizing these vary facts, the present study has been conducted on residents' attitudes for sustainable tourism development in himachal

Pradesh. Four hypotheses have been created to assess the local residents' perceptions towards sustainable tourism development in the present study area.

*Hypothesis 1: There is a common set of Residents' perceptions towards sustainable tourism development in Himachal Pradesh.*

*Hypothesis 2: The effective management of tourism will have a beneficial effect on overall community satisfaction.*

*Hypothesis 3: The residents have affirmative observation towards environmental impact of tourism.*

*Hypothesis 4: Community attitude has shown positive impacts on the sustainable tourism development.*

## RESEARCH METHODOLOGY

### Study Area

The study was conducted in the popular destinations of Himachal Pradesh, namely Hill stations like Shimla, Manali, Dharamshala, Dalhousie, Chamba, Khajjiar, Kullu and Kasauli etc. areas for both domestic and foreign tourists.

### Research Instrument

To test the hypothesis a structured questionnaire was developed with the help of literature review, consisting of questions such as demographic profile of respondents and sustainable tourism development variables. Further, survey instrument and various sustainable tourism development factors should be tested (Nunkoo, et al., 2010; Singh & Mishra, 2004, & Choi & Sirakaya, 2005; Johnson et al., 1994, Ritchie, 1993; Matarrita-Cascante et al., 2010; Robson & Robson, 1996; Sirakaya et al., 2001; Teye et al., 2002; Upchurch & Teivane, 2000). The validated final questions are made up to a demographic profile containing 14 questions. Eighteen items were emerged but after survey only thirteen items were found significant.

Likert-type scale values assigned 5 to "strongly disagree", 4 to "disagree", 3 to "neither agree nor disagree," 2 to "agree" and 1 to "strongly agree". Respondents gave their level of agreement that closely corresponded with perception of following statements.

### Sampling and Data Collection

The purpose of this research is to explore Himachal Pradesh residents' attitudes towards environmental impacts of tourism. The intended respondent's resident of the state of Himachal Pradesh. A total of 530 questionnaires were collected. Thirty of the questionnaires were rejected because

they were incomplete or respondents were not residents over the age of 18. Of the questionnaires collected, 500 (94.33% were usable. Data were analyzed by applying factor analysis, mean and S.D.

## RESULTS AND DISCUSSION

### Demographic Profile

Residents were request to choice their sexual category, age, and place. In the survey respondents males accounted for 55% and female 45% (Table 1). The average respondent was in the age group of 26-45. Respondents selected the following as their primary place Shimla (125), Manali (110), Dharamshala (80), and Dalhousie (50). Of the 500 respondents who answered, 25 percent come from Shimla, 22% came from Manali, and 18 percent from Dharamshala. Differences could be attributed to this selection of more than one place or 'other' by several respondents. Respondents were asked to mention about personal income; education level; or their family member doing job in the tourism industry. 41% of respondents held higher degree and 38% declared their personal per year income between 20,001 and 45,000 rupees. A large proportion of the respondents 80.5% stated ranged drove to work or school and a huge majority of 66% commutes spent less than 30 minutes on commuting. 20% of respondents (100) employed in the tourism industry directly or indirectly, in retail business 14, in hotels 50, in restaurants 20. The vast majority 50% percent of respondents reside in Shimla, the Respondents have been in the state on an average be between 21 to 40 years. See Table 1.

**Table 1: Demographic Profile of Survey Respondents**

Gender	N	%
Male	275	55%
Female	225	45%
<b>Age</b>		
18-25	100	20%
26-40	190	38%
41-55	150	30%
55 and over	60	12.0%
<b>Marital status</b>		
Single	175	35%
Married	325	65%
<b>Race</b>		
Shimla	125	24.5%
manali	110	23.0%
Dharamshala	80	18.2%
Delhousie	50	9.8%
Chamba	40	7.5%
Khajjiar	30	5.9%
Kullu	40	0.5%
Kasouli	20	6.8%

Gender	N	%
<b>Level of Education</b>		
High School	170	34%
GED	25	5%
Associates Degree	100	10%
Bachelor's Degree	135	27%
Master's 5467 Degree	60	12%
Doctoral Degree	10	2%
<b>Income Rupees</b>		
0-20,000	80	16%
20,001-45,000	190	38%
45,001-70,000	130	26%
Over 70,000	100	20%
<b>Tourism Employment</b>		
Respondent		
Full-time	100	14.7%
Part-time	50	6.6%
Other industry	350	60.5%
<b>Household Member</b>		
Full-time	80	16%
Part-time	50	10%
Other industry	370	74%
<b>Commute</b>		
No	100	18.0%
Yes*	400	80.5%
0-15 minutes	180	34.9%
15-30 minutes	150	33.0%
30-60 minutes	100	27.2%
Over 60 minutes	70	4.9%
<b>Hill Station of Residence</b>		
Shimla	200	40%
Manali	150	30%
Dharamshala	100	20%
Chamba	50	10%
<b>Length of Residence in State</b>		
0-10 years	100	20%
11-20 years	70	14%
21-40 years	190	38%
Over 40 years	140	28%

\*Note: some respondents reported a commute time though they do not drive

Table No. 2 showcases the descriptive statistics of the 13 variables. On the basis of a five-point Likert type scale (5 to “strongly disagree”, 4. to “disagree”, 3. to “neither agree nor disagree,” 2 to “agree” and 1 to “strongly agree”) the combination variable scores shows that the statements were strongly agreed : (1) TI3 “Resident make less wastewater than Tourists” (M = 4.27) (2) TI4 “Tourism progress warns drinking water supply” (M = 4.27), and (3) GM3 “Due to tourism the govt. services has enhanced in Himachal Pradesh” (M = 4.339), Residents were strongly disagreed of this statement: 1. GM1 “Government does excellent employment balancing tourists and residents necessitates” (M = 3.986) 2. CS3 “I like communication with tourists” (M = 3.85), and 3. CS1 “More land to be urbanized due to tourism” (M = 3.506). To fit in with the assumptions of SEM data was evaluated: linearity, normality, singularity, multicollinearity and adequacy of covariances At Table 2. Larger samples usually have less sampling error than from smaller samples derived from results. In order to assess the perceptions of resident’s towards sustainable tourism development determinants in the Himachal Pradesh, or in other words to be able to test H1, a factor analysis with varimax rotation on the 13 sustainable tourism development determinants was performed categorized into the three groups of “Tourism Environment impacts”, “Government Management of tourism”, “Community Satisfaction”, “Sustainable tourism”. The Bartlett’s test of sufficiency & the Kaiser-Meyer-Olkin test of puerility give support for the factor analysis. Following were the requirements of the study: Eigenvalues > 1, cut-off points > 0.40, cross-loadings > 0.10 and Cronbach’s alpha > 0.70.

Table 2 presents significant information about factors explaining between 82.12 and 78.60% of the variation that are found above the generally accepted level of 50%.

Thus, all items pass the eigenvalue (more than 1.00), the cut-off points (factor loading not > 0.54). The Cronbach alpha (ranging from 0.89 to 0.81) is very high, and is above the usually accepted level of 0.80.

**Table 2: Results of Factor Analysis for the**

**Community Perceptions towards Sustainable Tourism**

The study had 500 respondents and 13 observed variables.

**Development Variables**

	Factor 1	Factor 2	Factor 3	Factor 4	ASTDF	Mean	SD
Explained variation (per cent)	82.22	83.60	80.10	80.20	78.60		
Eigen values	2.60	2.57	2.39	240	1.66		
<b>1. Tourism Environment Impacts</b>							

	Factor 1	Factor 2	Factor 3	Factor 4	ASTDF	Mean	SD
Tourists use more energy than residents	.821					3.92	2.1
Tourists use more than residents	.935					4.23	2.1
Tourists generate more wastewater than residents	.995					4.27	2.03
Tourism development threatens drinking water supply due to tourism	.772					4.27	2.07
<b>2. Government Management of Tourism</b>							
The State government does a job balancing resident's and tourists' needs		.895				3.98	.973
The state government listens to residents about their concerns with tourism		.965				3.92	.978
The quality of public services has improved on Himachal Pradesh due to tourism		.665				4.33	.994
<b>3. Community Satisfaction</b>							
Tourism causes more land to be developed			.767			3.50	2.20
Tourism is responsible for higher land prices			.825			4.02	2.23
enjoy interactions with tourists			.963			3.85	2.17
Due to tourism, housing is not affordable on Himachal Pradesh			.865			3.98	2.2
<b>4. Sustainable Tourism</b>							
I feel I can access the decision-making process to influence future tourism development				.825		3.95	2.02
Long-term government planning control tourism's negative environmental pacts				.540		4.31	1.93
Cronbach Alpha	0.84	0.87	0.80	.82	0.81		

As shown in Table 3:

Factor 1, *Tourism Environment Impacts* includes Tourists use more energy than residents, Tourists use more than residents, Tourists generate more wastewater than residents, and Tourism development threatens drinking water supply due to tourism. The item tourists generate more wastewater than residents with highest loading 0. (0.995).

Factor 2, *Government Management of Tourism* includes the State government does a job balancing resident's and tourists' needs, the state government listens to residents about their concerns with tourism, the quality of public services has improved on Himachal Pradesh due to tourism. The item the state government listens to residents about their concerns with tourism with highest loading (0.965).

Factor 3, *Community Satisfaction* includes tourism causes more land to be developed, tourism is responsible for higher land prices, enjoy interactions with tourists, Due to tourism and housing is not affordable on Himachal Pradesh. The item enjoy interactions with tourists' highest loading (.963).

Factor 4, *Sustainable Tourism* includes I feel I can access the decision-making process to influence future tourism development, Long-term government planning control tourism's negative environmental pacts. The item I feel I can access the decision-making process to influence future tourism development highest loading (.825). The study

indicates a set of sustainable tourism development factors that are considered more noteworthy by the respondents (confirms HI).

Table 3 displays variables used in the present study using bivariate correlation coefficients.

We observe strong, positive and significant correlations between all the sustainable tourism development criteria such as *Tourism Environment impacts* (TI), *Government Management of tourism* (GM), *Community Satisfaction* (CS), *Sustainable tourism* (AS) and all sustainable tourism development (ASTDF). These results show that the all determinants for sustainable tourism development are optimistically related with demographic variables.

Table 3: In respect to characteristics of education there is positive and strong association between occupation, education and age, and maximum variables of sustainable tourism criteria, providing partial support to hypothesis H2. The results support H2 stating that effective tourism management will have fruitful effect on community satisfaction completely (partially support H2). Contrary there is a strong and negative association between sex and marital status, and most systems of the sustainable tourism criteria see Table 3, thus providing partial support to hypothesis H2. Further, results reveal that age, occupation and education are rated as the systems of sustainable tourism higher and other rated as lower in this case.

**Table 3: Bivariate Correlations for the Variables used in Analysis**

	Age	Gender	Employment	Marital Status	Education	GM	CS	TI	AS	ASTDI
Age	1.000									
Gender	-0.822**	1.000								
Employment	0.792**	0.812**	1.000							
Marital status	-0.359**	0.463**	-0.370**	1.000						
Education	0.125	0.138	0.164	0.080	1.000					
GM	0.565**	0.539**	0.492**	-0.314**	0.427**	1.000				
CS	0.497**	0.406**	0.476**	-0.207**	-0.523**	0.503**	1.000			
EcoI	0.405**	0.412**	0.474**	-0.309**	-0.423**	0.510**	0.316**	1.000		
AS	0.406	0.412	0.474	-0.309	-0.423	0.511	0.316	1.000	1.005	
ASTDI	0.170	0.281	-0.205*	-0.206	-0.651**	0.562**	0.525**	0.401**	0.400	1.000

\*\* Significant at 0.01 level

\* Significant at 0.05 level

TI = Tourism Environment impacts, GM = Government Management of tourism 'CS = Community Satisfaction

AS = Sustainable tourism, ASTDI = all sustainable tourism development impacts

*Hypothesis 3: The residents have affirmative observation towards environmental impacts of tourism.*

Table 3 shows the relationship of residents towards environmental impacts. The findings foretell, that favorable perception of residents towards environmental tourism impacts have advantageous results on the community satisfaction and is such supported with an  $R^2 = 0.73$ . Similarly, residents having positive perception towards the environmental impacts of tourism will experience higher community satisfaction. The past studies also established this relationship (Doxey, 1975; Ko & Stewart, 2002; Cavus & Tanrisevdi, 2003; Cohen, 1978; Dyer et al., 2007; Faulkner & Tideswell, 1997).

*Hypothesis 4: Community attitude have shown positive impacts on sustainable tourism development.*

In order to examine the overall community attitude towards sustainable tourism development in the state co-coefficient of correlation applied. Hypothesis 4 reveals that the community attitude have advantageous impact on sustainable tourism development for this relationship is substantiated by ( $R^2 = 0.27$ ). The finding shows that community involvement in tourism planning & development is encouraged in the state. In fact, participation of residents is necessary for sustainable tourism development which has a profound impact on their attitudes. Many scholars have also emphasized community participation in the tourism development process (Ko & Stewart, 2002; Dyer et al., 2007).

## CONCLUSION

The scope of this paper was fourfold: first, examines the common set of Residents' perceptions towards sustainable

tourism development in Himachal Pradesh with resident's demographic characteristics. The major finding with respect to the second and third objective may be summarised as follows, the results of this study indicate that perceived effective government management of tourism will positively affect overall community satisfaction and is supported. The finding indicates that tourism development needs to be harmonious with destination activities. Furthermore, government planning is very important for residents' satisfaction and the additional burden of infrastructure may be maintained by the public departments. In addition, the findings show the relationship of residents towards environmental impacts. The findings predict that favorable perception of environmental tourism impacts will have positive effect on the overall community satisfaction. Similarly, residents having more positive perception towards environmental impacts of tourism will experience high community satisfaction. Hypothesis 4 reveals community satisfaction having positive impact on the attitude for sustainable tourism development, with this relationship is substantiated. The finding shows that community involvement in tourism planning & development is encouraged in the state. In fact, participation of residents is necessary for sustainable tourism development which has a profound impact on their attitudes. The findings of this study are limited by the nature of the sample. The above findings cannot be comprehensive to the overall population in India, as the resident's perception differs with respect towards sustainable tourism development. Further studies, especially comparative may be conducted to cover similar industrial perspectives. Hence, gainful tourism development of perceived influence over community should be studied further in a prospective manner as per need. To cope

with changing requirements of the industry a calculative methodology needs to be examined and further monitored for positive results.

## REFERENCES

- Ahn, B. Y., Lee, B. K., & Shafer, C. S. (2002). Operationalizing sustainability in regional tourism planning: An application of the limits of acceptable change framework. *Tourism Management, 23*, 1-15.
- Álvarez, L., Martín, A., & Casielles, R. (2007, May). Relationship marketing and information and communication technologies: Analysis of retail travel agencies. *Journal of Travel Research, 45*(4), 453-463. Retrieved April 15, 2009, doi:10.1177/0047287507299593
- Batra, G., & Kaur, N. (1996). New vistas in reducing the conflicts between tourism and the environment: An environmental audit approach. *Managerial Auditing Journal, 11*, 3-10.
- Bramwell, B. (2006). Actors, power, and discourses of growth limits. *Annals of Tourism Research, 33*(4), 957-978.
- Butler, R. (1980). The concept of a tourist area cycle of evolution: Implications for management of resources. *Canadian Geographer, 24*, 5-12.
- Cavus, S., & Tanrisevdi, A. (2003). Residents' attitudes toward tourism development: A case study in Kusadasi, Turkey. *Tourism Analysis, 7*, 259-269.
- Choi, H. C., & Sirakaya, E. (2005). Measuring residents' attitude toward sustainable tourism: Development of sustainable tourism attitude scale. *Journal of Travel Research, 43*, 380-394.
- Christensen, A. M., & Beckmann, S. (1998). Consumers' perspectives on tourism and the environment. CEC Working Paper No. 7.
- Cohen, E. (1978). The impact of tourism on the physical environment. *Annals of Tourism Research, 5*, 215-237.
- Cronk, Q. (1997). Islands: Stability, diversity, conservation. *Biodiversity and Conservation, 6*, 477-493.
- DBEDT (2005). Annual Estimates of the Population by Sex and Age for Hawai'i and its Counties: April 1, 2000 through July 1, 2005.
- DBEDT (2007). 2006 Annual Visitor Research Report Revised.
- DBEDT (2006a). Planning for Sustainable Tourism Part 1: Summary Report.
- DBEDT (2006b). County Population Facts (as of March 22, 2007). Retrieved April 8, 2007, from <http://www.hawaii.gov/dbedt/info/census/population-estimate>
- Doxey, G. (1975). A causation theory of visitor-resident irritants: Methodology and research inferences. *Travel and Tourism Research Associations Sixth Annual Conference Proceedings*, 195-198.
- Dyer, P., Gursoy, D., Sharma, B., & Carter, J. (2007). Structural modeling of resident perceptions of tourism and associated development on the Sunshine Coast, Australia. *Tourism Management, 28*, 409-422.
- Faulkner, B., & Tideswell, C. (1997). A framework for monitoring community impacts of tourism. *Journal of Sustainable Tourism, 5*, 3-28.
- Gössling, S. (2001). The consequences of tourism for sustainable water use on a tropical island: Zanzibar, Tanzania. *Journal of Environmental Management, 61*, 179-191.
- Gössling, S. (2002). Global environmental consequences of tourism. *Global Environmental Change, 12*, 283-302.
- Gössling, S., Peeters, P., Ceron, J. P., Dubois, G., Patterson, T., & Richardson, R. (2005). The eco-efficiency of tourism. *Ecological Economics, 54*, 417-434.
- Green, S. B., & Salkind, N. J. (2005). *Using SPSS for windows and Macintosh: Analyzing and understanding data*. Upper Saddle River, NJ: Pearson Prentice Hall.
- Harrill, R. (2004). Residents' attitudes toward tourism development: A literature review with implications for tourism planning. *Journal of Planning Literature, 18*(3), 251-256.
- Hjalager, A. M. (1996). Tourism and the environment: The innovation connection. *Journal of Sustainable Tourism, 4*, 201-218.
- Hoyle, R. H. (Ed.) (1995). *Structural equation modeling: Concepts, issues, and applications*. Thousand Oaks, CA: Sage Publications.
- HTA. (2006). 2006 Survey of Resident Sentiments on Tourism in Hawai'i. HTA (2005). Hawai'i Tourism Strategic Plan: 2005-2015.
- Jamal, T. B., & Getz, D. (1995). Collaboration theory and community tourism planning. *Annals of Tourism Research, 22*, 186-204.
- Klasner, F., & Mikami, C. (2003). Land use on the island of India, 1998. USGS.
- Kline, R. B. (2005). *Principles and practice of structural equation modeling* (2<sup>nd</sup> ed.). New York, NY: The Guilford Press.
- Ko, D. W., & Stewart, W. (2002). A structural equation model of residents' attitudes for tourism development. *Tourism Management, 23*, 521-530.
- Lankford, S. V., & Howard, D. R. (1994). Developing a tourism impact attitude scale. *Annals of Tourism Research, 21*, 121-139.

- Lindberg, K., & Johnson, R. (1997). Modeling resident attitudes toward tourism. *Annals of Tourism Research, 24*, 402-424.
- Liu, J., Sheldon, P., & Var, T. (1987). Resident perception of the environmental impacts of tourism. *Annals of Tourism Research, 14*, 17-37.
- Liu, J., & Var, T. (1986). Resident attitudes toward tourism impacts in Hawai'i. *Annals of Tourism Research, 13*, 193-214.
- Chand, M., & Vivek. (2012). Residents' perceptions towards sustainable tourism development in Manali region. *South Asian Journal of Tourism & Heritage, 5*(1).
- Mortz, D., Ray, C., & Jain, R. (2005). Major environmental problems facing the Hawai'ian Islands: Management, policy, and technology transfer options. *International Journal of Technology Transfer and Commercialization, 4*, 79-104.
- Nunnally, J. C., & Bernstein, I. H. (1994). *Psychometric theory*. New York, NY: McGraw-Hill.
- Oki, D., & Brasher, A. (2003). Environmental setting and the effects of natural and human-related factors on water quality and aquatic biota, Canada. USGS Water-Resources Investigations Report 03-4156.
- Satorra, A., & Bentler, P. M. (1994). Corrections to test statistics and standard errors in covariance structure analysis. In A. Von Eye & C. C. Clogg (Eds.), *Analysis of Latent Variables in Developmental Research* (pp. 399-419). Newbury Park, CA: Sage Publications.
- Sheldon, P., Knox, J. M., Lowry, K. (2005). Sustainability in a mature mass tourism destination: The case of Hawai'i. *Tourism Review International, 9*, 47-59.
- SHERC. (2005). Annual Report, 2005. State of Hawai'i DBEDT.
- Tabatchnaia-Tamirisa, N., Loke, M., Leung, P., & Tucker, K. (1997). Energy and tourism in Hawai'i. *Annals of Tourism Research, 24*, 390-401.
- Tabachnick, B. G., & Fidell, L. S. (2001). *Using multivariate statistics* (4<sup>th</sup> ed.). Boston, MA: Allyn and Bacon.
- Twining-Ward, L., & Butler, R. (2002). Implementing STD on a small island: Development and use of sustainable tourism development indicators in Samoa. *Journal of Sustainable Tourism, 10*, 363-387.
- Walpole, M., & Goodwin, H. (2001). Local attitudes towards conservation and tourism around Komodo National Park, Indonesia. *Environmental Conservation, 28*, 160-166.
- Warnken, J., Bradley, M., & Guilding, C. (2004). Exploring methods and practicalities of conducting sector-wide energy consumption accounting in the tourism accommodation industry. *Ecological Economics, 48*, 125-141.
- Wen, J. (1998). Evaluation of tourism and tourist resources in China: Existing methods and their limitations. *International Journal of Social Economics, 25*, 467-485.
- Wong, J. (1996). The impact of tourism on local government expenditures. *Growth and Change, 27*, 313-326.
- Tourism Highlights 2008 Edition. (2008). Retrieved April 15, 2009, from World Tourism Organization (WTO) Web site: <http://unwto.org/facts/menu.html>. World Tourism Organization (2007). Tourism Barometer, February 2007.
- World Tourism Organization. (2006). Tourism highlights: 2006 edition.
- Yoon, Y., Gursoy, D., & Chen, J. (2001). Validating a tourism development theory with structural equation modeling. *Tourism Management, 22*, 363-372.
- Aref, F., & Redzuan, M. (2009). Community leaders' perceptions toward tourism impacts and level of community capacity building in tourism development. *Journal of Sustainable Tourism, 2*(3).
- Richa. (2003). Manali resort development process: A case for dispersal of tourism in Himachal Pradesh. *Tourism Development Journal - An International Journal for Tourism Research (Annual Journal), 1*(1).
- Singh, R. B., & Mishra, D. K. (2004). Green tourism in mountain regions – Reducing vulnerability and promoting people and place centric development in the Himalayas. *Journal of Mountain Science, 1*(1), 57-64.
- Kibicho, W. (2008). Community-based tourism: A factor-cluster segmentation approach. *Journal of Sustainable Tourism, 16*(2), 211-231.
- Jensen, Ø. (2010). Social mediation in remote developing world tourism locations - The significance of social ties between local guides and host communities in sustainable tourism development. *Journal of Sustainable Tourism, 18*(5), 615-633.
- Nunkoo, R., & Ramkissoon, H. (2010). Modeling community support for a proposed integrated resort project. *Journal of Sustainable Tourism, 18*(2), 257-277.
- Richa. (2007). Sustainable nature based tourism: A case study of Kerala, Sikkim and Himachal. In S. P. Bansal, (Ed.) *Cutting Edge Research in Tourism Emerging Issues and Challenges* (pp. 290-325). Abhishek Publication.
- Bansal, S. P., & Gautam, P. K. (2007). Implementing sustainable tourism: A critical appraisal of tourism at wetlands. *Cutting Edge Research in Tourism Emerging Issues and Challenges*, 210-232. Abhishek Publication.
- Choi, H. C., & Murray, I. (2010). Resident attitudes toward sustainable community tourism. *Journal of Sustainable Tourism, 18*(4), 575-594.
- Tatoglu, E., Erdal, F., Ozgur, H., & Azakli, S. (2000). Resident perception of the impacts of tourism in a Turkish

- resort town. Retrieved from <http://www.opf.slu.cz/vvr/akce/turecko/pdf/Tatoglu.pdf>
- Matarrita-Cascante, D., Brennan, M. A., & Luloff, A. E. (2010). Community agency and sustainable tourism development: The case of La Fortuna, Costa Rica'. *Journal of Sustainable Tourism, 18*(6), 735-756.
- Eraqi, M. I. (2007). Local communities attitudes towards impacts of tourism development in Egypt. *Tourism Analysis, 12*, 191-200.
- Keske, C., & Smutko, S. (2010). Consulting communities: Using audience response system (ARS) technology to assess community preferences for sustainable recreation and tourism development. *Journal of Sustainable Tourism, 18*(8), 951-970.
- Andrew, L. (2008). Attitudes towards initial tourism development in a community with no prior tourism experience: The case of Bigodi, Uganda. *Journal of Sustainable Tourism, 16*(1), 5-22.
- Choi, H. C., & Murray, I. (2010). Resident attitudes toward sustainable community tourism. *Journal of Sustainable Tourism, 18*(4), 575-594.