Chapter 5

Summary, Conclusion, Suggestions and Recommendations

About the Chapter

This chapter presents the findings of the dissertation. The chapter begins with summary of the dissertation followed by the implications and the suggestions are given to policymakers and managers. And finally limitations of the study and future research are discussed.

5.1 Summary

This dissertation was intended to address the lack of empirical studies regarding tourists’ behavioral beliefs and responses to climate change in the valley of Kashmir. Specifically, this study extended the evaluation of climate change related behavior including tourists’ beliefs on climate change, awareness and concern about climate change impacts, and related attitudes towards climate change initiatives and programs. Three overarching objectives guided this dissertation. The main objectives of this study were; 1) Understanding tourist perception towards climate change; 2) Evaluating tourist attitude with regard to climate change and 3) Suggest mitigating strategies to minimize the impacts of climate change on a tourist destination. While the first two objectives were met by implementing the survey method using a self administered questionnaire, the last objective was met by reviewing the literature regarding the behaviour of a tourist towards climate change.

The first objective of the study was to understand the perception of tourist towards climate change. For the items of perception three components were identified as Knowledge, Awareness and Understanding making the perception of tourists. The analysis reveals that the tourists in Kashmir valley possess a very good knowledge about climate change. The mean for the components of awareness and understanding was also significantly on the higher side. The tourists were aware about the causes and consequences of climate change on a tourist destination. The tourists agreed that the mountain environments in Kashmir are losing snow,
thus affecting the winter sports tourism in Gulmarg and Pahalgam. The respondents were also of the opinion that the number of flooding events is increasing by taking into consideration the threat of floods looming over the Kashmir valley after the devastating floods of Sep 2014. The tourists understand the magnitude of the problem of climate change and feel that sustainable development is a solution to the climate change problem at a place like Kashmir.

The next objective of the study was to evaluate the tourist attitude with regard to climate change. Three components were extracted as Environmental concern, Low carbon lifestyle and Green consumerism out of the items of attitude. The tourists were environmentally concerned about climate change but a little reluctant to practice low carbon lifestyle. They felt that people are severely abusing the environment, particularly in tourist places which may result in the overall degradation of tourist destination. For practicing a low carbon lifestyle, there is a lack of knowledge and skills how to practice it. In addition, there is also a lack of interest to practice low carbon lifestyle. The tourists find really difficult to be in the category of green consumers. In spite of them separating their waste while at home, they are little ignorant to repeat the same at tourist places.

This study investigated factors that affect tourist opinion in Kashmir valley towards climate change and environmentally significant behaviors. This study is first of its kind in Kashmir valley to systematically investigate the perception of a tourist along with attitudinal variables and socio-demographic characteristics of global warming and voluntary actions and intentions to reduce green house gas emissions. It also focuses on willingness of the tourists participating in green consumerism. These analyses reveal several important findings.

One of the problems associated with climate change is that not all tourists or stakeholders accept the existence of change and the degree of change. Some of the disputed issues include
the following: whether the global warming trend is within normal limits, whether humankind has contributed to the change, whether temperature increases are a reliable measurement, and what the consequences of global warming will be in the future for humankind. Accordingly, a survey instrument is adopted and modified based on an environmental paradigm. In order to identify the dimensions of the instrument, factor analysis technique was introduced. The variables of the perception were categorized into three dimensions after factor analysis, namely knowledge, awareness and understanding. These three dimensions form the perception of a tourist towards climate change. Out of the 384 tourists surveyed, 81% (306) think that climate change is a concern for a tourist destination. Considering the extreme climate/weather events of the past 10 years, 79% of the sample says that the world climate is changing at a rapid rate. The majority of the sample has a very high awareness of climate change. They believe that there is an increase in mean annual temperature.

The results of this study provide insights into how individuals or tourists’ translate local weather and climate into their perceptions of global warming and personal environmentally significant behaviors. Tourists who have experienced comparatively warmer winters over the past decade or two tend to believe that global warming is happening at an alarming rate and attribute it to human influence, and are more likely to see the urgency of the impact and severity of the problem. In other words, tourists’ perceptions are most sensitive to increasing temperature in winters because the mountain regions have been affected the most. They are more likely to link warmer winters to evidence of anthropogenic global warming, and of the severity of global warming.

Attitudinal variables play a very important role in affecting tourist perceptions of climate warming and tourists’ environmentally significant behaviors. For instance, personal attitudes of an individual towards environment are found to be a strong group of predictors on tourist
opinion towards global warming and climate change. When tourists have more awareness about environmental conservation programs, they are more likely to accept global warming. Furthermore, tourists’ awareness of climate change increased most substantially of all measures.

Findings also revealed that the type of tourist (adventure, cultural, business, leisure and religious) significantly influenced the degree of awareness and understanding of the facts of climate change. For example, an adventure tourist is more responsible and aware towards his role as an environmental conservationist than a business tourist. It also influenced the degree of change in tourists’ awareness, perceived vulnerability, and current influence of terrestrial features (e.g., glaciers and vegetation). Conversely, visitors who engaged in an adventure based experience displayed changes in their awareness and perceptions related to global warming. This is important because it indicates a particular tourist experience is not entirely responsible for changes in perceptions. Changes are more likely attributable to a vast experience engaged in during a visit.

Although awareness of climate change impacts may increase due to a tourist experience at a destination, awareness alone will not directly lead to positive perception towards change in climate. Tourists need to understand in clear terms the elements responsible for climate change and their role to assess the impacts of their acts. For example, in this study, although tourists’ awareness and perceived current impact from climate is on the higher side, there was hardly any change in adapting to a low carbon lifestyle. Beliefs in the occurrence of climate change and human’s impact on climate not only differ within distinct samples of (e.g., adventure and leisure tourist), but their perceptions regarding climate change also differ from the previous studies.
Overall, this study reveals that there was a positive perception of tourists towards climate change. The tourists possess a good knowledge about changing climate. Awareness and understanding of tourists also stands on the higher side. The attitude towards climate change is somewhat little complicated to understand. In this research, tourists were very much concerned environmentally. But at the same time they were little reluctant to adopt to low carbon behaviors. The reason can be unavailability of carbon offset schemes at the consumer stores. For the mitigation of the climate change both the tourist as well as the tourism industry is to take responsibility. The tourist need to be extra committed towards environment. Behaving responsibly at a tourist place will automatically decrease the impacts on a destination.

5.2 Conclusion

The aim of the study was to gain an in-depth understanding of tourists’ perception, attitude and behaviors as it relates to the phenomenon of climate change. More particularly, this study aimed at understanding how tourists’ perceived the problem of climate change in order to understand what would make them commit to adopt to green consumerism while going to participate in tourism activities at various destinations. The results of the study have been presented and discussed in the last chapter; it is now time to conclude how this study can be optimized and why it needs to be replicated.

As revealed in the analysis part of this study, it is clear that the society is moving towards green values and environmental concerns. On the other hand, there is huge gap between the desire to act and real behaviour among tourists as consumers. Although sustainable tourism development suggests that tourism industry may remain a sustainable economy if all its elements collaborate together, the population represented in this study, largely seem to agree. Although tourists were aware of the issue of climate change, they were not willing to change
themselves unless they felt benefited from it. But it is quite evident from the results of this study that the society is moving towards green values indeed and that the emergence of green demand is appearing.

Although major portion of the respondents were aware of the phenomenon of climate change going on today, they were hardly concerned about environmental protection. First of all, one may recognize that individuals have different levels of awareness and different level of knowledge about the issue of climate change, as described in the model of responsible behaviour (Hines, et al., 1986). In this investigation, whether or not individuals are likely to adopt an environmental behaviour actually depends on a combination of three factors, namely knowledge of issue, priorities in life, and attitude toward the environment in general (Bergin-Seers & Mair, 2009; Swarbrooke & Horner, 1999).

Furthermore, this study has found a number of similarities between the literature review and the data collected. First of all, it is clear that tourists’ are not willing to sacrifice their trip for the sake of the environment; especially they are not ready to compromise when they are not able to understand the purpose. In fact, tourists as individuals did not believe that their activity had a significant impact on the environment and did not believe that they contribute to global warming. Socio-psychological theory of dissonance and denial illustrated that “people may profess anxiety over climate change, but be faced with internal resentment or even denial over what they cannot accept as justifiable change in behaviour” (Stoll-Kleemann, et al., 2001, p.112) such as in the present case travelling by public transport or change their travel patterns.

This investigation remains very important both from academic research and tourist destination’s management point of view. Although one will not be able to draw conclusions
about tourist perception and attitude of the phenomenon of climate change in whole Jammu 
and Kashmir, one may however conclude that for this particular study, tourists were very 
concerned about the phenomenon of climate change. As a matter of fact, the major concern 
that has been significantly observed among respondent is the fear of natural hazards due to 
the impacts of climate change.

Climate change is one of the most urgent global problems facing the planet. The increasing 
contribution of tourism to climate change makes this research valuable in a number of ways. 
A wide range of international bodies, governments and non-governmental organizations are 
actively engaged in reducing greenhouse gas emissions. Specifically, the findings of this 
research provide important information to policymakers seeking to reduce the effect of 
tourism’s contribution to global warming through affecting behavioral change by individual 
tourists.

This research has demonstrated that the majority of tourists are aware that tourism activities 
have a substantial impact on climate of the world. Although levels of awareness of the 
impacts of tourist activities on climate change are quite high, tourists are less aware of their 
role to minimize the impacts. The association between tourist behaviour and climate change 
is not one that is formed automatically in the minds of the tourists that took part in this 
research. Policymakers need to address this issue and find a way to induce tourists to make 
the connection in their minds between their activities and impacts on climate change. It is not 
necessarily a lack of knowledge that is causing the problem, as the majority of tourists are 
highly knowledgeable that tourism activities are a significant contributor to climate change. 
The problem is more that this awareness is in the back of the tourists’ minds, rather than 
being a prominent consideration in their thoughts.
5.3 Implications

5.3.1 Theoretical Implications

This study investigating tourists’ behaviour towards climate change resulted in a number of important contributions to knowledge. This section outlines and discusses the main theoretical contributions. This study contributes new knowledge to the field of tourism and climate change in a number of different ways. Previous studies have tended to focus on tourists’ awareness of and attitudes towards climate change (Gössling et al. 2006; Becken 2007; Randles and Mander 2009; Barr et al. 2010; Cohen et al. 2011). This study is one of the first to wholly examine the extent to which thoughts about climate change feature in the day to day lifestyle of a tourist. This research revealed that the majority of tourists do not think about climate change impacts at all. The reasons why tourists do not think about climate change when practicing a certain lifestyle were also investigated and established.

This study is the first of its kind in Kashmir valley to identify the behavioral aspects of tourists towards climate change. This research contributes to the literature on the tourists’ engagement with climate change (Stoll-Kleemann et al. 2001; Anable et al. 2006; Lorenzoni et al. 2007). The results of this research contribute to the literature that has investigated tourists’ awareness and understanding of climate change. In contrast with some of the earlier studies (Gössling et al. 2006; Shaw and Thomas 2006; Becken 2007; Randles and Mander 2009) that found a generally low awareness amongst tourists of the impacts of climate change, this study discovered that the majority of tourists are aware that climate change is a cause of concern for the whole of the tourism industry. This finding is supported by the results of Cohen et al. (2011); tourists are aware to some degree of the impact of climate change on a tourist destination. In this way, the findings of this research were not parallel
with previous studies that have proposed that tourists do not have a deeper insight into knowledge of climate change issues.

This study provides further insights into the reluctance amongst tourists to adapt to the concept of green consumerism (Becken 2007; Randles and Mander 2009; Barr et al. 2010). Similar to the findings of Becken (2007), this research discovered a belief amongst tourists that if people don’t change their current ways of living, the earth will suffer from severe environmental disasters. In contrast with the findings of Randles and Mander (2009) and Barr et al. (2010), the prospect of using public transport was not viewed favorable than using a private car. In contrast with Cohen et al. (2011), this research revealed that tourists have a strong affinity with carbon offset schemes. Whilst this research found weak evidence of tourists believing that responsibility for climate change lies with them. This contradicts the findings of Becken (2007), Gössling et al. (2009) and Randles and Mander (2009) who found that the majority of tourists were prepared to accept personal responsibility for contributing to climate change. As with the increased awareness of the impacts of climate change discovered in this research compared with earlier studies, the increased level of acknowledgement of personal responsibility may signal a growing understanding and acceptance of climate change over time by tourists.

5.3.2 Managerial Implications

A key finding from this research that has important implications for policymakers and managers is that Carbon dioxide has a stronger global warming potential than all other greenhouse gases. The responsibility of the policy makers and managers is to make keen attempts for the reduction of carbon emissions. In this study, tourists that had most frequently taken holidays had higher levels of awareness of the impacts of climate change and expressed more positive attitudes towards changing climate. The tourists have reported lower levels of
engagement with low carbon lifestyle. This is an important issue for policy makers aiming to reduce tourism’s impact on climate change. Awareness programs and policies are to be formulated with regard to engagement with low carbon lifestyle.

The study reveals that the tourists are very reluctant in practicing green consumerism, which throws a challenge open for the managers and policymakers to educate the masses particularly the tourism stakeholders about the value of being green. The findings of this research provide policymakers with detailed information on the most salient barriers to adapt to green consumerism. Whilst there is a considerable amount of scope for behavioral change by tourists in Kashmir valley, the findings of this research suggest a difficult and slow process, but it is vital that policymakers strive to affect this change if emissions from the tourism industry are to be reduced in the future. In addition, further action could be taken to make alternative forms of transport more competitive with flying. Policymakers could subsidize train, coach and ferry travel; they could reduce taxes on fuel for these transport modes; they could invest more money in infrastructure, particularly the rail network in Kashmir; and they could encourage and fund the development of new booking systems that would enable tourists to purchase one integrated ticket for travel to their holiday destination rather than having to purchase numerous tickets from many transport companies which are often the case currently.

5.3.3 Factor wise Implications

5.3.3.1 Knowledge

For this factor there were six items. The item “I have heard of climate change” have a mean value of below 4. Likewise “Climate change is caused mainly by human activities at a tourist destination” recorded a mean of 3.85. Also the variable “the world’s climate is changing very
rapidly” recorded the mean at 3.9. The overall mean for the factor was 3.95 which depicts that tourists do not possess enough knowledge about climate change and its impacts.

Suggestions

A brief program about climate change must be included in the itinerary by the travel agents and tour operators in Kashmir valley. It is suggested that Governments must support educational efforts that help individuals and societies make informed decisions about climate change. To enhance the knowledge of climate change, climate change seminars are to be organized by Jammu and Kashmir Tourism Development Corporation at the various tourism destinations across the Kashmir valley. The focus of these seminars must be on the causes of climate change and the role of humans in climate change.

5.3.3.2 Understanding

There were seven items for this factor. The overall mean for the factor is 3.3 which indicate that the tourists have a very low understanding of the climate change issue. The items “renewable energy sources are example of sustainable development. It can alleviate the climate change problem” and “reduce consumption and production will help mitigate climate change problem on a destination” have a mean value of 3.27 and 3.29 respectively.

Suggestions

It is suggested that Jammu and Kashmir tourism department must educate tourists through climate change leaflets at the arrival at a destination about the impacts of carbon emissions and how it ultimately leads to global warming. The hotel fraternity in Kashmir valley can sensitize the tourists about the production and consumption patterns by providing in-house training programs. Jammu and Kashmir Tourism Development Corporation to conduct awareness programs about the sustainable tourism development.
5.3.3.3 Environmental Concern

There were 6 measurement items for this construct. The overall mean for the factor is 4.00, which indicates that tourists are less concerned about the environment. The items “plants and animals have as much right as people to live” and “there are too many people that the earth can support” have recorded mean value of below 4.00.

Suggestions

Environment concern is a vital element in the reduction of climate change impacts. It is suggested that the Forest department of Jammu and Kashmir should take adequate measures to prevent cutting of trees. Legislations for wildlife protection should be framed and practiced rigorously. The law enforcement agencies should prevent land encroachment at tourist places.

5.3.3.4 Low Carbon Lifestyle

There were 6 measurement items for this construct. The overall mean for the factor is 3.4, which reveals that people are reluctant to adopt a low carbon lifestyle. The item “There is a lack of interest to practice low carbon (green) lifestyle” recorded mean of 3.43 and item “While on holiday I prefer to use products that include carbon offset (environmental protection) schemes” have a mean value of 3.33. “I prefer to shop at stores that offer carbon offset (environmental protection) schemes” also have a mean value of 3.4.

Suggestions

It is suggested that the Jammu and Kashmir tourism department should provide carbon offset schemes at the shops and ventures run by the state at the various tourist destinations in Kashmir valley. These offset programs should be advertised through local and national media to enhance tourist awareness about such schemes. Brief round table talks and informal debates should be held by the concerned tourism development authorities for the tourists aiming at the benefits of low carbon lifestyle. The government of Jammu and Kashmir shall
provide subsidized energy-efficient devices for lighting and star-rated electrical appliances. Documentaries on climate change should be played by the tourism department at destinations for enhancement of low carbon behavior of tourists.

5.3.3.5 Green Consumerism

There were seven items for this factor. The overall mean for all the seven items 2.59, which depicts that tourists are not at all aware of green consumerism. The items “I participate in green (low carbon) activities at a tourist destination” recorded the mean value of 2.32. “I used to purchase bio friendly products at a tourist place” have a mean value of 2.45 well below the neutral value.

Suggestions

It is suggested that the department of road transport of Jammu and Kashmir should ensure smooth and energy efficient transport service to all the tourism destinations across the Kashmir valley. It will enable the tourist to use public transport instead of using his/her own car. The hotels must ensure redeem points system for the tourist in participating in green activities like travelling to the destination by public transport or bicycle. The Government of Jammu and Kashmir should provide a subsidy on the procurement of green products like handmade paper at the tourist destination. In addition to this, the tourism department should ensure the use of solar products in place of conventional energy resources. The govt. of Jammu And Kashmir State shall start retail stores that use sustainable or recycled materials in production of items. Encouragement of bicycle travel is another aspect of green consumerism which the government and tourism stakeholders need to promote.

5.4 Other suggestions for the mitigation of climate change

1. To provide climate change education to raise awareness of the impacts, to better understand options for change and to create a political will for change.
2. Incentives schemes to encourage better management of scarce resources, particularly water.

3. Restrictions on activities that are seen to be highly detrimental to the sustainability of tourism.

4. Research and technological development to better understand the impacts on our natural and production systems and create opportunities for changes in management at a local level.

5. Policy and planning guidelines to incorporate the implications of climate change and support the community to change.

6. Positive, action-based leadership to bring about the changes required.

7. Greater awareness of potential climate change impacts on all sectors (rural, urban, flora/fauna, primary production).

8. Better education programs for the wider community, e.g. energy efficiency, water efficiency.

5.5 Limitation of the study

The tourist sample was taken from limited destinations of Kashmir valley only, and it does not represent the tourists all over Kashmir. Time and cost constraints prevented the research from going deeper into the data collection process. Secondly, due to continuous political unrest in Kashmir valley, the data collection process was restricted to local tourists as there was a little inflow of tourists from outside the valley. The sample size of the research was limited to the selected tourist establishments in the Kashmir valley like, Srinagar, Pahalgam and Gulmarg. The aim of this research was to investigate the relationship between tourism and climate change through a perception-based approach. While this was achieved, the research would have benefited from a larger sample size to improve the level of analysis and better represent the perceptions and related behaviors in response to climate change.
5.6 Future research

There are a number of areas for further research that have materialized out of this study. This research has identified the elements of perception of tourists and attitude with regard to the phenomenon of climate change. Further research could be conducted to ascertain deeper insights into the perception towards climate change. This research could then lead to further investigation into how the attitudes of the tourists can be targeted and eventually overcome. Qualitative research would provide an excellent opportunity to generate a greater insight into the facets of each element of attitude of tourists. The focus of this research has been on tourists’ in Kashmir valley in India regarding the behaviour of tourists towards climate change.

The findings and implications of this study are likely to be relevant to a number of other countries in the developing world as well as in other states of India. Whilst some research has already been undertaken on tourists’ attitudes towards climate change in other European countries and in Australia, further research could be undertaken specifically examining behavioral change. This dissertation only represents an attempt to explore the perception of a tourist – all types of tourist. Thus, a recommendation would be that further investigation could be aimed at addressing specific tourism segments. Their perceptions could be useful in gaining insight into the climate change field. The sample size for this study was 384. A recommendation would be to go for a larger sample size to have deeper insight into the perception and attitude of tourist towards climate change. Further, the research frame for this study is Kashmir valley. This study can be replicated in other parts of India and the world.