

CHAPTER 5 – FINDINGS, SUGGESTIONS AND CONCLUSION

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OUTLINE OF THE CHAPTER

This chapter would provide the list of findings of the study. The findings enlisted will be in connection with the objectives and research questions of the study and further the analysis conducted for the data collected for the study. The chapter would provide required suggestions and recommendations of the study in line with the findings of the present study. The chapter would also entail the discussions which would compare the findings of the previous study with the present one. Further the chapter would provide the future scope of the present research which would be of great help for recognizing similar future research areas. The chapter would also contain the conclusion of the study mentioning a gist of the systematic approach of the study connecting the objectives, sample design, analysis, findings and suggestions.

5.1 Findings

The findings of the study consist of the results regarding the evolution of tourism development in Andaman Islands which are extracted from the literature review. The demographic profile of the respondents on the basis of their gender, age, profession, educational qualification, income, length of residence, place of residence and duration of job in tourism industry is analyzed with the help of percentage. Further, it enlists the positive and negative economic, socio-cultural and environmental impacts of tourism development identified from independent t test and ANOVA test. The findings of the relationship between the various impacts and the factors of tourism development are identified by the multiple regression.

5.1.1 Demographic Profile of the Respondents

- The gender distribution indicated that, the respondents were 77.8% males and 22.2% females which clearly illustrated that the male respondents were more than the female respondents.
- The age distribution of the respondents depicted that, most of the respondents of the study were from the age group 40 to 49 years that accounted for 37% of the total respondents. The other respondent age groups were 20 to 29 years which were 29.3%, 30 to 39 years with 24.8%. 50 to 59 with 8.1% and the least respondents were in the age group 60 and above with only 0.7%. This implies that most of the stakeholders in the Andaman Islands fall in the age group of 40 to 49 years.
- The professional profile of the respondents depicted that most of the stakeholders were owners of their business in the Andaman Islands which accounted for 61.9% of the total sample. Apart from owning their business, 25.9% of the respondents were employees of the private establishments, 10% were government employees, 0.7% accounted for farmers and retired personnel each and the least accounted for students with the share of 0.4% of the total sample.
- Most of the respondents of the study were graduates that accounted for 31.9% of the total respondents, 20.4% were 12th pass, 18.1% were post graduates, 14.1% had diplomas, 10.4% were 10th pass, 3.7% were not even 10th pass and rest had a PhD degree

which accounted for only 1.5% of the total respondents. It is clear from the data that none of the respondents of the study were illiterate.

- Most of the respondents were from the monthly income range of more than 50,000 Rupees which accounted for 35.2% as most of them owned their own business. The other income ranges to which the respondents belonged were 21,000 to 30,000 Rupees with 20.7% of the respondents, 11,000 to 20,000 with 15.6% of the respondents, 31,000 to 40,000 Rupees with 14.1% of the respondents and 1.5% of the respondents with less than 10,000 Rupees as their monthly income.
- The respondents were also asked to specify their length of residence in the Andaman Islands where it was seen that majority of the respondents were staying in the Andaman Islands for more than 30 years which accounted for 44.8% of the sample. 40.4% of the respondents were a resident of the Andaman Islands from 20 to 30 years. 12.6% of the respondents were staying in the island from 10 to 20 years and 2.2% of the respondents were staying in the islands for less than 10 years.
- Majority of the respondents of the study were seen to be staying near tourism practicing areas which were 83% of the sample and only 17% of them stayed away from tourism practicing areas.
- It was also seen that 12.6 % of the respondents did not belong to tourism related jobs and 87.4% were involved directly with the tourism industry in Andaman Islands out of which 26.7% were involved in the tourism related jobs from 1 to 5 years, 24.4% were involved from 5 to 10 years, 30.7% were serving the tourism industry from more than 30 years and the least were 5.6% serving the tourism industry for less than 1 year.

5.1.2 Evolution of Tourism Development in Andaman Islands (from Literature Review)

- Since the inception of tourism in the islands the tourism has grown to a very large extent. The initial recorded data of the opening of the first hotel in these islands was in 1970s which was years after the independence of India. It was constructed in the capital of these islands, Port Blair by the Travel Corporation of India Limited and named as Andaman Beach Resort. Since then the islands have seen immense amount of development in the past years. It was Vidyarthi (1971) where the author mentioned about the tremendous potential of these islands in terms of adventure tourism. Today,

Andaman and Nicobar Islands have set an example in the field of scuba diving by using its natural marine resources in the optimum possible way. The water sports are one of the niche markets and unique selling proposition of these islands.

- As per trends of domestic and foreign tourist arrivals in Andaman and Nicobar Islands, it is seen that the tourist inflow is increasing rapidly. In 1980 the total tourist arriving in these islands were 9596 and in the year 2017 it was 4, 87,229 (Directorate of Economics and Statistics, Andaman and Nicobar Administration, 2018), which clearly shows the growth in tourism in the Andaman and Nicobar Islands. A report by equations (2008) mentions that in the year 2007 when the total tourist arriving in these island were 1, 46,990, for every 100 persons in the island there were 3 tourists at every time of the year and given the data of the Port Blair town alone for every 100 residents there are 10 tourists and now the figure has grown four times since then.
- It is evident by the facts that after the tsunami in 2004, the Andaman and Nicobar islands made a prominent mark in the national and international tourism map and the government of India including the local administration recognized tourism as a major economic activity of the islands (Chaudhry & Bairagi, 2011; Reddy, 2007). This resulted rapid increase in number of resorts in various islands (Reddy, 2007). An example of this is the first property of Taj Group of Hotels that has recently opened in the Havelock islands and is running successfully.
- Various new projects and circuits were planned to be implemented through the years, by the various central government agencies in collaboration with the local concerned bodies. Perspective Plan of Tourism Development in Andaman and Nicobar Islands (2003) and Identification of Tourism Circuits across India, Andaman and Nicobar Islands (2012) mentioned that a lot of potential islands were opened for the tourism purpose and many tourism circuits were identified for the increase in tourism activities and revenue generated by tourism.
- The tourism development over the time, has transformed the tribal communities too. The best example of which is the Jarawa community which clearly depicts that they grown and developed over the years and are still continuing to grow. Several international agencies are also lending a helping hand to the tribes in order to provide them with

required medical aids. Also, they are being educated which is gradually bringing them to the main stream (Chaudhry & Bairagi, 2011; Pandya, 2002; Vidyarthi, 1971).

- One of the most important developmental milestones for Andaman and Nicobar Islands was when after the tsunami the administration of the islands were trying to compensate the destruction caused to the environment and economy, the Ministry of Tourism and Andaman and Nicobar Administration proposed an opening of 15 new islands and 50 sites for intensive tourism (Perspective Plan of Tourism Development in Andaman and Nicobar Islands, 2003). Also, massive amount of investment is being done for the construction of tourism infrastructure and improved connectivity between the islands. It can be said that over a period of time the government's involvement and interference in the working of various departments of the islands have increased highlighting these islands on the tourism map of India. The recent step taken by the central government of renaming the famous islands of Andaman and Nicobar Group is an evident example of the same (PM Narendra Modi renames 3 islands of Andaman Nicobar, 2018).

a) **The Present Stage of Tourism Development in Andaman Islands (Questionnaire):**

The respondents were asked to choose among the stages of destination life cycle under which they think the Andaman Islands can be seen in the present scenario. The options provided to them were beginning stage, growth stage, maturity stage and decline stage. Most of the stakeholders i.e. 57.8% of the total sample had an opinion that the Andaman Islands are at present in the growth stage of destination life cycle. It depicts that the stakeholders perceive that the Andaman Islands have been developing tourism since the time of its inception and still has a lot of scope in the growth and development of tourism and related activities in the Andaman Islands. It was also seen that 21.9% of the stakeholders had an opinion that the Andaman Islands are still in the beginning stage of tourism development where as 14.8% of the stakeholders had an opinion that the tourism in the Andaman Islands have reached the maturity stage. A very minimal share of the respondents had an opinion that tourism has reached the decline stage.

5.1.3 Opinions of Stakeholders on Perceived Tourism Development

- The stakeholders of all income level, educational qualification, gender, irrespective of duration of stay, place of stay and duration of work in the tourism industry have a common view that the local administration is doing it right by supporting tourism activities in the Andaman Islands.
- Regardless of the gender, income level, educational qualification, duration of work in the tourism industry the stakeholders have a common view that tourism should be actively encouraged in the Andaman Islands.
- The stakeholders of all income groups, duration of stay, place of stay and duration of work in the tourism industry believe that it is important to plan and manage the growth of tourism in the Andaman Islands in order to practice a sustainable tourism.
- The stakeholders falling in all categories of income level, educational qualification, duration of work in the tourism industry and duration of stay have a common view that there should be a long term view for planning of tourism development taking place in the Andaman Islands.
- The stakeholders under all income level and irrespective of duration of work believe that the tourism sector will continue to play a major role in the economy of the Andaman Islands where as the stakeholders of different Educational qualifications, gender having different duration of stay and place of stay have difference in opinion for the same.
- The stakeholders regardless of their durations of stay and duration of work in the tourism industry have an opinion that overall tourism development is important for the residents and should be encouraged in the Andaman Islands except the stakeholders under different categories of gender, educational qualification; income and place of stay have a difference in opinion for the said statement.

5.1.4 Perceived Economic Impact

a) Positive Economic Impact Identified:

- After the analysis of the data collected it was seen, that irrespective of gender of the stakeholders, educational qualification of the stakeholders, income level of the stakeholders, duration of stay of the stakeholders, place of stay of the stakeholders and

duration of work in tourism industry of the stakeholders, the positive economic impact that were seen to be prevalent was that all have a similar opinion that local community in the Andaman Islands are keen in selling local products to the visitors and earn from them. This implies that the revenue which generated from selling the products is not being deviated towards a foreign source but comes to the local community only.

- Also the stakeholders with respect to their gender, income level, duration of stay, place of stay and duration of work believe that due to tourism in their area the public infrastructure like the water system and sewage and the communication facilities like telephone networks and Wi-Fi facilities have improved.
- Apart from the difference in opinions of different educational qualification and income groups rest all the stakeholders with respect to their gender, duration of stay, place of stay and duration of work in tourism industry, they have a common opinion that public transport infrastructure like bus stands, roads and airport facilities have improved from the time tourism has started emerging at their place.
- The stakeholders, regardless of their gender, place of stay and duration of work agreed that due to tourism development in their area the job opportunities for the local community have increased where as the stakeholders with respect to income educational qualification and duration of stay
- The views of the stakeholders are similar with respect to gender, place of stay and duration of work in tourism industry are similar for the statement that after the introduction of tourism in their place, the job opportunities for the locals have increased and locals also get benefit from selling or renting their lands to the non local for business purposes.
- The stakeholders regardless their gender, duration of stay and place of stay think that public utility like electricity, natural gas and water supply has improved in their area after tourism has emerged.

b) Negative Economic Impact Identified:

- The stakeholders irrespective of their gender, educational qualification, income, duration of stay and duration of work in the tourism industry have an opinion that price of basic goods and services has increased because of the tourism in their area.

- Also apart from differences in gender, the stakeholders regardless of their educational qualification, income, duration of stay place of stay and duration of work in tourism industry have an opinion that prices of land and houses have increased in their area because of the development due to tourism.
- Cost of living for local residents has increased according to the stakeholders irrespective of their gender, duration of Stay and duration of work in tourism industry.

5.1.5 Perceived Socio-Cultural Impact

a) Positive Socio-Cultural Impact Identified:

- It is seen that irrespective of gender of the stakeholders, educational qualification of the stakeholders, income level of the stakeholders, duration of stay of the stakeholders, place of stay of the stakeholders and duration of work in tourism industry of the stakeholders it is a strong opinion of the stakeholders that the conditions of tourists' spots and historical buildings have improved because of the tourism development in the Andaman Islands.
- Also the stakeholders of various income level, duration of stay, place of stay, duration of work in the tourism industry and gender have an opinion that the local community has become aware and proud of their local culture and heritage after the tourism has started in their area.
- Also the stakeholders irrespective of their income, duration of stay, place of stay and work strongly believe that more women have been employed and have started working after the emergence of tourism in their area.
- The stakeholder with different place of residence, gender and duration of work in the tourism industry have similar opinions that facilities like health centers, restaurants, public spaces and transportation have improved in their place

b) Negative Socio Cultural Impact Identified:

- Irrespective of gender, place of stay and work the stakeholders have an opinion that the criminal activities like theft, drug taking, prostitution, sexual harassment, child labour

have increased and local community is getting disturbed due to tourism activities around them.

- The stakeholders regardless of gender, duration of stay and duration of work, have an opinion that people have migrated from their own place of residence to the Andaman islands for different purposes since the tourism has started emerging in the islands
- Stakeholders of all income groups, place of stay and gender believe that due to tourism development in their area, the construction of roads in the protected area causes disturbances to the tribal community.
- The stakeholders have an opinion that there is a change in occupation structure of the locals from traditional fishing and agriculture to being directly or indirectly involved in tourism activities irrespective of their place of stay, income level and gender.

5.1.6 Perceived Environmental Impact

a) Positive Environmental Impact Identified:

- It is a strong opinion of the stakeholders of all educational qualification, income level, gender, place of stay, duration of stay and duration of work in the tourism industry that fishermen have started following the fishing regulations after the development in tourism as the rules to protect the marine life and wild life has become strict.
- The stakeholders of all income groups, gender, duration of stay, and place of stay believe that the government and local community has taken steps to protect the wildlife and the natural habitat in their area due to the surfacing of tourism activities and tourist's inflow.
- It was found that the stakeholders of all educational qualifications, income levels, duration of work in the tourism industry and gender think that the locals have started caring more about protecting the marine environment due to tourism activities taking place in the Andaman Islands.
- The stakeholders irrespective of their gender, educational qualification and gender believe that the local community has become more educated and aware for the protection and conservation of marine environment.

- It was identified that the stakeholders of all income group, gender and duration of work believe that due to the tourism development in Andaman Islands beaches have become cleaner and quality of natural environment has improved.
- It was analyzed that the stakeholders of different income level disagree with the fact that the corals are in better condition than before.

b) Negative Environmental Impact Identified:

- The stakeholders irrespective of their gender, income, duration of stay, place of stay and duration of work in the tourism industry believe that the migration of birds and the nesting of the turtles in the beaches have reduced after the tourists have started coming to the islands and the tourism activities have increased.
- The stakeholders also have an opinion regardless of their gender, educational qualification, income duration of stay and place of stay believe that construction of roads in the protected area for the ongoing of tourism activities affects the wildlife and plants of these areas.
- The stakeholders irrespective of gender, income, duration of work and place of stay has an opinion that due to increase in tourism, transportation on road and water has increased leading to water and air pollution.
- Stakeholders irrespective of gender, educational qualification, duration of stay and place of stay believe that due to tourism in their area there is lack of natural resources like water, land, clean air for the local people.
- The stakeholders of all income category, duration of stay and gender have a common view that lodging industry is consuming more energy such as electric supply, water supply etc.

5.1.7 Relationship between Perceived Tourism Impact and Perceived Tourism Development

a) Perceived Economic Impact and Perceived Tourism Development

- **Encouraging Tourism Development and Perceived Economic Impacts**

From the analysis it was found that out of the five factors of economic impact namely, Negative Economic Impact, Improvement of Public Facilities, Local and Non-Local Interaction,

Employment Aspect and Improvement in Conditions of Local, there were two factors which were having a positive impact on the factors of encouraging tourism development, Improvement of Public Facilities and Improvement in Conditions of Local.

This implies that the improvement in the public facilities and improvement in the economic conditions of the host community would encourage and have a positive impact on the perceived tourism development in the Andaman Islands.

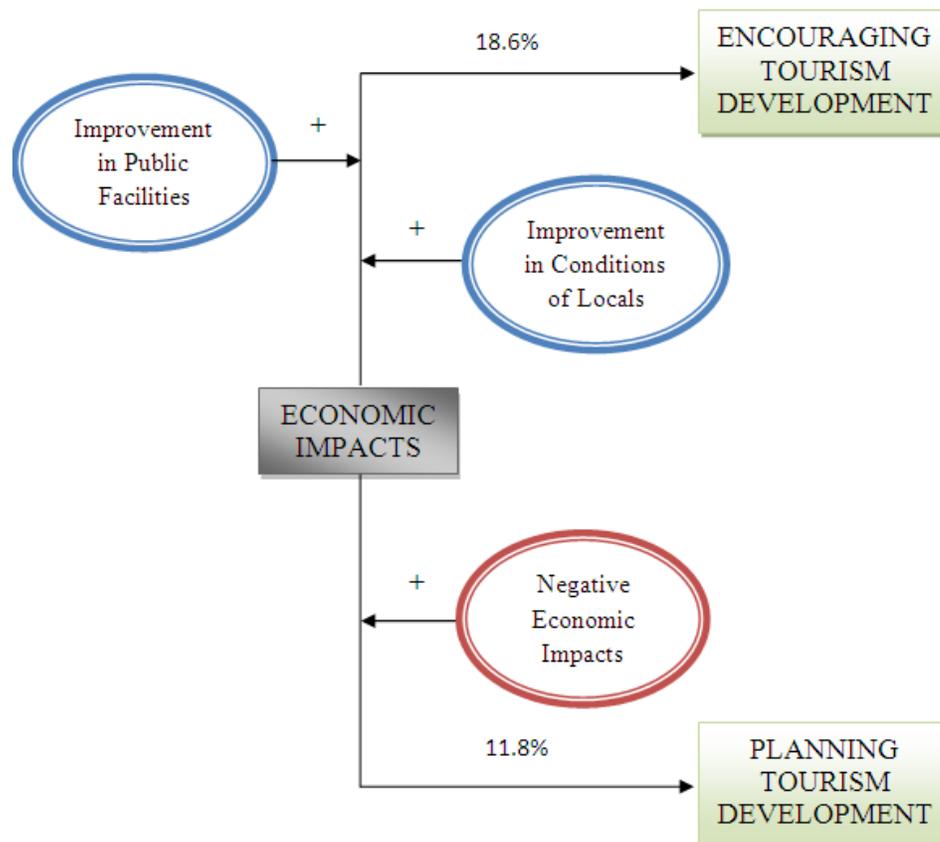


Figure 5.1: Relation between Perceived Economic Impact and Perceived Tourism Development

- **Planning Tourism Development and Perceived Economic Impact**

Out of the five factors of economic impacts which were Negative Economic Impact, Improvement of Public Facilities, Local and Non-Local Interaction, Employment Aspect and Improvement in Conditions of Local, there is one factor of Negative Economic Impact which has a strong positive relation with the factor of planning tourism development. It can be interpreted that if there is an increase in negative economic impacts of tourism development on the

Andaman Islands then there should also be an increase in planning the tourism development for the betterment of the economy and economic conditions of the host community.

b) Perceived Socio – Cultural Impact and Perceived Tourism Development

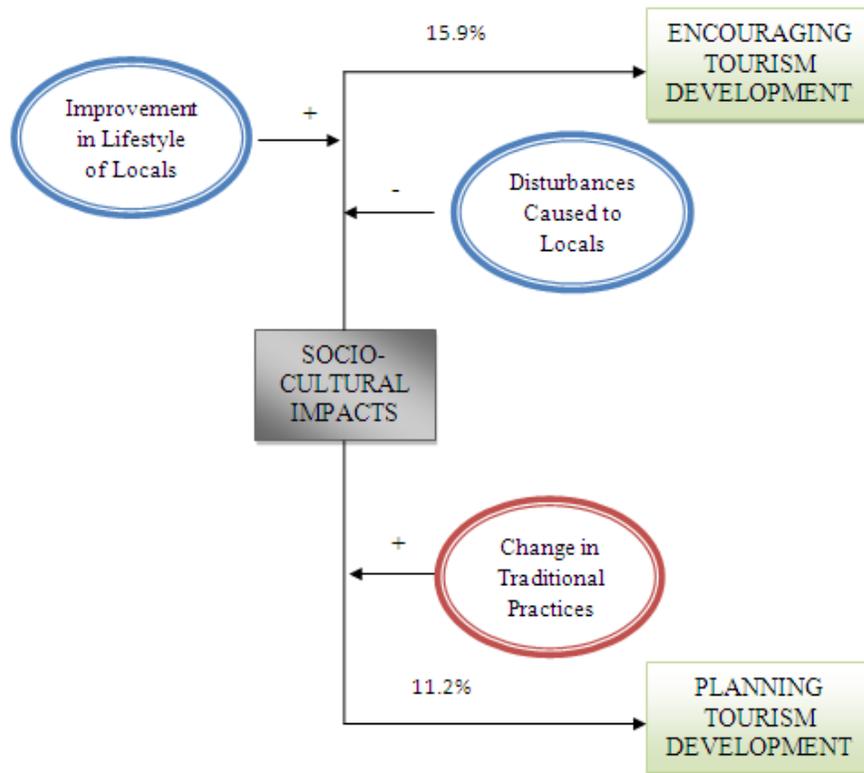


Figure 5.2: Relation between Perceived Socio-Cultural Impact and Perceived Tourism Development

- **Encouraging Tourism Development and Perceived Socio-cultural Impact**

The Socio-cultural impacts in this study was divided into four factors namely, Improvement in lifestyle of locals, Disturbances caused to the Locals, Change in Traditional Practices and Changes in lifestyle where only two factors came out to be related to the factor of Encouraging Tourism Development. The two factors namely Improvement in lifestyle of locals and Disturbances caused to the Locals have a moderate relationship with the factor of Encouraging Tourism Development where factor of Improvement in Lifestyle of Locals is positively related to the factor of Encouraging Tourism Development and factor of Disturbances caused to the Locals is negatively related to Encouraging Tourism Development.

From the results it is clear that if there is improvement in the lifestyle of the host community due to tourism development in the Andaman Islands, the tourism development should be encouraged. Whereas if the local community is getting disturbed by the tourism activities in these islands the tourism development should not be encouraged.

- **Planning Tourism Development and Perceived Socio-cultural Impact**

Out of the four factors of Socio-cultural Impact namely Improvement in lifestyle of locals, Disturbances caused to the Locals, Change in Traditional Practices and Changes in lifestyle, there was one factor which was moderately positively related to the factor of Planning Tourism Development which was Change in Traditional Practices.

It can be deduced that if changes have occurred in the traditional practices of the host community in the Andaman Islands then the perceived tourism development activities must be planned accordingly.

It is evident from the above finding that there is a significant impact of the change in traditional practices of the local communities of the islands on planning the perceived tourism development activities in the Andaman Islands. This would providently help the tourism development impose very less negative impact on the culture of the local communities of the Andaman Islands.

- b) Perceived Environmental Impact and Perceived Tourism Development**

- **Encouraging Tourism Development and Perceived Environmental Impact**

The Environmental Impact with five factors namely, Negative Environmental Impacts, Positive Environmental Impacts, Energy Consumption and Migration, Protection of Wildlife and Natural Habitat and Environmental Awareness of Local was analyzed to find out the relation with the factor of Encouraging Tourism Impact. Here two factors namely Positive Environmental Impacts and Protection of Wildlife and Natural Habitat were seen to have a strong relationship with the factor of Encouraging Tourism Development.

The stakeholders believe that if there is positive impact of tourism development on the environment, wildlife and natural habitat is being protected and conserved due to tourism

activities in the Andaman Islands, then the tourism development must be encouraged in the islands.

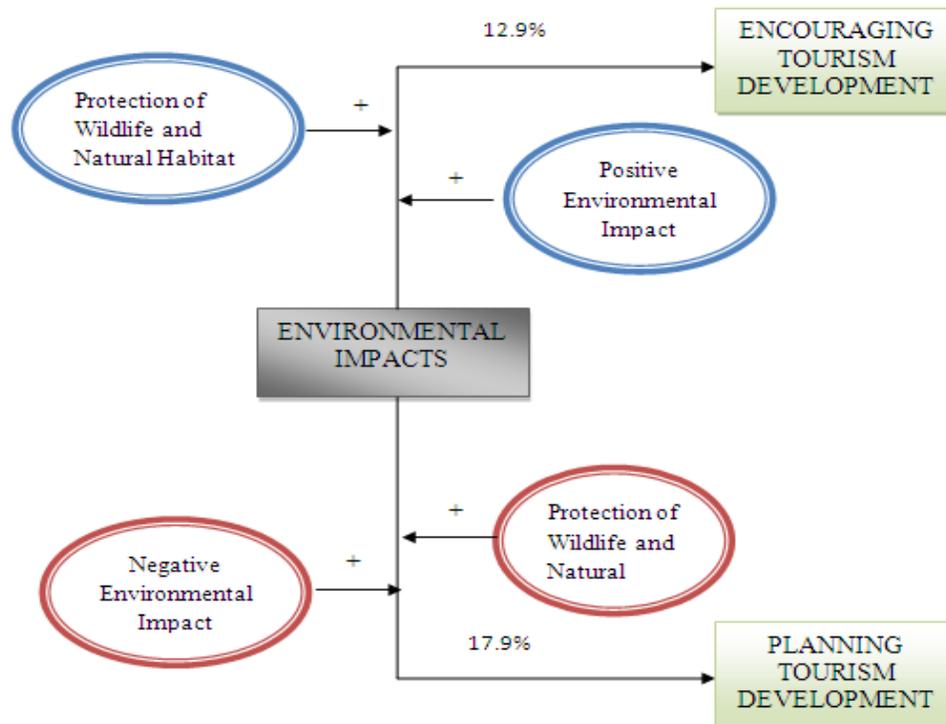


Figure 5.3: Relation between Perceived Environmental Impact and Perceived Tourism Development

- **Planning Tourism Development and Perceived Environmental Impact**

Out of the five factors of Environmental Impacts namely, Negative Environmental Impacts, Positive Environmental Impacts, Energy Consumption and Migration, Protection of Wildlife and Natural Habitat and Environmental Awareness of Local there were two factors which came out to be positively related to the factor of Planning Tourism Development.

It is clear from the analysis that the stakeholders believe that if the tourism development creates more of negative impacts on the environment, it should be carried out in a much more planned way in the islands. Also, it is the view of the stakeholders that even if the tourism activities leads

to the protection of marine life and wildlife, the perceived tourism development should be more organized and planned in the Andaman Islands.

5.2 Discussions

The host community and the other stakeholders of tourism in the Andaman Islands are seen to be in strong agreement of developing tourism in the Andaman Islands. Although they have an opinion of developing planned and organized tourism in order to experience minimum negative impacts of tourism development on the environment of the island and their communities. Previous studies (Marzuki, 2011; Mbaiwa & Stronza, 2011; Lee & Chang, 2008; Mayson & Cheyne, 2000; Burns, 1996) have also depicted that the respondents are satisfied with tourism development in their area.

The present study incorporates 270 stakeholders' sample for the fulfillment of the objectives of the study. On similar lines, another study assessing the tourism development in Washington, NC used 130 respondents to assess the attitude of the residents towards the tourism development (Wang et al., 2007). A study conducted by Figueroa & Rotarou (2016) involved 99 samples to identify the role of tourism as development driver in Easter Island. In a study on impacts of tourism development in Zimbabwe by Woyo & Woyo (2016) only 50 questionnaires were distributed to local stakeholders. Ramdas & Mohamed (2014) studied the impact of tourism activities, development and infrastructure to environment of Perhentian Islands where the study involved 258 questionnaires. Ramseook-Munhurrun & Naidoo (2011) involved only 20 stakeholders in their study for understanding resident's attitudes towards perceived tourism benefits. Andereck & Vogt (2000) identified the relationship between residents' attitude towards tourism and its development where the study was conducted on less 250 sample from each community. A study of residents' attitude towards tourism development in Marshall County, West Virginia carried the study with 123 residents which showed positive attitude towards tourism development and the residents perceived the tourism development in their area to be a tool for economic growth. The factors used in the study which significantly affected the attitudes of the residents are length of residency, perceived economic benefits and role residents in the community (Maumbe & Riley, 2012).

In the present study, the overall impact of economic, socio-cultural and environmental factors was found to be around 88.3% on the factors of planning and encouraging tourism development. Further, the overall economic impact of tourism development came out to be 30.4% on the factors of encouraging and planning tourism development. The socio cultural impact on the tourism development factors were analyzed as 27.1%. The environmental indicators had an impact of 30.8% on the tourism development in Andaman Islands. Similarly, in a study conducted by Eraqi (2007) on the local communities attitude towards impacts of tourism development in Egypt the variables of quality of Egyptian social, economic and environmental assets, income and employment and investments on infrastructure explained only 13.1% of the variance in perceived standard of living in Egypt. In the study of exploring relationship between residents' attitude towards tourism and tourism development options the relationship between tourism attitude and support for tourism was identified where the model explained 28% of variance in the dependent variable (Andereck & Vogt, 2000). Wang et al. (2007) showed the overall impact of the socio economic variables of the residents on tourism development as that of less than 50%. A study on residents' attitude towards perceived tourism benefits found out that socio cultural and economic impact has positive influence and environmental impact has negative influence on future tourism development and over all influence of the all the impacts were 50% on the future tourism development (Ramseook-Munhurrun & Naidoo, 2011). In a study examining the impact of tourism on economy and population of small islands in Aruba, the multinomial regression also provided low impacts where the study defines multiple market segments analyze recruitment of migrants from various world regions (Croes, 2007).

Butler (1974) examined similar social implications of tourism development as identified in the present study as economic wellbeing and resource utilization by the population in the destination. Pigram (1980) identified the environmental implications of tourism development in Australia where the researcher described the relation between environment and tourism as complicated one as it enhances the environment if planned and destroys it if unplanned as identified in the present study too. A study on the island biographical theory also connects the island tourism with sustainable tourism development and aims to analyze the environmental implications of the tourism on the environment (Hall, 2010). The study identified the environmental implications as disturbances caused to the marine life causing serious implications

on the natural environment of the islands. Also Nechifor (2014) highlights various approaches of sustainable tourism development and its implications at the lower community levels which was emphasized towards framing policies related to instruments supporting the sustainable tourism development as carried out in the present study too. Stanchev et al. (2014) assessed the implications of the population and tourism development growth for Bulgarian coast which also found that the human pressure on the coastal areas are increasing rapidly and proving to impose serious implications.

A study on the attitudes of the local community towards tourism development in Tioman Island also analyzed the relationship between perceived positive impacts of tourism development and perceived tourism development and negative positive impacts of tourism development and perceived tourism development. The findings revealed that the local community which supported tourism development and experienced positive impacts of tourism development supported the idea of further developing tourism in their destination. On the other hand the local community experiencing negative impact of tourism development was also in favour of supporting perceived tourism development as they knew it was major source of economic development in their area (Abas & Hanafiah, 2014). The similar findings were recorded for the present study where relationship between the perceived tourism impacts and perceived tourism development was explored and the stakeholders who were involved in tourism business for a longer period of time had positive attitude towards the tourism development in the Andaman Islands.

Mason & Cheyne (2000) discussed the perceived negative and positive impacts and the level of tourism development taking place in a rural region of New Zealand. The perceived positive impacts identified were similar to the present study which included increase in job opportunities and improvement in facilities provided to the communities due to tourism development in the area. The perceived negative impacts which coincided with the study are traffic problems and noise pollution which was caused by the increased inflow of the tourists to the destination. The study also displayed a difference in opinion with respect to gender and also a positive attitude towards tourism development of those communities who are directly related to tourism jobs which is also reflected in the present study.

The study of residents' attitude towards impacts from tourism development in Langkawi Island, Malaysia identified three factors of tourism development in the study namely, costs from tourism development, benefits from tourism development and socio economic effects from tourism development (Marzuki, 2011). This study resulted in finding out that the benefits of tourism development were more than the disadvantages of it in the Langkawi Island.

The findings of the present study coincides with the previous studies (Woyo, 2016; Pekkala, 2015; Ramdas & Mohamed, 2014; Zaei & Zaei, 2013; Ismail et al., 2011; Marzuki, 2011; Mbaiwa & Stronza, 2011; Gatewood & Cameron, 2009; Lee & Chang, 2008; Mbugua & Comwell, 2008; Kreag, 2001; Andreck & Vogt, 2000; Ap & Crompton, 1998; Giraldo, 1980) which assessed the perceived economic impacts of tourism development on the stakeholders and reported the results that the positive economic impacts of tourism development are more than the negative impacts and tourism development is positively related to economic impacts on the stakeholders. Also some studies which reported positive attitude towards in their destinations and positive economic impacts of tourism development included improved quality of life (McCool & Martin, 1994; Perdue et al., 1990) and promotion of cultural activities.

The study conducted on the Okavango Delta, Botswana, also reflected the positive impacts of tourism as improvement in the conditions of the roads, increase in income of the villagers, creation of employment opportunities and promotion of their handicrafts (Mbaiwa & Stronza, 2011) as identified in the present study.

There are previous studies which identified the negative impacts of tourism in the destinations like the disturbances caused due to the traffic (Black & Nickerson, 1997; Perdue et al., 1990). The increase in traffic in certain Caribbean Islands has led to disturbances to the local community as well as the endemic flora and fauna species which is an example of negative impacts of unregulated tourism and haphazard development in island destinations (Scheyvens & Momsen, 2008; McElroy & Albuquerque, 1998).

However, the stakeholders are concerned about the socio cultural and environmental impacts of tourism development on the natural and cultural environment. The previous studies also depict the apprehension of the host community about the damage on the culture and

destruction on the natural environment. These previous studies along with the present study recorded the change in traditional cultures of the local community, adapting of the tourist culture by the local community and many such glimpses of demonstration effect. Also the damage in environment was seen with time which stated the destruction of mangroves and coral life along with reduction in forest cover, increase in pollution, reduction in number of several land and marine species and destruction of flora (Pekkala, 2015; Ramdas & Mohamed, 2014; Singla, 2014; Marzuki, 2011; Mbaiwa & Stronza, 2011; Gatewood & Cameron, 2009; Mbaiwa, 2008; Deng, 2007; Kuvan & Akan, 2005; Sunlu, 2003; Teye et al., 2002; Kreag, 2001; Davies & Cahill, 2000; Harcombe, 1999; Ap & Crompton, 1998; Lankford & Howard, 1994; Liu et al., 1987; Liu & Var, 1986).

5.3 Suggestions and Implications

To minimize the negative impacts on the natural and cultural environment and maximize the benefits of tourism development, new policies needs to be implemented for sustaining quality of economic, social and environmental assets of the Andaman Islands. In the light of the results of the analysis, the suggestions for the study are provided under the topics of policy oriented and stakeholders oriented suggestions.

5.3.1 Policy Oriented Suggestions

The policy document of National Tourism Policy (2002) mentioned the seven key areas that are considered to be the thrust to the tourism development in our country. These are Swagat (Welcome), Soochna (Information), Suvidha (Facilitation), Suraksha (Safety), Sahyog (Cooperation), Samrachana (Infrastructure Development) and Safai (Cleanliness). This six point plan was created with an aim of promoting balanced socio-economic development of the destinations. Planning and development of tourism is always supposed to look forward to achieve a superior quality of life for the local community through tourism and provide economically viable opportunities. When it comes to policy making of the island destinations, along with the social equity, it is also important to focus on the environmental equity of the destination. The following suggestions for the study are the outcomes of the findings and have

economic, social and environmental implications on the stakeholders in the light of policy making.

- An effective zoning plan can minimize environmental disturbances due to tourism development; zoning of any destination ensures that the tourism activities are carried out in a sustainable manner which minimizes the negative impacts and maximizes the positive ones. The zoning in Andaman Islands can be done to separate different incompatible uses and to reduce user conflicts. Andaman Islands have a variety of natural environment which includes open water environment, coral reefs, mangroves forests, beaches, seabird or marine mammal colonies, and terrestrial habitats. This huge range of setting attracts a variety of potential visitors. Therefore, zoning can be done on the basis of high impact and low impact tourists as practiced in Florida. The high impact tourists which are also the high end tourists expecting comfortable and better quality facilities have the potential for causing more environmental impact. Such visitors must be allowed into intensive use zones which have visitor centers, restaurants, water sports and other luxurious facilities. A little less high impact tourist can be restricted to extensive zones which allow controlled activities like hiking, trekking, snorkeling etc. Whereas the low end tourists who have low impact on the environment and culture and are adventurous should be allowed to utilize sections of protected areas that are away from the enclaves and relatively undeveloped after being provided by the permits by the concerned authorities. Such zones can be the core zones that have high conservation value and are vulnerable to disturbances and can tolerate a minimum human use.
- Certain criteria can be decided to serve to segment tourist demand. As suggested by Díaz-Pérez et al. (2005) for Canary Islands, Spain with regard to the characteristics of tourists arriving in the destination, tourism policy should prioritize the services which represent the highest demand products. Tourism product diversification policy can prove to be very practical and functional in case of Andaman Islands and would also provide a unique identity to the islands which would market them in terms of their unique selling proposition. Like Fiji has marketed its Turtle Island as a luxury 5 star all inclusive private island vacation only for couples, some islands in Andamans like the Ross and Smith can be marketed on the similar lines. Similarly, the islands presently known for their scuba

diving like the North Bay and certain beaches of Havelock (Swaraj Dweep) should restrict the divers only to the sites and sell the islands and beaches using its unique selling proposition as Scuba Island. This would create a niche market for every island providing it an individual identity to itself.

- Taking an example of the Lakshadweep Islands, which have restricted some of its uninhabited islands only for the foreign tourists in order to reduce the socio cultural impact on the stakeholders (Kokkranikal et al., 2003), Andaman Islands can also plan some of the secluded and virgin islands like the Aves Island, to be only opened to the international tourists which would entail all the luxury and world class facilities for such segment of tourists. This would suffice the needs of the international visitors without causing any much negative impact on the cultural or the natural setting of the Andaman Islands.
- Andaman Islands have a unique combination of being tagged as the ‘Marine and Martyrs’ land. Along with the selling its marine life and being associated with water sports, these islands can also provide a strong sense of the colonial history of the country and become a suitable example of Dark Tourism. as the Uttar Pradesh Tourism has set an example by selling its Buddhist Circuit similarly, a circuit can be introduced in the Andaman Islands by the name of ‘Freedom Moment Circuit’ starting from the symbol of freedom in the islands, the Cellular Jail connecting Ross Island (Netaji Subhas Chandra Bose Dweep) and Viper Island along with showcasing the light and sound shows of Cellular Jail and Ross Island (Netaji Subhas Chandra Bose Dweep). This would add on to the existing image of sun and sea destination of these islands and position the islands in the tourist map of India as a destination of historical importance.
- In order to sensitize the local community and the stakeholders towards the cultural and natural environment of these islands, the policy makers can start the process of involving the local community and the stakeholders in the process of sensitization, keeping in view the Triple Bottom Line Measure of carrying out ethical and sustainable practices of tourism. This involves the People-Planet-Profit System where the ‘People’ Bottom Line ensures the involvement and benefits of the stakeholders and the local community in decision making process. The Tourism Department can facilitate capacity building

programs for the stakeholders and local community and train them regarding the marine and terrestrial species of the flora and fauna and their locations in different tourist spots of the islands. Further, such trainers can be sent to different schools and colleges of these islands in order to sensitize the students regarding the cultural and natural assets of these islands. Therefore, creating Inter and Intra Generational relationship in terms of disseminating local tourism knowledge. This would not only aim towards protection of the environment highlighting the 'Planet' Bottom Line aspect, but also provide profit to the local community by employing them.

- To provide an all together different experience of an immersion travel to the tourists arriving to these islands, the policy makers can focus on 'Experiential Travel' which is presently practiced by the Ontario Tourism, Canada showcasing their eco tourism, community tourism, cultural tourism and heritage tourism sites and practices. This form of tourism aims towards giving an experience to the visitors regarding the history, people, culture, food and environment of the destination (Nature and Outdoor Tourism Ontario, 2018). The Department of Tourism can organize programs with the help of the tribal community to showcase their culture and tradition and involve tourists in such workshops which where they can help the tribal community with the handicrafts and local seafood cuisines. The Department of Tourism can also employ trained people who would provide knowledge of the rare flora and fauna existing in the tourist spots. This would encourage community based tourism and also create awareness among the visitors regarding the environment and people of these islands.
- The importance of engaging the tourism stakeholders in the planning and development process by the government is a growing trend in many countries now. The New Zealand Tourism Strategy, 2010 was framed keeping in mind the tourism industry and government partnership involving the private sector tourism players and government sector tourism industry players (OECD Tourism Trends and Policies, 2010). The goal of this Public Private Partnership in the Andaman Islands would be to work closely together to manage the destination in a sustainable way coordinating with local government and ensuring the involvement of tourism stakeholders for the growth of a sustainable island tourism industry.

- Tourism Department of Ireland has adopted a Balanced Score card Approach for Stakeholders Performance measurement. The range and criteria for scoring in the Key Performance Indicators was identified by the senior management and is circulated to all the tourism stakeholders running their own companies (OECD Tourism Trends and Policies, 2010). A similar strategy can be adopted by the Tourism Department of the Andaman Islands where within stipulated time period, the Key Performance Indicators Score of the different tourism companies and stakeholders would be calculated and accordingly incentives and subsidies can be provided to the stakeholders for their best practices.
- In order to provide customized experiences for the potential visitors of the Andaman Islands, the Department of Tourism can design the tourism website accordingly keeping in mind the demands of different tourists coming from different parts of the country and world. Taking an example of Singapore Tourism Board which has customized websites for the people of different regions of the world taking care of their individual demands. In the same light, the Department of Tourism can also provide brochures of the islands in different Indian languages in order to take care of the comfort of the tourists.
- In order to manage a planned and sustainable growth of tourism in the Andaman Islands, a building policy can be developed by the environmental experts along with the concerned local authorities for any new construction to take place for tourism purposes like accommodation or for recreation as recommended in Indonesia too. This would reduce the cost of construction in terms of using eco friendly and renewable materials and also would not cause hazards to the environmental as much as it does now. The policy may also take into account the place of construction so that less of forest area is destroyed due to the tourism development. An information session can be conducted for the tourism stakeholders in the islands and also a booklet can be made available to explain the building policies to the new investors in the Andaman Islands (Dodds & Graci, 2012).

5.3.2 Stakeholders Oriented Suggestions

- Collaboration across different levels of stakeholders of the society would improve the implementation and effectiveness of tourism strategy and planning by the government.

Therefore, as practiced by the island of Gili Trawangan, Indonesia (Dodds & Graci, 2012) creation of a multi-stakeholder partnership would help the Andaman Islands overcome the challenges to perform a sustainable tourism development. This would create a system and a single platform for all the stakeholders to interact and plan according to everybody's need. The local community would have a say for all the needs and development they are planning to take place. The educational institute head who would be a specialist in the economic, environmental or social matters can put their inputs of how successful the plan might be and what will be the negative or positive consequences. The administrative head would then decide the amount and sanction it for the project. This would build a cohesive vision that would enable the industry to focus on the optimum usage of the resources, sharing of information, reducing of negative impacts on economy, society and the environment and sustain the destination.

- The tourism stakeholders of Andaman Islands can make way for the development of an eco-trust in the Islands. A stakeholder committee can take charge to collect eco-tax from the recreational managers, boat associations and tour operators associations. The collected eco tax can be used to take initiatives for conservation of the marine and the forest habitat. The funds can be used for the activities like creation of a patrolling of the team for keeping a check on the illegal mining of corals and fishing and implementation of the bio rock technology for coral regeneration in the places where the corals are destroyed due to unplanned tourism activities. Indonesia is the first successful example of using the coral regeneration technology which was discovered by a German born architect, Wolf Hilbertz in 1970s. Also Pemuteran Bay in Bali after implementing this technology has regained its coral reef and has become a tourist attraction in its own (Dodds & Graci, 2012).
- Out of the six aboriginal tribes, the Nicobarese have adjusted well in the mainstream since many years. The Jarawas are rapidly proceeding towards the mainstream culture. Both these tribes have left or are in the process of leaving behind their culture and traditional practices. They are undergoing a process of transforming their lifestyle and copying the lifestyle of the non tribal community. A way to revive their lost traditional practices is to promote aboriginal tourism products rather than attracting tourist with the

coral made and shell products. Along with administration, the tourism stakeholders can take steps to promote the souvenirs of tribal community which symbolizes their traditional art and bring tourists to such spots. This would not only keep their tradition alive but also help the tribal women sustain economically.

- The stakeholders and local communities should take care of the beaches where the nesting of the turtles and arrival of the migratory birds take place. They should instruct the tour operators to restrict the visitors from visiting the beaches during the peak times so that the turtles and the birds are not affected by the visitors.
- The tourists should be prohibited to enter the sites and the islands where the population of tribal community reside, so that the tribal community is not disturbed and they do not become a victim of demonstration effect by the tourists visiting them. Taking the example of Lakshadweep islands where the destinations managers have restricted foreign tourists to visit the islands where the local people reside, in order to reduce the demonstration effects of tourism (Kokkranikal et al., 2003). Also, it would be beneficial for the tourist keeping in view the recent incident regarding the killing of a tourist by Sentinelese tribe. This would help the islands not become a victim of the negative marketing.
- It is also important to facilitate direct contact between tourists and local people by encouraging the rural families in Andaman Islands to invite tourists for home stays. The local administration can conduct capacity building programs for the local communities to instruct and encourage them to provide home stays facility for the tourists. This would promote the local culture, involve the visitors in experiential tourism and also reduce the exploitation of environment through construction of new accommodation facilities.

5.4 Future Scope of the Study

The present study focuses upon opinions of the stakeholders regarding the tourism development and tourism impacts on the people and environment of the Andaman Islands. It attempts to understand the tourism impacts on the basis of different demographic profiles of the stakeholders like gender, age, profession, educational qualification, income, length of residence, place of residence and duration of job in tourism industry. The study can further be conducted

for understanding the difference in opinions of the stakeholders on the basis of different level of the demographical variables regarding the tourism development and tourism impacts. This would make clear that which group of stakeholder supports which items of tourism development and tourism impacts and it would help bring out detailed and better results related to the study.

The present study was restricted to Andaman Islands as most of the tourists visit Andaman Islands and do not visit the other parts of the Andaman and Nicobar Islands. The study can be further conducted in the Nicobar Islands for exploring and understanding the impacts of tourism development and improving the conditions of the local communities and the wildlife and marine environment.

The study explores the relation between the economic, socio cultural and environmental impacts factors with the factors of tourism development in the Andaman Islands. It can be further investigated in the future studies to explore the other factors influencing the tourism development in the Andaman Islands for the smooth and sustainable development of the Andaman Islands.

The study was restricted to the local stakeholders and did not involve the tourists in process of understanding the impacts of tourism development. The study can be further conducted in the Andaman and Nicobar Islands and the tourists' opinions can be involved for the identification and understanding of the tourism development and its impacts on the host community, environment along with the tourist community.

5.5 Research Challenges and Limitations of the Study

The present study is one among the very few island studies done in the country on the tourism development and its implications in an island destination. The study is restricted to only Andaman Islands though there are several other groups of islands in the country. Due to the limitation of time and money, the present study is limited to Andaman Islands. Also this study has not involved all the indicators of tourism development, economic impacts, socio-cultural impacts and environmental impacts due to paucity of time and lack of previous literature as not much study has been done in this area. The previous as well as updated information related to the Andaman Islands and the tourism development is not easily available as most of the islands are

uninhabited or habited by the hostile tribes. Also the information provided by the several secondary sources lacked consistency. The sample taken for the study are the stakeholders and host community which could have been increased and the sample the tourists' opinions could have been included for the study. Due to the paucity of time the study was restricted to the opinions of the stakeholders and host community.

5.6 Conclusion

This study has reflected on the tourism development and its implications on the people, environment and the economy of Andaman Islands. It has given an account of the introduction of tourism and its growth and development in the Andaman Islands. The identification of the impacts of tourism development helped reach till the implications of the development happening in the Andaman Islands and is the key to the success of sustainable tourism development. It is the first step towards planning and managing the destination in a sustainable and environmental friendly manner. It is believed that tourism can never achieve a complete sustainability in any destination; it can only be worked towards achieving it. This proves that the achievement of sustainability is difficult even if all the impacts of tourism development are reduced to the minimum. Tourism in any destination will survive for longer period only if it adheres to its dynamic nature and changes its qualities with the natural and cultural environment in which it is taking place. Hall (2009) mentions that the development of tourism needs to be focused with a steady-state economy described as steady-state tourism. The quantitative increase in the economy increases the risk on the environment and society than the production benefits. As a result, it makes the people poorer and not rich (Hall & Lew, 2009).

It is evident that the island destinations due to their size, limited resources and vulnerable environment face lot more challenges for achieving sustainable tourism than other mainland destinations. On one hand these problems of island destination hinders them to perform tourism evenly, they also are a unique characteristic of these destinations which help them stand out in the tourism field and attract a different set of tourist all together. But, a haphazard inflow of tourist would destroy the natural and the cultural environment at a higher pace. Hence, it becomes extremely vital for the island destinations to understand their developmental history of

tourism and thereby identify the impacts of tourism development in the destination so as to put minimum impact on the destination and its stakeholders.

This study has given importance to the opinions of the tourism stakeholders of the Andaman Islands as the host community is the best judge to identify the positive and negative impacts of the tourism since its inception. The community whose generations have stayed in these islands and who have seen the nativity of these islands and the ups and downs of the tourism developing till date. The respondents indulged for exploring the tourism impacts and understanding the tourism development in the study were the stakeholders who include the local residents and the people involved in the tourism business in the Andaman Islands. The data collected for the present study was done through questionnaire which consisted of one dimension to understand the opinions of stakeholders regarding the tourism development and three dimensions to understand the tourism impacts on the islands and its residents which were perceived economic impacts, perceived socio-cultural impacts and perceived environmental impacts. The demographic profile of the respondents included gender, age, profession, educational qualification, income, length of residence, place of residence and duration of job in tourism industry. The reliability of the questionnaire was tested with the help of Cronbach Alpha where as the validity was tested through the Exploratory Factor Analysis. The questionnaire was also validated through various academic and industry experts and accordingly necessary changes were done during the pilot survey and field visit. The questionnaire was distributed to various tour operators and travel Agents, Hoteliers, home stay providers and government guest house managers, recreational business managers and ferry service providers, NGOs, police stations and host community mostly in the enclaves like the hawkers, shopkeepers, taxi and auto-rikshaw drivers and fisher folks. After the data collection, the items under each dimension were reduced to factors using exploratory factor analysis. The data thus collected was analyzed with the help of suitable analysis techniques which included the Independent T-Test and ANOVA for understanding the tourism impacts in view of the stakeholders directly or indirectly involved in the tourism activities in the Andaman Islands. Further, the relationship between the future tourism development and the perceived tourism impacts was explored.

The stakeholders mostly expressed their support towards the tourism development taking place in the Andaman Islands if preceded with long term planning and provides maximum benefit to the local communities. The major positive economic impacts were found as financial stability of the local communities due to tourism activities and improvement in the infrastructure of the Andaman Islands. The major negative economic impacts of the study were found that there was an increase in cost of living of the local communities due to increased tourism activities in the Andaman Islands. The positive socio-cultural impacts came out to be that the physical conditions of the tourists spots were improved due to increased tourism activities and also the local people became more aware about the local culture and heritage. Simultaneously it was also seen that the crime activities like theft, drug taking, prostitution, sexual harassment, child labour was found to increase according to the stakeholders and also the local community was disturbed due to increased tourist inflow in the Andaman Islands. Being an island destination the environmental impacts are of greater importance for the Andaman Islands where it was found that due to the increase in tourism activities the environment and the wildlife and marine life was given more attention and was protected from negative effects. The negative effects of the tourism development on the environment came out to be that the birds and turtles were presumed to have decreased due to the tourism activities in the Andaman Islands and also the cultural setup of the indigenous tribes were disturbed. Further, the relationship between the different factors of perceived impacts of tourism with factors of perceived tourism development was examined. The economic impact factors influencing the tourism development were identified as improvement in public facilities, improvement in conditions of the locals and negative economic impacts. The socio cultural impact factors influencing tourism development were improvement in lifestyle of the locals, disturbances caused to the locals and changes in traditional practices. The environmental impact factors influencing the tourism development were protection of wildlife and natural habitat, positive environmental impact and negative environmental impact. The influence of the impact factors on the perceived tourism development factors explored the implications on the stakeholders as well as the environment of the Andaman Islands. The suggestions and implications of the study are provided as per the policy makers and also the stakeholders of the Andaman Islands.

The goal of the impact assessment in these islands was to bring about a more ecologically, socio-culturally and economically sustainable and equitable environment. The assessment of impact in these islands would promote community development and empowerment and will make the stakeholders focus on the environment and their culture first and then towards the visitors.

SUMMARY OF THE CHAPTER

This chapter gives an account of the fulfillment of the objectives by providing with all the findings of the study regarding the demographic profile, opinion of the stakeholders regarding the tourism development both through the review of literature and through the analysis of the questionnaire. The study also mentions the tourism impacts recognized according to the stakeholders of the Andaman Islands. It further provides suggestions in line with the findings of the study which not only contribute to the area academically but will also be helpful for the policy makers of the Andaman Islands. An important part of the chapter is the discussions which compares the findings of the present research with the previous related studies. The chapter further provides a detailed account of the future scope of the study along with the discussions and conclusion.