CHAPTER I

“IMPACT OF TOURISM ON ENVIRONMENT A CASE STUDY OF NORTH AND SOUTH MALE’ ATOLLS OF MALDIVES”

AN INTRODUCTION

1.1 INTRODUCTION

Geography is fundamental to the study of tourism, because tourism is geographical in nature. Tourism occurs in places, it involves movement and activities between places and it is an activity in which both place characteristics and personal self-identities are formed, through the relationships that are created among places, landscapes and people. Physical geography provides the essential background, against which tourism places are created and environmental impacts and concerns are major issues that must be considered in managing the development of tourism locations.

Tourism geography is the study of travel and tourism, as an industry and as a social and cultural activity. Tourism geography covers a wide range of interests including the environmental impact of tourism, the geographies of tourism and leisure economies, answering tourism industry and management concerns, sociology of tourism and locations of tourism.

The approaches to study will differ according to the varying concerns. Much tourism management literature remains quantitative in methodology and considers tourism as consisting of the places of tourist origin (or tourist generating areas), tourist destinations (or places of tourism supply) and the relationship (connections) between origin and destination places, which includes transportation routes, business relationships and motivations of travelers.
Recent developments in Human geography have resulted in approaches such as those from cultural geography, which take more theoretically diverse approaches to tourism, including a sociology of tourism, which extends beyond tourism as an isolated, exceptional activity and considering how travel fits into the everyday lives and how tourism is not only a consumptive of places, but also produces the sense of place at a destination.

Tourism has existed in one form or other since societies have been in existence and its roots can be traced back to ancient times. The latter half of the twentieth century saw a spectacular development and expansion of modern tourism to all corners of the globe. Facilitated by remarkable technological advances, especially in transport, as well as increases in leisure time and disposable wealth, tourism has become one of the largest and most important industries of the world. The growth in leisure travel has matched the number of countries, regions and destinations opening up for tourism. As a result, today there is hardly any part of the globe that is not ‘invaded’ by tourism.

The main reason that growing numbers of countries are getting involved in tourism activities is the economic gains promised by the industry. Due to the industry’s vast opportunities for employment and income generation, less-developed countries see tourism as their “passport” to development. Indeed, The Manila Declaration on World Tourism (United Nations World Tourism Organization, 1980) recommended tourism as a gateway for “a steady acceleration of economic and social development” particularly for developing countries.

The increasing number of destinations competing in the global tourism arena has created a fiercely competitive industry where nations,
regions and communities have to vie with each other to lure the ‘elusive’
tourist. Consequently, competitive advantages, innovative product
differentiation and effective marketing have become essential to sustain
the tourism as an industry. Strong competition in the tourism industry
makes it extremely difficult for destinations to survive without
differentiation.

1.2 MEANING AND IMPORTANCE OF TOURISM

Tourism is travel for recreational, leisure, or business purposes. The
World Tourism Organization defines tourists as people "traveling to and
staying in places outside their usual environment for not more than one
consecutive year for leisure, business and other purposes.

There is no definition of tourism that is acceptable to all without some
commentary as to the appropriateness. Jafari (1977) defines tourism as:

“a study of man away from his usual habitat, of the industry which
responds to his needs, and of the impacts that both he and the
industry have on the host socio-cultural, economic and physical
environments”.

Jafrai (1977) chose to define ‘tourism’ as a ‘study’ of what tourism
is, projecting an indication of his ‘academic bias’. This definition shows
a bias towards gender inequality (by using the ‘he’ form), which may,
have been acceptable at that point in time, but not in today’s theoretical
‘equity’ environment. Tourism is “the temporary movement of people
to destinations outside their normal places of work and residence, the
activities undertaken during their stay in those destinations, and the
facilities created to cater to their needs” (Mathieson & Wall, 1982).
There are definitions of tourism that are based on the purpose of travel, with travel as an integral part. For example tourism has also been defined as: “The relationship and phenomena arising from the journeys and temporary stays of people travelling primarily for leisure and recreational purposes.” (Pearce, 1989)

This definition’s emphasis on the prime purpose of travel as ‘leisure’ makes it quiet appropriate for ‘holiday destinations’ such as the Maldives, but may be less appropriate for ‘commercial destinations’. This is indicative of the complexity in defining tourism in a way that could encompass everything that ‘tourism’ stands for. It is often difficult to distinguish between tourism and recreation, as they are interrelated. Tourism involves traveling a distance from home, while recreation is defined as the activities undertaken during leisure time (McIntosh & Goeldner, 1990).

The existence of numerous classifications, levels and branches of tourism also makes the definition of tourism complex and its study broad (Wanhill, 1998). Aspects of tourism are fraught with terminological disagreements and inconsistencies as attempts are made to differentiate between and within various components such as: tourists and travellers, visitors and excursionists, inbound tourists and out bound tourists, international tourists and domestic tourists, hotels and resorts, so on and so forth (Burns & Holden, 1995; Vellas & Bécherel, 1995; Murphy, 1994). At the forefront of these arguments are, as one would expect, the established academics of tourism studies and international tourism organizations.

For destinations like the Maldives, these definitional problems appear to be none less daunting. Before the introduction of ‘tourism’
(suggestive of most of the definitions), island destinations were visited by a number of travelling traders and diplomats.

The reason for these ‘travels’ may have been different from that of today’s ‘tourists’, and may have been intentional or accidental (as in cases of shipwrecks). Therefore, definitions such as the one provided by Pearce (1989), may not be appropriate for all these ‘journeys’ but they (Travellers? Visitors? Traders?) would have received services that a ‘tourist’ will get today. Does this not mean that tourism existed in destinations like the Maldives for hundreds of years? Inskeep (1991) suggests that:

“Some 5,000 years ago, with the development of intensive agriculture, cities, sea-going ships, and money as a medium of exchange, travel became more commonly motivated by trade, military activities, and government administration of large empires such as the Sumerian, Persian and Roman empires in the Mediterranean and Middle eastern regions” (Inskeep, 1991).

As early as 3000 BC, commercial travel was very well developed in the Indian Ocean by the Indus Valley civilization and by North African traders (Heyerdahl, 1986). Yet it may not be very easy to draw the line between ‘tourists’ and ‘travellers’ because of the existence of various typologies for each that have some common characteristics (Pryer, 1997). Are all tourists, travellers and all travellers tourists? Is it fair to suggest that “tourists don’t know where they’ve been; travellers don’t know where they are going” (Theroux 1992).

These questions will probably be debated for generations to come. Yet, what appears to be certain is that for someone to become a tourist, travel is necessary. Hence it may be appropriate to consider that all the
tourists are travellers, whereas all travellers may not be tourists.

At the International Tourism Conference of the United Nations held in Rome in 1963, the International Union of Official Travel Organizations -IOUTO, (now the World Tourism Organization - WTO), agreed on the adaptation of the word ‘visitor’ to define any person visiting a country other than that person’s usual place of residence, for any reason other than following an occupation remunerated from the country visited. The fact that this definition focuses on someone travelling to another country points towards international visitors, if in this definition ‘visiting a country’ is to be changed to ‘visiting a place’ it would be more appropriate for both ‘domestic’ and ‘international’ visitors.

For the purpose of this study this definition of ‘visitor’ is considered as appropriate to be used as ‘tourists’. However, through this study, words ‘tourists’, ‘visitors’ and ‘travellers’ are used interchangeably.

Even though there is a general consensus on the importance of having uniformity and consistency in defining tourism and categorizing travellers or tourists or visitors, there are differences in opinions as how to process such a categorization (Mowforth & Munt, 2003; Stabler, 1997; Burns & Holden, 1995; Murphy, 1994; Burkart, 1981). Many attempts to address this problem have been unable to achieve a consensus. One of the causes of this problem could be that the definers appear to have a tendency to get carried away with the ‘meaning’ of the ‘word or words’ being defined rather than taking that/them in context.

From a terminological perspective, many of the words used in any study could convey a number of meanings and hence can be open to debate. However, defining all the words could make dictionaries redundant and the study unnecessarily lengthy. Therefore, in this study the issues of
definitions are dealt on a ‘need to define’ basis, based on the ‘relevancy’ and direct ‘significance’ of such terminological clarification to this ‘study’. Thus, for example understanding of the various forms of tourism labelled such as: sustainable tourism (Inskeep, 1991); mass tourism (Poon, 1993); met tourism (Burns & Holden, 1995); alternative tourism (Albuquerque & McElroy, 1995); ecotourism (Cater, 1996), etc. is needed to be reviewed as they appears to be significant to tourism development in island destinations such as the Maldives.

Tourism in Maldives has become a popular global leisure activity. After slowly recovering from the contraction resulting from the late-2000s recession, where tourism suffered a strong slowdown from the second half of 2008 through the end of 2009, and the outbreak of the H1N1 influenza virus, international tourist arrivals surpassed the milestone 1 billion tourists globally for first time in history in 2012. International tourism receipts (the travel item of the balance of payments) grew to US$1.03 trillion (€740 billion) in 2011, corresponding to an increase in real terms of 3.8% from 2010. In 2012, China became the largest spender in international tourism globally with US$102 billion, surpassing Germany and United States. China and emerging markets significantly increase their spending over the past decade, with Russia and Brazil as noteworthy examples.

Tourism is important, and in some cases, vital for many countries. It was recognized in the Manila Declaration on World Tourism of 1980 as "an activity essential to the life of nations because of its direct effects on the social, cultural, educational, and economic sectors of national societies and on their international relations." Tourism brings in large amounts of income in payment for goods and services available, accounting for 30%
of the world's exports of services, and 6% of overall exports of goods and services. It also creates opportunities for employment in the service sector of the economy, associated with tourism. These service industries include transportation services, such as airlines, cruise ships, and taxicabs; hospitality services, such as accommodations, including hotels and resorts; and entertainment venues, such as amusement parks, casinos, shopping malls, music venues, and theatres.

The rich natural characteristics of tourist destinations such as sea, sand, all the recreational activities and all the unique scenery, that the coastal areas offer, make these regions an attractive destination (Gormsen, E 1997, Davenport J. and Davenport J. L. 2006). However, this increasing tourist population and the corresponding related activities, inevitably lead to strong pressures on the coastal area (Hall C. M., 2001) and a host of environmental problems. Tourism is an industry with enormous economic impacts. It is also an industry that has many environmental and social consequences. A thorough understanding of each component of the tourism phenomenon is essential so that those involved with planning, management, and policy determination have a basis for decision-making.

In both developing and developed countries tourism is often regarded as an economic activity of immense significance creating thousands of jobs. Today, tourism is one of the largest and dynamically developing sectors of external economic activities. Its high growth and development rates, considerable volumes of foreign currency inflows, infrastructure development, and introduction of new management and educational activities affect various sectors of economies, which positively contribute to the social and economic development of the country as a whole.
The quality of the environment, both natural and man-made, is essential to tourism. However, tourism's relationship with the environment is complex as many activities can have adverse environmental effects. Many of these impacts are linked with the construction of general infrastructure such as roads, airports and tourism facilities, including resorts, hotels, restaurants, shops, golf courses and marinas. The negative impacts of tourism development can gradually destroy the environmental resources on which it depends. On the other hand, tourism has the potential to create beneficial effects on the environment by contributing to environmental protection and conservation. It is a way to raise awareness of environmental values and it can serve as a tool to finance protection of natural areas and increase their economic importance.

Negative impacts from tourism occur when the level of visitors use is greater than the environment's ability to cope with this use within the acceptable limits of change. Uncontrolled conventional tourism poses potential threats to many natural areas around the world. It can put enormous pressure on an area and lead to impacts such as: soil erosion, increased pollution, discharges into the sea, natural habitat loss, increased pressure on endangered species and heightened vulnerability to forest fires. It often puts a strain on water resources, and it can force local populations to compete for the use of critical resources. Direct impact on natural resources in the provision of tourist facilities can be caused by the use of land for accommodation and other infrastructure provision, and the use of building materials. Tourism is known to negatively affect the environment due to pollution caused by for instance transportation, overproduction of waste by tourists and physical damages of known tourist attractions and destinations. Therefore in recent years the tourism industry has tried to offer products and alternatives that are less damaging
towards the environment, so called “green” alternatives (Gunce, 2003). The tourists that choose “green” alternatives and prefer destinations that limit the negative environmental impacts are typically known as ecotourists (Cavlek, 2002).

1.3 TOURISM IN MALDIVES

Tourism is the largest economic industry in the Maldives, as it plays an important role in earning foreign exchange revenues and generating employment in the tertiary sector of the country. The archipelago of the Maldives is the main source of attraction to many tourists visiting the country worldwide.

1.3.1. History of Tourism

Tourism began in the Maldives in 1972. A United Nations mission on development which visited the Maldives Islands in the 1960s did not recommend tourism, claiming that the islands were not suitable. Ever since the launch of the first resort in Maldives in 1972, however, tourism in Maldives has flourished. The arrival of the first tourist group is estimated to have occurred in February 1972. The group landed at Malé, the capital city of the Maldives, and spent 12 days in the country. Tourism in Maldives started with just two resorts with a capacity of about 280 beds in Kurumba Village and Bandos Island Resort. Kurumba island resort is the first resort which was opened in Maldives then Bandos island resort was opened. At present, there are over 105 resorts located in the different atolls constituting the Republic of Maldives. Over the past few decades, the number of tourists in Maldives has risen continuously. In 2009, local island guesthouses started popping up in the Maldives. This was thanks to a change in regulations that began to officially allow tourists to stay among the local population, rather than just on privately
owned resort islands. Today, more than 900,000 tourists visit the Maldives each year. Former President Ibrahim Nasir, introduced tourism in Maldives.

1.3.2. Natural beauty of the Maldives

Maldives is very famous for its natural beauty which includes the blue ocean and white beaches, accompanied by clean air and pleasant temperatures. The climate of the Maldives is ideal for visitors to get engaged in water sports such as swimming, fishing, scuba diving, snorkeling, and water-skiing. Windsurfing and kite boarding. Due to its extraordinary underwater scenery and clean water, Maldives is ranked among the best recreational diving destinations of the world.

1.3.3. Overview of a Tropical resort Maldivian tourist resort

A tourist resort in the Maldives consists of an exclusive hotel on its own island, with its population entirely based on tourists and work force, with no local people or houses.

These islands developed for tourism are approximately 800 by 200 metres in size and are composed of sand and coral to a maximum height of about 2 metres above the sea. In addition to its beach encircling the island, each island has its own "house reef" which serves as a coral garden and natural aquarium for scuba divers and snorkelers. The shallow water enclosed by the house reef also serves as a large natural swimming pool and protects swimmers from the ocean waves and strong tidal currents outside the house reef.

The buildings on a typical resort includes rooms and suites reserved for use by its guests, restaurants, coffee shops, shops, lounges, bars, discos and diving schools. A portion of the island also contains staff lodgings
and support services such as catering, power generators, laundry, and a sewage plant. On-island shops offer a wide range of products, such as souvenirs and artifacts. Most resorts offer a wide variety of activities such as aerobics, volleyball and table tennis.

1.3.4. Ecotourism in Maldives

Some promotion of ecotourism is practiced in the Maldives, with resorts emphasizing recycling of heat that is wasted in producing electricity and stricter policies of waste disposal. Furthermore, the government aims to conserve the natural beauty of the islands before they are being altered into resorts by enforcing laws such as prohibition of catching turtles and reduction in the damages caused to the coral reefs.

Nevertheless, the Maldives have frequently come under criticism for their lack of protection of the local shark populations, which have sharply decreased after being hunted extensively for decades. In some areas of the island, sharks have entirely disappeared. Sharks are hunted primarily for their fins. Shark fins are exported from the Maldives to other countries in Asia, where they are regarded as a delicacy. The fins are amputated from the live animals, which are then thrown back alive into the sea.

Although laws exist that prohibit this practice in the Maldives, these laws are not respected or enforced by the local authorities

1.4 ECONOMY AND TOURISM OF MALDIVES

Among the 1,900 islands in the Maldives, only 198 are inhabited. The population is scattered throughout the country, and the greatest concentration is on the capital island, Malé. Limitations on potable water and arable land, plus the added difficulty of congestion are some of the problems faced by households in Male’.
In ancient times the Maldives were renowned for cowries, coir rope, dried tuna fish (Maldive Fish), ambergris (Maavaharu) and Coco de mer (Tavakkaashi). Local and foreign trading ships used to load these products in the Maldives and bring them abroad. Nowadays, the mixed economy of the Maldives is based on the principal activities of tourism, fishing and shipping.

1.4.1. Tourism

Tourism is the largest industry in the Maldives, accounting for 28% of GDP and more than 60% of the Maldives' foreign exchange receipts. It powered the current GDP per capita to expand 265% in the 1980s and a further 115% in the 1990s. Over 90% of government tax revenue flows in from import duties and tourism-related taxes. As of 2007, the Maldives has successfully promoted its natural assets for tourism. The beautiful, unpolluted beaches on small coral islands, blue waters and sunsets attract tourists worldwide, bringing in about $325 million a year. Tourism and other services in the tertiary sector contributed 33% to the GDP in 2000.

Since the establishment of the first resort in 1972, over 84 islands have been developed as tourist resorts, with a total capacity of some 16,000 beds. The number of tourists (mainly from Europe) visiting the Maldives increased from 1,100 in 1972 to 280,000 in 1994. In 2000, tourist arrivals exceeded 466,000. The average occupancy rate is 68%, with the average number of tourists staying for 8 days and spending about $755. It is recorded that over 500,000 tourists visited the islands in 2003.

1.4.2. Fishing

Fishing is the second leading sector in the Maldives. The economic reform program by the government in 1989 lifted import quotas and
opened some exports to the private sector. Subsequently, it has liberalized regulations to allow more foreign investment. This sector employs about 20% of the labour force and contributes 10% of GDP. All fishing is done by line as the use of nets is illegal. Production in the fishing sector was approximately 119,000 metric tons in 2000, most of which were skipjack tuna. About 50% of fish is exported, especially to Sri Lanka, Germany, UK, Thailand, Japan, and Singapore. Almost 42% of fish exports consist of dried or canned fish, and another 31% is frozen and the remaining 10% is exported as fresh fish. Total exports of fish reached about $40 million in 2000. The fishing fleet consists of some 1,140 small, flat-bottomed boats (dhonis). Since the dhonis have shifted from sailing boats to outboard motors, the annual tuna catch per fisherman has risen from 1.4 metric tons in 1983 to 15.2 in 2002.

1.4.3. Agriculture and Manufacturing

Agriculture and manufacturing play a minor role in the economy, constrained by the limited availability of cultivable land and shortage of domestic labour. Most staple foods are imported. Due to the availability of poor soil and scarceness of arable land in the islands, agriculture is limited to only a few subsistence crops, such as coconut, banana, breadfruit, papayas, mangoes, taro, betel, chilies, sweet potatoes, and onions. Agriculture contributes about 6% of GDP.

1.4.4. Industry

Industry in the Maldives consists mainly of garment production, boat building, and handicrafts. It accounts for around 18% of GDP. Maldivian authorities are concerned about the impact of erosion and possible global warming in the low-lying country. Traditional industry consists of boat building and handicrafts, while modern industry is limited to a few tuna
canneries, five garment factories, a bottling plant, and a few enterprises in
the capital producing PVC pipe, soap, furniture, and food products. There
are no patent laws in the Maldives.

1.4.5. Financial

The banking industry dominates the small financial sector of the Maldives. The country's seven banks are regulated by the Maldives Monetary Authority. The Maldives has no income, sales, property, or capital-gains taxes, and has been considered to have the simplest tax code in the world. The Tax Justice Network gave the Maldives a "secrecy score" of 92 on its 2011 Financial Secrecy Index - the highest score in that category of any actively-ranked country. However, the Maldives' minor market share put it near the bottom of the overall weighted list.

1.4.6. Other

Traditional economic activities such as mat weaving, jewelry making and lacquer work are also found in the Maldives.

1.4.7. Infrastructure

Development of the infrastructure is mainly dependent on the tourism industry and its complementary tertiary sectors, transport, distribution, real estate, construction, and government. Taxes on the tourist industry have been plowed into infrastructure and it is used to improve technology in the agricultural sector.

1.4.8. Macro-Economic Trend

The following table 1.1 shows the trend of gross domestic product of Maldives at market prices estimated by the International Monetary Fund with figures in millions of Rufiyaa.
### Table: 1.1: Gross Domestic Product

<table>
<thead>
<tr>
<th>Year</th>
<th>Gross Domestic Product (Exchange)</th>
<th>US Dollar</th>
<th>Per Capital Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>1980</td>
<td>440</td>
<td>7.85 Rufiyaa</td>
<td>3.11</td>
</tr>
<tr>
<td>1985</td>
<td>885</td>
<td>7.08 Rufiyaa</td>
<td>3.85</td>
</tr>
<tr>
<td>1990</td>
<td>2054</td>
<td>9.55 Rufiyaa</td>
<td>4.34</td>
</tr>
<tr>
<td>1995</td>
<td>4696</td>
<td>11.76 Rufiyaa</td>
<td>6.29</td>
</tr>
<tr>
<td>2000</td>
<td>7348</td>
<td>11.76 Rufiyaa</td>
<td>6.77</td>
</tr>
<tr>
<td>2005</td>
<td>10458</td>
<td>12.80 Rufiyaa</td>
<td>5.33</td>
</tr>
<tr>
<td>2011</td>
<td>10458</td>
<td>15.40 Rufiyaa</td>
<td>7.43</td>
</tr>
</tbody>
</table>

Source: Ministry of Finance

For purchasing power parity comparisons, the US Dollar is exchanged at 12.85 Rufiyaa only. Mean wages were $4.15 per man-hour in 2009. The Maldives has experienced relatively low inflation throughout the recent years. Real GDP growth averaged about 10% in the 1980s. It expanded by an exceptional 16.2% in 1990, declined to 4% in 1993, and, over the 1995-2004 decade, real GDP growth averaged just over 7.5% per year. In 2005, as a result of the tsunami, the GDP contracted by about 5.5%; however, the economy rebounded in 2006 with a 13% increase.

The Maldives has been running a merchandise trade deficit in the range of $200 to $260 million since 1997. The trade deficit declined to $233 million in 2000 from $262 million in 1999. In 2004 it was $444 million. International shipping to and from the Maldives is mainly operated by the private sector with only a small fraction of the tonnage carried on vessels operated by the national carrier, Maldives Shipping Management Ltd.
Over the years, Maldives has received economic assistance from multilateral development organizations, including the United Nations Development Programme, Asian Development Bank, and the World Bank. Individual donors, including Japan, India, Europe, Australia, Arab countries (such as Islamic Development Bank and the Kuwait Fund) also have contributed. See: Economic

In 1956, a bilateral agreement gave United Kingdom access to Gan in Addu Atoll in the far south, to establish an air facility in Gan in return for British aid. However, the agreement ended in 1976, shortly after the closing of the Gan air station.

Environmental concerns There is growing concern towards the coral reef and marine life due to coral mining (used for building and jewelry making), sand dredging, solid waste pollution and oil spills from boats. Mining of sand and coral has destroyed the natural coral reef that once protected several important islands, now making them highly susceptible to the erosive effects of the sea. The destruction of large coral beds due to heat is also a growing concern.

In April 1987, high tides swept over the Maldives, inundating much of Malé and nearby islands which prompted Maldivian authorities to take global climatic changes seriously. An INQUA research in 2003 found that actual sea levels in the Maldives had dropped in the 1970s and forecasts little change in the next century. There is also concern over the questionable shark fishing practices in place in the island. Shark fishing is forbidden by law, but these laws are not enforced. The population of sharks has sharply decreased in recent years.
The Asian brown cloud hovering in the atmosphere over the northern Indian Ocean is also another concern, Studies show that decreased sunshine and increased acid rain from the cloud.

1.5 TOURISM AND ENVIRONMENTAL ISSUES

The official World Tourism Day celebrations, was held in Kurumba Maldives on 27th September 2013, under the theme "Tourism and Water Protecting our Common Future", in line with the United Nations International Year of Water Cooperation.

As part of the WTD celebrations, in collaboration with the UNWTO, a World Tourism Day Think Tank Seminar was held on the topic Tourism and Water. The Think Tank Seminar aimed to examine water consumption in the tourism sector, the challenges facing water management, the measures being undertaken by the UNWTO to raise awareness and ensure access and the preservation of water resources worldwide & to increase the understanding of the importance of tourism and its contribution to major global challenges.

The five-year, Fourth Tourism Master plan of the Maldives was also launched on the World Tourism Day 2013. The aim of this Fourth Tourism Master plan (4TMP) is to articulate a 5-year strategic agenda and action plan agreed by both public and private players in the tourism industry.

1.6 SIGNIFICANCE OF THE STUDY

Tourism is widely known that it is one of the most enterprising branches of the tertiary sector of economy in many countries. Nevertheless, tourism is characterized by an increasing number of negative environmental and social impacts. This combination of both social
problems and environmental pollution, makes the need for further study and investigation of this phenomenon imperative, especially in a prime tourist country. Tourism especially, marine and coastal tourism is one the fastest growing areas within the world's largest industry. Yet despite increased awareness of the economic and environmental significance of tourism, it is only in recent years, scientific researchers have emerged (Hall, 2001).

The tourism industry generally overuses water resources for hotels, swimming pools, and personal use of water by tourists. This can result in water shortages and degradation of water supplies, as well as generating a greater volume of waste water. In areas with high concentrations of tourist activities, waste disposal is a serious problem and improper disposal can be a major despoiler of the natural environment.

Increased construction of tourism and recreational facilities have not only increased pressure on important land resources including minerals, fossil fuels, fertile soil, forests, wetland and wildlife and on scenic landscapes but also often leads to increased sewage pollution. Wastewater pollutes seas and lakes surrounded by tourist places, damaging the flora and fauna. Sewage runoff causes serious damage to coral reefs because it contains lots of nutrients and it stimulates the growth of algae, which cover the filter-feeding corals, hindering their ability to survive. Changes in salinity and transparency can have wide-range of impacts on coastal environments.

Development of marinas and breakwaters can cause changes in currents and coastlines. Furthermore, extraction of building materials such as sand affects coral reefs, mangroves, and hinterland forests, leading to erosion and destruction of habitats. In the Philippines and the Maldives,
dynamiting and mining of coral for resort building materials has damaged fragile coral reefs and depleted the fisheries (Hall, 2001).

In marine areas (around coastal waters, reefs, beach and shoreline, offshore waters, uplands and lagoons) many tourist activities occur in or around fragile ecosystems. Anchoring, snorkeling, sport fishing and scuba diving, yachting, and cruising are some of the activities that can cause direct degradation of marine ecosystems such as coral reefs, and subsequent impacts on coastal protection and fisheries (Hall, 2001).

1.7 OBJECTIVES

The thesis is based on the following objectives:

- To identify the recent growth and development of tourism in Maldives.
- To identify the location growth and development of resorts and hotels with transport hubs of the study area.
- To analyze the Positive and Negative economic impacts of tourism in Maldives.
- To analyze the Positive and Negative environmental impacts of tourism on the local communities.
- Provide suggestions for the sustainable development tourism in Maldives

1.8 HYPOTHESES

- Development of tourism has brought both positive and negative economic impacts on the community of study area.
- Development of tourism has also similarly produced both positive and negative environmental socio-cultural impacts on the local community.
1.9 METHODOLOGY

Methodology of a research should be sound so that the objectives will be achieved and hypotheses will be proved. Present study is based on to analyse the economic and environmental impacts of tourism of Maldives. Out of 26 major atolls, North and South Male atolls alone constitutes about more than 70 percent of the total population of the country. So the data regarding the present study has been collected from both primary and secondary sources from these two major islands. Stratified sampling has been used for selection of tourist resorts. Out of the total 90 tourist resorts, 9 tourist resorts (which constitute about 10 percent of the total resorts in the study area) have been selected for primary survey. In addition to this, simple random sampling has been applied for the selection of particular individual. In order to assess the environmental impact, a number of social, economic, geographical and environmental variables have been taken into consideration. An appropriate Environmental Impact Assessment (EIA) technique has been employed to estimate the carrying capacity of these islands. The secondary data has been collected from various government departments like Ministry of Tourism, Historical department, Ministry of health and welfare, etc. Furthermore Statistical Package for Social Science (SPSS) software has been used to apply the ANOVA for statistical analysis. The data has been also presented in the form of tables, charts, graphs and images.
Data

Primary-Questionnaire

Secondary

Impact

Economic impact

Socio-Cultural and Environmental impact

Positive

Negative

Positive

Negative

6 Variables

7 Variables

8 Variables

18 Variables

Statistical ANOVA Test

Testing of Hypotheses

Result
1.10 ORGANIZATION OF THESIS

The present study is based on eight chapters as:

Chapter – 1: Introduction to study

This chapter includes introduction to topic, history of tourism of Maldives significance of the study, Objectives, Hypotheses, Methodology and Organization of thesis.

Chapter – 2: Study Area

This chapter provides the profile of study area which includes history of Maldives climate, flora and fauna, demography, land use, soil, vegetation, population, economy and tourism.

Chapter – 3: Review of Literature

This chapter provides a vast information reviewed from international, national and local literature on various aspects such as Coastal tourism, Positive impacts of tourism, Negative impacts of tourism, Environmental impacts, Pollution, Solid waste, Priority categories of parameters, Maldives wildlife at marine life, Economic impacts, Socio-cultural impacts of tourism, Sustainable tourism and sustainable development.

Chapter – 4: Growth and development of Tourism in Maldives.

This chapter provides the information regarding the growth and development of tourism, flow of tourist and purpose of visit of tourist visit. This chapter fulfills the first objective of the study -to identify the recent growth and development of tourism in Maldives.
Chapter – 5 Location – Growth and development of resorts and hotels

This chapter provides geographical location of resorts and hotels their linkages, three generation of safari boats, safari routes growth of safari boats, international air gate ways and transport hubs, sea planes and planning at Atoll and inland level. The above said study fulfills the second objective of the research – to identify the location growth and development of resorts and hotels with transport hubs of the study area.

Chapter – 6: Positive and negative impact of tourism on economy of Maldives

It also includes the positive and negative impacts of tourism on the economy of the study area. The impact has been analyzed by using ANNOVA test. It is the important chapter which full fills the third objective of the study and also tests the first hypotheses of the research. - Development of tourism has brought both positive and negative impacts on the community of Maldives.

Chapter – 7: Impacts of Tourism on Socio-cultural and Environment of Maldives

This chapter provides the results of analysis positive and negative impact of tourism on socio-cultural and environment of Maldives. This is the crux of the study which shows the result of the second hypotheses and fulfills fourth objective- the Development of tourism has also similarly produced both positive and negative environmental socio-cultural impacts on the local community.
Chapter – 8: Summary, Conclusion and Suggestions

This chapter gives the summary, findings of the various chapters, suggestion and conclusion. It shows the result of the fifth objective of the research - to provide suggestions for the sustainable development tourism in Maldives.