

**MANAGING TOURISM DEVELOPMENT IN GOA THROUGH
SUSTAINABLE TOURISM**

**THESIS SUBMITTED TO GOA UNIVERSITY FOR THE
AWARD OF THE DEGREE OF DOCTOR OF PHILOSOPHY**

BY

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FACULTY OF COMMERCE & MANAGEMENT STUDIES

DEPARTMENT OF COMMERCE

GOA UNIVERSITY

TALEIGAO PLATEAU

GOA 403 206

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GOA UNIVERSITY
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2015

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DECLARATION

I, **Carmelita A. (D'Souza) D'Mello**, hereby declare that the thesis, entitled "*Managing Tourism Development in Goa through Sustainable Tourism*", submitted to Goa University, Goa, for the award of the degree of **Doctor of Philosophy in Commerce** is the outcome of the original and independent work undertaken by me during the period 2011 – 2015. This study is carried out under the supervision and guidance of **Professor Subhash K. B.**, Department of Commerce, Goa University. It has not previously formed the basis for the award of any Degree / Diploma / Certificate / Associate-ship / Fellowship or any such similar title to the candidates of this University or any other Universities. I have duly acknowledged all the sources used by me in the preparation of this thesis.

Date:

Carmelita A. (D'Souza) D'Mello

Place: Goa

CERTIFICATE

This is to certify that the thesis titled “*Managing Tourism Development in Goa through Sustainable Tourism*” for the award of **Ph.D.** Degree in **Commerce**, is the bonafide record of the original work done by **Ms. Carmelita Anita (D’Souza) D’Mello**, during the period of her study 2011-2015 under my supervision. This thesis has not formed the basis for award of any Degree / Diploma / Certificate / Associate ship / Fellowship or any such similar title to the candidates of this University or any other Universities.

Date:

Professor Subhash K. B.

Place: Goa

(Research Supervisor)

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Carmelita A. (D’Souza) D’Mello

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LIST OF ABBREVIATIONS

ABET - Anais Brasileiros de Estudos Turísticos (Brazilian Annals of Tourism Studies)

AIEST- International Association of Scientific Experts in Tourism

ANOVA - Analysis of Variance

APTA - Asia Pacific Tourism Association

AST - Attitude towards Sustainable Tourism

CAGR - Compound Annual Growth Rate -

CFA - Confirmatory Factor Analysis

CFI - Comparative Fit Index

DMO - Destination Management Organisations

EFA - Exploratory Factor Analysis

EFST - Economic Focus of Sustainable Tourism

FST - Focus of Sustainable Tourism

GFI - Adjusted Goodness of Fit Index

GFI - Goodness of Fit Index

GTDC - Goa Tourism Development Corporation

IITM - India International Travel Mart

IPA - Importance-Performance Analysis

LV - Latent Variable

MSIM - Multi - Stakeholder Involvement Model

MV - Measured Variable

NFI - Normed-Fit index

NGO - Non-Governmental Organisation

NI - Negative impact

PATWA- Pacific Area Travel Writers Association

PB - Personal Benefit

PC - Personal Characteristics

PI - Positive Impacts

PST - Participation in sustainable Tourism Development

RMR- Root Mean Square Residual (RMR)

RMSEA - Root Mean Square Error of Approximation

SAT- Support for Additional Tourism

SEM - Structural Equation Modeling

SRMR - Standardized Root Mean Square Residual

ST - Sustainable Tourism

STM - Sustainable Tourism Management

STP - Support for Tourism Planning

TAIP - Transportes Aéreos da Índia Portuguesa

TIS - Tourism Industry & Sustainability

TRA - Theory of Reasoned Action

TTF - Travel & Tourism Fair

UNTWO - United Nations World Tourism Organization

US - Understanding of Sustainability

WCED - World Commission on Environment and Development

WTO - World Tourism Organization

EXECUTIVE SUMMARY

Tourism is a major industry in Goa and attracts domestic tourists from other states of the country and foreign tourists from all over the world for a glimpse into the complex heritage and natural beauty of this unique and all-time favorite tourist destination in India. This thesis concentrates on the state of Goa as the research location in an attempt to understand tourism, its evolution and growth, its impacts on the host community and the environment, the needs of its visitors, the perceptions, attitudes and motivations of its various stakeholders and to evaluate all of this in terms of tourism's costs and benefits, using various appropriate techniques, so as to promote sustainable tourism development in the state.

This research considered the study of tourism's sustainability from the point of view of its stakeholders and is divided into 7 chapters of which Chapters 3, 4, 5 & 6 cover the four (4) objectives framed, while **Chapter 1** is the introductory chapter and **Chapter 7** reflects the findings and conclusions of the study. The aim of **Chapter 2** was to review relevant literature related to the various objectives of the study and in turn, to identify the research gap viz. the Tourists' perception about the infrastructure and facilities for tourism in the state, the Residents' perception about the impact of tourism in the state and its influence on their attitude towards additional tourism and support for tourism, multi-stakeholder perception about the sustainability of tourism in the state and consequently to determine the possibility of suggesting a model for achieving sustainable tourism in the state. The aim of **Chapter 3** was to examine the perceptions of tourists visiting the state of Goa with regard to the importance given to and the satisfaction level with respect to the infrastructure, facilities, services and amenities available for tourism and

to identify infrastructural strengths as well as problem areas which will enable various stakeholders to take appropriate measures to improve/enhance the same. In order to strategically utilize resources to minimize the negative impacts of tourism and increase the social support for tourism development. **Chapter 4** examined perceptions of the residents in the state of Goa by using the model developed by [Perdue et al. \(1990\)](#); later extended by [Mc Gehee, et al. \(2002\)](#) and based on the social exchange theory; tried to determine whether personal characteristics and personal benefits from tourism influence perception of tourism as well as support for tourism development, and what factors influence support for tourism development and management. The state of Goa is a well known and popular mass tourism destination and increased awareness about the ill-effects of mass tourism coupled with the economic necessity of encouraging tourism growth, has fuelled stakeholder interest towards sustainable tourism. The practice of sustainability in tourism can take diverse paths as evidenced in tourism research, but recently debate is on collaboration and involvement among tourism stakeholders is gaining importance as a key to sustainable tourism development. **Chapter 5** investigates the perceptions about various dimensions of sustainable tourism among four groups of tourism stakeholder's; viz.; Residents, Tourists, Entrepreneurs and Government Officials. The vital role that stakeholders play in the development and promotion of sustainable tourism in a destination cannot be overemphasized, yet there seems to be very little concerted involvement by them, in the planning and management of sustainable tourism development of the destination as well as limited research carried out in this regard so far. **Chapter 6** aims at bridging this gap by assessing multi-stakeholder perceptions about various aspects about the sustainability of tourism in Goa in an attempt to predict the direction and consequently the strength of their support for the same. In terms of the

data analysis tools used; **Chapter 3** rated the importance given to and the satisfaction level of tourists through a structured questionnaire administered to them and used Importance-Performance Analysis and Gap Analysis used to determine the gap between tourist perception of importance given before trip and satisfaction level after trip; paired t-test to determine if the gap was significant. Variables were plotted on four and two quadrant grids to determine their status in terms of investment and improvement required. **Chapter 4** used Regression Analysis to determine whether residents perception of tourism's impacts was influenced by personal characteristics and personal benefit derived from tourism and if these perceptions influenced support for tourism development and predicted tourism planning. **Chapter 5** attempted to discover if differences existed with regard to stakeholder perceptions about tourism's sustainability with respect to all four stakeholder groups. An ANOVA test was conducted for each dimension, followed by a Scheffes' Post Hoc test to determine which groups differed. Finally, using Structural Equation Modeling, **Chapter 6** attempted to develop a model/path design which would help to make tourism in the destination sustainable.

Research Findings of **Chapter 3** reveal that in 30 out of 34 variables, there is a significant difference in tourist perception before and after the trip. Further, when plotted on an Importance-Performance Grid, a significant number of variables fall in Quadrant II (Concentrate here) indicating an urgent need to focus efforts and resources to improve the same (D'Mello et al, 2015 and 2016). The results of **Chapter 4** indicated that in general, while personal characteristics were not good predictors of resident's attitude towards tourism impacts, Personal benefits from tourism predicted positive impacts of tourism, support for additional tourism and also support for tourism planning. Further, Personal benefits from tourism and the impacts of

tourism predicted support for additional tourism which in turn predicted support for tourism planning thus supporting the social exchange theory (D'Mello et al, 2014, 2015a and 2015b). Results of **Chapter 5** result showed that statistically significant differences exists in perception among the four stakeholder groups i.e. tourists, residents, entrepreneurs & government officials for six out of the seven dimensions of sustainability studied (D'Mello et al, 2015). Finally, findings of **Chapter 6** indicate that while stakeholder perception about sustainable tourism management, its focus and attitude towards sustainable tourism share a high, positive association with sustainable tourism, understanding of sustainability, its economics and the tourism industry and sustainability are positively associated to a moderate extent only (D'Mello et al, 2015). However, actual participation in sustainable tourism efforts does not share a significant relationship with sustainable tourism. The study concludes by drawing the attention of destination managers, tourism planners and all involved in tourism to the importance of stakeholder awareness, education, participation and involvement for the sustainability of tourism in any destination.

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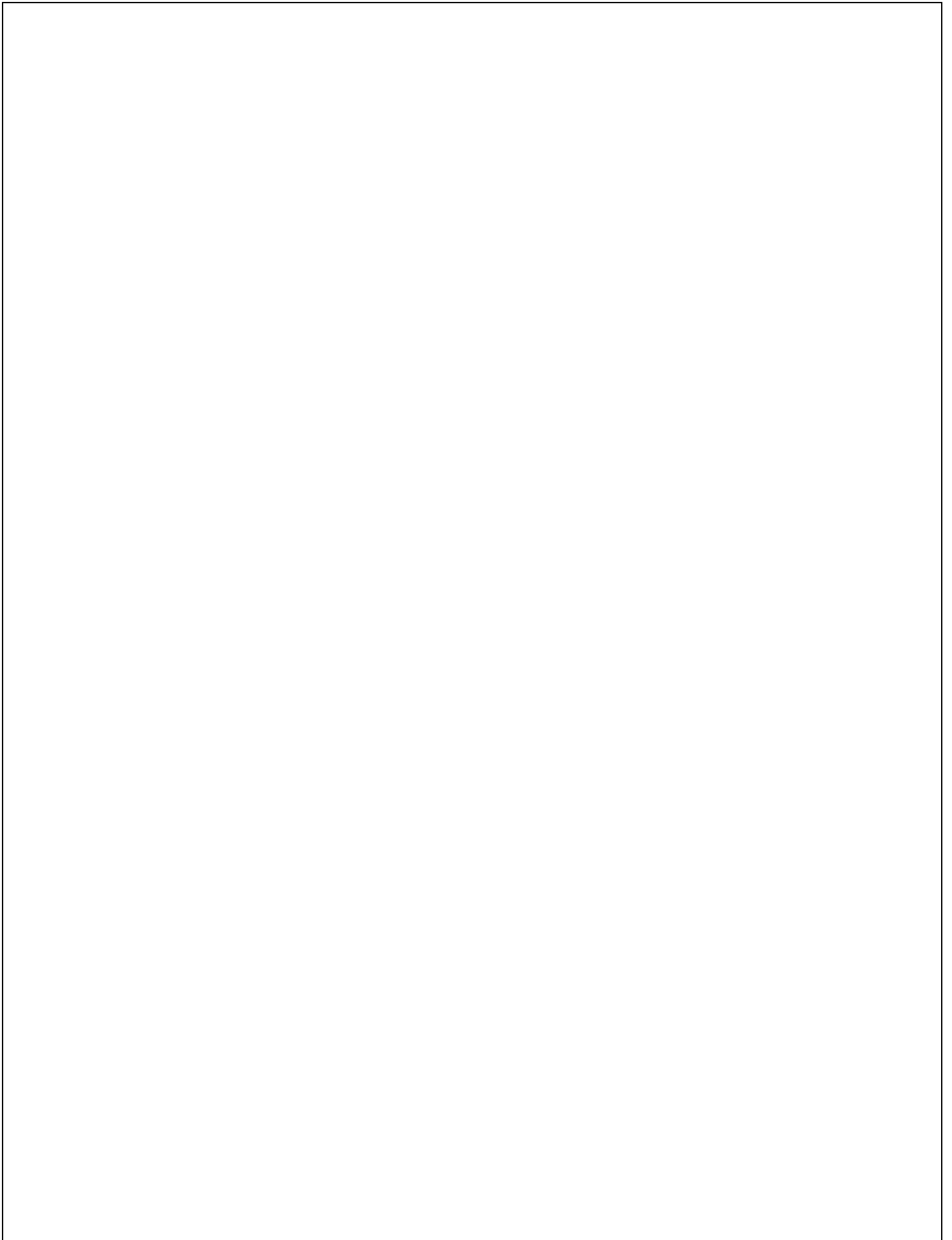
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CHAPTER I

INTRODUCTION

1.1 Goa: A Historical Perspective

Goa is a land described in myriad ways, by diverse authors at various stages in its evolution. While it was historically referred to as Gomantak or Govapuri or Govarashtra or Goym (Goem) in both Konkani and Mundari the ancient tongue of the Indian aboriginals (Gomes, 2010) following its luzitanization (westernization of the Goan culture and the acquisition of a Portuguese veneer), the portuguese are credited with coining the name Goa for the capital of their State of India (Estado da India), to rhyme with their metropolis, Lisboa. (Kamat, 1999) The quincentenary of Vasco da Gama's arrival on the west coast of South Asia in 1998, brought Goa's colonial past into national attention, perhaps, for the first time since her liberation in 1961, from the Portuguese rule. But in Goa, the issue basically crystallized into two political visions of Goa's past, 'Goa Dourada' and 'Goa Indika'. While 'Goa Dourada', (meaning Golden Goa) refers to the Portuguese colonial construction of Goa and sees it as European enclave attached to the Indian subcontinent, 'Goa Indika' refers to the anti-colonial construction of Goa and highlights the Indian contribution to Goan society (Trichur, 2013).

Goa's reputation as a trade destination dates back to many centuries, and was ruled by many dynasties till it got independence in 1961. (Refer Table 1.1) On account of its importance as a commercial *entrepôt* or *entrepot* (i.e., a port, city, or trading post during the days of wind-powered sailing), Goa was well known, both in the Indian subcontinent as well as to the

Egyptians, Phoenicians and Greeks because of its trade relations with them. The first written reference to Goa appear in Cuneiform when King Gudea of the Sumerian city state of Lagash (2143-2124 B.C.) refers to Goa as Gubi. Ptolemy, the Greek, referred to it as Kouba while Arab traders refer to it as Kuve/Kuwa. Writers like Ibn Batuta mention Sindabur (a corruption of the ancient capital of Goa, Chandrapur) while the Turkish Admiral Siddi Ali, referred to it as Gowai-Sandabur (Kamat, 1999). The Jain guru Hemachandra, in the Sanskrit text Dvyasharaya, written in the 12th century A.D. refers to the port of Gopakapattana as having commercial contacts with other ports in the Indian Ocean like Zanzibar, Bengal, Gujarat and Ceylon. Travel lore and archived records suggest that foreign travelers visited Goa from centuries past for business, pleasure, scholarship (scholarly reasons) as well as military reasons. Hiouen Tsang, the Chinese traveler, visited Konkanapur (Goa) in A.D. 640 and described its geographical boundaries. Goa's beauty and commercial development was extolled as far back as 1472, when its conqueror, Mahmud Gawan, the Bahamani general, sang its praises by terming it, "the envy of the islands and the ports of India..."(Kamat, 1999). Its commercial significance was yet again chronicled when the Portuguese traveler Duarte Barbosa, in the early 16th century described it as a great port and place of trade in merchandise and a well developed civic, commercial, agricultural port (Kamat, 1999). Francois Pyrard de Laval, a French navigator, who in the course of his travels, visited Goa in the 16th century, stated that, "*Whoever has been to Goa may say that he has seen the choicest rarities of India.... One would say that a fair was being held every day for the sale of all sorts of merchandise.*"(Pyrard, 1570) While today's traveler may not come to Goa strictly for the purchase and sale of goods, the "fair" still continues, with a wide variety of attractions to cater to all needs whether they be sport, culture, religion, cuisine, entertainment, business, health or relaxation (DOT, 2015). Legend also has it, that some notable churches in Goa were tributes

of foreign travelers, constructed in fulfillment of vows, for their safe passage when visiting Goa, most notable among them being the Churches of Our Lady of Penha de Franca and Our Lady of Ajuda Church at Ribandar. (De Souza, 2009)

Period	Milestones in History of Goa
Up to 200 B.C.	Bhojas of Chandrapur in feudal allegiance to Mauryan Empire
200B.C.-100 A.D.	Satavahanas as feudatories of Chuttus of Karwar
150A-249 A.D.	Kshatrapas
250 - 4 th Century A.D.	Abhiras
4 th century - 416 AD	Traikutas as feudatories of Abhiras
416 - mid 5 th century	Kalachuris of Mahishmati
540 - 757 A.D.	Chalukyas of Badami
755 - 973A.D.	Shilharas/ Rashtrakuta Dynasty
980 - 1300 A.D.	Kadambas as feudatories of Chakulyas of Kalyan & Devagiri Yadavs
1300-1335 A.D.	Alaudin Khilji
1350-1370 A.D.	Bahamani Sultanate
1370-1469 A.D.	Vijayanagar Empire
1469-1492 A.D.	Bahamani Sultanate of Gulbarga
1492-1510 A.D.	Adil Shah of Bijapur Sultanate
1510-1961 A.D.	Portuguese Rule
1961 A.D.	Goa's Liberation from Portuguese rule
1987 A.D.	Goa Statehood

Table 1.1: Historical Milestones of Goa from BC to AD

Source: Wikipedia: Timeline of Goan History

With its strategic location, the economically and militarily important port of Goa became an important maritime hub for both traders and travelers since control over the port of Goa meant control over seaborne trade along the coast and across the Arabian Sea. (Trichur, 2013) Ancient structures like the light house at Aguada, which is the oldest in Asia, reinforce this statement. Having attracted merchants, traders, historians, monks and missionaries since its earliest known history, Goa has undergone a continuous process of transformation which has left a unique and indelible impression on every aspect of its development, be it social, cultural, economic or environmental. The Portuguese regime also contributed to the growth of well appointed, paid accommodation in Goa due to the visits by foreign dignitaries along with their friends and relatives, leading to the establishment of luxury hotels in Goa; viz.; the **Mandovi** in Panaji (often

termed the pioneer of the tourism industry in Goa) and Hotel Zuari at Vasco da Gama. A pioneering development was Goa's own international airline - TAIP or Transportes Aéreos da Índia Portuguesa (Air Transport of Portuguese India), created in 1955, which functioned as the state airline of Portuguese India from 1955 to 1961 and connected Goa, the then Ceylon, Daman & Dui and Karachi. TAIP was created principally, to counteract the blockade that India had imposed on Portuguese territories in India as part of Nehru's efforts to annex them. The creation of TAIP was accompanied by the development of facilities of Goa, Daman & Diu to allow the operation of large aircraft allowing links with Portuguese territories without the use of any Indian infrastructure (Monteiro, 2008).

As tourism as an industry grew slowly and steadily in Goa, it gave rise to the need for a mechanism to enforce law and order and one of the earliest authorities in this respect, the '*O Centro do Informacao e Turismo de Goa*' was established in 1959. Soon after Liberation, on December 19th 1961, the *Department for Information, Publicity and Tourism* was formed in 1962 but recognition of the importance of the tourism industry dawned fairly late and it was only in 1977 that the *Department of Tourism* was set up and still later, in 1982, the *Goa, Daman & Dui Registration of Tourism and Trade Act* was passed by the Legislative Assembly. Goa saw the first influx of tourists, both domestic and international, after Liberation. The 'Hippies' or 'Flower children' as they were popularly known, left California and came to Goa in the late 1960's, both in search of peace and as a protest against the violence and materialism of the western world (de Souza, 2009). They carried little or no luggage and small amounts of cash, they hitchhiked from Europe to Athens and Istanbul, travelled by train through Central Turkey, continued by bus into Iran, across the Afghan border through southern Afghanistan to Kabul, over the Khyber Pass into

Pakistan, via Rawalpindi and Lahore to the Indian frontier. Once in India, hippies went to many different destinations, but gathered in large numbers on the beaches of Goa and Kovalam in Thiruvananthapuram (earlier Trivandrum) in Kerala, or crossed the border into Nepal to spend months in Katmandu (TNT, 2006).

Domestic tourists too began visiting Goa both for her natural beauty and for the foreign goods that were then available in Goa. Once here, both foreign and domestic groups of visitors were entranced by the clean and safe destination, verdant and varied natural beauty, the un-spoilt beauty of the beaches, the unique blend of Indo-Portuguese culture, cuisine and lifestyle but most importantly, Goa's unique selling proposition (USP), *her friendly, warm hearted and hospitable people*. Travelers also came to Goa from foreign lands via the land route. The bulk of travellers comprised Western Europeans, North Americans, Australians, and Japanese (Wikipedia, 2011) and being unsure of the availability of daily requirements, they came amply stocked with all necessities some of which they later used to barter or sell in what came to be popularly known as the '*flea market*', which still continues to be held in Anjuna, on every Wednesday. This inspired the popular full moon parties in the 60's and 70's where both local and world renowned musicians played for the benefit of Goans and tourists alike and placed Goa prominently on the international tourism map.

The Goa airport came into existence in 1923, when the Portuguese government acquired a large area and constructed a grass runway. The only existing building at this site was a multipurpose shed with very minimum basic facilities. This airstrip catered for light aircrafts which flew in once in a while, whenever a government dignitary or an army officer visited Goa. This primitive

airstrip was replaced by a better airport in the year 1950 with an asphalted runway and a control tower besides an arrival/departure shed, and the frequency of flights increased gradually to approximately once a week. This created connectivity between Goa, Portugal and other countries (De Souza, 2013). The *Aeroporto de Dabolim* was built in 1955 by the Government of the Portuguese State of India and later received the official name of *Aeroporto General Bernard Guedes*. Until 1961, it served as the main hub of the TAIP, but in April 1962, it was occupied by the Indian Navy's air wing. In 1966, after the runway was repaired and jet-enabled, the Government of India and the Indian Navy invited the public sector airline (later known as Indian Airlines) to operate from Dabolim for civilian air travel out of Goa. On 4th November 1985, the first Charter flight of CONDOR landed in Goa from West Germany, followed by flights of Air Europa and Inspiration East from the UK. These were the three direct flights per week from Europe and they operated from November to April each year. The Charter flights and subsequently, Goa's first five star hotel, the Fort Aguada, commissioned in 1974, were a direct result of this. These were the torch bearers of the tourism movement in Goa and their experiences paved the way for Goa's evolution as one of the important tourist destination in India.

Though Goa does not feature in the top 10 state destinations in India in terms of domestic tourists visits, its ranking is 10th with respect to foreign tourists visits (GOI, 2013). However, Goa over the years, has carved a niche for itself amidst the vast numbers of famous tourist destinations available in India. A tiny state, the smallest in India according to area (3702 sq. km), Goa measures just 105 kms along its length from north to south and 65 kms from east to west. Over the past couple of decades, Goa has rapidly gained worldwide recognition as a tourist

hotspot, having been awarded a multitude of domestic awards for the past years in categories as diverse as Stall Design & Decoration, Tourism Promotion and Destination Category and notably for the year 2014, at the prestigious India International Travel Mart (IITM) as well as Travel & Tourism Fair (TTF) held at various cities throughout the country, during the year. Goa tourism was also awarded the Pacific Area Travel Writers Association (PATWA) Award for the Best Beach Destination in Relaxation, Water sports & Entertainment at Berlin, the Best Honeymoon Destination, Best Family Destination, Best Leisure Destination & Best Party Destination for India & South East Asia by the leading travel magazine, Travel & Leisure (India & South Asia Division), the Conde' Nast, Readers Travel Award for Favorite Leisure destination – India, as well as the Lonely Planet Award for the Best Indian Destination for Relaxation for the year 2014. In 2015, Goa, once again was awarded the Best Decorated Stall Award at IITM & TTF in the national category as well as the prestigious PATWA Award for the Best Wedding & Honeymoon Destination at Berlin and was ranked sixth by National Geographic in The World's Best Night Life Cities List. Goa, therefore is and has been one of the most sought after destinations year round and also for the festive season of Christmas and New Year, along with having acquired the status of a long haul winter destination, in the European markets and as a preferred family destination in the domestic market. (DOT, 2015)

1.2 Research Setting

Goa is India's smallest state by area with 0.04 lakh sq. km and the fourth smallest by population having 1.45 million (Economic Survey, 2014-15). Located in south west India in the region known as the *Konkan*, it is bounded by the state of Maharashtra to the north and by Karnataka to the east and south, while the Arabian Sea forms its western coast (*Refer Figure 1.1*). The word

Konkan is of Indian origin and is of considerable antiquity, but its meaning is not obvious and has never been satisfactorily explained, although various explanations have been given. The area known by the name of Konkan appears to have had different limits at different times but is generally believed to extend from Mumbai in the northern part of India's western coast to Karwar in the south, on the western coast of India (Nairne, 2001). It has a coastline of 106 kilometers of which 65 kilometers consist of sandy beaches. Panaji is the state's capital, with Margao, Mapusa, and Vasco as its main cities. While *Konkani* and *Marathi* are spoken as the native language of Goa; English is widely used and spoken in the state for both official and social purposes. Portuguese was used extensively as an administrative language during the Portuguese colonial era but is no longer in use now officially, though it is still used socially.



Figure 1.1: Administrative Map of Goa
 Source: Wikipedia: Status of Infrastructure in Goa

When compared to other states in the country, Goa has impressive socio-economic indicators. The growth rate of Gross State Domestic Product (GSDP) at constant prices (2004-05) over its

previous year show that the economy of the State grew at 7.71 percent in 2013-14 (**Economic Survey, 2014-15**). Rated as the best among the emerging states in the country for its social infrastructure, the state government is furthering civic, information technology & transport facilities.

Goa has a well developed international airport with e-Tourist Visa (eTV) facility previously known as Visa on Arrival (VOA) which is currently extended to 75 countries, in an attempt to boost tourism growth and with customs clearance facilities (**GOI, 2015**). Dabolim International Airport is 25 km away from the State Capital, Panaji and is well connected to major cities of India as well as international destinations besides having facilities for chartered flights as a result of which chartered flights from European and Asian countries arriving here regularly.

The state charter flight statistics (country wise and overall) indicate that for the tourist season October 2014 – May 2015, 895 flights in total from 6 European & Asian destinations bringing in 1,61,316 charter tourists arrivals to the state. Of these 6 destinations, **Russia** had the largest number of flights and tourists arriving in the state; viz.; with 560 charter flights (**64% share**) bringing in 1,08,429 tourists (**67% share**). **UK** and **Ukraine** had 129 charter flights (**14% share**) each but while UK charters brought in 32,979 tourists (**20% share**), Ukraine charters brought in 9,235 tourists (**6% share**). Germany, Lithuania and Israel had charter flights into this destination during the same season¹. A Green Field International Airport at Mopa in Pernem has been proposed for construction under Public Private Partnership (PPP).

¹ This information was obtained from Goa Tourism Development Corporation through an informal interview. Detailed statistics on charter flights are not available in published form.

With respect to roads; Goa has 195 kms of roads for every 100sq. km, against the National average of 50 Kms of roads for every 100 sq. km. It is well connected by two national highways along the west coast, namely NH4A and NH17, besides the dense network of metallic roads connecting the state to other parts of the country. A new bridge (the third one) over the river Mandovi is being constructed at a cost of Rs 403 crore to ease traffic congestion on the existing bridges as well as serve as a link between North & South Goa. As on 31st December 2014 the number of vehicles registered in the State stands at 10,63,899 of which 68% are in the category of 2 wheelers while, 11 % comprise of transport vehicles and 89% are from the non- transport category ([Economic Survey, 2014-15](#)). In terms of its railways, South-Central Railway and Konkan Railway provide rail links with major cities. It is well linked by South-Central railway to Bangalore, Delhi, Bombay and Secundrabad and well connected with Konkan railway from Bombay, Mangalore & Kerala. Goa has a well developed internal water transport network formed by a grid of navigable rivers which is the most economical mode of transport, but is mainly used by the mining industry which is just showing signs of revival. This is also used by tourism industry for the purpose of river cruises and also anchoring offshore casinos. The construction of a new Captain of Ports jetty at Panaji and a jetty at Old Goa is almost ready. Mormugao port in Goa is an excellent all weather international port with multipurpose general cargo berth and fully containerized service operations. It can accommodate over 50 ships in outer anchorage and has mechanized loading facility, an oil berth and general Cargo berth. Minor ports are also available along the river.

Several All India Financial Institutions along with the State's Financial and Infrastructure Developmental Organizations help entrepreneurs to get a firm foothold in Goa without any

inconvenience. The State has a well knit banking network, with as many as 694 banking offices as on 30-06-14. As on March 2014, Goa tops the list amongst States and Union Territories in the country with regard to population covered per bank branch and the bank branches in the state depicted an increase deposit mobilization by 22.81% over the previous year ([Economic Survey, 2014-15](#)). A unique feature of the Goan banking industry scenario is the high Credit-Deposit Ratio, where the ratio of amount of deposits made is much higher than advances given. This can be possibly explained if one considers that the mindset of the typical Goan consumer is opposed to risk taking and consequently opposed to credit purchases on one hand and the high amount of deposits by the NRI community in Goa. ([SLBC, 2014](#))

Goa's requirement of power for all users is 480 Mega Watts (MW), out of which 380 MW is currently available. The shortfall during peak hours is around 100 MW. Power is available through a central grid from super thermal power stations. The short fall is made up to the extent possible from the following sources and during peak hours, heavy duty users including major industries and 5 star hotels etc. use generators. It draws 12 mega watts on weekdays from Reliance infrastructure Ltd, and 14-12 mega watts of power from Goa Energy Pvt. Ltd, and 1-2 mega watts of power from Goa Sponge and Power Ltd. The state has secured 20 MW additional allocation of power from the Central Sector Generating Stations as well as for 50-100 MW short term procurement of power till May 2015. However, despite being the only state in the country that does not produce a single unit of power, no major power shortages have been experienced till date which is a major plus point for the state and the Electricity Department as well as an important factor favouring industrial development in the state. [[ED, \(2015\), Economic Survey, \(2014-15\)](#) & [TNT, \(2014\)](#)]. The Telecom facilities in Goa are on par with other metro cities in

the country. Optical fiber provides high speed access to a wide range of Internet related services from Email to the WWW. Goa is the second State in the Country to achieve 100% automatic telephone system, with a very good network of Telephone Exchanges. All towns are well connected to the STD and ISD network.

Goa has sufficient water for domestic as well as industrial uses. It is one of the few states in the country where public water supply is available to the extent of covering more than 90% of the State. Despite there being adequate number of wells for the supply of water, particularly in villages in the state, the usage of well water is much less than the usage of public water supply. The overall demand for water in all sectors of the economy including Domestic, Industry, Tourism, Mining, Agriculture etc. is approximately 927 million cubic meters (MCM), while the overall water supply available is 1283.9 MCM (WRD, 2011-12). The projected overall demand for water for 2020 is 1166 MCM while the projected availability for 2020 is 1288 MCM. TERI, 2013). Water available in adequate quantity and is piped through Assonora, Selaulim and Opa reservoirs. With respect to sanitation, as per 2011 census, 63% of the State is urbanized but needs well-knit sewerage network and majority of the population is still dependant on the traditional septic tank and soak pit system for the disposal of wastewater which could cause contamination of ground water or drinking water due to lack of adequate soaking capacity of the soil. While schemes exist for financing domestic sanitation facilities, they appear to be underutilized and the government should encourage the construction of the same to improve sanitation in the state. During 2014-15, three urban sanitation schemes were completed in South Goa and nine are still under progress while four major works were completed in rural areas of North Goa and five are in progress. (Economic Survey, 2014-15). However, the Government

undertook the process of revamping the sewerage system in all major cities in the third quarter of 2014 and is currently in the process of completing this task. While no authentic data exists on waste generation and its disposal across the state, estimates suggest that it is in the range of 400 tonnes per day of which approximately 50% i.e. 200 tonnes is non-biodegradable therefore having tremendous potential for recycling. However, with the current low composting and recycling rates prevailing in the state, waste remains largely a discard rather than a resource. Despite laws and rules with respect to governing municipal solid waste management in the state, the ground reality in the state, barring a few municipal bodies is deplorable and remains a massive challenge to be addressed. While the City Corporation of Panaji and the Bicholim Municipal Corporation are encouraging beacons of hope in the otherwise grim scenario and a state of the art project based on mechanical biological treatment processes, for solid waste management has been undertaken at Saligao, in north Goa (whose commissioning and functioning need to be monitored), supporting infrastructure and appropriate technologies to facilitate proper waste handling and processing need to be developed. (TNN, 2013)

In terms of health and social welfare, Goa has excellent health parameters in comparison to other states in the country with a very good medical college and teaching hospital having excellent facilities and infrastructure to cater to all aspects of health and the treatment of disease (both regular and super-speciality) which are ably supported by government hospitals in certain major cities and primary health centers in most villages. In terms of Law & Order, the government has been making efforts to enhance the capabilities of its law & order personnel through training, augmenting and modernizing infrastructure and the work force as a result of which the overall crime situation in the state remained under control as well as showed a reduction in criminal

cases by 18% over the past year. However, despite its enhanced capacity in terms of Law and Order and despite a reduction in overall criminal cases, it is clearly observed that loopholes do exist in the system and that the enforcers of law and order in the state do not treat it with the seriousness it deserves thus allowing anti-social, criminal and deviant behavior among both locals and tourists, to progress steadily in the state which is a detriment to society in general. The Fire & Emergency services (including 108 ambulance services) are prompt, well trained, well equipped and function efficiently in dealing with any casualty or emergency in the state. (Economic Survey, 2014-15).

Tourism has become a major industry in Goa and attracts domestic tourists from other states and foreign tourists from all over the world for a glimpse into the complex heritage and natural spectacle of “Goa”. Due to its scenic beauty and the architectural splendor of its temples, churches and monuments, Goa is a favorite spot for tourists from all over the world. Tourism is now the largest industry in Goa after the ban on mining in the post-colonial era. According to the State Department of Tourism, it is the “backbone of Goan economy” as a sizeable percentage of Goa’s population directly or indirectly derives its livelihood from tourism activities. Tourism’s influence on social, cultural, ecological aspects of life in the state is monumental, with its effects being experienced by individuals and institutions not directly related to the industry. The state is famous for its breathtakingly beautiful beaches, smooth white and silver sands, rich cultural heritage, captivating churches and temples and its diverse flora and fauna.

The relative figures (% share) of tourism arrivals of domestic and foreign tourists (*Refer Figure 1.2*) are not constant but rather show a fluctuating pattern. Foreign tourist arrivals increased from

6% in 1975 to 21% in 1995, remained relatively constant between 21% - 23% till 2000, fluctuated between 19%-16% from 2001 – 2013 followed by a sudden sharp increase to 23% in 2015. Domestic tourists arrivals gradually decreased from 94% in 1975 to 79% in 1995, remained relatively constant between 79% - 77% till 2000, fluctuated between 81% - 84% from 2001 - 2013 followed by a sudden sharp decrease to 77% in 2015. Over the years, the share of domestic tourists to the state reduced from 94% to 77%, while, at the same time foreign tourists arrival increased from a mere 6% in 1975 to 23% by the first quarter of 2015, showing an almost 300% increase. Compound Annual Growth Rate (CAGR) shows a declining/increasing trend for Domestic/foreign tourist arrivals over the years with the share remaining relatively constant at around 13-14% over the past decade. This being the case, it appears that the quality of tourism infrastructure and other supporting facilities available for tourism industry in Goa have not improved significantly over the years as pointed out by Wilson (1997) and despite cosmetic improvements, the situation remains largely unchanged. The present research tried to identify the status of tourism industry in Goa.

In order to maintain and improve the tourist offer and to retain destination competitiveness the government has undertaken a series of efforts which are both infrastructural (developmental) and cosmetic. Beautification of important tourist spots, creation of a tourist circuit along the beach belt, completion of the Panjim jetty, construction of a multi-level parking facility in the capital city, creation a mobile based tourist guidance service, a much needed water sports regulation policy, multi pronged promotional and participatory initiatives are some of the important tourism related activities undertaken by the state to boost tourism. (Economic survey, 2014-15)

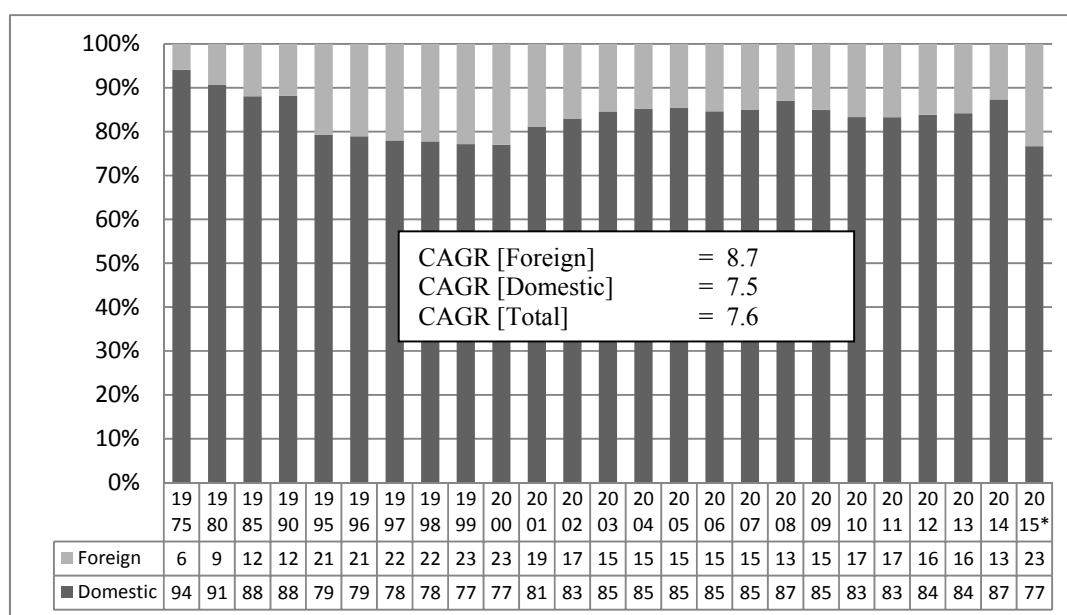


Figure 1.2: Tourist Arrivals in Goa (in %) from 1975 to 2015

** figures are up to March 2015 (provisional)*

Source: Department of Tourism, Government of Goa.

Tourism has the potential of keeping the demographic growth to a minimum level while ensuring GDP growth (Economic Survey, 2014-15). As evidenced from the multitude of awards Goa keeps acquiring from various travel and tourism related associations, forums, and from primary data survey as well, Goa is widely accepted as the best tourism destination for (a) Beach tourism, (b) as a favourite Leisure destination for rest and relaxation, (c) for Adventure & Water sports, (d) for Party and Entertainment as well as (e) Best Family and Best Honeymoon destination in India for both domestic and foreign visitors (DOT, 2015) resulting in a year around a floating population of 4.058 million against the population of Goa around 1.817 million in 2014. Goa also has a well developed hospitality industry handling approximately 10% of all foreign tourist arrivals in India. As on 31.12.2015, the total number of hotels including Star Category Hotels and Paying Guest Houses available were 3358, Rooms were 31767 and Beds are 56595. The above facts and ever increasing numbers are indicators of the continuing interest in Goa as a tourism hot spot (Refer Table 1.2)

Year	Domestic	Foreign	Total
1975	198,979	12,494	211,473
1980	332,535	34,288	366,823
1985	682,545	92,667	775,212
1990	776,993	104,330	881,323
1995	878,487	229,218	1,107,705
1996	888,914	237,216	1,126,130
1997	928,925	261,673	1,190,598
1998	963,212	275,047	1,238,259
1999	960,114	284,298	1,244,412
2000	976,804	291,709	1,268,513
2001	1,120,242	260,071	1,380,313
2002	1,325,296	271,645	1,596,941
2003	1,725,140	314,357	2,039,497
2004	2,085,729	363,230	2,448,959
2005	1,965,343	336,803	2,302,146
2006	2,098,654	380,414	2,479,068
2007	2,208,986	388,457	2,597,443
2008	2,371,539	351,123	2,722,662
2009	2,127,063	376,640	2,503,703
2010	2,201,752	441,053	2,642,805
2011	2,225,002	445,935	2,670,937
2012	2,337,499	450,530	2,788,029
2013	2,629,151	492,322	3,121,473
2014	3,544,634	513,592	4,058,226
2015 (March)*	629,199 (P)	191,379 (P)	820,578 (P)

Table 1.2: Tourist arrivals in Goa

** Figures are till first quarter of 2015*

Source: Department of Tourism, Government of Goa.

1.3 Significance of the Research

The character of tourism which involves travel and discovery with elements of novelty and risk has changed to the economics of leisure. Leisure travel was originally associated with the growth of industrialization and the English middle classes but, with improvements in technology, particularly mass transportation, modern forms of mass tourism emerged. In the initial stages, the bulk of this mass tourism movement was domestic. However, with the growth of air travel in general and economic (no frills) air travel in particular, the international tourism phenomenon was born and is growing with leaps and bounds, as people from higher income countries move to destinations with lower costs and lower standards of living. Higher disposable incomes give rise

to the creation of new needs and desires which demand increasingly sophisticated options for their satisfaction, resulting in the exploitative nature of mass tourism. (Equations, 2008)

Any well rounded study of tourism in any destination must necessarily understand its evolution and growth, its impacts on the host community and the environment, the needs of its visitors, the perceptions, attitudes and motivations of its various stakeholders and evaluate all of this in terms of its costs and benefits, if tourism is to flourish in a sustainable manner. A review of relevant tourism literature in these domains provides justification for this study as highlighted below:

1.3.1 Tourists or Visitors

Tourists to any destination always have, as their motivation for travel, the need for 'other experiences', something away from the daily routine of their lives. This creates pressures on destinations to become and remain creative and competitive if they are to survive and succeed. It has also led to extensive research on aspects including competitive advantages of destinations, tourists' satisfaction in different destinations (since visitor satisfaction is a major factor which determines repeat visitation and recommendation of the destination to others) (Kozak, 2000, 2001); the importance of repeat visitors to the same destination (Oppermann, 1999) etc. Understanding of the causes and nature of visitor satisfaction or dissatisfaction can help in promotion and development of tourism destinations by measuring the 'health' of the industry for strategic planning purposes; understanding the customers reaction to products and services offered; encouraging both new and repeat visitation and comparing different sectors within the industry to determine areas that may need improvement. Although the relevance of Importance-Performance Analysis (IPA) as an instrument for the measurement of quality perception is well

documented in marketing literature (Ennew et. al, 1993; Slack, 1994; Matzler et al., 2003), there still appears to be a lack of research to provide empirical application to tourism destination management especially in Mass Tourism destinations, Goa being generally considered one such destination. *The present study attempts to evaluate tourist perception of and satisfaction with, the infrastructure and facilities available for tourism in the state, prior to and after their visit, with a view to determine the gap between them, so as to improve the infrastructure available and increase tourist satisfaction and consequently destination competitiveness. Since very limited research has been done in the state of Goa in any of these areas and none in terms of an analysis of the expectations and satisfaction of visitors prior to and after their visit to the state, using the Importance-Performance Analysis (IPA), this study assumes great significance.*

1.3.2 Host Community or Residents

Resident's perspective of the tourist destination studied in relation to tourism, both in developing and developed countries, indicate a series of problems that arise from tourism in general and the prevailing models of mass tourism in particular. They include:

Economic:

While big businesses gain subsidized land, tax concessions, import advantages, earnings etc., financial leakages from the tourism trade leave insignificant or no gains for local communities. Instead, it increases their cost of living without living up to their claims of generating quality and secure employment for locals.

Ecological:

Damage and losses incurred through environmental degradation, deforestation, pollution, wasteful consumption of resources, all in the name of developing and using tourism related infrastructure, are problems which have assumed huge proportions.

Socio-cultural:

Issues arising from tourism particularly relating to the commodification of culture to cater to tourists, increasing consumerism influenced by the demonstration effect, changes in lifestyles and traditions, loss of value systems, increasingly materialistic mindset, usage of narcotic drugs and alcohol, gambling, prostitution, child abuse both sexual and economic (through human trafficking), rising levels of HIV/AIDS are all considered the fallout of tourism on vulnerable populations in the host destinations.

Political, Institutional & Human Rights:

Hidden and often least commented aspects of tourism include the diversion of natural, common property resources like land, forests, beaches, rivers & natural water sources as well as the diversion of basic necessities like water supply and electricity for the use of tourism enterprises, social and economic displacement caused to locals by tourism, dilution of their rights to control and regulate the kind, pace and direction of tourism development in their community, the nexus between politicians and entrepreneurs (domestic and international) for their own gain as opposed to local interests, all seem at variance with models of tourism that should be promoted for common good and sustainability.

Residents are considered a critical factor for the success of tourism industry because they are one of the most important stakeholder groups in development of any region as a tourism destination (Choi and Sirkaya, 2005); their support is required for generation of funds through increased taxes to develop and maintain tourism related infrastructure development and to create a hospitable and attractive environment (Var *et al.* 1977) which makes tourists feel welcomed, motivates them to revisit and encourages more tourists to visit. (Andriotis, 2005; Yoon *et al.*, 2001). It is only when local residents have a positive attitude towards tourism and play a role in the planning, development and management of tourism in their community that the tourism industry can grow and develop in a sustainable manner. Though many studies have been carried about on assessing the factors influencing the attitude of residents towards development of tourism in various other destinations, *the present study tries to identify and assess the factors influencing the local resident's attitude towards tourism development in Goa so as to throw some light on an otherwise unexplored area which needs to be studied in detail for promoting the tourism industry in the state, for ensuring its sustainability and empowering the residents..*

1.3.3 Stakeholders' Role in Sustainable Tourism

Stakeholders are individuals or groups, having a legitimate interest in the organization who can affect or be affected by the achievement of the organization's objectives. The economic necessity of encouraging tourism growth coupled with increased awareness about the ill-effects of mass tourism has prompted stakeholder interest in sustainable tourism and highlighted the vital role that they play in the development and promotion of sustainable tourism in a destination. Stakeholders in tourism represent the *host* community which includes local residents, entrepreneurs, government officials, Non-Governmental Organisations (NGOs), as well as the

tourist or the visitor (*guest*) to the destination. Tourism, therefore, is an economic sector which must be approached in a special way due to the interlinking of all the stakeholders involved in tourism activities - both those based in the destination, viz., local residents / entrepreneurs, and those who travel to such places, viz., visitors (Castellanos & Orgaz, 2013). While all stakeholders need not be equally involved in the decision making process, their perceptions, attitudes and interests should be identified and understood (Donaldson & Preston, 1995) as this is a necessary precursor to planned and sustainable tourism development. One of the main causes of conflict between stakeholder groups is the difference in perceptions and interests that exist between them in terms of tourism development (Byrd, 1997; Marwick, 2000; Davis & Morais, 2004; Gursoy & Rutherford, 2004). Failure to identify the interests of even a single primary stakeholder group may cause the entire process of introducing and fostering sustainable tourism to fail. (Clarkson, 1995) *In comparison to the magnitude of research work that has carried out on perceptions of individual stakeholder groups, relatively limited amount of research has been done on the perceptions of multiple stakeholder groups. Further, Multi-stakeholder perception on sustainability of tourism as an issue that has been researched to a very limited extent in general and not at all in the state of Goa. Hence the study assumes increasing significance in providing valuable inputs on the impact of the differences in stakeholder perceptions on tourism's sustainability.*

1.3.4 Possibility of Developing a Sustainable Model for Tourism in Goa

Sustainability as a concept is still relatively new to India and despite the substantial body of empirical and conceptual literature on various aspects of sustainability in recreation and tourism (Clarke, 1997; Collins, 1999; Tubb, 2003; Kelley et al., 2007) there remains “no widely accepted

definition of sustainable tourism". A community that plans and uses tourism as an alternative means of strengthening its economic development must develop sustainable tourism in order to meet the needs and demands of its resident community; viz.; local residents, entrepreneurs and also the government (Puczko & Ratz, 2000). While the *host* community includes local residents, entrepreneurs, government officials, NGOs etc who are among the key stakeholders in the tourism industry, another key stakeholder is the tourist or the visitor (*guest*) to the destination. While it is easy to comprehend the host community's vested interest in sustainable tourism, it has been increasingly found that visitors to destinations are aware of the problems of mass tourism development and wish to do their part in protecting the destination from the ill effects of mass tourism. All efforts aimed at sustainability in tourism have the end goal of achieving long term cooperation among multi-stakeholder groups in promoting tourism while safeguarding the ecosystem. Inherent in sustainable tourism, whether it is through the routes of eco-tourism, pro-poor tourism, rural tourism, community tourism, volunteer tourism etc. is the exploration of transformative capacities which focus on people centeredness, equity, accountability, democratic participation and non-exploitation. *So far no research has been carried out with respect to identifying multi-stakeholders perceptions towards sustainable tourism, with a view to determining the most appropriate and mutually acceptable route (model) towards initiating and establishing sustainable tourism in the state, which makes the study essential and provides valuable inputs on otherwise unexplored area.*

1.4 Research Gap

A review of relevant literature indicates that no similar study in the areas of significance brought to light, has been carried out in the state to adequately address the subject under discussion,

which makes it all the more essential for consideration. Detailed literature review in the form of content analysis on the four aspects; viz.; (1) Tourists perception about tourism infrastructure, (2) Residents perception about tourism in Goa, (3) Multi-stakeholder perception about sustainable tourism, and (4) Developing a model for sustainable tourism in Goa; are provided in Chapter 2. This being a novel and unique study in the state, it attempts to address the following gaps in research.

1.4.1 Assessing Tourists' Perception

Using IPA as a tool for evaluating tourist satisfaction, this study attempts to assess the perceptions of tourists visiting Goa in order to evaluate the importance given to and their satisfaction with the infrastructural facilities and attractions available in the state, in order to identify the main factors and/or areas where intervention is required to improve the quality of the tourism product & services offered, in accordance with tourists' perceptions. With the evaluation of the tourist's importance and satisfaction, conclusions can be drawn in regard to these attributes and their need for enhancement and improvement in view of the state's robust tourism growth. Therefore the present study fills the gap by adding valuable knowledge, new perspectives and presents possibilities for consideration.

1.4.2 Assessing Residents' Attitude towards Tourism Development

Review of literature reveals that as far as the authors' knowledge goes, no studies have been carried out about identifying and assessing the factors influencing the attitude of residents towards tourism development in Goa. This study, which bridges this unexplored area, provides

vital inputs for promoting the tourism industry in the state and for ensuring sustainable development leading to socio-economic transformation.

1.4.3 Comparison of Multi-stakeholder perception of Sustainable Tourism

Multi-stakeholder perception of Sustainable Tourism as an issue has been researched to a very limited extent in general; and not at all in Goa, in particular. Hence the purpose of this study is to discover if differences in the perceptions about sustainable tourism exist among four major stakeholder groups and the consequences or impacts of these differences, in terms managing tourism in the state sustainably.

1.4.4 Development of a model for sustainable tourism

The uniqueness of the study is revealed by the fact that, to the best of the researcher's knowledge, as yet, no research has been carried out with respect to identifying multi-stakeholders perceptions towards sustainable tourism. Given that stakeholder perceptions influence the pathways considered appropriate for achieving sustainable outcomes in tourism, this study attempts to determine the **most appropriate and mutually acceptable route (model)** which will **initiate** and **establish sustainable tourism** in the state as well as lead to empowerment of local residents in the coming years.

This entire study therefore, concentrates on the state of Goa as the research location in order to identify and evaluate the perceptions of four stakeholders; viz.; local residents, entrepreneurs and government officials (*hosts*); and tourists (*guests*) in various capacities, using various appropriate techniques, so as to promote sustainable tourism development in the state, which

may add valuable knowledge, new perspectives and possibilities for consideration along with valuable inputs for government, academia as well as the tourism industry.

1.5 Research Objectives

This research sought primarily to study the “present status of tourism industry” in the state of Goa with a view to understanding the attitudes and perceptions of its various stakeholders, given that their attitude and consequently, their support for tourism in the state, would be essential for its sustainable perpetuation. Literature revealed lacunae in the study of tourism, particularly with reference to the state of Goa and gave rise to certain challenging research questions.

- Are the ‘*guests*’ to the state satisfied with the infrastructure, facilities and amenities available for tourism in the state?
- Are they willing to repeat the experience by revisiting the destination?
- Do *personal characteristics of residents* affect their *perception of the impacts of tourism* when considered along with the *personal benefit* they derive from Tourism?
- Does the *extent to which personal benefit* derived from tourism development influence *perceived positive impacts, perceived negative impacts and support for additional tourism* of residents?
- Does the *extent to which personal benefit* derived from tourism development, *perceived positive impacts of tourism, and perceived negative impacts of tourism* affect residents’ *support for additional tourism*?
- What *variables* contribute to *support for tourism planning*?

- Do *differences* exist in the *perception about tourism's sustainability* among the various *stakeholders* of tourism in the state?
- To what *extent*, if any, do these differences affect their *support for sustainable tourism*?
- Is there a *possibility of introducing sustainability in tourism* in the state, *through stakeholder involvement*?

Keeping these relevant research questions in mind, the following objectives of the study were drawn up.

Objective 1: To assess the perception of Tourists about the infrastructure and inputs currently available for tourism in the State of Goa and to identify existing gaps.

Objective 2: To evaluate the perception of Residents about the impacts of tourism in the State of Goa.

Objective 3: To study the perception of Stakeholders about tourism in Goa in terms of its sustainability.

Objective 4: To suggest a model for Tourism in Goa that is sustainable, integrative and participative.

1.6 Research Hypotheses

Keeping in mind the research questions, the objectives drawn up for the study and the discussion at hand, the following hypotheses were framed for statistical testing of the objectives, viz.;

For Objective 1:

H₁: There is no significant difference between Tourist perception about the Importance given to and Satisfaction with (a) Tourist Assistance factors (F1), (b) Infrastructure Factors (F2), (c) Attraction/Destination Factors (F3), and (d) Entertainment factors (F4) which are available in the state for tourism, before and after the trip.

For Objective 2:

H₂: Personal Characteristics along with Personal Benefit (PB) from tourism affects residents perception of positive (PI) and negative (NI) impact of tourism

H₃: Extent of Personal Benefit (PB) derived from tourism influences residents perception of positive (PI) and negative (NI) impacts of tourism as well as Support for Additional Tourism (SAT);

H₄: Extent Of Personal Benefit (PB) derived from tourism, residents perception of positive (PI) and negative (NI) impacts of tourism & Support for Additional Tourism (SAT) influences Support for Tourism Planning (STP)

For Objective 3:

H₅: There is no significant difference in the perception of Stakeholders; viz.;

(1) Residents, (2) Tourists, (3) Entrepreneurs and (4) Government Officials with respect to:

(F1) Understanding of Sustainability [US],

(F2) Focus of Sustainable Tourism [FST],

(F3) Sustainable Tourism Management [STM],

(F4) Attitude towards Sustainable Tourism [AST],

(F5) Participation in sustainable Tourism Development [PST]

(F6) Economic Focus of Sustainable Tourism [EFST], and

(F7) Tourism Industry & Sustainability [TIS]

For Objective 4:

H₆: There is no significant relationship between

a) Understanding of Sustainability (US)

b) Focus of Sustainable Tourism (FST)

c) Sustainable Tourism Management (STM)

d) Attitude towards Sustainable Tourism (AST)

e) Participation in Sustainable Tourism Development (PST)

f) Economic Focus of Sustainable Tourism (EFST)

g) Tourism Industry and Sustainability (TIS) and

Sustainable Tourism (ST) with respect to Stakeholder perception

1.7 Research Methodology

The research work attempts to understand the concept of sustainable tourism through the perceptions of the various stakeholders of tourism in the state of Goa to develop or suggest an appropriate and mutually acceptable path (model) to bring about sustainability. Since the research work involved studying different categories of stakeholders, the methodology varied according to the objective, as did the sample size, response rate, data collection instrument, study

period and the data analysis techniques. What were common to all objectives were the study area and the sources of secondary data used.

Study Area: The entire State of Goa

Sources of Secondary Data: Secondary data was collected from relevant research journals; data procured from Department of Tourism (Government of Goa), Goa Tourism Development Corporation (GTDC), other relevant government departments, information was also collected from booklets and other relevant government publications like the Economic Survey etc.

Objective-wise Methodology: Specific research methodology used is detailed below as per the objective studied.

1.7.1 Objective 1

Source of Data: Primary data was collected from both Domestic and International Tourists who were above the age of 18 and visited the state during the study period.

Sample Size: Questionnaires were given to 1000 Foreign and Domestic tourists who visited the state of Goa and were above 18 years of age.

Study Area: Tourists were surveyed in touristic locations which represented the entire State of Goa.

Study Period: Fourteen month period from November 2013 to December 2014

Sampling Method: Judgment/Convenience Sampling

Data Collection Instrument: Data was collected using a Four Part Structured Questionnaire based on study of *Infrastructure Gaps in Tourism Sector conducted by GOI, Ministry of Tourism, Market Research Division, prepared by GFK Mode Pvt. Ltd., 2010*. **Part I, II,** and **III** were used for analyzing data for Objective 1. **Part IV** included a scale with statements on stakeholder perceptions of sustainability which was used to analyze Objective 3 & 4. **Part I** consisted of demographic profile of the tourists. **Part II** consisted of a five point Importance - Performance scale consisting of 34 variables where 1 = Least Important and 5 = Most Important, with 3 as neutral point. **Part III** having 5 sub parts consisted of a five point scale to rate tourist experiences in the destination where 1 = strongly disagree and 5 = strongly agree, with 3 as neutral point.

Data Analysis: Data was analyzed using SPSS 20. The reliability of the scale & data was tested using Cronbach's Alpha. Techniques used (which are in accordance with the standard techniques used in similar studies carried out elsewhere based on the literature review) includes Descriptive Statistics, Factor Analysis, Mean Analysis, Importance – Performance Analysis, Gap Analysis [Importance/Expectation – Performance/Satisfaction of infrastructure in terms of pre and post visit] and Paired t-test.

Response rate: Total Responses received – 805, Response rate - (80.5%), Total usable responses – 761, Final Response rate (76.1 %).

1.7.2 Objective 2

Source of Data: Primary data was collected from Residents from the entire state of Goa which included local residents, tourism entrepreneurs from private and public sector as well as Government officials.

Sample Size: Questionnaires were given to 1000 full time Residents who were above 18 years of age and included all stakeholder groups: Locals (engaged & not engaged in Tourism businesses), Service providers (Private & Public sector), Government officials employed in Tourism offices & other related offices.

Study Area: Residents were surveyed from both tourist centric and non tourist centric regions in the entire State of Goa

Study Period: Sixteen month period from September 2013 to December 2014

Sampling Method: Judgment / Convenience Sampling

Data Collection Instrument: Data was collected using a four part Structured questionnaire developed based on previous research studies carried out by *Lankford & Howard (1994); Allen et al., (1993); Long et al., (1990)*. **Part I, II, and III** were used for analyzing data for the Objective 2. **Part IV** included a scale with statements on stakeholder perceptions of sustainability which was used to analyze Objective 3 & 4. **Part I** consisting of demographic profile of the tourists while **Part II** consisting of Determinants of Residents Attitude. **Part III** which consisted of Tourism Impact Statements with 5 sub parts had a five point Likert scale type

format where 1 = strongly disagree and 5 = strongly agree, with 3 as neutral point was used for this objective.

Data Analysis: Data was analyzed using SPSS 20. The reliability of the scale & data was tested using Cronbach's Alpha. Techniques used (which are in accordance with the standard techniques used in similar studies carried out elsewhere based on the literature review) included Descriptive Statistics, Mean analysis, Multiple Regression using Ordinary Least Squares.

Response rate: Total Responses received were 852, Response rate was 85.2%, while Total usable responses was 809 giving Final Response rate of 80.9%

1.7.3 Objective 3

Source of Data: Primary data was collected from Residents from the entire state of Goa which included local residents, tourism entrepreneurs from private and public sector as well as Government officials and from both Domestic and International Tourists who visited the state during the study period.

Sample size: Questionnaires were given to 1000 full time residents who were above the age of 18 and [including all stakeholder groups: Locals (engaged & not engaged in Tourism businesses), Service providers (Private & Public sector), Government officials employed in Tourism offices & other related offices] & 1000 Foreign & Domestic Tourists above 18 years of age.

Study Area: Residential and touristic locations in the entire state of Goa

Study Period: a sixteen month period from September 2013 – December 2014

Sampling Method: Judgement /Convenience sampling

Data Collection Instrument: Data was collected using a four part structured questionnaire. which was developed based on previous research studies carried out by *Kruja, D., & Hasaj, A., 2010; Quintano et al., 2011; Ong & Smith, 2013*. **Part I** and **IV** were used for analyzing data for the Objective 3. **Part I** consisting of Biographical details and **Part IV** consisting of a Tourism Sustainability Issues scale having 44 items with 5 sub parts which used a five point Likert scale type format where 1 = strongly disagree, 5 = strongly agree and 3 as neutral point were used for this objective.

Data Analysis Techniques: Data was analyzed using SPSS 20. Descriptive Statistics, Mean Analysis, Exploratory Factor Analysis & One way ANOVA using Scheffe's Post hoc test were used. The reliability of the scale & data was tested using Cronbach's Alpha.

Response rate: Total Responses received were 1657 (805 Tourists & 852 residents) having Response rate – 82.8%. Total usable responses were 1570 (761 Tourists & 809 residents) having Final Response rate – 78.5%.

1.7.4 Objective 4

Since Objectives 3 & 4 were based on the same data collected, the **Sample size, Study Area, Study Period, Sampling Method, Data Collection Instrument & Response rate** were the

same as that of Objective 3. Most of the data collection and analysis techniques and tools were the same too. (*Refer Section 1.7.3*)

Data Analysis Techniques: Data was analyzed using SPSS 20 & AMOS 22. Descriptive Statistics, Mean Analysis, Exploratory Factor Analysis & Structural Equation Modeling (SEM) were used. The reliability of the scale & data was tested using Cronbach's Alpha.

1.8 Limitations of Research

Undertaking a study of this magnitude is bound to have certain limiting factors which will to a greater or lesser extent affect the data collected and the outcomes generated.

1.8.1 Tourists response rate:

One of the major problems faced was getting respondents, particularly the tourists, to fill the questionnaires completely and sincerely. Understandably, being on holiday, their attitude to expending any kind of effort except that which would enhance their present or short term enjoyment, was not encouraging. However, by targeting regular/repeat visitors to the state who stayed at the same accommodations regularly and felt a connection with the destination (through contacts provided by such accommodation service providers), by mailing the questionnaires to visitors to the state from/through personal contacts as well as databases of various service providers and by interviewing the tourists and filling in the questionnaires personally without them expending the effort to write and of course through the efforts of many visitors who readily agreed to give up their valuable time on holiday and personally completed the forms which were

collected later from them or the reception counters of hotels and resorts, this problem was dealt with to a great extent.

1.8.2 Language problem:

Another major difficulty which presented itself was language, for some international as well as domestic tourist, most particularly the technical nature of certain constructs which could not be simplified and did not lend themselves to adequate translation in the case of both residents as well as tourists, but, as they were essential to the study, had to be asked.

1.8.3 Lengthy questionnaire

The length of the questionnaire for all the stakeholders; particularly because of the common section on perception about tourism's sustainability in the state; was daunting and required much persuasion, effort, motivation, patience on the part of the respondents as well as the researcher.

1.8.4 Lethargic attitude of Government officials:

An exceptionally worrisome limitation which arose, was the unwillingness of many employees in tourism public sector (both management and staff levels) and in a few cases, their inability, to fill the questionnaire. This was extremely perplexing and difficult to comprehend, given that they derived their livelihood from this sector and were by default, expected to have greater knowledge and comprehension of the area being studied and consequently greater willingness to contribute to the study.

1.8.5 Inadequacy of SEM findings for use as Model:

Despite a vast amount of data collected as evidenced from the sample size, the technique used in Objective IV namely Structural Equation Modeling, to suggest a model for sustainable tourism in the state, did not yield appropriate results but instead suggested a path diagram, to determine the relationship between the various factors studied and their respective influence on sustainability. Further research modifications will be needed to yield more satisfactory results, which can be developed into a model, if required. These are explained in detail in Chapter 7.2.4: Summary, Findings, Suggestion for further research and Conclusion

1.9 Contribution to Research and Literature

The success of any research depends on the research scholar's ability to contribute towards the existing literature on the basis of which the research is being carried out. This contribution can be in the form of research papers (1) presented at national / international conferences, (2) published as part of national / international conference proceedings, and (3) published in national / international journals. The importance and significance of any research output can be measured based on the nature of conference where the paper is presented, nature of conference proceedings, nature of journals but above all, the authors' association, plays a crucial role. The research contribution from the present work, in the form of research papers, is the result of association with five scholars from abroad; viz.; Prof. Emeritus. Klaus Weiermair (University of Innsbruck), Prof. Miriam Scaglione (University of Applied Sciences Western Switzerland), Prof. Friedrich Zimmermann (University of Graz), Mr. Jacob Ganef Pah (Bandung Institute of Tourism), and Dr. Ling-Chen Chang (Taiwan Hospitality and Tourism College)

Seven research papers in association with scholars in the tourism field are completed; one is based on the literature review carried out and other six are based on the four objectives. **Paper 1** (Objective 2) has been presented at two conferences (pilot study at the APTA 2014 and main study at the IHC 2015). While the paper from Pilot Study has already been published as *APTA 2014 Conference Proceedings*, **Paper 2** (Objective 2) has been published in the December 2015 issue of *International Journal of Hospitality and Tourism Systems*. **Paper 3** (Objective 1) has been presented at the AIEST 2015; the revised paper was invited and published in the AIEST special issue of *Anais Brasileiros De Estudos Turisticos - ABET* (Brazilian Annals of Tourist Studies). **Paper 4** and **Paper 5** have been presented at the *3rd World Research Summit for Tourism and Hospitality & 1st USA-China Tourism Research Summit*, in the US. **Paper 6** is being presented at *12th Biennial Asia Tourism Forum, ATF 2016 Conference* to be held in Bandung, Indonesia, in May 2016.

1.9.1 Research Output from Literature Review:

A research paper titled “*Stakeholders Perception towards Tourism Development*” based on the literature review in the form of Content Analysis is completed and awaiting suggestions from the co-authors before submission for review.

1.9.2 Research Output from Objective 1:

Presented a research paper titled, “*Assessing Tourism Infrastructure In Goa: A Gap Analysis*”, at the 65th AIEST Conference, held at Lijiang, Yunnan, (China) from 23rd to 27th August, 2015. The critiques provided by **Prof. Dr. Christian Laesser** of University of St. Gallen, Switzerland; **Prof. Dr. Harald Pechlaner** of European Academy of Bolzano (EURAC), Modul University,

Austria; and **Prof. Dr. Sara Dolnicar** of University of Queensland, Australia; as reviewers of my research paper submitted with Aiest, enabled the revised paper to be submitted for the 3rd World Research Summit organized by Elsevier at Florida in December, 2015.

The paper entitled “*Assessing Tourism Infrastructure In Goa: A Gap Analysis*”, presented at the 65th Aiest Conference, held at Lijiang, Yunnan, (China) was invited and has been published by **Brazilian Annals of Tourist Studies** (original name: Anais Brasileiros de Estudos Turísticos - **ABET**) for the special issue in ABET in collaboration with Aiest, January-April, 2016.

The revised research paper titled, “*Assessing Tourism Infrastructure in Goa: a Gap Analysis*”, was presented at the 3rd **World Research Summit for Tourism and Hospitality and 1st USA-China Tourism Research Summit, organized by Elsevier, held in Florida, USA** from 15th to 19th December 2015.

1.9.3 Research Output from Objective 2:

Presented a paper “*An Examination of Factors influencing attitude towards tourism in Goa*” at the 20th **APTA (Asia Pacific Tourism Association) Annual Conference on “Development of Regional Tourism by collaboration between Public Sector and Academics in the Asia Pacific Region”**, Ho Chi minh City, Vietnam, 1-4 July 2014. The same has been **published** in the form of Conference Proceedings:

D'Mello, C; Chang, L; Kamat, K; Scaglione, M; Weiermair, K; Subhash, K. B (2014). “*An Examination of Factors influencing attitude towards tourism in Goa*”, 20th **Asia Pacific**

Tourism Association Annual Conference Proceedings, Department of Tourism Management, Dong-A University, Busan, Korea, pp 557-568.

Presented the paper after revision, based on the comments received from the reviewers and participants with full study data as, “*An Examination of Factors Influencing Residents’ Perception of the Impacts of Tourism in Goa* ” at the “**6th IHC (Indian Hospitality Congress) Annual Conference “Prospects and Challenges faced by the Hospitality Industry Towards Their Role in Tourism Management”, Navi Mumbai, India, 5-6 February 2015.** The paper has been published in the **Volume 8, Issue 2, December, 2015** issue of *International Journal of Hospitality and Tourism Systems*, pp 1-11, ISSN: 0974-6250

1.9.4 Research Output from Objective 3:

A Research Paper titled, “*Comparison of Stakeholder Perception of Tourism Sustainability in Goa*” has been presented at the **3rd World Research Summit for Tourism and Hospitality and 1st USA-China Tourism Research Summit, organized by Elsevier, held in Florida, USA** from 15th to 19th December 2015.

1.9.5 Research Output from Objective 4:

A Research Paper titled “**Evaluation of Multi-Stakeholder perceptions towards Sustainable Tourism using Structural Equation Modeling**” is completed and submitted for the 12th Biennial Asia Tourism Forum, ATF 2016 Conference to be held in Bandung, Indonesia, organised by Bandung Institute of Tourism during May 7-9, 2016. The data analysis with regard to the same has been checked and validated by Dr. Venkata Subramanyam, Ph. D in Computer

Science & in Management, Currently ranked 19th amongst Worldwide Cross-Platform Data Scientists and 6th in India amongst Cross-Platform Data Scientists.

1.10 Chapterization Scheme

Chapter 1: Introduction

This chapter dealt with an introduction to the state of Goa, a brief history tracing its evolution to the current day, a representation of its infrastructure and facilities both tourism and non-tourism related, the rationale of the research, a brief on the stakeholders of tourism in the state, their role in tourism development, an introduction to the concept of sustainable tourism, the research gap, the methodology, the objectives and the hypotheses raised and the limitations of the study.

Chapter 2: Literature Review

This chapter contained the Review of Literature which provided the theoretical background of the study. It included a Content Analysis of relevant tourism literature with respect to all four research objectives, in order to review the studies done in the past on similar issues, in relation to objectives set, so that the most appropriate sources of data analytical techniques and statistical tools could be determined in order to identify the research gap, as well as highlight the uniqueness of the study.

Chapter 3: Tourists' Perception about Tourism Infrastructure

This chapter dealt with assessment of infrastructure and facilities available for tourism in the state from the point of view of tourists, using data collected from 1000 domestic and international tourists (response rate 76.1%). The IPA, Gap and Mean Analysis were used to

analyze tourist perceptions of the importance/expectation relating to and performance/satisfaction with infrastructure, thereby indicting lacunae or areas requiring improvement in order to enhance destination competitiveness and as a result, provide insights to destination managers and planners on efforts and investment to be made to achieve sustainability in tourism.

Chapter 4: Residents' Perception about Impacts of Tourism

This chapter dealt with evaluating impacts of tourism in the state from the point of view of residents, through data collected from 1000 residents both involved and not involved in tourism activities (response rate 80.9%) and used Regression Analysis in order to find out what influenced residents perception of positive and negative impacts of tourism and whether it affected their support for additional tourism development and for tourism planning in the state, using the Social Exchange Theory as the basis for the same .

Chapter 5: Multi-Stakeholders Perception towards Sustainable Tourism

This chapter studied the perception about sustainability of tourism in Goa from the point of the stakeholders through data collected from 2000 stakeholders of different categories (response rate 78.5%). ANOVA was used to discover if significant differences existed in stakeholder perceptions about sustainable tourism while Scheffe's Post Hoc test was used to determine which groups were different. These insights would help to manage the differing perceptions so as to promote sustainable tourism in the state, thus leading to socio-economic transformation.

Chapter 6: Sustainable Tourism in Goa: A Multi-Stakeholder Perspective Using Structural Equation Modeling

This chapter attempts to study stakeholder perceptions about sustainability and its relation to sustainable tourism from the point of view of 2000 stakeholders (response rate 78.5%). It attempted to predict the relationship between stakeholder perceptions about sustainable tourism through the versatile technique of Structural Equation Modeling, in order to suggest an appropriate and mutually beneficial route or path to introduce and maintain Sustainable Tourism in the state and thus lead to empowerment of locals.

Chapter 7: Summary, Findings, Conclusion and Suggestions for Further Research

This chapter summarizes the entire thesis in general. In the light of the objectives set, it lists the findings of the study based on the testing of the hypotheses so as to draw the necessary inferences for the conclusion and take the necessary action for improvement. It offers suggestions for further research which could be carried out to improve upon the findings of present work.

CHAPTER II

REVIEW OF LITERATURE

2.1 Introduction

Research is all about the search for knowledge, which comprises “creative work undertaken on a systematic basis in order to increase the stock of knowledge, including knowledge of humans, culture, and society, and the use of this stock of knowledge to devise new applications. (OECD 2015) In other words, research is mainly used to establish or confirm facts, reaffirms the results of previous work, solve new or existing problems, support theorems or develop new theories. Research may also be an expansion on past work in the field. The primary purposes of basic research are documentation, discovery and interpretation for the advancement of human knowledge (Research, 2015). This generalized definition and subsequent explanation clearly indicates the need for every scholar pursuing research, to search for knowledge which exists in the form of published and unpublished research works carried out earlier, by others, on the selected topic. These existing research works are available in the form of research papers published in various academic journals, doctoral dissertations and other forms of reports and occasionally, unpublished works too, while searching for knowledge.

This search for knowledge provides the basic foundation for the proposed research and is technically known as literature review or background information; which provides answers to the three fundamental questions; viz.; how to identify (1) *research gap*, (2) *source and method of collecting the data* and finally (3) *techniques and tools used for data analysis*, all of which are

considered as the universally accepted standard for carrying out successful research. Once these three fundamental aspects are clear, the researcher can safely commence his/her research work; *firstly* by preparing content analysis, *secondly* by identifying the source of data, collecting the data using appropriate methodology and *finally* applying appropriate techniques for data analysis and interpretation of the results. The present research work strictly followed this universally accepted standard and this chapter provides information about the *content analysis* carried out on a total of 237 research papers reviewed on the topic in general and based on the four objectives, in particular. It is an evaluation of all relevant literature in the area under study which should ideally provide a clear theoretical base and appropriate background for research. It must go beyond being an extensive listing of information related to the present research work and instead, must lucidly articulate the knowledge and ideas already established in the field, along with their relative strengths and weaknesses. This then, will ideally provide a basis for determining the research gap which exists, based on which, the research objectives and consequently related research hypotheses will be drawn up.

An interesting aspect observed while carrying out the literature review for the present study was in terms of the geographical clustering of the research activities carried out on tourism related studies, which include the present topics on (1) tourists' perception about infrastructure available for tourism, (2) residents' perception towards impact of tourism and also (3) multi-stakeholder perception on sustainable tourism. A majority of research works being carried out on those topics were from developed countries (above 75%) which clearly shows a clustering of research work in favor of developed countries, indicating the existence of *technological clustering* and *financial clustering* patterns (Subhash, 2007(1) and 2007(2)). Due to the advancement of

technology, scholars from developed countries were able to access almost all research works published by well known publishers on real-time basis as they receive instant messages whenever new works get published in their respective research areas. Such work becomes possible because access to such an extensive list of publications is readily available as a result of the funding (self generated or institutional) available to the academic institutions in order to subscribe to almost all publications, thus promoting a healthy and thriving research climate.

This geographical clustering in the field of research led to the situation of information asymmetry (Subhash, 2015) between developed and developing countries, resulting in a lowering of the quality of research work and sometimes, duplication of work. Information asymmetry in research publications is seen in all fields of study and tourism studies are no exception; resulting in redundancies in research works, thus reducing relevance. This was the main topic; i.e., “*Research in a culturally diverse world: Reducing redundancies, increasing relevance*”; which the expert panel members discussed at the 65th Aiest Conference held in China during August 23-26, 2015. Aiest proposes a solution to the removal of this problem by collaboration and association between Aiest experts and participating institutions (Beritelli, 2016). Keeping this point in mind, great care is taken with respect to checking whether the research gap identified is appropriate, whether the methodology used for identifying the source and collection of data is acceptable within the purview of research work carried out elsewhere and finally whether the techniques used are relevant and up to date, in accordance with the standard techniques used by others. All these aspects were discussed via email with members of Aiest, who are experts in the field of tourism research; viz.; Emeritus Prof. Klaus Weiermair from Innsbruck University, Austria; Prof. Miriam Scaglione from University of Applied

Sciences Western Switzerland; Prof. Friedrich M. Zimmermann of University of Graz, Austria; Prof. Sara Dolnicar of University of Queensland, Australia, over the past two years. At every stage of the study, constructive criticism was provided by these experts in order to make the present research work progress in the right direction, thereby avoiding redundancy and increasing its relevance. Further, their assistance extended to the provision of checking for similarity via the similarity test as and when the researcher submitted working papers for review, co-authored, with these experts. Though the present research work tried to complete literature review and compile information in the form of a content analysis, the researcher would like to state that the problem of information asymmetry has taken place which resulted in non-inclusion of many research works which were not available to the researcher through the UGC-INFLIBNET Consortium as well. Though Goa University is among the 50 Indian Universities given INFLIBNET access, complete access to many journals is unavailable, which therefore, were unfortunately not covered under this consortium.

Literature Review, besides providing insights into the field of study in question helps to identify the research gap and prevents a researcher from redoing work already done by others and repeating errors in previous works. It provides insights into aspects of the study which could prove worthy of exploration and future research. A thorough review of literature allows the researcher to see, understand and evaluate the sources of data, the methods of data collection, statistical techniques used by other, perhaps more experienced researchers, in similar areas and to duplicate or modify the same in different settings at different times. Conflicting theories and conflicting approaches to same or similar research problems and the relevant arguments approving / disproving the same, are brought to light through the literature review and allow a

researcher the opportunity to increase the stock of knowledge and awareness about the topic as well as refine the area of study, methodology, etc.

This present study, '**Managing Tourism Development in Goa Through Sustainable Tourism**' is organized around several intersecting bodies of knowledge, and this chapter reflects the contributions made by each area of literature to this study, categorized as four (4) separate objectives mentioned in the first chapter. (*Refer Chapter 1, Section 1.5.2*) *Firstly*, the discussion was carried out in terms of the *Visitors (Guests / Tourists)* to the destination and their perceptions, expectations and evaluation of the importance of infrastructure and facilities available for tourism. This was done bearing in mind the importance of visitor perceptions and satisfaction to destination competitiveness as well as to the health and sustainability of tourism in a destination. The relevant research works reviewed were carried out during 1998 – 2015 covering a period of 18 years, mostly carried out from developed countries, principally the US, where most research works originate and countries where tourism was important to the economy. These areas appeared to be gaining increasing importance from mid 2000s and were being published in a variety of journals. The studies were generally oriented toward visitor satisfaction, were empirical in nature and as a consequence, used mainly surveys or questionnaires having a five point Likert scale to collect primary data (quantitative in nature) and the most popular statistical techniques for assessment of the same was the Importance-Performance Analysis (**IPA**) with Structural Equation Modeling (**SEM**) making an appearance as a technique in more recent studies. The most commonly used methods of sampling were random and convenience sampling. Data was collected from small to medium samples ranging from above 100 to 750 respondents and had, on an average, above 50% response rate.

Secondly the focus was given to literature relating to the **Host Community (Hosts / Residents)** and their perceptions of the impacts of tourism; whether this perception was affected by the benefit they receive / do not receive from tourism and consequently whether the same influences their support for tourism development in the destination. The relevant research works reviewed were carried out during 1998 – 2015 covering a period of 18 years, mostly from developed countries, mainly the US, showing an increasing number of research works being published from early 2000s, till date, in a variety of journals. The studies were generally oriented toward host or resident perception of tourism's impacts and their consequent attitudes toward tourism development, they were empirical in nature and as a consequence used mainly questionnaires having a five point Likert scale to collect primary data (quantitative in nature). The most popular statistical techniques for assessment appeared to be a combination of Factor Analysis, Regression and Mean Analysis with Structural Equation Modeling (**SEM**) increasingly being used as a technique in more recent studies. Most studies used Residents as the sampling unit with random sampling method and collected data from small to medium sized samples ranging from above 100 to 750 respondents and had a relatively high response rate of 70% and above, which could be attributable perhaps to the respondents being residents and having a vested interest in the research.

Thirdly focus was given to the aspect of **Sustainable Tourism**. Since stakeholders are increasingly being recognized as major influencers / determinants of tourism development in general and sustainable tourism in particular, in any destination, sustainability and sustainable tourism, stakeholder theory, perceptions of stakeholders regarding the sustainability of tourism

and their involvement in sustainable tourism were studied. The relevant research works reviewed were carried out during 1993 – 2014 covering a period of 22 years, mostly from US and UK. The number of research works being published from early 2000s till date increased substantially each year from 2007 onwards and were published in a variety of journals. The studies were generally oriented toward stakeholder participation in sustainable tourism. However, being an area of research gaining global recognition, research works were both conceptual (aimed at contributing to the growth and development of theory) and empirical in nature (aimed at testing theory in practical settings) and as a consequence used both primary and secondary data which was both qualitative and quantitative in nature. For the collection of primary data (quantitative in nature), questionnaires having a five point Likert scale supplemented by interviews were the most popular choice. The most popular statistical technique appeared to be Regression, for empirical studies and Qualitative Content Analysis, for conceptual studies. Most studies used one or a combination of stakeholders (residents, tourists, government employees and entrepreneurs) for the primary data collection, with random and convenience sampling being the methods of choice. Data was collected from small to below medium sized samples ranging from below 100 to 500 respondents and had a relatively high response rate of 80% and above, attributable perhaps to the respondents being residents to a great extent thus having a vested interest in the research.

The *fourth* aspect covered was in continuation to sustainable tourism where the specific challenges associated with its implementation were studied in terms of the various kinds of models of sustainable tourism proposed and the techniques (specifically **SEM**) being used to evaluate them in different destinations across the globe. The study covered a period of 21 years from 1995 to 2015, originating mainly from developed countries like the US but also in countries

where tourism is the mainstay of the economy. The number of research works increased substantially each year from 2007 till date in a variety of journals. The studies were largely oriented toward models of sustainable tourism and more specifically **SEM** models which, being a versatile technique of multivariate analysis, capable of being used in varying disciplines and fields, is gaining global recognition. The research works were largely empirical in nature (aimed at testing theoretical models in practical settings) and as a consequence used mostly primary data, which was both qualitative and quantitative in nature. For the collection of primary data (quantitative in nature), questionnaires having a five point Likert scale supplemented by interviews continued to be the most popular choice and the most popular statistical techniques appeared to be **SEM** which uses exploratory and confirmatory factor analysis (**EFA** and **CFA**). Most studies used one or a combination of stakeholders (residents, tourists, government employees and entrepreneurs) for the collection of primary data and used random and convenience sampling as the methods of choice. Data was collected from mainly medium sized samples ranging from below 250 to 750 respondents and had a relatively high response rate of 70% and above, attributable perhaps due to the respondents being largely residents and having a vested interest in the research.

The literature reviewed in this chapter in terms of the various objectives of the study finally provides the basis for a discussion on the aspects mentioned above such that a link between the various stakeholders i.e. the *guests* and the *hosts* (includes local residents, entrepreneurs and government officials), their perceptions and attitudes towards tourism and its consequent impact on the sustainability of tourism in the destination is made. The chapter concludes by highlighting key issues raised by literature that form the basis of this research and **in comparison to the**

above mentioned criteria, the present study is on par with the findings of most of the research works carried out elsewhere.

In order to facilitate clarity in the understanding of the four areas mentioned above with respect to the four objectives identified, literature reviewed from various sources for this thesis is presented objective wise, followed by a more extensive elaborate verbal consolidation of the same in the form of concepts, theories and findings of research studies conducted, wherever relevant in a tabular format. All the articles/theses reviewed were tabulated on the basis of: Year of publication, Number of authors, Name of journal, Page count, Country of study, Type of study, Type of data collected, Nature of data, Study area, Method of research, Sampling unit, Sampling method, Sample size, Response rate, Statistical techniques, Type of scale used etc. The Content Analysis Literature review is depicted according to the objectives of the study. Literature from the year 1993 to 2015 has been reviewed in the present research. Relevant and useful research articles were available from 1993 onwards and as there was limited research work carried out before 1993, especially with respect to tourists perception towards tourism infrastructure availability at various tourist destinations, residents attitude towards tourism development and various stakeholders towards sustainable tourism development; hence the base year was kept as 1993. For the purpose of making the literature review extensive and exhaustive, a rigorous search was carried out using the following databases:

- Elsevier
- Taylor and Francis
- John Wiley Publications
- Emerald Full Text

- JSTOR
- Palgrave Macmillan
- SAGE Publications
- Springer-Verlag/Kluwer
- EBSCO

An advanced search, within the preview of each objective, was carried out using different combination of words such as:

- **Objective 1:** perception of tourists/visitor and tourism destination; perception of tourists/visitor and tourism infrastructure; assessing tourist/visitor perception and tourism infrastructure; tourists'/visitor satisfaction with tourism infrastructure; assessing tourists'/ visitor perception of tourism infrastructure using IPA
- **Objective 2:** perception of residents and tourism destination; perception of residents and impact of tourism; assessing residents' perception and impact of tourism development; residents' perception of tourism impacts and support for tourism development; residents' attitude towards tourism and support for tourism development
- **Objective 3:** stakeholder perception and sustainable tourism; sustainable tourism and measuring sustainability; impact of sustainable tourism and tourism destinations; stakeholder participation and involvement in sustainable tourism
- **Objective 4:** sustainable tourism models and tourism destinations; modeling of sustainable tourism and stakeholder involvement; Structural Equation Modeling and sustainable tourism

Of the available research papers from various databases filtering was carried out based on the relevance and appropriateness of the papers, depending on each of the four objectives and finally 51 research works were identified for objective 1; 56 research works for objective 2; 74 research works for objective 3; and 56 research works for objective 4; totaling to 237 research works for the present study. This review includes research works which were published in journals which generally represent a higher level of research (Garg et al., 2011; Nord and Nord, 1995) and research works available in the form of dissertations and conference papers as well, since they also contribute towards literature. As recommended by previous studies, this study only analyzed full length papers. (Reid and Andereck, 1989; Crawford-Welch & McCleary, 1992; Baloglu and Assante, 1999) The final list of 237 research works was then tabulated separately for each of the four objectives to identify the:

- Research Gap (year of publication, number of authors, name of journal, country of study, page count)
- Source of Data / Method of Collecting Data (type of study, type of data collected, nature of data collected, study area, research method, type of scale used, sampling unit, sampling method, sample size, response rate)
- Statistical Tools used for Data Analysis (Techniques applied);

and was subsequently examined and evaluated carefully, to ensure that all research works were relevant for the present study. After final selection and evaluation, all 237 research works were tabulated and classified on the following basis for each of the four objectives.

- Year of publication
- Number of authors
- Name of journal

- Country of study
- Type of study
- Type of data collected
- Nature of data collected
- Study area
- Research method
- Type of scale used
- Sampling unit
- Sampling method
- Sample size
- Response rate,
- Techniques used

The subsequent sections will provide detailed information on the above mentioned criteria for each of the four objectives separately as well as the consolidated view of all 237 research works. In conclusion, the exhaustive literature review was presented in an altered format, not only to provide clarity on prior research done in the areas specified, but also to present it in the form of a paper, which could subsequently be suitable for publication as a content analysis paper.

2.2 Tourists' Perception about Tourism Infrastructure

OBJECTIVE 1: To assess the perception of Tourists about the infrastructure and inputs currently available for tourism in the State of Goa and to identify existing gaps.

The aim of this objective from a research perspective is to assess tourist or visitor perception

of the facilities, infrastructure and amenities available in the state, particularly from the perspective of tourism. The primary purpose of this assessment would be to determine the importance they attach to the above, prior to their visit and their satisfaction with the performance of the same during their visit, such that gaps in perception, if any, could be determined. The use of tools and techniques including Factor Analysis, Mean Analysis, Gap Analysis and the Importance-Performance Analysis indicated as appropriate, from literature review of similar studies, would allow for a proper diagnosis of the situation in the state and corrective action, wherever necessary could be undertaken so as to enhance destination competitiveness.

Tourism research in the area of attitudes is generally bifurcated between those studies that focus principally on the tourists / visitors / guests to a given destination and those that focus on the local residents or the hosts in a destination. Studies focusing on tourists generally have arisen from the pro-tourism and basically laissez-faire advocacy platform elucidated by [Jafari \(2001\)](#) in an attempt to understand visitor preferences and levels of satisfaction so that the feasibility and profitability of tourism product and its operation in a destination can be improved both by improving the tourism product or offer as well as by improving its marketing. Tourism Literature has firmly established that both, overall tourist satisfaction and the tourist's intention to revisit a destination, are determined at least in part, by their assessment of the destinations attributes. Many studies explore a destination's performance by analyzing declared tourist satisfaction with different aspects of the destination ([Kozak & Rimmington, 1999](#); [Pizam & Ellis, 1999](#); [Baker & Crompton, 2000](#); [Kozak, 2002](#); [Yoon & Uysal, 2005](#); [Alegre & Cladera, 2006](#)) while others which research destination loyalty, indicate that one of the key factors in deciding to revisit or

return to a destination by tourists, is their satisfaction with previous stays there. (Kozak & Rimmington, 2000; Baker & Crompton, 2000; Kozak, 2001, 2003; Yoon & Uysal, 2005; Alegre & Cladera, 2006)

2.2.1 Tourist Satisfaction

Tourist satisfaction is important to successful destination marketing because it influences the choice of destination, the consumption of products and services, and the decision to return (Kozak&Rimmington, 2000). Several researchers have studied customer satisfaction and provided theories/models about tourism, for example, Parasuraman, Zeithaml, and Berry's Expectation-Perception Gap Model (Parasuraman et al. 1985), Oliver's Expectancy–Disconfirmation Theory (Pizam and Milman, 1993), and Sirgy's Congruity Model (Sirgy, 1984 ; Chon and Olsen, 1991). Importance-Performance Analysis (IPA) (Martilla&James, 1977) and the performance – only model (Pizam, et al., 1978) have been used to measure tourist satisfaction with specific tourism destinations. Since tourism is considered to be an amalgam of service industries, (Fuchs and Weiermair, 2003), research has generally focused on the marketing measurement tools aimed at assessing customer satisfaction, in view of the fact that satisfaction influences both expectations as well as intentions for future destination purchasing decisions. Over the last decade, numerous research contributions have discussed the limits and the problems of the research in this area. Different perspectives and theories have been proposed in tourism literature to assess tourist satisfaction. Most of the studies have utilized models of expectation-disconfirmation, according to which consumers develop expectations about a product/service before purchasing it and subsequently they compare actual performance with those expectations (Oliver, 1980).

If the performance is better than the expectations, the consumer has a positive disconfirmation, which means that (s)he is satisfied and (s)he will be more willing to repeat the purchase. If the performance is worse than the expectations, the consumer has a negative disconfirmation, which means that (s)he is unsatisfied and (s)he will look for alternatives for the next purchase. Applying such a model to tourism, it follows that satisfaction is the result of a comparison between [tourist] previous images of the destination and what (s)he actually sees, feels and achieves at the destination (Chon, 1989). Review of literature, suggests that customer surveys in tourism are useful and reliable only if they are meticulously designed keeping in mind the conceptual construct and the theoretical model used. The choice of the survey method, the sample design, the time and place of the interview are all highly critical issues in tourism satisfaction surveys that may invalidate the results if improperly chosen and/or managed. (Fuchs and Weiermair, 2003) Given these limits and possibilities of tourism satisfaction research, this paper uses the Importance-Performance Analysis (IPA) (Martilla&James, 1977) which is generally viewed as a “low-cost/easily managed” tool for evaluating tourist satisfaction and is part of the expectation-disconfirmation branch of literature.

2.2.2 Tourist Preference

Destination competitiveness is an area that is gaining importance in tourism literature particularly in the light of ease of travel, information availability, destination marketing etc. As tourists travel to different destinations which are competing with each other either directly or indirectly, it is the tourists' perceptions of service standards, quality, facilities, attractions and overall performance of a destination, explicitly or implicitly compared, which influence their

preference for a given destination and will ultimately determine repeat visitation. (Akhtas et al., 2007) One of the main variables influencing preference for and choice of a destination is tourism image of a destination; where it is generally believed that the stronger the positive image of a destination, the greater its likelihood of being included / chosen in the process of decision making. Further, the effect of image not only influences the tourist at the stage of decision making but also affects the behavior of tourists in general. (Ashworth & Voogd, 1990; Chon et al., 1991; Bramwell and Rawding, 1996)

2.2.3 Tourist Perception

Tourist perceptions about a destination are generally influenced by two elements: the actual place or environment at the destination and the tourist's value system. (Gnoth, 1997; Mohammed, 2008) Tourist destinations have different aspects of attractiveness such as natural or scenic beauty, historical and cultural attractions, pristine environment, shopping, entertainment and nightlife, beach or coastal attraction etc., based on which visitors visit and revisit them. Any tourist destination where pristine environment is important may lose its charm and attraction generally, either through deterioration in the environment or as a result of overcrowding. Several studies have focused on visitor perceptions both in terrestrial settings (Schreyer & Roggenbuck, 1978; Hoover et al., 1985; Chavez, 1993; Lynn & Brown, 2003) and in marine settings (Shafer et al., 1998; Inglis et al., 1999; Barker, 2003) which found crowding to be one of the key factors contributing to visitor dissatisfaction (Hoover et al., 1985; Musa, 2002). Further, visitor perception of crowding depends on a variety of factors including visitor characteristics, location of encounter (Schreyer & Roggenbuck, 1978; Manning, 1985a; Chavez, 1993), visitor expectations - where visitors with greater experience of nature are more sensitive to

overcrowding (Manning, 1985a, b; Inglis et al., 1999) and recreational use impacts such as litter, damage to plants and eco-systems etc. (Hoover et al., 1985; Barker, 2003; Lynn & Brown, 2003) The positivity of tourist perception and experience depends on cultural enrichment, friendliness of locals and hospitality facilities at a destination, (Chheang, 2011) while lack of proper infrastructure negatively influences perception of international tourists at a destination. (Henderson, 2011)

2.2.4 Importance – Performance Analysis (IPA)

The Importance-Performance Analysis (IPA) is a simple yet effective technique, used extensively to study of customer satisfaction, expressed as a function of expectation related to importance and performance/satisfaction. (Eskildsen & Kristensen, 2006; Magal & Levenburg, 2005; Martilla & James, 1977) It requires the simultaneous consideration of customers' assessments of the importance of salient attributes as well as their level of satisfaction with the service provided and the performance of the service providers. Of the various methodologies available to measure the satisfaction of visitor to tourism or leisure destinations, the IPA has been used with great success not only in the understanding of customer satisfaction but also in order to understand and prioritize improvements in service quality. (Bacon, 2003) The IPA framework has been widely applied across various fields and contexts including the evaluation of park facilities (Hollenhorst et al., 1992; Mengak et al., 1986; Wade & Eagles, 2003); wildlife parks (Akama & Keiti, 2003; Taplin, 2012); Outdoor recreation sites, (Tarrant & Smith, 2002); ski resorts (Hudson & Shephard, 1998; Usyal et al., 1991) and hot springs tourism (Deng, 2007) In tourism, policymakers and management have used the IPA matrix to assess the competitive position of a tourism product, service, company or destination and to formulate relevant

strategies to achieve a competitive advantage over rivals (Deng, 2007; Enright & Newton, 2004; Hudson et al., 2004). It achieved significant popularity among tourism, hotel and leisure researchers who adopted the approach in studies of destination image (Joppe et al., 2001; Litvin & Ling, 2001; O'Leary & Deegan, 2005); destination policy (Evans & Chon, 1989); destination positioning (Pike & Ryan, 2004); and parks and protected areas (Hollenshorst, et al., 1992; Hunt et al., 2003; Tonge & Moore, 2007; Wade & Eagles, 2003). The basic assumption of the IPA is that the importance of the attribute and its perceived performance influence satisfaction and the IPA matrix graphically depicts the difference between the importance and satisfaction of individual attributes in such a manner that it is both easy to understand and interpret. (Duke & Persia, 1996)

The method usually defines a two dimensional grid with the horizontal axis indicating the visitors' perceptions of the service providers' performance on a given attribute. The vertical axis indicates the importance of the attribute to the visitor. The visitors' importance and satisfaction values are plotted on the grid, which is divided into four quadrants that are formed based on the mean scores of the importance and satisfaction attribute ratings. The matrix so formed guides the firms to identify the most appropriate strategic options to enhance competitiveness. Martilla and James (1977) who pioneered this technique highlighted that since IPA works with relative rather than absolute measures of importance, therefore the placement of crosshairs in relation to satisfaction mean is subjective (Zeigler et al., 2012). The various crosshair measures used include actual/data means, scale means and statistical means (Oh, 2001; Tonge & Moore, 2007). The simplicity of the IPA approach has in part contributed to its popularity among researchers, but it still is not considered completely reliable and valid (Oh, 2001) because of its arbitrary

measurement of importance as well as its poor discriminatory and predictive validity. (Azzopardi & Nash, 2013) These values are then assessed according to their quadrant on the grid. Each quadrant suggests a different strategy. Attributes that are rated high in importance and high in satisfaction suggest that the service provider's high performance should be continued and that resources should continue to be directed toward these attributes. In contrast, attributes having a low importance rating and a low satisfaction rating suggest that investing scarce resources on these attributes may have little strategic advantage. Attributes that are rated high in importance and low in satisfaction are the attributes that an organization should pay particular attention to, investing the greatest amount of resources to improve the performance of these attributes. Lastly, attributes rated low in importance and high in satisfaction are attributes that an organization should continue to maintain, but not necessarily allocate any additional resources. (Almanza et al., 1994; Go and Zhang, 1997; Joppe et al., 2001; Ryan, 1995; Uysal et al., 1991) The main purpose of IPA is to determine which attributes the visitors consider most important, measure how well the destination performs in delivering these attributes and to make to destination site management aware about what they should concentrate upon and what strategies they should follow. (Kozak and Nield, 1998) The IPA can be effectively used to point out a destination's strengths and weaknesses. The use of this method has significant management implications for decision-makers at any destination. The IPA provides significant support to policy-makers, both as forward-looking instrument, aiming to audit the state of health of the tourist destination and to define the main area of intervention, as well as a backward-looking instrument, aiming to evaluate the impact of the programs and strategies implemented. Subsequent sections will provide detailed information in the tabular format following with critical evaluation on how the

following aspects are identified (1) research gap, (2) source and method of collecting data, and (3) techniques used for data analysis.

2.3 Residents' Perception about Impacts of Tourism

OBJECTIVE 2: To evaluate the perception of Residents about the impacts of tourism in the State of Goa.

The aim of this objective from a research perspective is to assess resident or host perceptions of the impacts of tourism in the state and consequently their support for further tourism development in the community. Irrespective of the kind of tourism and the manner in which it is developed, tourism does have positive and negative outcomes or impacts for the community which need to be anticipated, comprehended, planned for and managed to enable timely action. The primary purpose of this assessment was therefore, to determine residents' attitude toward tourism and its impacts and whether it affected their support for tourism development in the community, particularly because residents' of a community are important players who can influence the success or failure of the tourism industry. Without a proper understanding of residents' opinions, development of sustainable tourism in a region is difficult, if not impossible in the long run. A vast body of research has been carried out on resident attitude towards tourism and its development in a destination but before development of tourism resources, it is absolutely vital to gain an insight into their opinions regarding development. **Menning (1995)** emphasized that tourism development in a community involves both matching demand and supply along with local acceptability of tourism development since it is the residents of a community who have the ultimate say in determining which tourism impacts are positive and which are problems. Further, residents' needs and wants should necessarily take precedence over development for tourists'

requirements, since they are in the community to stay and taking care of their concerns is vital to ensuring and maintaining support for tourism in the destination.

2.3.1 Global Context

For the long term success of the tourism industry, it is important to understand and evaluate residents' attitudes toward impacts of tourism particularly because it influences their behavior towards tourism and tourism development. [Andriotis and Vaughan \(2003\)](#) reiterated the importance of understanding resident perceptions towards tourism development as a consequence of their review of more than 83 studies worldwide, relating to the same. These studies were focused on communities across the globe including Europe ([Snaith and Hayley, 1999](#)), Australia, New Zealand and the South Pacific ([Fredline & Faulkner, 2000](#); [Mason & Cheyne, 2000](#)), Asia ([Kayat, 2002](#)), Africa, North America ([Carmichael, 2000](#); [Gursoy et al., 2002](#); [Wang & Pfister, 2008](#)) etc. A number of factors which influence resident attitude have been identified by various researchers. These same factors with different groupings of variables have been termed differently in different studies but generally fall in the category of demographic factors, personal factors, social factors and factors related to tourism ([Jackson and Inbakaran, 2006](#)). However, the findings are inconclusive. Differences in resident attitudes towards tourism development have been examined on the basis of stage of development ([Butler, 1980](#); [Doxey, 1975](#)); degree of tourism development ([Long et al., 1990](#)); tourism policy participation ([Lankford and Howard 1994](#)); level of individual involvement in tourism industry ([Smith and Krannich, 1998](#)); maturity of destination ([Sheldon and Abenoja, 2001](#)); involvement in decision making process ([Sheldon and Var, 1984](#)); personal benefit received from tourism ([Jurowski et al., 1997](#), [Wang and Pfister, 2008](#) ; [Hanafiah et al., 2013](#)). The social exchange

theory has often been used to interpret the effect of the material and psychological transactions on the attitudes of the residents of tourist destinations (Ap, 1992; Gursoy *et al.*, 2002; Jurowski *et al.*, 1997; Yoon *et al.*, 1999). A number of studies have been carried out which also refer to the important relationship that exists between resident perceptions of tourism and their economic dependence on it, implying that as residents economic benefits from tourism increases, so does their perception of tourism positive impacts (Haralambopoulos & Pizam, 1996; Johnson *et al.*, 1994; Weaver and Lawton, 2001). Thus, the balance between resident's perception of the costs and benefits of tourism development influence not only visitor satisfaction with destination but also consequently becomes an important factor increasing tourist arrival (Allen *et al.*, 1988; Andriotis and Vaughn, 2003; Lankford and Howard, 1994). Resident Demographic characteristics also influence their perceptions of impacts but the study results are mixed and vary according to the location, the methodology and the instrument used, which makes it not only difficult, but also inconclusive, to compare such results. (Wang *et al.*, 2006) However, despite the availability of a relatively extensive body of research on residents attitudes toward tourism and its impacts, many researchers have suggested the necessity of conducting additional research on this topic, in other geographical locations in different settings and over an extended period of time, both to reinforce earlier findings as well as identify and explore other factors that may influence the local resident perceptions of and attitudes toward tourism, its impacts, and their support for tourism development (Andriotis *et al.*, 2003; Andriotis, 2005; Cavus and Tanrisevdi, 2003; Haralambopoulos & Pizam, 1996; Kuvan and Akan, 2005; Sheldon and Var, 1984; Smith and Krannich, 1998; Yoon *et al.*, 2001). Understanding of the reasons why residents do or do not support the tourism industry and its growth would help to develop models for tourism development in a community that would minimize their negative impacts while

maximizing support for them, thus giving credence and relevance to the need and importance of research in this field (Vargas- Sanchez *et al.*, 2009)

2.3.2 Indian Context

In India too, several studies have been carried out to explore how residents consider tourism affects their community, their attitude toward tourism and the factors which influence it. Respondents are generally aware of both the positive and negative effects of tourism and the overall view is optimistic because of the economic, social and cultural benefits accruing out of tourism growth and development (Singh and Singh, 2012). However, a certain amount of resentment arises when all activities become increasingly tourist oriented. While negative economic, environmental, social and cultural benefits may neither be intentional nor inevitable; they must be viewed as serious risks and must be carefully evaluated, monitored and managed, if the resource base is to be sustained for the future (Kala, 2008). Economic impacts are most favourably viewed followed by infrastructural and environmental impacts, while socio-cultural impacts are viewed with concern. The understanding such attitudes can help to formulate appropriate strategies for tourism planning and policy development. (Saha, 2012) Community attachment and economic dependence have a significant effect on tourism's positive impacts which in turn, can affect support for tourism. Further, positive impacts have a greater effect on influencing sustainability of tourism than do negative impacts. (Sofique and Ghosh, 2012) Socio-cultural issues are generally viewed with the greatest concern and so training and education can help improve resident lifestyle as well as resource management, which in turn, could help promote and support sustainable development in the area (Ramchurjee and Suresha, 2013). Local residents are heterogeneous in the way they perceive and receive many of tourism's reported

benefits, hence the understanding of such attitudes is an essential requirement for resident support for tourism development and its sustainability (Chand, 2013). Further, though they support tourism development, their inclusion and involvement in the planning, promotion and development of tourism is negligible and must be significantly encouraged for sustainability. (Chand and Vivek, 2012)

2.3.3 Goan Context

Tourism is the second largest industry in Goa after mining in the post-colonial era. According to the state Department of Tourism, it is the “backbone of Goan economy” as a large percentage of the population directly or indirectly derives its livelihood from tourism activities. **The Tourism Sector’s contribution to the Gross State Domestic Product is approximately 12.5% of total Gross State Domestic Product, at current prices.** (Source: Directorate of Planning & Statistics, Government of Goa) It has a phenomenal influence on social, cultural and ecological life rhythms in the state of Goa and this effect is even felt by individuals and institutions not directly related to the tourism industry. The state is famous for its breathtakingly beautiful beaches, long stretches of white and silver sands, rich cultural heritage, captivating churches, temples and its fabulous flora and fauna. A taluka wise analysis of the distribution of tourists in Goa in terms of their country of origin, tourist sites available in the state and tourist preference for those sites, indicated that Beach tourism in Goa is ranked as the foremost tourist attraction in the state and hence should be protected (Ambli, 1991). However the growth of tourism in Goa has taken place extensively in four of main coastal talukas of Tiswadi, Salcete, Bardez and Mormugao resulting in pressure on scarce resources with consequent economic and environmental problems; near saturation being reached along with the negative impacts of

tourism being clearly visible in these areas. (Singh 2004; Mazumdar, 2006) This lopsided growth has given rise to numerous problems in the state and any alternate form of tourism, if introduced in the state, without adequate planning, will face the same fate as mass tourism. (Maganlal, 2010) For an equitable and sustainable growth of tourism in the state, tourism should belong to local residents, providers and participants and tourism planning and management should be brought under community stewardship with a proactive approach by all stakeholders (Solomon, 2008; Akhtar and Shah, 2012; Mazumdar, 2006; Sawkar, 1998; Tantrigama, 1999; De Abreu, 2008).

2.3.4 Residents' perception of tourism's impacts

There is a growing body of tourism literature which focuses on residents' perceptions of tourism's impacts. (Pizam, 1978; Liu et al., 1987; Long et al., 1990; Ap & Crompton, 1993, 1998; McCool & Martin, 1994; Allen et al., 1994; Lankford & Howard, 1994; Jurowski et al., 1997) It is a well researched fact that tourism has great potential to influence the lives of the community residents and while it provides several benefits of both economic and other categories to locals, (Perdue et al., 1990; McCool & Martin, 1994; Brunt & Courtney, 1999) there are concerns that it can negatively affect the quality of life of residents through its socio-cultural and environmental impacts. (Liu et al., 1987, McCool & Martin, 1994, Brunt & Courtney, 1999) The specific impacts of tourism as perceived by different communities vary, as do their perceptions of direct and indirect impacts, depending on several demographic / personal characteristics, on their level of involvement with the industry, on whether they receive personal benefit from it, their level of attachment to the community etc. Despite impact perceptions being measured in different communities, using different focus questions, different scales etc., the

general conclusion is that communities where tourism exists, seem to be positively disposed towards tourism and while they do have concerns about its impact on their communities, these concerns vary from place to place. In addition, the most widely considered theoretical base for most of these studies has been the Social Exchange Theory. [Lankford & Howard, 1994](#); [Jurowski et al., 1997](#); [Brunt & Courtney, 1999](#)) It is therefore being increasingly felt that a thorough understanding of residents' perceptions and attitudes and their predictors is of vital importance to a tourist destination, particularly because an understanding of residents' perceptions of tourism's impacts allows practitioners, Destination Management Offices and policy makers to develop better strategies for service delivery and community development. Further, the constantly growing concerns about the impact of tourism on the host community, make understanding the host perceptions of these impacts of paramount importance, particularly in view of gaining the host community support for future development and for ensuring a better quality of life for them.

2.3.5 Resident attitude towards Tourism & Support for Tourism Development

There exist a relatively larger number of studies investigating Resident attitude towards Tourism development in general and lesser number which study the relationship between resident attitude and support for tourism development. There is an apparent assumption that positive attitudes toward tourism imply support for tourism development. [King et al., 1993](#) did find a relationship between 'attitude' and 'overall opinion about tourism' but the overall opinion variable was considered too vague. [Jurowski et al., 1997](#), found that perceptions of tourism impacts influenced support for 'nature based' tourism but the finding was considered specific to a particular type of tourism. [Perdue et al., 1990](#), confirmed that positive attitudes towards tourism and amount of personal benefit derived from tourism in rural areas was positively related to attracting

increasing number of tourists to the destination and vice versa. [Snaith and Haley, 1995](#), who extended the study by [Perdue et al., 1990](#), discovered that a positive perception of tourism predicted support for its development. While the four studies mentioned provided preliminary confirmation of the relationship between resident attitude and support for tourism development, it raised issues as to which specific types of development residents supported, whether results would differ in rural/urban communities, how support was operationalized or defined to respondents and how individual residents interpreted tourism development. The growth and success of tourism industry along with its inherent costs and benefits depends on the active support of the local population ([Gursoy & Rutherford, 2004](#)) without which, the very sustainability of the industry is threatened. While the majority of studies on residents' attitude is atheoretical, ([Gursoy & Rutherford, 2004](#)) a number of researchers are using theoretical frameworks, particularly Social Exchange Theory, to study host community reactions and attitudes. ([Ap, 1992](#); [Ko & Stewart, 2002](#); [Byrd et al., 2009](#); [Vargas-Sanchez et al., 2009](#); [Gursoy et al., 2009](#), [Nunkoo & Ramkisoorn, 2010](#))

2.3.6 Social Exchange Theory

From a theoretical perspective it is important to understand the manner in which resident support for tourism development is both understood and interpreted particularly since much of the research work done in this area is theoretical and based on the social exchange theory. ([Perdue et al., 1987](#); [Long et al., 1990](#); [Perdue et al., 1990](#); [Ap, 1990, 1992](#); [Carmichael et al., 1996](#), [Jurowski et al., 1997](#)) [Ap, \(1992\)](#) explains the Social Exchange Theory or SET as a “general sociological theory concerned with understanding the exchange of resources of any kind – concrete or symbolic, between individuals and groups in an interaction situation wherein

individuals evaluate the exchange relative to the personal costs and benefits associated with the exchange. From a tourism perspective, residents who perceive that the benefits of the exchange outweigh the costs, will support tourism development and the level of this support will be influenced by the amount of personal benefit received and vice versa. (Perdue et al., 1990; Snaith and Haley, 1995; Jurowski et al., 1997) It is well established fact under social exchange theory (SET) that “*understanding the exchange of resources between individuals and groups in an interaction situation is crucial for harmonious development of a region.*” (Ap, 1992) According to the SET, people evaluate an exchange based on the relative costs and benefits incurred as a result of that exchange. From a tourism development standpoint, SET assumes that stakeholder attitude towards tourism and their consequent support for its development, will be influenced by the actual and perceived outcomes that tourism has in their community (Andereck et al., 2005). Positive tourism development will occur in a community if there is an exchange between stakeholders (Ap. 1992; Mc Gehee & Andereck, 2004) and the goal of tourism development is “*to achieve outcomes that obtain the best balance of benefits and costs for all stakeholder groups*” (Ap, 1992). Thus stakeholder theory indicates that all stakeholder groups should be involved in planning for tourism development (Byrd et al., 2009) and the benefits that accrue are to be shared proportionately.

2.4 Multi-Stakeholders Perception towards Sustainable Tourism

OBJECTIVE 3: To study the perception of Stakeholders about tourism in Goa, in terms of its sustainability

Given that tourism is vital to the economy of Goa but as currently practiced in the state is principally ‘mass tourism’ in nature, understanding stakeholders’ perception sustainable tourism

and its various aspects is of great importance for its sustainable continuity. The primary purpose of this assessment would be to gauge stakeholder understanding of the concept and their perceptions and attitudes towards the same. The use of appropriate tools and techniques such as Factor Analysis, Mean Analysis and ANOVA as indicated by literature review of similar studies, would allow for a proper diagnosis of the situation in the state. The findings of such an assessment could be used to increase stakeholder awareness, such that they could protect and conserve resources and make educated choices, about the various alternative routes to sustainable tourism available to them and if necessary, cause corrective action to be undertaken, so as to promote and enhance sustainable tourism in the state.

2.4.1 Sustainability

Tourism is believed to be a truly global activity accounting for the single largest peaceful movement of people across cultural boundaries in the history of the world (Lett, 1989); is often viewed as an environmentally friendly industry in comparison to other industries (Wilson et al., 2001; Davis & Morais, 2004) and is seen as a strategy for economic development that is easier and cheaper to establish, largely because it makes use of infrastructure already available in the community in which it develops, yet it does present considerable challenges to the local environment and communities on which it is dependent. (UNEP & WTO, 2005) As a result, sustainable tourism has been propagated as the new ideal to stop the damaging effects of tourism. The concept of sustainability has gained wide acceptance both theoretically and practically in diverse fields and can be therefore viewed from different perspectives. From a sociological perspective, Ratner, (2004), believes that the concept of sustainability can be viewed as a technical pursuit, an ethical shift or as a dialogue of values. Further, if sustainability is to be

considered a desirable goal, diverse means of pursuing the goal must be explored and developed. However, the very diversity of perspectives on sustainability pose a challenge to the development of means, to this end and hence requires, among other efforts, new kinds of governance as well as involvement of a large number of stakeholders in decision-making processes. (Irwin et al., 1994; Loorbach & Rotmans, 2006) Recognizing that all tourism entails cost, Weaver (2006), associates “*sustainability with strategic management that strives to minimize the direct and indirect costs of a given activity whilst concurrently maximizing the attendant benefits, both locally and globally.*” This definition of sustainability attempts to promote “*enhancement*” of the *three pillars of sustainability* (social, environmental, and economic) and moves beyond the status-quo definition of the Bruntland Report (1987). Further, with the recognition that costs and benefits of tourism are context dependent, the definition embraces the idea of sustainability as a paradigm with “*strong*” and “*weak*” manifestations. (Hunter, 1997)

2.4.2 Sustainable Tourism

The concept of sustainable tourism arose out of the obvious drawbacks and failings of the mass tourism movement (its resource intensive nature, its contribution to economic disparity and its haphazard development etc.) in an attempt to minimize its negative impacts by the use of practices that are both environmentally sensitive and socially aware. Swarbrooke (1999) emphasizes that the three main dimensions of sustainability include economic, social and environmental and for sustainable tourism to be successful, the inter-relationship between all three aspects is acknowledged and a balance must exist between all three, since all three contribute equally to development. (Muller, 1994) Hunter (1997), disagrees with the view that a

balance is possible between these competing aspects since trade off decisions will occur, on a day to day basis, producing priorities, which will in turn, affect or influence the tourism system in favour of some aspects. Despite the substantial body of empirical and conceptual literature on various aspects of sustainability in recreation and tourism (Clarke, 1997; Collins, 1999; Tubb, 2003; Kelley et al., 2007) there remains “*no widely accepted definition of sustainable tourism*”. (Swarbrooke, 1998) Confusion exists, both with regard to the precise implications, as well as with regard to the specific patterns of resource use, implied in the definition of the term. (Collins, 1999) The World Travel and Tourism Council (WTTC, 2010) has equated sustainability with “*guaranteed respect*” for local environment, societies and cultures while the attainment of “*triple bottom line*” outcomes (i.e. economic, environmental and socio-cultural sustainability) is now widely evoked. (Elkington, 1998) With respect to tourism, sustainability is differently referred to as “sustainable tourism”, “green tourism”, “eco-tourism”, etc., all having the end goal of achieving long term cooperation among multi-stakeholder groups, in promoting tourism, while safeguarding the eco-system. Sustainable tourism development is regarded as economically viable, financially profitable, environmentally sustainable and socio-culturally acceptable. (WTO, 2002) Thus, all kinds of alternative forms of tourism, including green tourism, eco tourism, nature tourism, culture and heritage tourism can apply these principles of sustainability (Harill and Potts, 2003; Stoddard et al., 2008; Chang and Lui, 2009).

Despite being well researched, the concept of sustainable tourism still remains vague. The recent virtual special issue by the well known publisher Elsevier, on sustainable tourism around the world, covered a wide range of subjects; viz.; volunteer tourism, sustainable development, ecotourism, climate change, green tourism and tourism education; all of which revolved around

the main theme of sustainable tourism. The geographical area covered in different studies include Africa (Wyngaard and Lange, 2013), Arctic (Bryan, et al, 2015), Asia (Sin and Minca, 2014; Mostafanezhad, 2014; Xu and Fox, 2014; Chan, 2013; Klähn and Edwards, 2014), Australia (Schweinsberg. et al, 2013), Central America (Blackman. et al., 2014; Little, 2014; Weaver, 2015), Europe (Ekinici, 2014; Farmaki. et al., 2015; Bujosa. et al., 2015; Øian, 2013; Alberti and Giusti, 2012; Buta. et al., 2014), UK (Currie and Falconer, 2014; Jarvis et.al, 2010; La Lopa and Day, 2011; Ali et al, 2014), US (Fjelstul, 2014; Terry, 2014; Doiron and Weissenberger, 2014; NamyunKil et al, 2014) and also a few studies at the global level. (Zhang et al, 2015; Zahra and McGehee, 2013) This being the case, sustainable tourism continues to remain a concept that can be modified to fit different perceptions and flexible enough to convey different meanings to different groups of people (Farsari et al., 2007) without having any universally accepted definition. However, the World Tourism Organization (WTO, 1998) defines sustainable tourism as that, which “*meets the needs of the present tourists and host regions, while at the same time protects and improves opportunities for the future*”. It focuses on the management of all resources in a region in such a way that all economic, social and aesthetic needs are met, while the cultural integrity, key ecological processes, bio-diversity and life support systems are respected. The six main principles of sustainable tourism development considered under WTO’s definition of sustainability include (a) *high level of tourist satisfaction*, (b) *optimal use of environmental resources*, (c) *respect for socio-cultural authenticity of host community*, (d) *providing socio-economic benefits to all stakeholders*, (e) *constant monitoring of impacts* and (f) *informed participation of all relevant stakeholders as well as strong political leadership*. (Kruja, D. & Hasaj, A., 2010) With particular reference to the tourism industry, sustainability implies the regulated use of tourism’s resources in such a manner that they are not consumed, depleted or

polluted, so as to render them unfit or unavailable for use by future generations of stakeholders. Understanding the concept of sustainable tourism and ensuring its practical use helps educate the community, to protect and conserve resources for the benefit of all its stakeholders.

Sustainable tourism has been conceptualized and defined differently by different organizations and researchers at different times and has currently been expanded to include specific dimensions of sustainability which are critical to its operationalization. [UNTWO, 2012](#), defined it as “Tourism that takes full account of its current and future economic, social and environmental impacts while addressing the needs of visitors, the industry, the environment and host communities.” While the economic, social and environmental dimensions of sustainability are commonly referred to as the pillars of sustainability, ([McKercher, 2003](#)) the political, local, cultural, managerial, and technological dimensions have been included by other researchers into the conceptualization of sustainable tourism. ([Bramwell et al, 1996](#); [Mowforth & Munt, 1998](#); [Pawlowski, 2008](#)) Despite the disagreement with respect to the approach and implementation of sustainable tourism, both [Muller \(1994\)](#) and [Hunter \(1997\)](#) emphasize the importance of stakeholder involvement in the decision to choose the appropriate approach towards sustainable tourism and it is in its proper implementation that sustainable tourism will have the best chance of success.

2.4.3 Stakeholder Theory

The origin of the term “stakeholder can be traced back to [Freeman \(1984\)](#) who was credited with pioneering the term and defined it as “any group or individual who can affect or is affected by the achievement of the organizations objectives.” As always, the term and the concept kept

undergoing refinement in subsequent years with [Carroll \(1993\)](#) expanding the definition of stakeholder to “those groups or individuals with whom the organization interacts and can affect or is affected by any actions, decisions, policies, practices or goals of the organization”. [Donaldson & Preston, \(1995\)](#) further qualified the definition by adding that any stakeholder must have a legitimate interest in the organization, need not participate equally in the decision making process but should have their interests identified, understood and represented. As a result of the increasing popularity of multidisciplinary research, leading to the blurring of lines between disciplines, the concept of stakeholder became a recurring theme in tourism research and the term ‘tourism stakeholder’ was formally accepted at the 13th General Assembly of World Tourism Organization and two of the main principles of sustainable tourism as reported by [WTO, 2004](#), specifically mention and are related to stakeholders viz. ‘provide socio-economic benefits to all stakeholders and informed participation of all relevant stakeholders as well a strong political leadership.’

While the importance of stakeholder contribution to managerial decision-making and consequently, long term conflict reduction and a healthy and desirable society was understood, as far back as the 1990s, ([Jones, 1995](#); [Healy, 1998](#)) it is being increasingly recognized that stakeholder theory plays a vital role in tourism development, requiring a balance between the needs of all stakeholders – industry, local residents or hosts and guests or tourists. ([Byrd et al., 2009](#); [Timur, 2010](#)) While any group or individual who affect the tourism product of a destination or have an interest in the community and its environment can be viewed as a stakeholder(s), research studies in the area of tourism research have identified four key groups; Tourists, Residents, Government Officials and Business owners. ([Andereck & Vogt, 2000](#);

Goeldner & Ritchie, 2003; Byrd, 2007) Using these four stakeholder groups, various researchers have studied different aspects of tourism and recreation such as stakeholder attitudes; (Lankford, 1994) stakeholder views on local tourism planning; (Yuskel et al., 1999) perceptions of community groups about tourism development; (Andriotis, 2005) stakeholder attitudes and interest in new tourism development plans; (Kayat, 2008) discovery of differing perceptions of tourism impacts among stakeholder groups; (Byrd et al., 2009) exploration of perceptions about sustainable tourism development among four stakeholder groups etc.(Holden, 2010)

2.4.4 Stakeholder Involvement and Participation in Sustainable Tourism

With the increasing economic importance of tourism, given the employment it generates and the fact that tourism business activity is conducted in places that belong to local society, these businesses owe society, the natural environment and other elements in the surroundings, a certain responsibility, which is where stakeholder theory comes into play. (Aguera, 2013) The concept of “stakeholder” gained wide acceptance with Freeman’s (1984) book “Strategic Management: A Stakeholder Approach”, a concept that is widely recognized by researchers. (Donaldson and Preston, 1995; Mitchell et al., 1997; Jawahar & Mc Laughlin, 2001) Stakeholder involvement, participation and agreement in sustainable tourism has long been accepted as necessary for the achievement of sustainable tourism. (Yuskel et al., 1999; Hardy & Beeton, 2001; Hardy et al., 2002; Twining-Ward & Butler, 2002) Jamal and Getz (1995) explain that any individual or group which is impacted by the actions of other stakeholders is entitled to become involved in the process, however, they must have the resources, skills and capacity to participate. The tourism industry wants long term growth, profitability and new business opportunities and provides an array of services and facilities in order to achieve the same. Environmental

supporters attempt to balance the type and extent of tourism in a destination against the natural, cultural and man-made resources that exist there which the industry is dependent upon for attracting tourists. The Community refers to residents', property owners and local government authorities (who being the public sector tourism development agent) is concerned with protection, conservation and optimum usage of resources, while holding the responsibility of developing tourism at all levels. While the stakeholders or the diverse parties/partners involved have different goals, interests and provide differing services to tourism as a whole, their goals do tend to overlap, both between pairs of groups and among all partners overall. [Moisey & McCool, \(2001\)](#) suggest that sustainability can only be achieved when there is involvement and participation of all key stakeholder groups and they share common goals. Community participation as a concept made an appearance in tourism planning and management practices as late as the 1990's. While in the initial stages, participation was largely confined to local government, later it shifted to other stakeholder groups, partly due growth of democracies which placed increasing trust in citizens and less on the state ([Curry, 2001](#)) coupled with the community's decreasing trust in its policy makers ([Simrell et al., 1998](#)) and the growing realization that community involvement and participation could resolve conflicts among stakeholders to a great extent.

Research on stakeholders in tourism covers a wide range of topics including stakeholder identification and analysis ([Mereiros De Araujo and Bramwell, 1999](#); [Hardy and Beeton, 2001](#); [Aas et al., 2005](#); [Vernon et al., 2005](#); [Byrd, 2007](#)); stakeholder types ([Hall and Lew, 1998](#); [Butler, 1999](#); [Marwick, 2000](#); [Mason, 2003](#); [Getz and Timur, 2005](#)); stakeholder involvement in sustainable development of tourism ([Ryan, 2002](#); [Getz and Timur, 2005](#); [Hall, 2007](#); [Dodds ,](#)

2007); stakeholder impact on tourism development initiatives (Bramwell and Sharman, 2000; Getz and Timur, 2005; Hall, 2007) etc. However, in terms of issues involving stakeholders in tourism, empirical research lacks widespread documentation. (Dodds, 2007; Hall, 2007) Thus, recognizing the role of stakeholders for the successful management of sustainable tourism and taking into account their varied perspectives on different issues, is of vital importance. (Bramwell et al., 1996; Hardy and Beeton, 2001; Dodds, 2007) The issue is further complicated by the fact that effective stakeholder involvement is complex, problematic and often, underestimated (Jamal & Getz, 1995; Mowforth & Munt, 2003; Friedman & Miles, 2006) and that collaboration is often complicated by the existence of multiple and diverse stakeholders having widely differing viewpoints. (Marwick, 2000; Ladkin & Bertramini, 2002)

Further, while sustainable tourism embraces all three of the dimensions of tourism development viz.; *economic, environmental and social*; attention in research has been largely focused on economic and environmental aspects, neglecting, to a great extent, the social aspect and stakeholder processes. (Hardy et al., 2002; Ryan, 2002). For successful implementation of sustainable tourism, stakeholders can no longer be recipients of sustainable tourism plans but must also be active participants in the planning process. (Southgate & Sharpley, 2002; Byrd, 2003) Very often, sustainable tourism strategies are developed for destinations without considering stakeholder perspectives (Polonsky & Scott, 2005; Byrd et al., 2009; Currie et al., 2009) and as a result, do not necessarily favor stakeholder participation and sometimes actually hinder sustainability. (Pretty, 1995) The current perspective of sustainable tourism implementation is driven by stakeholder partnerships and therefore, implies that successful sustainable tourism implementation depends greatly on effective stakeholder engagement. As a

result of this, further research must necessarily explore the barriers and opportunities in stakeholder involvement as well as the factors which influence stakeholders when engaging with sustainability.

2.5 Sustainable Tourism in Goa: A Multi-Stakeholder Perspective using Structural Equation Modeling

OBJECTIVE 4: To suggest a model for Tourism in Goa that is sustainable, integrative and participative

Sustainable tourism is inherently ambiguous both from the point of view of its theoretical understanding, as well as its practical application. The purpose of this objective from a research perspective, is to determine whether a suitable model of sustainable tourism can be developed from an assessment of the understanding of stakeholders' perception about sustainable tourism and its various aspects. The primary purpose of this assessment would be to gauge stakeholder understanding of the concept and their perceptions and attitudes towards the same, using appropriate tools and techniques such as Factor Analysis and Structural Equation Modeling, as indicated by literature review of similar studies, to predict the relationship between stakeholder understanding of sustainable tourism and their willingness to support it. The findings of such an assessment could be used to understand the type and strength of the relationship between sustainable tourism and its various issues, such that the reasons for the relationship can be analyzed and corrective action can be initiated, by providing a model/path design in order to enhance the sustainability of tourism in the state.

2.5.1 Challenges and Issues in Implementation of Sustainable Tourism

One of the main problems in the implementation of sustainable tourism lies in the complexity of the issue and its practical applications (Sharpley, 2000; Harris et al., 2002; Hardy et al., 2002; Dewhurst & Thomas, 2003). Interpretation of sustainability from an operational perspective presents problems as the construct or term itself, is inherently ambiguous and malleable. While controversy still exists in the various terms and the alternative approaches assumed to be synonymous with sustainable tourism, (Butler, 1990; Wheeler, 1991; Mowforth & Munt, 1998; Hunter & Green, 1995) the methods of delivering sustainable tourism and the routes and directions for its practical application remain vague. (Robson & Robson, 1996; Wall & Mathieson, 2006) Hopwood et al. (2005) attempted to explain this diversity in sustainability through the terms “*status quo*”, “*reform*” and “*transformational*” perspectives, where each subsequent perspective advocates higher levels of human and environmental wellbeing, through concomitantly higher levels of social, cultural and political change. Hunter’s (1997) paradigm of *weak* and *strong* sustainability perspectives would appear to be in accord with the status-quo and transformational approaches (Weaver, 2012). Coupled with the salient issues of agreement, coordination, collaboration and responsibility, were other issues such as mistrust of government policy, poor administration, failure to involve local communities, ineffective communication (Berry & Ladkin, 1997; Ioannides, 1995) lack of government support, lack of leadership and lack of stakeholder involvement or buy in. (Dodds, 2007; Timur and Getz, 2009) This has resulted in a feeling of disempowerment among stakeholders, a lack of common ground and common interests between stakeholders and bureaucracy and consequently, an unwillingness to make significant changes in behaviour among stakeholders. (Weaver, 2000; Getz and Timur, 2005; Miller et al., 2010; Cooper et al., 2009; Dodds and Butler, 2009) Stakeholders, therefore, need

the opportunity to discuss issues that impact their lives and livelihoods and must be empowered to do so. (Norton, 2005; Wall & Mathieson, 2006)

2.5.2 Sustainable Tourism Models

A model is generally considered to be a frame work for the assessment and possible solution to an existing problem. In terms of tourism, models have been framed theoretically for a number of aspects and many of these have been tested in empirical conditions to assess their feasibility. There are several models to describe the cycles of tourism development and associated impacts in a destination area including Plog's Psychographic Groups Model (1974), Butler's Tourism Area Life Cycle Model (1980), Doxey's Irridex Model (1976), Reid et al's . (1993) Model For Community Development and Planning, Dasgupta & Heal (1974), Johnston & Sutinen (1996) Bio-Economic Models, associated with different variants of sustainability etc. Despite empirical analysis providing substantial information relevant to tourism planning and sustainability in specific case studies, tourism literature has thus far, provided no generally accepted theoretical frameworks for the assessment of progress towards sustainability. Generally two schools of thought emanate - *a political economy* or *reactive view* which suggests residents have little, if any, voice in the developmental process of the destination and can at best react to consequences in their environment via plans imposed on them, by planning groups or outside bodies. (Keogh, 1990) The *functional view* considers tourism as a proactive force, which when appropriately managed, seeks to maximize community returns while minimizing costs to its environment and culture via stakeholders who collectively manage the tourism system. (Keogh, 1990) Jamal and Getz (1995) define these collaborative efforts as "a process of joint decision making among autonomous, key stakeholders of an inter-organizational, community tourism domain designed to

resolve planning problems of the domain and/or to manage issues related to the planning and development of the domain". Fennel (1999) and Weaver (2001) in their research on *model relationships* between sustainable and unsustainable tourism claim that it is practically impossible to designate a clear boundary between sustainable and unsustainable tourism. Fennel (1999) explains sustainable tourism in relation to the various aspects of tourism (attraction, accommodation, accessibility and ancillary services) and the kind of degrees or stages of tourism. Weaver (2001) claims that mass tourism (closer to *unsustainable tourism*) constitutes a kind of continuum of alternative tourism (closer to *sustainable tourism*) such that both cannot be treated as opposing categories. Two conclusions can be drawn from these disparate viewpoints; viz.; (1) *principles of sustainable tourism should be introduced in all forms of tourism thus causing change in the desired direction from unsustainable to sustainable tourism and (2) if mass tourism is a continuum of alternative tourism, a less desirable direction of change from sustainable to unsustainable tourism is possible.*

Hunter, 1997, conceptualized (stages) degrees of development (functioning) of sustainable tourism, wherein he contrasted the position of tourism vis `a vis the position of sustainable development within diverse areas, distinguishing four variants of the functioning of tourism within sustainable development. Hunter's model is criticized in that it excludes the possibility of wide scale tourism development which would take into account principles of sustainable development. Johnston and Tyrrell, (2005) suggested a mathematical model based on the application of Optimal Control Theory to Fisheries put forward by Clark, (1990) and assumes two main primary interest (stakeholder) groups who are interested in the existence and outcomes of tourism- local permanent residents and tourism planners. The model stresses the impossibility

of a universally sustainable, environmentally optimal solution, across all stakeholder groups but attempts to assist tourism planners in understanding the various choices and tradeoffs inherent in the various options for environmentally sustainable tourism and is thus, clarifying and structuralizing the concept of tourism sustainability. Okazaki, (2008) advocates community participation in the tourism planning process as a way of implementing sustainable tourism and reviews the major theories of community participation as the basis for defining a community based tourism (CBT) model which used to assess the current status of a community with regard to actual participation levels in a tourist destination using a two-dimensional graph. The model was empirically tested in Palawan in the Philippines and the levels of community participation, collaboration and social capital estimated as well as suggested initiatives to enhance CBT. Shikida et al., 2010 proposed a simple tourism relationship model depicting the relationship between community and extra-community stakeholders to enable the effective development of sustainable tourism. The model attempts to balance two separate values - the economic value (which extra-community stakeholders focus on maximizing and which could overuse community resources) and the existence value (which communities tend to favour in terms of protecting resources). The intermediary, which is a subsystem of the model represents the value of the community and tries to balance the relationship between community and extra community stakeholders by a 'circular mechanism' and a 'control flow' mechanism to transfer financial capital from non financial resources.

In their model of Sustainable Tourism, Durydiwka et al., (2010) contended that sustainable tourism was related to three main types of tourism; viz.; natural environment (ST natural), cultural environment (ST cultural) and requiring certain skills from tourists (ST qualifying) and

that the holistic conception of sustainable tourism should be understood as a combination of various forms of tourism, complemented by common objectives. Butowski (2012) presented a versatile model of Sustainable Tourism designed as a theoretical construct which would constitute a theoretical basis for detailed application models, applicable in all conditions, on every reception area and for every type of tourism. The aim of the sustainable tourism model was to strive for a state of equilibrium in fulfilling the needs of two main stakeholder groups; viz.; tourists and community residents. It is a short term cost-benefit model which considers tourism development and its concomitant benefits to both residents and tourists versus resource degradation as the unavoidable cost to be incurred due to tourism development. It considers the minimum/maximum accepted level of benefits (*need fulfillment*) of both tourists and residents versus the minimum/maximum/unavoidable accepted level of costs (*degradation*) of the natural and anthropogenic environment, where minimum accepted benefits and maximum accepted degradation are the two pairs of interrelated independent variables and unavoidable degradation and maximum benefits are the dependent variables. Sustainable tourism is the area of balance in fulfilling the needs of both stakeholder groups.

Numerous other models of Sustainable tourism have been proposed by various researchers to suit their particular types of tourism promotion through research objectives and destination requirements. The model of sustainable tourism based on systematic analysis (Camus et al., 2014) views the tourist sector as a complex social system (due to its multiple components) involved in multiple mutual interactions which successfully integrates the principles of sustainable development so as to ensure long term sustainable tourism. Kristinic Nizic and Drpic (2013) suggest a model of sustainable tourism management for a destination based on the SWOT

analysis of the tourism development of the destination. The Management Model so suggested for sustainable tourism uses an association/organization of various stakeholder groups in clusters whose activities will be designed and coordinated by a 'Centre for Sustainable and Responsible Tourism of a Destination'. Such an interdisciplinary approach will not only provide for synergy in the effort towards sustainable tourism but will, both individually for each stakeholder and collectively for the destination, eliminate the negative phenomena of tourism development while emphasizing its advantages.

2.5.3 Structural Equation Modeling

Structural Equation Modeling is a statistical technique for testing causal relationships based on non - experimental data and allows researchers to study real life phenomenon linking the philosophy of science to theoretical and empirical research. (Bagozzi & Yi, 2012) Its ability lies in the assessment of latent or unobserved variables at the observation level (measurement model) and testing hypothesized relationships between latent variables at the theoretical level (structural model) (Hair et al., 2012). SEM has recently gained popularity as a statistical technique in a number of academic disciplines (Hair et al., 1998, Schumacker & Lomax, 2004) and is one of the most popularly used statistical techniques in behavioral and social sciences for the testing of complex models involving several independent and dependent variables. (MacCallum and Austin, 2000; Heene et al., 2011) It is a method of multivariate statistical analysis capable of measuring underlying constructs identified by factor analysis and assessing the paths of hypothesized relationships between constructs. (Klem, 2000) SEM allows for the estimation of a series of independent multiple regression equations simultaneously and while incorporating latent variables into the analysis, accounts for measurement errors in the estimation process.

(Hair et al., 1998) SEM can be tested using a one step approach wherein the measurement and structural model are simultaneously tested in a single analysis or two step approach wherein the measurement and structural models are estimated separately. The measurement or the Confirmatory factor model of SEM depicts the pattern of observed variables for the latent variables in the hypothesized model while the structural component of SEM is a hypothetical model that prescribes relationships between latent and observed variables and relates the variables to other variables by providing path coefficients for each hypothesized relationship. (Nunkoo & Ramkisoorn, 2012b; Bagozzi & Yi, 2012). Though not a new statistical technique per se, its diffusion into tourism research is relatively recent and is used to test various types of theoretical models (Chi & Qu, 2008, Gross & Brown, 2008, He & Song, 2009, Vargas- Sanchez et al., 2011; Nunkoo & Ramkisoorn, 2011, 2012a; Nunkoo et al., 2012) but is subject to debate and controversy with respect to reporting its fit indices (Hu & Bentler, 1998; Heene et al., 2011) sample size, estimation methods, multivariate normality etc.(Sun et al., 2011; Ryu, 2011; Zhong & Yuan, 2011)

2.5.4 Structural Equation Modeling and Sustainable Tourism

While Structural Equation Modeling (SEM) is not a new statistical technique (Joreskog, 1967; 1969) its usage in tourism research is relatively recent. Yoon et al., (2001) used SEM to examine the effects of the exogenous constructs dealing with economic, social, cultural and environmental impacts of tourism on two endogenous constructs - the first being total impact and the second being the residents' support for tourism development. Ko & Stewart (2002) used SEM to test the relationship between residents' perceived tourism impacts and attitudes towards host community in Korea and found that community satisfaction was closely related to perceived positive and

negative impacts which further caused their attitude towards additional tourism development. [Dyer et al., \(2007\)](#), developed a structural model to describe tourism impact perceptions of the residents in Queensland, Australia and its subsequent effect on the resident support for tourism development, wherein positive economic impact had the largest influence on support for tourism development. [Gross & Brown \(2008\)](#) used SEM to examine the relationship between involvement and place attachment in a tourism context. [He & Song \(2009\)](#) investigated the mutual relationships among tourists' perceived service quality, value, satisfaction and intentions to repurchase package tours from travel agents using SEM.

[Ballantyne et al., \(2011\)](#) attempted to investigate the extent to which wildlife tourism experiences positively impact tourists' awareness, appreciation and actions, in relation to the specific wildlife encountered as well as the environment in general, using SEM to identify those factors, that best predict positive, long term learning and environmental behavior change. [Nunkoo & Ramkissoon, \(2011\)](#) developed a model of community support based on social exchange theory using SEM and suggested that residents' support for tourism was influenced by perceived benefits, perceived costs and community satisfaction. [Vargas - Sanchez et al., \(2011\)](#) used SEM to investigate the possibility of proposing a universal model to explain residents' attitude towards tourism development given its wide popularity with tourism researchers and it supported the hypothesis that positive impacts have a favorable influence on residents' perspective. [Assante et al. \(2012\)](#) used SEM to construct a model to understand resident perceptions about tourism impacts in Hawaii and their consequent involvement and satisfaction with tourism, so as to increase the sustainability of future tourism development. [Hallak et al., \(2012\)](#) attempted to examine and develop a model using SEM, of how place identity,

entrepreneurial self efficacy and support for community, influence the entrepreneurial performance of small and medium tourism enterprise owners (SMTE) and found that place identity (the place from where the business operates) of tourism entrepreneurs has a significant positive direct as well as indirect effect on entrepreneurial performance.

Ramkisoorn et al., (2013) used SEM to examine the four dimensions of place attachment as a second order construct and studied its relationship with place satisfaction and low and high effort pro-environmental behavioural intention. Romao et al., (2014), used SEM along with other statistical techniques to depict the relationship between tourist choice of a particular trip (boat tour) and the effect of this choice on their satisfaction and loyalty of tourists as well as its implications for the marketing and management of the destination. Xu & Fox, (2014) undertook a study of visitors to the protected areas in different cultural contexts viz. China and the UK, to explore whether the value a person attaches to the environment, influences their attitude towards sustainable tourism development in National Parks and found that eco-centric values significantly influence people's attitude towards tourism and sustainable development.

2.6 Literature Review (Individual and Consolidated)

2.6.1 Research Gap

Systematic reviews are considered an acceptable standard for evaluating the current state of scientific knowledge regarding specific research issues. Research gaps are areas/issues/questions that have either not been answered appropriately or at all, in a given field of study. The identification and prioritization of research gaps allows for the rapid generation of subsequent research and informed inputs from stakeholders, for the use of a wide audience including other

researchers, academicians, funding organizations, government, non-governmental organizations and the like. Most importantly, it emphasizes the need or necessity of conducting a research as it specifies the difference between what exists in terms of knowledge i.e. theories, assumptions or practices and what is required or targeted i.e. what is to be done.

For Objective 1, since no such study has been conducted in the state of Goa with regard to an assessment of domestic and international tourists' perception about the infrastructure, facilities and amenities available for tourism in the state using the most preferred tool of Importance-Performance Analysis, this study aims at carrying out such a study in order to shed light on the same and provide insights to Destination Planners and Organizers on improving the same with a view to strengthening the destinations competitiveness and sustainability in the long run.

For Objective 2, Literature review reveals that since no similar study has been conducted in the state of Goa with respect to an assessment of residents' perceptions about the impact of tourism development in the state, whether these perceptions are influenced by the degree to which residents derive personal benefit from tourism and consequently whether it affects their support for future tourism development and tourism planning, this study aims at doing so. The outcome of such a research would provide clarity to Destination Planners and Organizers on developing strategies to involve and empower residents, such that sustainable tourism is promoted in the state in the long run.

For Objective 3, since a study on assessment of multiple stakeholder perceptions has not been conducted in the state of Goa either in terms of tourism or its sustainability, hence this study

aims at carrying out an assessment of the perceptions of all four stakeholder groups about sustainable tourism in the state, in order to shed light on the same and provide insights to Destination Planners and Organizers on how to promote sustainable tourism in Goa through stakeholder participation, involvement and collaboration in the long run.

For Objective 4, since no similar effort has been made with regard to the development of a model of sustainable tourism for the state of Goa, which, given the state's dependence on tourism, is essential for its sustainable continuity, this study aims at using the versatile SEM technique in order to shed light on the direction and extent of stakeholder perceptions about tourism's sustainability in the state and thereby attempt to develop a model / path design for Destination Planners and Organizers to implement, such that sustainable tourism becomes a working reality in the state.

2.6.1.1 Year of Publication

For Objective 1, in terms of the year of publication of research papers, of the 51 papers reviewed for the thesis in the area of Tourist satisfaction, perception and preference, Tourist Satisfaction seemed to have been gaining importance in recent years with there being a marked increase in articles published from 2006 onwards and with 2012 having nine works published in that year alone. Further studying visitor perceptions too, seemed to have gained importance from 2007 onwards and the technique of choice to study this area seems to be the Importance-Performance Analysis, **reiterating the importance of the area of tourist or visitor perception and satisfaction for study, particularly, from the point of view ensuring competitiveness of the destination.**

For Objective 2, it is observed that in terms of the year of publication of research papers, studies in the area of perceptions about tourism seemed to have gained importance in the late 1990s with there being a steady increase in articles published from 1998 onwards. While no article appeared to be published in 2003 in the journals reviewed, the number of articles being published from 2004 was relatively constant with 2012 having eight works published in that year alone, However, in 2014 & 2015, the number of papers published appears to have decreased. **The relatively constant number of papers in this area of research reiterates the importance of the area of study and of Residents as vital stakeholders from the point of view studying their perceptions to ensure sustainability of tourism in the destination.**

For Objective 3, it is observed that in terms of the year of publication of research papers, studies in the area of perception about sustainable tourism seemed to have gained importance in the early 1990s, yet prior to 2000, some years saw no publications in the journals reviewed. However, there was a steady increase in articles published from 2005 onwards and the finding is confirmed in the literature review given above with the number of articles being published from then on being relatively constant. 2012 having 12 papers and 2014 with 11 published in that year, indicate the increasing importance of stakeholder participation as a field of study to ensure sustainability of the destination. **An increasing interest in this field would stimulate awareness of stakeholder participation and involvement thus giving stakeholders the opportunity increase their understanding of the concept, allow them to make informed choices about tourism development in their community and the gain the power to influence the same either directly or indirectly.**

For Objective 4, it is observed that in terms of the year of publication of research papers, studies in the area of tourism models seemed to have started gaining importance in the mid 1990's. However the works were sporadic in nature till the mid 2000's and it is really from 2007 onwards that a substantial amount of work on tourism models in general and Structural Equation Modeling (SEM) in particular, began to make an appearance. Although SEM is by no means a recently developed technique, (Joreskog 1967, 1969) its usage in tourism though relatively recent, is increasing steadily, as is borne out by the findings of this study. Specifically, research works using SEM with 8 papers reviewed in 2014 and 7 so far in 2015 emphasize the importance of both tourism models and SEM in tourism. **Studies in Tourism adopt the SEM approach because of its ability to address research questions related to complex causal relationships between the constructs.**

Year of Publication	Objective 1	Objective 2	Objective 3	Objective 4	Total
1993	-	-	1	-	1
1994	-	-	-	-	-
1995	-	-	1	1	2
1996	-	-	-	-	-
1997	-	-	2	1	3
1998	1	2	-	-	3
1999	1	1	3	3	8
2000	1	1	-	-	2
2001	1	2	1	1	5
2002	1	4	1	1	7
2003	2	-	3	-	5
2004	1	3	1	-	5
2005	-	4	4	1	9
2006	3	3	5	-	11
2007	5	3	2	2	12
2008	2	4	4	3	13
2009	4	4	5	1	14
2010	5	4	7	4	20
2011	4	5	6	4	19
2012	9	8	12	7	36
2013	4	4	5	10	23
2014	1	2	11	9	23
2015	6	2	-	8	16
Total	51	56	74	56	237

Table 2.1: Year of Publication; Source: Author's own compilation

In terms of year of publication the consolidated picture too shows that for all four objectives, the publishing of papers in all four areas in relatively larger numbers started in the early 2000s with it gaining momentum from the mid 2000s, i.e. 2005-07 till date and the year 2013 having the highest number of papers being published. This indicates a growing interest in tourism research which is a very positive trend given that tourism as an industry is growing rapidly both in size and importance globally .

2.6.1.2 Number of Authors

The number of writers authoring/co-authoring a paper depend upon a number of different factors. The trend of multiple or increasing number of authors is seen not only in tourism and hospitality research but is reported in biomedical, chemical, economics and mathematics research as well. (Glanzel, 2002) The average number of authors for both hospitality and tourism journals in a 1998 survey was 1.5 which has now increased to 2.3 in hospitality journals and 2.2 in tourism journals. (Woods et al., 2010) Further, research by Katz and Martin (1995) on research papers written in scientific fields, indicated reasons for the popularity of this trend, the following of which may be applicable to hospitality and tourism research viz. increased emphasis on collaboration, researchers desire to increase their own popularity, visibility and recognition, increasing specialization and professionalism in the field etc. (Woods et al., 2010)

For Objective 1, in terms of the number of authors of the research works, it is observed that almost 50% of the works are co-authored by two researchers with single authors accounting for 30% of all research works in this study. Further, it is observed that papers co-authored by 3 and 4 authors accounted for only 21% of the research papers while among the 51 papers studied, 4 was the maximum number of co-authors. This is consistent with most other similar studies where

single and two author combinations are most commonly observed in terms of number of authors, irrespective of the area covered.

For Objective 2, in terms of the number of authors of the research works, it is observed that almost 50% of the works are co-authored by two researchers with single authors accounting for 30% of all research works in this study. Further, it is observed that papers co-authored by 3 and 4 authors accounted for only 21% of the research papers while among the 51 papers studied, 4 was the maximum number of co-authors. This is consistent with most other similar studies where single and two author combinations are most commonly observed in terms of number of authors, irrespective of the area covered.

For Objective 3, In terms of the number of authors of the research works, it is observed that 65% of the works are co-authored by two or more researchers, out of which approximately 40% and 24% were authored by two and three authors respectively while single authors accounted for 24% of all research works in this study. Further, it is observed that papers co-authored by four, five and six authors accounted for only 11% of the research papers and among the 74 papers studied, six was the maximum number of co-authors. As observed in other similar content analysis studies and most research works in general, papers co-authored by two authors tend to be the most popular probably due to convenience in coordination, resource sharing etc.

For Objective 4, it is observed that 45 out of 56 papers reviewed (80%) are co-authored by two or more researchers, out of which approximately 25% and 41% were authored by two and three authors respectively. Single authors accounted for over 19% of all research works in this study. Further, it is observed that papers co-authored by four accounted for only 14% of the research

papers and among the 56 papers studied, four was the maximum number of co-authors. As with similar studies in this field, research works are generally coauthored by two researchers for convenience in all aspects of research - data collection, analysis, writing, authors' reputation etc. In keeping with the findings of individual objectives, the consolidated table for number of authors too indicates that the largest number of research papers are co-authored by two and three authors while quite a sizeable number are written by single authors too.

Number of Authors	Objective 1	Objective 2	Objective 3	Objective 4	Total
1	15	10	18	11	54
2	25	18	30	14	87
3	8	20	18	23	69
4	3	5	5	8	21
5	-	3	2	-	5
6	-	-	1	-	1
Total	51	56	74	56	237

Table 2.2: Number of Authors: Source: Author's own compilation

2.6.1.3 Name of Journal

Authors usually aim at publishing research papers in reputed journals in the specific field of study related to the research work done and hence the journal of publication should be selected prior to writing the paper. (Derntl, 2014)

For Objective 1, the distribution of all 51 research papers in the 16 journals reviewed shows their classification in terms of the journal they were published in. While a variety of journals have been chosen by researchers to publish their work, Tourism Management appears to be the most popular journal of choice accounting for 21 out of 51 papers i.e. 41% of papers published. Tourismos with 6 papers (11%) and Annals of Tourism Research with 5 papers (10%) are the next most popular journals of publication. Munich Personal Research Archive (MPRA) accounting for 4 papers (8%) is popular with European researchers. The other 12 journals have a

relatively limited publication of 1 and 2 papers in terms of studying tourist or visitor perception and together account for only 30% of papers published. This is probably indicative of the fact that when it comes to typically tourism related topics, journals which appear to be principally tourism focused, seem to be the first choice of researchers for publishing their tourist/tourism based articles.

For Objective 2 all 56 research papers in the 20 journals were reviewed by their classification in terms of the journal they were published in. While a variety of journals have been chosen by researchers to publish their work, *Annals of Tourism Research* appears to be the most popular journal of choice accounting for 16 out of 56 papers i.e. 28% of papers published. *Tourismos* with 6 papers (11%) is the next highest journal of publication. *Tourism Management*, *Journal of Travel Research* and *Chinese Geographical Science* appear to be reasonably popular with researchers and account for 3 papers (5%) each. Other 15 journals have relatively limited publication of 1 and 2 papers in terms of studying resident perception and together account for only 44% of papers published. Further, as observed in most content analysis studies on tourism, while journals are chosen for publication depending on the area of research engaged in and the area of specialization of the journal, for tourism research, *Annals of Tourism research* with its reputation of being a top tourism journal, appears to be the journal of choice for publication.

For Objective 3, all 74 research papers in the 20 journals reviewed by classification in terms of the journal they were published in. While a variety of journals have been chosen by researchers to publish their work, the *Journal of Sustainable Tourism* appears to be the most popular journal of choice accounting for 16 out of 74 papers i.e. 22% of papers published. *Tourism Management*

with 9 papers is the next highest next highest journal of publication, Journal of Travel Research, Annals of Tourism Research, Journal of Sustainability and Sustainable Development with 5 papers (7%) and *Tourismos* appear to be reasonably popular with researchers possibly because the research works relate to the core area of the journal. Other 14 journals have relatively limited publication of 1, 2 and 3 papers in terms of studying resident perception and together account for only 40% of papers published. As the research works pertain to sustainable tourism, most researchers would attempt to get their works published in the premier journals in that field and JOST being the premier journal would naturally account for most number of papers, which is justified by the findings of this study.

In terms of Objective 4 all 56 research papers in the 18 journals were reviewed by their classification in terms of the journal they were published in. While a variety of journals have been chosen by researchers to publish their work, *Tourism Management* and *Annals of Tourism Research* appears to be the most popular journal of choice accounting for 29 out of 56 papers i.e. 46% of papers published. The remaining 16 journals account for 48% of papers published. This could well be justified on the grounds that these are the premier journals in tourism research and most authors who are working on SEM related research would want recognition for their work in reputed journals. Further, with the number of journals which publish SEM works increasing, SEM has become a pre-eminent multi-variate data analysis method.

Each of the objectives covered in this thesis was framed in order to answer specific research questions which were derived from the research gap revealed through literature review. Each research paper is written for a specific audience and is consequently sent to a specific publication outlet so as to assure the researcher/writer the greatest possible visibility for the work

Name of Journal	Obj. 1	Obj. 2	Obj. 3	Obj. 4	Total
Annals of Tourism Research	5	15	5	12	32
Tourismos	6	6	4	1	17
South Asian Jrnal of Trsm&Heritage	2	2	2	-	6
Jrnal of Hospitality&Leisure Services	1	1	-	-	2
Conference Proceedings	2	4	3	4	13
Intern'l Journal of Asian Tourism Mgt	1	-	-	-	1
Environment, Devpt,Sustainability	2	-	4	-	6
Munich Personal Research Archive	4	-	-	-	4
Environment Management	1	-	-	-	1
Tourism Management	21	3	9	17	50
Journal of Sustainable Tourism	1	-	16	2	19
Quality & Quantity	1	-	-	-	1
Jrnal of Destination Marketing&Mgt	1	-	-	2	3
Expert Systems With Applications	1	-	-	-	1
Journal of Business Research	1	-	-	-	1
Intrn'l Jrnal of Heritage Trsm. Service	1	-	-	-	1
Journal of Travel Research	-	3	-	2	5
Chinese Geographical Science	-	3	-	-	3
Open Urban Studies Forum	-	1	-	-	1
Journal of Sustainability&Green Biz	-	1	-	1	2
CRENoS	-	1	-	-	1
Scholar.Library Edutheses	-	3	-	-	3
Indian Streams Res Journal	-	1	-	-	1
Procedia	-	1	3	2	6
Journal Of Destination Mktg & Mgt	-	2	-	-	2
Intl Journal of Biz & Social Science	-	2	-	-	2
Ecology & Society	-	1	-	-	1
Asian Social Science Journal	-	1	-	-	1
Asia Pacific Jrnal of Trsm Research	-	2	-	-	2
Int'nal Jrnal of Anthropology	-	1	-	-	1
Int'nal Journal of Management Cases	-	-	1	-	1
Ocean and Coastal Management	-	-	2	-	2
Jrnal of Social Ecology&Sust Devpt.	-	-	3	-	3
Tourism Geographies	-	-	1	-	1
Tourism Review	-	-	2	-	2
Jrnal of Sustainability&Sust Devpt.	-	-	5	-	5
Journal of Tourism Research	-	-	5	-	5
Turizam	-	-	3	-	3
The Services Industries Journal	-	-	2	-	2
Int'nal Jrnal of Scientific Research	-	-	1	-	1
Journal of Rural Studies	-	-	1	-	1
People & Strategy	-	-	1	-	1
Tourism & Hospitality Research	-	-	-	1	1
Intnal Jrnal of Energy&Envrmnt	-	-	-	1	1
Int'nal Journal of Forecasting	-	-	-	1	1
European Jrnal of Social Sciences	-	-	-	2	2
Journal Of Transport Geographies	-	-	-	2	2
Indian Streams Research Journal	-	-	-	1	1
Ecological Economics	-	-	-	1	1
TURyDES	-	-	-	2	2
Total Quality Mgt	-	-	-	2	2
Total	51	54	74	56	237

Table 2.3: Name of Journal; Source: Author's own compilation

done while allowing some measure of popularity and prestige through peer reviewed publication in a reputed journal. The journals considered most popular and suitable for publication by reputed authors in the specific field of tourism as related to the objectives of the thesis continue to remain the same as from the review of the objectives and include Tourism management with 59 papers (33%), Annals of Tourism research with 32 papers (13%), JOST with 19 papers (8%), Tourismos with 17 papers (7%) and conference Proceedings with 13 papers (5%).

2.6.1.4 Region of Study

With the considerable growth and development of the hospitality and tourism industry and its globalization over the past few decades, the degree of research diversification at the country level is becoming increasingly important. For Objective 1, in terms of the countries where the research works in question have been carried out it can be observed that US and Australia each have an equal number of research works i.e. 5 each i.e. 10% each of the research work. Spain, Turkey and China with 4 papers each account for approximately 8% each of the research work done in this context in the respective countries. Hong Kong, Greece and Thailand with 3 papers each account for above 5% each, of country specific research works done in the field of visitor assessment. While countries like Egypt, India and Italy are increasing the number of research works in this field, they, along with the remaining 14 countries, account for only 34% of country wise research work. This is in keeping with the findings of similar content analysis studies, where, initially such studies were conducted in developed countries like USA, UK & Australia, but have now shifted to countries where tourism is a growing industry and of great importance to their economy particularly, China, Turkey, Taiwan, Spain, Greece etc.

In terms of Objective 2, the names of the countries where the research works in question have

been carried out has been listed, reviewed and studied. It can be observed that US has the highest number of research works carried out with 16 papers (28%) being based there. Turkey with 5 papers (9%) is the next highest while Greece Spain, Africa and China with 4 papers each account for approximately 7% each, of the research work done in this context, in the respective countries. The remaining 14 countries account for just 19 papers (34%) of the research work. Prior similar studies conducted have indicated similar results and a survey of the geographical location shows that most studies on residents' perceptions of tourism originated in the US and were conducted in both rural and urban communities in different parts of US, hence accounting for the large number of papers published there. Similar research studies are slowly being replicated, in different countries around the globe, where tourism is important to the economy, thus accounting for less number of research works and also indicating that such research is yet to gain the popularity elsewhere that it has garnered in the US.

For Objective 3, the names of the countries where the research works in question have been carried out is listed studied and reviewed. It can be observed that US has the highest number of research works carried out with 12 papers (16%) being based there. UK with 7 papers is next highest while Turkey, Spain and Australia with 5 papers each account for approximately 6% each of the research work done in this context, in the respective countries. Italy, Brazil, Norway, India and Macedonia account for 20 papers (27%). The remaining 13 countries account for 20 papers (27%) of the research work thus indicating that research on stakeholders is gaining popularity. Further, as is the case in most similar studies, results indicate that pioneering research works originate in developed countries owing to conditions conducive to research existing there and this accounts for the relatively large numbers of research works in the developed countries.

As such areas gain prominence, in keeping with suggestions of eminent researchers to validate their findings by reproducing them in other geographical locations, similar studies are carried out elsewhere.

For Objective 4, it can be observed that US has the highest number of research works carried out with 9 papers (16%) being based there while Spain, Australia and Taiwan having 6 papers, each account for 32% of research while for China with 4 papers, Thailand, Greece & Turkey with 3 papers each account for approximately 16%, of the research work done in this context in the respective countries. The remaining 14 countries account for just 16 papers (28%) of the research work thus indicating that such research is not as popular in the rest of the world as it is in the US. This could also be indicative of the fact that most new research works are pioneered in developed countries particularly the US and after gaining prominence and acceptance, they diffuse to other countries where they may be replicated. This could also account for research being carried out in developing countries where tourism plays an important role in the economy eg. China, Greece etc.

Region of Study	Objective 1	Objective 2	Objective 3	Objective 4	Total
North America	7	17	14	13	51
South & Central America	1	1	4	-	6
Europe	11	13	30	13	67
Africa	1	7	3	1	12
Asia Pacific	24	12	17	26	79
Middle East	7	6	6	3	22
Total	51	56	74	56	237

Table 2.4: Region of study; Source: Author's own compilation

For the purpose of convenience of reporting the country where the study/research paper originated, the countries were clubbed into regions in the consolidated literature review. In the current study, the USA, though individually the highest contributor of research papers (42) when

considered as a region (North America) is the third highest contributor after Asia Pacific (79) and Europe (67) both taken as total of countries in the region. These findings are reinforced by [Ma & Law, 1998](#), [Park et al., 2011](#), where USA continues to be the strongest individual contributor in hospitality as well as tourism research and the regions of Asia-Pacific (because of the contributions of China, Australia and Hongkong, in their study) and Europe (because of the contribution of UK which was the second highest contributor in tourism and hospitality research, in their study) are the highest and second highest when considered as a region. ([Park et al., 2011](#)) USA appears to be the most prolific in this field presumably because of the large number of university and hospitality and tourism institutes/programs as compared to other countries, generating larger amounts of research. However, the historical domain of the region of Americas is gradually giving way to that of Asia Pacific and Europe is consistent with the findings of [Ma & Law, 1998](#) and [Xiao & Smith, 2006](#).

2.6.1.5: Page Count

It is generally understood that the length of a research paper is linked to its content and longer papers are believed to have better content. ([Abt & Garfield, 2002](#)) It is believed that the more comprehensive papers fall in the medium to large categories having sufficient literature review and analysis to account for their number of pages and hence the findings show that the research papers reviewed for this study seem to have sufficient literature review & analysis to contribute satisfactorily to theory. For Objective 1, in respect of the number of pages in the paper, the largest number of papers i.e. 25 (49%) fall in the relatively low category i.e. between 6-10 pages; 19 papers (37%) fall in the medium category i.e. having between 11-20 pages, 6 papers (12%) fall into the large category i.e. having between 21-30 pages. Only 1 paper studied had less than 5 pages.

For Objective 2, in respect of the number of pages in the paper, the largest number of papers i.e. 17 (30%) fall in the relatively (low) smaller article category i.e. between 6-10 pages; 22 papers (37%) fell in the medium category i.e. having between 11-20 pages, 13 papers (23%) fall into the large category i.e. having between 21-30 pages. 4 papers studied had more than 30 pages. It is generally believed that the more comprehensive papers fall in the medium to large categories having sufficient literature review and analysis to account for their number of pages, and papers in this study all seem to have sufficient number of pages to validate their literature review.

For Objective 3, in respect of the number of pages in the paper, the largest number of papers i.e. 17 (30%) fall in the relatively low category i.e. between 6-10 pages; 22 papers (37%) fell in the medium category i.e. having between 11-20 pages, 13 papers (23%) fall into the large category i.e. having between 21-30 pages. 4 papers studied had more than 30 pages. It is generally believed that the more comprehensive papers fall in the medium to large categories having sufficient literature review and analysis to account for their number of pages.

For Objective 4, in respect of the number of pages in the paper, the largest number of papers i.e. 53 (94%) fall in the medium to large category i.e. between 6-25 pages; 22 papers (37%) fell in the medium category i.e. having between 11-20 pages, 2 papers (3%) fall into the small category i.e. having between less than 5 pages. No papers had more than 30 pages. It is generally believed that the more comprehensive papers fall in the medium to large categories having sufficient literature review and analysis to account for their number of pages and are better accepted for the same reasons.

As is expected, major studies in tourism and hospitality too have longer length papers and have a

larger number of reference and citations and vice versa. However, while the largest group of research papers were relatively short in size i.e. between 6-10 pages, a large majority were of medium length i.e. between 11-20 pages.

Number of Pages	Objective 1	Objective 2	Objective 3	Objective 4	Total
>5 Pages	1	-	2	2	5
6-10 Pages	25	17	20	18	80
11-15 Pages	8	10	16	20	54
16-20 Pages	11	12	19	12	54
21-25 Pages	4	10	15	3	32
26-30 Pages	2	3	1	1	6
<30 Pages	-	4	1	-	5
Total	51	56	74	56	237

Table 2.5: Page Count; Source: Author's own compilation

2.6.2 Classification according to the Source and Methodology of data

Any research study can use a wide variety of data sources and methods to collect and analyze data and arrive at conclusions. Each methodology has its own strengths and limitations and the choice of methodology will have direct implications on the quality of data collected and the findings. The type of study i.e. whether Empirical (Analytical) or Conceptual influences the nature of study, whether qualitative or quantitative and to a greater or lesser extent, the type of data collected. Further, the particular area of study i.e. an industry or issue being studied, the research method i.e. the methodology used for data collection, the type of scale used as well as issues related to sample size, method, unit and response rate are covered in this section.

2.6.2.1 Type of Study

Research studies may be conceptual or empirical in nature. Considering that the type of study i.e. whether Empirical (Analytical) or Conceptual influences the nature of study whether qualitative or quantitative and to a greater or lesser extent, the type of data collected, they are explained

together. While the superiority of either method cannot be proclaimed with any degree of certainty, earlier, conceptual research which focused on the theory or concept explaining a phenomenon was considered superior to empirical research which conducted experiments to prove or explain a phenomenon as well as to provide the basis for new theories. Previous similar studies showed a larger number of conceptual studies with a suggestion to encourage field experiments. (Baloglu & Assante, 1999)

For Objective 1, it has been observed that the bulk of research work done (42 papers) has been empirical in nature accounting for 82% with only 7 papers i.e. (13%) being conceptual and 2 papers (only 4%) having both conceptual as well as empirical components thus indicating that researchers are moving towards the practical application of research concepts and testing the validity of theory in field situations. This is in keeping with the suggestions of eminent researchers in this and other fields, that it is important to replicate similar studies in different locations, at different times and in different settings so as to validate previous findings and/or identify new factors influencing the same.

For Objective 2, it has been observed that the bulk of research work done (54 papers) has been empirical in nature accounting for 96% with only 2 papers i.e. (4%) being conceptual thus indicating that researchers are moving towards empirical studies to test the validity of theory in field situations. This is as per the suggestions of eminent researchers in this and related fields, that it is necessary to replicate similar studies in different locations, at different times and in different settings so as to validate previous findings and/or identify new factors influencing the same. Further, empirical studies, either in new areas or replications of previous studies in the

same/different locations contribute to theory in the area of research/study thereby fulfilling the aim of research.

For Objective 3, it has been observed that approximately 77% of research work done, i.e. 57 papers have been empirical in nature, approximately 23% i.e. 17 papers are conceptual, thus indicating that researchers are working, both to increase conceptual knowledge as well as, are moving towards empirical studies, to test the validity of developed theory in field situations, which is essential if previous findings are to be validated and/or new factors influencing the same are to be identified.

For Objective 4, it has been observed that the bulk of research work done (37 papers) has been empirical in nature accounting for 66% with only 12 papers i.e. (21%) being conceptual and 7 i.e. (12%) of papers being both, thus indicating that researchers are moving towards the empirical studies to test the validity of theory in field situations. This is as per the suggestions of eminent researchers in this and related fields, to replicate similar studies in different locations, at different times and in different settings so as to validate previous findings and/or identify new factors influencing the same. Further, with SEM becoming such a versatile technique of multi-variate analysis capable of being used in a number of varying disciplines and fields, testing theoretical models empirically or revalidating the findings of similar studies in different geographical settings accounts for the larger number of empirical and analytical studies.

As observed from the table given below the bulk of the research both for individual objectives and overall has been empirical in nature accounting for 71% of all research papers and only 18% of them being conceptual in nature and 10% being both conceptual as well as empirical which

indicates an increasing focus on empirical research to make useful predictions. This is in keeping with similar studies done in the past with researchers suggesting that the field of tourism research employ more empirical studies so as to increase content of knowledge as well as credibility. (Dann et al., 1988)

Type of Study	Objective 1	Objective 2	Objective 3	Objective 4	Total
Empirical	42	54	37	37	170
Conceptual	7	2	22	12	43
Both	2	-	15	7	24
Total	51	56	74	56	237

Table 2.6: Type of Study; Source: Author's own compilation

2.6.2.2 Type of Data collected

The type of data collected for research purposes may be primary or secondary. Primary data is collected for a specific research problem and may in the case of a quantitative research design involve collection of data from a large representative sample of respondents or in the case of a qualitative research design collection of data from a small purposive sample. Primary data when collected adds to the existing store of knowledge in the form of secondary data. (Hox & Boeije, 2005) Further, an empirical study necessitates the collection of primary data and sometimes the use of secondary data as well collected and used for literature review, past statistics etc., while conceptual studies usually always use secondary data only.

For objective 1, it is observed that all 44 empirical papers use primary data and some secondary data as well (thus explaining the larger total figure 74) while the 7 conceptual papers make use of secondary data only. For Objective 2, it is observed that all 54 empirical papers use primary data and some secondary data as well, using both methods (explaining the larger total figures 95 & 97) while the 2 conceptual papers used secondary data only.

For Objective 3, it is observed that all 57 empirical papers used primary data, some used secondary data as well. The 17 conceptual papers used only secondary data.

For Objective 4, it is observed that 43 papers (77%) papers used primary data and 13 papers (23%) used secondary data while 9 papers (16%) used both. Data collected depends on the type and nature of research work and hence since most of the papers were empirical they used primary data with some secondary data probably from review of literature.

Hence from the standpoint of data individual objectives as well as from consolidated data, 57% of the research papers tended to use primary data with 35% used secondary data and only 8% used both, indicating a strong reliance on primary data. This is in keeping with similar studies done, which indicate that primary data was the most common type of data collected with some use of archival or secondary data. . (Baloglu & Assante, 1999) This is presumably because tourism and hospitality research in recent times, is being geared toward attitudes, perceptions, expectations and motivations of hosts and guests and must necessarily involve the collection of specific data related to the issue being researched and may use secondary data only to the extent that the appropriate source can be located, the data can be retrieved and it is relevant.

Data Collection	Objective 1	Objective 2	Objective 3	Objective 4	Total
Primary	44	54	37	43	178
Secondary	30	43	22	13	108
Both	-	-	15	9	24
Total	74*	97*	74	65	310

Table 2.7: Type of Data collected; Source: Author's own compilation
Note * some papers used more than one method of data collection

2.6.2.3 Nature of Data collected

Qualitative and quantitative data are the two basic methods of data collection and can be

evaluated from a theoretical as well as practical standpoint. Qualitative and quantitative data provide a tradeoff between the generalizability and specificity of the data and its applications. While both have their own advantages and limitations, quantitative data is considered more objective, accurate, replicable, standardized and suitable for summative evaluations while qualitative data is considered more flexible, sensitive and suitable for formative evaluations. (Hox & Boeije, 2005) While empirical studies necessitate primary data collection, they consequently also favor quantitative methods of data collection, in order to get the required sample size and response rate. However, in order to develop and/or refine the instrument of data collection, or in some cases to supplement quantitative data collected, researchers may make use of qualitative data collection methods too. Conceptual papers may, very rarely, make use of data collection methods but generally do not use data collection methods and may rely purely on theoretical data or secondary data.

For Objective 1, it is observed that all 42 empirical papers used quantitative methods, while 5 also used qualitative data collection methods, thus explaining the larger total figure of 47. The remaining 7 papers, being conceptual, did not use data collection methods.

For Objective 2, it is observed that 49 empirical papers used quantitative methods, while 7 also used qualitative data collection methods. The remaining 2 papers being conceptual, did not use data collection methods.

For Objective 3, it is observed that 22 empirical papers used quantitative methods, 23 used qualitative methods while 12 used both. The 7 conceptual papers did not use qualitative data

collection methods.

For Objective 4, it is observed that 39 (69%) papers used quantitative methods, while 7 (12%) also used qualitative data collection methods and 7 (12%) used both. The remaining 2 papers being conceptual did not use data collection methods.

Again, both from the standpoint of individual objective data as well as consolidated objective data, 71% of the research papers used quantitative data with 19% using qualitative data and only 9% using both, indicating a strong reliance on quantitative data. This is presumably because, in tourism and hospitality research, the characteristics of standardized data collection instruments usage, replicability and use of sophisticated techniques of analysis are largely used and recommended.

Nature of Data	Objective 1	Objective 2	Objective 3	Objective 4	Total
Qualitative	5	7	23	7	42
Quantitative	42	47	22	39	150
Both	-	-	12	7	19
Total	47	54	57	53	211

Table 2.8: Nature of data collected; Source: Author's own compilation
Note * some papers did not use either method of data collection

2.6.2.4 Study Area

In terms of the broad study area covered generally it varies based on researcher's preference, need of study as well as journal of publication.

For Objective 1, in terms of the study area covered, it was observed that 40 of the 51 papers i.e. 78% were in the broad study of area of tourism i.e. covering tourist preferences, perceptions and satisfaction. 2 i.e. 3% papers were in the area of conferences and event tourism, 3 papers i.e. 5% covered service providers i.e. Tourism businesses and Destination Management Organizations,

while 6 papers i.e. almost 12% covered the hotel industry specifically. However, all areas show a relation to the tourism and hospitality industry. This lends credence to the belief that the study of tourism is gaining importance in most countries in view of the growing importance of the service sector in general and tourism industry in particular, to economies the world over. Further, visitors to a destination are important and their perceptions and satisfactions influence repeat visits (customer retention and loyalty) which ultimately increases destination competitiveness, so important, in view of the vast array of options open to travelers today, in terms of opportunities, ease of travel, disposable income, awareness and information as well as mindset.

For Objective 2, it was observed that 22 papers each i.e. 39% each, of the 56 papers covered tourism impacts and residents attitude towards them and twelve i.e. 21% papers studied tourism planning and development. While there are real and perceived fears that tourism, especially poorly managed and mass tourism ventures, like any other economic activity, can have negative impacts on communities, it becomes vital to study both actual impacts and residents perception of them, so as to encourage development in keeping with residents needs and wants, such that tourism is sustainable in the long run. This lends credence to the belief that the host community of a destination is important and their perceptions and attitudes will affect the successful continuation of tourism in the state.

For Objective 3, it was observed that 21 papers i.e. 28%, of the 74 papers covered Sustainable Tourism and 14 (19%) covered Sustainable Tourism Development while 39 dealt with Stakeholders and Sustainable Tourism. As Stakeholders are the principal focus of this objective and an area of study, that is being recognized as vital to sustainability of tourism in a destination,

the findings lend credence to the belief that the stakeholders of a destination play an important role in sustainable tourism and that their perceptions and attitudes will affect the successful implementation of sustainable tourism in the destination.

For Objective 4, in terms of the study area covered, it was observed that 15 papers i.e. 26%, of the 56 papers covered Tourism Destination Management Model. 18 i.e. 32% papers studied Sustainable tourism models and 23 (41%) studied stakeholder participation models. This lends credence to the belief that tourism management of a destination is important and different approaches to sustainability of tourism in a destination are being researched. Further, the use of an appropriate model could affect the successful continuation of tourism in the state positively and vice versa.

Overall, it was observed that the main area of tourism which is the overall focus of the study was well represented in each of the objectives. However, in terms of the individual objectives, the research papers covered the key points of the concerned objective representatively.

Study Area	Objective 1	Objective 2	Objective 3	Objective 4	Total
Tourism	40	-	-	-	40
Conference	2	-	-	-	2
Tourism Business & DMO	3	-	-	-	3
Hotel Industry	6	-	-	-	6
Tourism Impacts	-	22	-	-	22
Resident Attitudes Towards Tourism	-	22	-	-	22
Tourism Planning & Development	-	12	-	-	12
Sustainable Tourism	-	-	21	-	21
Sustainable Tourism Development	-	-	14	-	14
Stakeholder & Sustainable Tourism	-	-	39	-	39
Tourism Destination Management Model	-	-	-	15	15
Sustainable Tourism Models	-	-	-	18	18
Stakeholder Participation Models	-	-	-	23	23
Total	51	56	74	56	237

Table 2.9: Study Area; Source: Author's own compilation

2.6.2.5 Research Method

For Objective 1, in terms of the research method used for data collection in the papers surveyed/studied, it is explicitly seen that 40 papers i.e. in 78% of the papers studied, the preferred method of research was the use of survey or questionnaire, which is justified, given that the papers were empirical and used primary data principally. The surveys used were generally offline and if administered, were done by trained surveyors to the respondents and collected either immediately or after a short time gap. Some questionnaires were mailed to respondents, while in a few cases, the telephone survey was used and in 2 papers (approximately 4%) Semi-structured interviews were used. In very few papers, Observation (1 paper) and Focus group (1 paper) were used, clearly indicating the lack of preference or in some cases lack of suitability of these methods for the studies in question. The 7 conceptual papers which used only secondary data, relied solely on the Literature Review /Qualitative Content Analysis method. Thus, as in similar Content Analysis studies, in the case of empirical research, which used primary data, questionnaires/surveys were the method of choice.

For Objective 2, it is explicitly seen that for 50 papers i.e. in 89% of the papers studied, the preferred method of research was the use of survey or questionnaire. The surveys used were generally offline and if administered to the respondents, were done so by trained surveyors and collected either immediately or after a short time gap. This is justified in terms of the fact that the large majority of papers used primary data, necessitating the use of questionnaires/surveys. In 8 papers (approximately 14%) semi structured interviews were used. In a few papers, in depth interviews (6 papers) & secondary data (7 papers) were used, indicating that these methods are supplementary methods for the studies in question. The use of multiple methods enables a richer

understanding of the research problem and improves the validity of the findings ultimately adding value to research. The 2 conceptual papers having used only secondary data, relied solely on the Literature Review Method.

For Objective 3, it is observed that in 24 papers (32%) of the papers studied, the preferred method of research was the use of survey or questionnaire. In 12 papers (approximately 16%) semi structured interviews were used. Case studies were used in 14 papers (19%) & Secondary data was used in 32 papers (43%), while focus group and In depth Interviews were used in 5 and 6 papers respectively, indicating that this method is a supplementary methods for the studies in question. The 17 conceptual papers which used Case Study and secondary data, relied solely on the Literature Review Method. Further, while it is understood that empirical papers must make use of primary data and questionnaires/surveys are the most popular means of collecting this data, the need to substantiate data collected from primary sources through interviews both semi-structured and in depth, is increasingly being felt, thus accounting for the growing popularity of these methods. Secondary data by itself, as well as through case studies is also a popular research method.

For Objective 4, it is explicitly seen that 37 papers i.e. in 66% of the papers studied, the preferred method of research was the use of survey or questionnaire which considering the studies are empirical in nature is a valid choice. The surveys used were generally offline and if administered were done so by trained surveyors to the respondents and collected either immediately or after a short time gap. In 7 papers (approximately 12%) semi structured interviews were used. In a few research papers, Focus group (3 papers) and Case study (6 papers) were used, indicating that

these methods are supplementary methods for the studies in question. 16 papers having used only secondary data relied solely on the Literature Review Method.

In terms of the research method used, since the data was principally primary in nature, the questionnaire was the preferred method of choice both for individual objectives and overall too, except in the case of Objective 3 where some emphasis was given to secondary data. Further, since most papers make use of both primary and secondary data, overall too, the second most preferred method of data collection was secondary data used presumably to supplement the primary data collected. As with similar studies conducted in the past, the survey using questionnaire method but supplemented by archival data was most preferred. (Baloglu & Assante, 1999)

Research Method	Objective 1	Objective 2	Objective 3	Objective 4	Total
Questionnaire	40	50	24	37	151
Observation	1	-	2	-	3
Semi-Structured Interview	2	8	12	7	29
In Depth Interview	-	6	6	-	12
Focus Group	1	-	5	3	9
Case Study	-	-	14	6	20
Secondary Data	-	7	32	16	55
Action Research	-	-	5	-	5
Qualitative Content Analysis	7	-	-	-	7
Total	51	71*	100 *	69 *	291

Table 2.10: Research method; Source: Author's own compilation

Note * some papers used more than one Research Method

2.6.2.6 Type of Scale

One of the main sources of knowledge development in tourism research has been survey research and it is through surveys of tourists, tourism industry and residents living in a destination that understanding of the positive and negative impacts of tourism and consequently tourist needs, has improved. The most commonly used scale in measuring attitudes and beliefs is the Likert

scale which has a variation in the number of points of which the five point scale appears to be the most popular choice, perhaps more out of habit of repetition than from any research justification. Since the large majority of papers studied used questionnaires for data collection, in addition to the basic biographic details asked, most papers used scales to assess preferences and attitudes. The most commonly used scale was the Likert Scale which places opposing viewpoints at the end points of the scale and the mid-point of the scale represents a neutral attitude. However, what differed among the papers was the number of points in the scale. Irrespective of the number of points on the scale, the Likert scale is an attempt to convert constructs into a relatively consistent measurable scale.

For Objective 1, since the 7 conceptual papers did not use scales, out of the remaining 44 papers reviewed the 5 point Likert Scale was the most popular with 24 papers (54%) using it, the 7 point scale had 9 papers (20%) and 3 point scale had 6 papers (13%) being used respectively. The 11 point scale was used in 3 papers (approximately 7%). Only 1 empirical paper did not use a scale.

For Objective 2, since the 2 conceptual papers did not use scales, out of the remaining 54 papers reviewed, the 5 point Likert Scale was the most popular with 43 papers (79%) using it, the 7 point scale was used by 1 paper (2%) and 3 point scale had 7 papers (13%) being used respectively. Using different number of points in a scale (Mixed Scale) is another method used to improve its measurability and often, a mixed scale is used so as to introduce variability and reduce response bias.

For Objective 3, since the 17 conceptual papers did not use scales, out of the remaining 57

papers reviewed, the 5 point Likert Scale was the most popular with 21 papers (28%) using it, the 7 point scale was used by 4 papers, 3 point scale was used by 8 papers and 10 point scale by 3 papers. 21 papers (28%) did not use a scale.

For Objective 4, out of the 56 reviewed only 45 papers used a scale and the 5 point Likert Scale was the most popular with 33 papers (59%) using it, the 7 point scale was used by 4 papers (7%) and 3 point scale had 5 papers (9%) and 11 point scale being used by 3 papers (5%) respectively. 11 papers (20%) used no scale.

Further, a review of all survey based research studies published in the Journal of Travel Research from 2006-2010 indicates that 33% and 32% used the five point and seven point scale respectively for their research without providing adequate justification for their choice except that it was used in similar studies. (Dolnicar et al. 2011) Likewise, in this research too, the most commonly used scale both individually and overall for all objectives was the five point scale.

Type of Scale	Objective 1	Objective 2	Objective 3	Objective 4	Total
3 Point Likerts	6	7	8	5	26
5 Point Likerts	24	43	21	33	121
7 Point Likerts	9	1	4	4	18
10 Point Likerts	-	-	3	-	3
11 Point Likerts	3	-	-	3	6
No Scale	1	-	21	11	33
Mixed	-	3	-	-	3
Total	43	54	57	56	210

Table 2.11: Type of Scale; Source: Author's own compilation
Note * some papers did not use any scale

2.6.2.7 Sampling Unit

Generally the sampling method is influenced by what is followed in past researches (literature review) and based on the purpose of the study or the issue being studied. Closely associated with

the sampling unit in a research paper are the sampling methods used, the sample size and the response rate. While the sampling method and the sampling unit are influenced by what is followed in past researches (literature review) and by what is considered appropriate, the appropriate sample size can be determined mathematically or likewise be based on past similar research studies. Response rate depends upon a number of extraneous factors.

For Objective 1, since the 7 conceptual papers do not have a sampling unit, method, size or response rate, the remaining 44 papers studied are considered in the analysis. In depicting the sampling unit used in the papers studied, it was observed that the majority of papers used the tourist or visitor to the destination as the sampling unit i.e. 43 papers (98%) which is predictable given the fact that they were research works on tourist satisfaction, preference and perception. A few papers used the service providers or the Destination Management Organizations as the main unit both individually and as a supplementary sampling unit along with the tourist, accounting for 10 papers or approximately 22%, and thereby accounting for the higher total number.

For Objective 2, it was observed that all of papers used residents as sampling unit in assessing host perceptions i.e. 54 papers (100%). The two conceptual papers relied on research articles. This is absolutely justifiable in the context of this being a study on residents or the host community, which are a particular stakeholder category whose perceptions and attitudes have been proved conclusively, to influence the growth, development and sustainability of tourism in a destination.

For Objective 3, since the 17 conceptual papers do not have a sampling unit, method, size or response rate, the remaining 57 papers studied are considered in the analysis. In depicting the

sampling unit used in the papers studied, it was observed that 49 of papers used stakeholders as the sampling unit in assessing stakeholder perceptions which is a fairly obvious conclusion, given that the topic being researched was stakeholder perception. 24 papers used research articles and one used the tourist as sampling unit. The 17 conceptual papers relied on research articles.

For Objective 4, it was observed that 34 i.e. (60%) papers used stakeholder as the sampling unit in assessing stakeholder perceptions of tourism sustainability as they are an important group covering all categories of people having vested interest in the destination and whose attitudes affect the sustainability of tourism in a destination i.e.12 papers (21%) used residents as sampling unit while 4 papers (7%) used tourist specifically as a sampling unit. 6 papers relied on research articles.

Of the 230 papers studied, it was observed that the main sampling units were stakeholders, residents and tourists while the conceptual papers used research articles as their sampling unit.

Sampling Unit	Objective 1	Objective 2	Objective 3	Objective 4	Total
Tourist	43	-	1	4	48
Stakeholder	-	-	49	34	83
Services Providers & DMO	1	-	-	-	1
Resident	-	54	-	12	66
Research Articles	-	2	24	6	32
Total	44	56	74	56	230

Table 2.12: Sampling Unit; Source: Author's own compilation

Note * some papers did not use any sampling unit

2.6.2.8 Sampling Method

Sampling is vital to any research process because it helps to determine the quality of inferences made by the researcher that arise from the findings of the study. While it is typically held that quantitative research typically follows random sampling schemes and non-random sampling

schemes are used by qualitative research [Onwuegbuzie and Leech \(2005a\)](#) state that both random and non-random sampling can be used in qualitative and quantitative studies but the choice of method should depend upon the generalization of interest i.e. whether it is statistical or analytical.

For Objective 1, in terms of the sampling methods used, since 7 were conceptual papers and did not use a sample, out of the 44 empirical papers reviewed, 27 papers i.e. 61% made use of the Random Sampling Method indicating this to be the most popular and commonly used method to ensure a proper sample, followed by 12 papers i.e. 27% which made use of Convenience Sampling Method;. Purposive Sampling and Stratified Random Sampling, used in 2 papers each (4%) and Probabilistic Sampling used in 1 paper (approximately 2%) were relatively less used and less popular methods.

For Objective 2, since 2 were conceptual papers and did not use a sample, out of the 54 empirical papers reviewed, 41 papers i.e. 76% made use of the Random Sampling Method, 12 papers i.e. 27% made use of Convenience Sampling Method; indicating these to be the most commonly used methods to ensure a proper sample. Purposive Sampling used in 3 papers (5%), Stratified Random Sampling used in 4 papers (7%) and Convenience Sampling used in 5 papers (approximately 9%) were relatively less used and less popular methods. The aim of any research using primary data, is to collect it from a random sample, so as to ensure elimination of bias to the greatest extent possible and to ensure its similarity to the population, thus accounting for the popularity of random sampling method.

For Objective 3, in terms of the sampling methods used, since 17 were conceptual papers and did

not use a sample, out of the 57 empirical papers reviewed, 17 papers each i.e. 23% made use of the Random Sampling Method and Purposive Methods, 16 papers i.e. 21% made use of Convenience Sampling Method thus indicating that there was no common preference for sampling methods to ensure a proper sample and hence the method depended on other factors. Quota Sampling used in 3 papers (5%) and Stratified Random Sampling being used in 4 papers each (7%) were relatively less used and less popular methods. Most research works conducted in similar areas and depicted in similar studies use either random or convenience sampling to ensure a random sample and reduce bias. However, if the respondents to be surveyed were of a specific category, purposive sampling was used, which is reflective of the findings of this study too.

For Objective 4, in terms of the sampling methods used out of the 56 papers reviewed 22 papers i.e. 39% made use of the Random Sampling Method, 17 papers i.e. 30% made use of Convenience Sampling Method; indicating these to be the most commonly used methods to ensure a proper sample. Stratified Random Sampling used in 6 papers i.e. (9%) and Purposive Sampling used in 5 papers (8%) and were relatively less used and less popular methods.

Sampling Method	Objective 1	Objective 2	Objective 3	Objective 4	Total
Random	27	41	17	22	107
Stratified Random	2	4	4	6	16
Convenience	12	5	16	17	50
Purposive	2	3	17	5	27
Quota	-	-	3	2	5
Probabilistic	1	-	-	-	1
Door to Door	-	1	-	-	1
Cluster	-	-	-	1	1
Total	44	54	57	53	208

Table 2.13: Sampling Methods; Source: Author's own compilation

Note * some papers did not use any sampling method

In keeping with the common belief that random sampling tends to be associated with quantitative research, this research work tends to associate with the same belief both in terms of the sampling

method used in individual objectives and for all the objectives overall where random sampling method accounts for 107 papers i.e. approximately 51% (Creswell, 2015)

2.6.2.9 Sample Size

In quantitative research primarily, researchers calculate the required sample size before beginning to study the issue and that sample size usually remains constant throughout the study. A review of past literature may be used for sample size guidelines to carry out particular analyses that will be adequate, as well as have the appropriate power to detect effects. Using an adequate sample along with high quality data collection often results in reliable, valid, generalizable results as well as resource savings. (Bartlett et al., 2001) With reference to classification according to sample size for

For Objective 1, since the 7 conceptual papers did not use a sample, the data is based on the remaining 44 papers. It was noted that 14 papers (32%) used a sample size between 251-500 respondents, 10 papers (approximately 23%) used a sample size between 101-250 respondents, while 9 papers (20%) used a relatively larger sample of respondents between 501-750 respondents and 3 papers (7%) having a sample size between 750-1000. Only 8 papers used a sample size above 1000 respondents with 6 papers (approximately 14%) having a sample size between 1001-1250 respondents and 2 papers (4%) having a sample size of 1251-1500 respondents. Sample size may be calculated mathematically or determined based on literature review, the analysis indicates that relatively smaller sample sizes i.e. below 500 respondents and medium sized up to 750 respondents were used, small to medium samples seem to be the most popular and convenient choice of sample size .

For Objective 2, since the 2 conceptual papers did not use a sample, the data is based on the remaining 54 papers. It was noted that 21 papers (39%) used a sample size between 251-500 respondents. 6 papers each (approximately 11%) used a sample size between 101-250, 501-750 and above 1500 respondents, while 9 papers (20%) used a relatively larger sample of respondents between 501-750 respondents. Only 3 papers (5%) of the papers had sample size below 100 respondents. The analysis indicates that resident sample sizes vary, depending on different factors, but a medium sample size between 250-500 seems to be the most popular. Since the sample size may be calculated mathematically or determined based on literature review and the analysis indicates that relatively smaller sample sizes i.e. below 500 respondents were used, indicating that small to medium samples seem to be the most popular and convenient choice of sample size. However depending on the need of research, the sample size used varied from very small to very large sample size.

For Objective 3, since the 17 conceptual papers did not use a sample, the data is based on the remaining 57 papers. It was noted that 21 papers (39%) used a sample size between 251-500 respondents. 6 papers (approximately 11%) used a sample size between 101-250, 501-750 and above 1500 respondents, while 9 papers (20%) used a relatively larger sample of respondents between 501-750 respondents. Only 3 papers (5%) of the papers had sample size below 100 respondents. The analysis indicates that resident's sample sizes vary depending on different factors but a medium sample size, between 250-500, seems to be the most popular.

For Objective 4, 16 papers (28%) used a medium sized sample, 10 papers (17%) used a very large sample size above 1500 respondents. 11 papers (approximately 19%) used a relatively large sample size i.e. between 751-1500 sample, while 9 papers (16%) used a very small sample of

respondents below 100 respondents. The analysis indicates that sample sizes vary depending on different factors but a medium to large sample size between 500-1500 seems to be the most popular. This could be accounted for perhaps by the fact that both very large and very small sample sizes have their own unique problems when SEM is used as a statistical technique.

For individual objectives as well as the consolidated research, it has been found that sample sizes between 250-750 respondents were most common though many research papers used as small a sample size as below hundred too. However since sample size determination is both objective and subjective to a degree, if the researcher reports procedures used in sample size determination it will allow the reader to make an informed judgement on its appropriateness and adequacy.

(Bartlett et al., 2001)

Sample Size	Objective 1	Objective 2	Objective 3	Objective 4	Total
>100	-	3	27	9	39
101-250	10	6	10	1	27
251-500	14	21	6	6	47
501-750	9	6	7	16	38
751-1000	3	5	2	5	15
1001-1250	6	4	1	3	14
1251-1500	2	3	-	3	8
<1500	-	6	4	10	20
Total	44	54	57	53	208

Table 2.14: Sample Size; Source: Author's own compilation

Note * some papers did not use a sample

2.6.2.10 Response Rate

The response rate is an important factor in assessing the value of survey research but this response rate is influenced by a number of factors including whether the survey is web based or mail, the timing of the survey, the length or size of the instrument, the motivation to complete etc. Further, what is considered an acceptable response rate varies from study to study, location

of study, respondents, researcher's objectives etc. One of the major concerns in terms of response rate is that a low response rate may harm the representativeness of the data collected due to non response bias. As a result, [Dolnicar et al., \(2009\)](#) suggest that using a multi-mode survey, though involving more work than mail or online surveys, can be implemented quite easily, does not cost significantly more but gives an appreciably higher response rate. Response rate is generally dependent on extraneous factors often beyond the control of the researcher, but it plays an important role in the analysis of a research paper and the applicability of its findings.

For Objective 1, since the 7 conceptual papers were excluded in the analysis for the sample, only 44 papers are considered. 35 papers (i.e. 79% approximately) of the papers studied had a relatively high response rate ranging from 61-100. Out of these 15 papers (34%) had a response rate of 81-90% and 8 papers (18%) had a very high response rate of 91-100%. 5 and 7 papers respectively (11% and 16%) had response rates of 71-80% and 61-70% respectively. The 9 remaining papers had relatively lower response rates, with 4 (9%) having response rate from 31-50% and of the remaining 5 papers, 4 (9%) had a low response rate of 21-30% and with 1 paper having a very poor response rate below 10%.

For Objective 2 since the 2 conceptual papers were excluded in the analysis for the sample, only 54 papers are considered. 36 papers (i.e. 66% approximately) of the papers studied had a relatively high response rate ranging from 61-100. Out of these 23 papers had a response rate of 81-100% and 8 papers (18%) had a very high response rate of 91-100%. Only 2 papers (4%) had a low response rate of 21-30%. However depending on the need of research , availability data and the willingness of respondents, the response rate varies and this study showed a response rate

in general that tended to be on the higher, more acceptable side. Generally, lower the response rate, the less applicable the research findings and results to the population.

For Objective 3, since the 17 conceptual papers were excluded in this analysis as they did not use a sample, only 57 papers are considered. 38 papers (i.e. 66% approximately) of the papers studied had a relatively high response rate ranging from 61-100. Out of these 32 papers had a response rate of 81-100% and 22 papers had a very high response rate of 91-100%. Only 9 papers had a low response rate of 11-30%. Generally, lower the response rate, less applicable the research findings and results to the population.

For Objective 4, 37 papers (i.e. 66% approximately) of the papers studied had a relatively high response rate ranging from 61-100. Out of these 14 papers (25%) had a response rate of 81-100% and 8 papers (14%) had a very high response rate of 91-100%. Only 12 papers (21%) had a low response rate of 11-40%.

Response Rate	Objective 1	Objective 2	Objective 3	Objective 4	Total
>10%	1	-	-	-	1
11-20%	-	2	4	5	11
21-30%	4	5	5	-	14
31-40%	2	5	1	5	13
41-50%	1	6	1	2	10
51-60%	1	-	4	4	9
61-70%	7	5	4	9	25
71-80%	5	8	6	14	33
81-90%	15	12	10	6	43
91-100%	8	11	22	8	49
Total	44	54	57	53	208

Table 2.15: Response Rate; Source: Author's own compilation
Note * some papers did not use a sample and did not have response rate

The response rates of the papers studied were generally found to be in the upper medium to very high categories with 72% of the studies falling in this category although, 23% also fell in the

low-medium to low category. Generally, lower the response rate, less applicable the research findings and results to the population, but since approximately 72% of the papers studied had high response rate, findings of the study would generally contribute satisfactorily to knowledge.

2.6.3 Statistical Technique

Like any emerging field of research, tourism research must strive for credibility and acceptance by other established disciplines which can be done by producing a body of knowledge through extensive and rigorous effort which is both conceptually and methodologically sound. (McGrath et al., 1982) Proper application of appropriate statistical techniques in data analysis is one such measure of rigor. (Crawford-Welch & Mc Cleary, 1992) The application of quantitative and qualitative techniques in tourism research has gained momentum possibly due to the fact that with the increasing reliance of destinations on tourism, the industry has grown globally and more resources have been devoted to the collection of quantitative data and the maintenance of tourism data sets. (Dwyer, 2012) This in turn has probably encouraged researchers interested in quantitative data analysis, to give greater priority to tourism research. Further, destination managers, local governments and general stakeholders of the industry who, in their need to make more informed decisions, to frame and evaluate better policies, are increasingly relying on quantitative research. In today's information age, data scarcity is no longer a problem. The sheer volume of data readily available added to that which can be easily collected for any purpose, is overpowering. Effective research lies in sifting and sorting through the huge amounts of data collected and in the correct interpretation of its implications for which, identifying and using the correct statistical tools and techniques are essential. A wide variety of techniques are generally available for carrying out a research work and the technique used depends on its suitability, on

the researcher's preference and knowledge and to a great extent, on past researches studying similar areas. They include Chi-square, comparison of means through independent sample and paired sample t tests, ANOVA, Correlation, Regression (Linear and Multiple), Factor & Cluster Analysis, Structural Equation Modeling etc.

For Objective 1, 10 techniques have been used in the 51 papers studied. The most popular technique in assessing tourist perceptions and satisfaction with destinations attributes appears to be the Importance-Performance Analysis (IPA), which has been used in 24 papers accounting for 47% of the total papers studied. Mean Analysis, ANOVA, Factor Analysis and Structural Equation Modeling, used in 4 papers individually, accounted for approximately 8% each. While regression (approximately 4%) was used in two papers, Chi Square and Correlation were used in just one paper each, accounting for a miniscule 2% in total. Descriptive statistics using frequency and percentages are commonly used by most research papers to explain the biographical variables and are used in 30 papers accounting for 58%. However, it is generally used in conjunction with other techniques and as a supplementary technique. The 7 conceptual papers all used the Qualitative Content Analysis method exclusively, accounting for 13%.

For Objective 2, 11 techniques have been used in the 56 papers studied. The most popular technique used is descriptive statistics which is used by 35 papers (62%). However, it is generally used in conjunction with another technique and as a supplementary technique. Other techniques used in assessing resident perceptions and attitudes are Factor Analysis and Regression, which have been used in 22 & 18 papers accounting for 39% & 32% respectively. Mean Analysis is used in 11 papers, while t-test, ANOVA and Structural Equation Modeling are

used in 7 papers each, accounting for approximately 8% each. The 2 conceptual papers used the Qualitative Content Analysis method exclusively. Factor analysis is one of the most widely used methods to condense scale data into more meaningful factors having related variables without loss of meaning or data and so continues to be used. However, it is generally used in conjunction with other methods, of which Regression was previously very popular. Since the initial research works in this field made use of FA & Regression most subsequent works continued with the same. However, with the development and introduction of SEM which essentially uses Exploratory/Confirmatory Factor Analysis and Regression, its use is gaining popularity in similar studies currently carried out.

For Objective 3, 13 techniques have been used in the 74 papers studied. Besides descriptive statistics which is used by 19 papers and is generally used in conjunction with another technique as a supplementary technique, the other most popular technique used in assessing stakeholder perceptions and attitudes is Regression which was used in 24 papers accounting for 32% respectively. Mean Analysis, ANOVA and Structural Equation Modeling are used in the remaining papers. The 17 conceptual papers used the Qualitative Content Analysis method exclusively. As in similar studies, Regression appeared to be the technique of choice when it comes to assessing attitudes and perceptions, however, it was not used as a single technique but in conjunction with other techniques like descriptive statistics, mean analysis, ANOVA etc which seemed to be used depending on the nature and objectives of the study.

For Objective 4, 11 techniques have been used in the 56 papers studied. The most popular technique used is SEM which is used by 30 papers (53%), followed by descriptive statistics, which is used by 17 papers (30%). However, it is generally used in conjunction with another

technique and is as a supplementary technique. Other techniques used in assessing resident perceptions and attitudes are Factor Analysis and Regression, which have been used in 12 & 4 papers accounting for 21% & 7% respectively. Since this objective was to develop an appropriate tourism model for the state SEM which uses factor analysis would be the most popular techniques. Further, with the number of journals publishing SEM works increasing, SEM has become a pre-eminent multi-variate data analysis method. In addition, of all the multi-variate techniques in use, SEM continues to be the technique that is undergoing the most refinement and extension, causing it to be usable in different fields in different ways thus increasing its popularity.

Statistical Technique	Objective 1	Objective 2	Objective 3	Objective 4	Total
Factor Analysis	4	22	5	12	43
Qualitative Content Analysis	7	2	17	-	26
Action Research	-	-	3	-	3
Constant Comparative Method	-	-	2	-	2
SWOT Analysis	-	-	1	-	1
Matrix	-	-	-	3	3
Sustainability Value Map	-	-	-	1	1
Descriptive Statistics	30	35	19	17	101
Regression	2	18	24	4	48
ANOVA	4	7	6	2	19
Correlation	1	3	-	-	4
Mean Analysis	4	11	7	-	22
Chi Square	1	5	5	1	12
Cluster Analysis	-	4	2	1	7
I-P Analysis	24	-	-	-	24
Structural Equation Modeling	4	7	1	30	42
t Test	-	7	-	-	7
Total	81*	121 *	92 *	71	365

Table 2.16: Statistical Technique Used; Source: Author's own compilation

Note * some papers used more than one technique of analysis

The findings of this study indicate that 28% of the papers used Descriptive Statistics, 13% used Regression, 12% used Factor Analysis which is in keeping with similar studies in tourism and hospitality which state that the most extensive statistical technique used was Descriptive Statistics (Crawford-Welch & McCleary, 1992; Reid & Andereck, 1989) followed by

Regression, Factor Analysis, ANOVA. (Baloglu & Assante, 1999; Reid & Andereck, 1989, Dann et al., 1988) Most of the studies reviewed for Objective 4 indicated the use of Structural Equation Modeling, which is keeping with the suggestion of previous researchers to employ newer and more number of multivariate statistics so as to be able to deal with complex issues and increase the credibility in the field.

2.7 Summary

A review of relevant literature on all four objectives of the study indicate that when tourism is an integral part of any economy, if it is allowed to grow and develop in a haphazard manner, the industry will not be able to sustain itself in the long run. While sustainability of tourism in a destination depends upon a number of factors, principal among them is the attitudes and perceptions of individual stakeholder groups, as each group of stakeholders has an important role to play in the development of tourism in a destination. Attracting Tourists to a destination is the primary aim of the destination marketers but ensuring that they keep visiting the destination despite gaining experiences of other destinations and ensuring the destination remains competitive is vital for the sustainability of tourism in the destination. In order that that the attraction that provided the positive motivation for the trip (expectations) matches the tourist experience at the destination (perceptions), it is vital that the two remain compatible. In this context, literature relating to tourist expectations and perceptions about various destinations and the approaches to measure the same was reviewed. Findings reveal that by measuring tourist perceptions of various attributes at a destination, stakeholders can try to satisfy them and one of the best techniques for this type of analysis is the Importance- Performance Analysis (IPA). Literature review of host community perceptions towards tourism development indicate that

perceptions of residents in terms of the impacts of tourism, their perception of its level of development and their support for its future development in their community differ significantly depending on several socio-economic variables. Understanding host attitude towards tourism in a destination can help destination managers and policy makers ensure compatibility between resident and industry requirements such that sustainability is ensured. Findings of literature review reveal that in general, using the social exchange theory as a base, the more closely residents are related to tourism in a destination and the more beneficial they perceive it to be personally, the more positively they perceive its impacts to be and the more likely they are to support its future development.

Researching stakeholder groups and the significance of their interests and involvement with tourism has been a recurring theme in tourism literature. However much of the research work focused on individual stakeholder groups or comparisons of only some groups. In order to reduce conflict, increase collaboration and compromise and generally promote sustainable tourism, researchers have recommended that the views and interests of all tourism's stakeholders be considered before initiating and proceeding with any developmental efforts. Findings of literature reveal that dealing with multiple stakeholder perceptions is a complex issue. There is a need to ensure that all groups are included and that their views and opinions are considered in any discussion or effort in tourism planning and development in the destination. Efforts are to be made to educate stakeholders and communicate effectively with them so as to enable them to make informed decisions as well as participate effectively so as to make tourism a more fulfilling experience for all concerned. Despite it being widely researched both theoretically and empirically, many researchers believe that the problem of implementing sustainable tourism, lies

both in its practical application and the plethora of terms, concepts and approaches associated with it. Although the concept has been widely endorsed the method of delivery of sustainable tourism is not fully explored and routes and directions remain unclear. Research reveals overall, that the issues that prevent the successful implementation of sustainable tourism are stakeholder related and are to a great extent, associated with resources, priorities and organization. Hence, stakeholder identification, education, involvement and participation along with effective leadership is the key to any model for sustainable tourism in a destination.

In conclusion, since no attempt has been made to study the research objectives in the manner specified above, this research work is unique and will provide valuable insights to Destination Planners and Organizers in the state to enhance the tourism offer, the destination's competitiveness and ensure sustainability in the long run. It will both, validate previous findings by other researchers in different settings conducted at different times and/or suggest new avenues for future research and will go a long way toward improving the sustainability of tourism in the state.

CHAPTER 3

TOURISTS' PERCEPTION ABOUT TOURISM INFRASTRUCTURE

3.1 Introduction

Tourism plays a crucial role for national economies throughout the world. (Korres, 2008) The existence of a well developed system of infrastructure is necessary for any tourist destination to carve a place for itself both at the national and the international level and to deal with the intense competition from other similar destinations. (Papanastasiou, Laszaridis & Noulas, 2006; Sheykhi, 2009; Petrakis & Psycharis, 2004) The economy of the state of Goa is dependent on tourism to a great extent and therefore requires to attract new tourists to the state as well as to retain its regular visitors by encouraging repeat visitation. To do this effectively, it is necessary to evaluate tourist perceptions regarding the infrastructure and facilities available for tourism in the state and to maintain, improve and develop the same, in the light of this evaluation. This will not only ensure that tourist satisfaction with infrastructure and facilities in the state exceeds their expectations, but in the process, will enhance destination competitiveness. This chapter is an attempt to evaluate tourist satisfaction with the infrastructure and facilities available in the destination so as to enhance tourism promotion in the state.

The development of the tourism industry and the subsequent interest in investigating its implications has increased greatly over the past few decades. Tourism and travel is now considered one of the world's largest industries. The United Nations World Tourism Organization's (UNWTO's), Tourism 2020 Vision, forecasts that international arrivals are

expected to reach nearly 1.6 billion by the year 2020. Of these, worldwide arrivals in 2020 will be 378 million long-haul travelers and 1.2 billion will be intra-regional (UNWTO, 2008). For many countries tourism has become an important source of business activity as well as a generator of income, employment and foreign exchange.

The Tourism product, described as a series of determinants from variable destinations which produce an output for tourists, is widely recognized as being vitally important in the success of any tourist destination. Tourism research indicates the five main sectors in the overall tourism product namely, Hospitality, Attractions and Events, Travel Organizers and Intermediaries, Transportation and Destination Organization sectors. The varied expression of welcome given by the host community, to visitors to their destination, is considered to be *hospitality* while the *attractions* are what motivate the visit in the first place. Means of *transportation* allow for choices in reaching a destination while the *travel organizers and intermediaries* facilitate a satisfactory experience to the visitor. *Destination organizers* are the various public and private organizations that manage tourism in a destination.

With the rapidly growing scope of tourism and the accelerating pace of competition in this field, if tourism is to contribute to both local and national development, the four A's (attractions, access, amenities, and ancillary services) must be nationally and internationally recognizable and competitive.(Cooper, et al, 1994; Yoon, Gursoy, & Chen, 2001). The Tourism industry in any destination must be well organized and managed such that the visitors experience is not adversely affected by either the lack of attractions, accessibility, amenities and ancillary services

or their improper management. **Accommodation** plays a vital role in the tourism sector because it provides the basic infrastructural need for all kinds of visitors (business travelers as well as leisure/pleasure seekers) to a destination, namely a place to stay when away from home, irrespective of duration of the visit. Further, regardless of where a visitor to a destination may stay i.e. commercial accommodation or with family or friends, they generally tend to use the **attractions** of the area they are visiting. Tourists visiting a destination engage in activities or events that provide a focal point for the use of their leisure time and these activities and events are a fundamental element of the tourists' travel plans and, in a number of cases, the main reason for their visit to a destination. While attractions may be natural (beach/scenic environments) or manmade (theme parks) or both, the range of attractions available to the tourist is constantly evolving so as to keep the inflow of general tourist numbers rising while at the same time seeking to appeal to specific niche market segments. Special events, whether sporting or cultural have a profound impact on the economy of the host destination owing to the consequent demand for accommodation, food & beverage, entry tariffs, ancillary services as well associated tourism activities like sightseeing etc. One of the most critical elements that has promoted the growth of both domestic and international tourism is the transportation system which provides **accessibility** and links the tourist from the home destination to the host destination, not only facilitating his travel to the destination but within the destination as well. In addition, transport may sometimes be an attraction in itself, as in the river cruise or a short river crossing trip on the ferry in Goa etc. **Ancillary services** are the additional services and facilities that are needed to complete a holiday and make it more secure and easier for the traveler. They would include travel insurance, money exchange, car hire, chauffer service, tour guides, event tickets etc. Therefore, within the context of the wider tourism industry, the elements of the tourism product viz. transport,

accommodation, attraction associated services and institutional elements as well as the agencies responsible for management of tourism in the destination, need to co-exist and function cohesively while working towards common goals, to promote the attributes of the destination in a positive manner such that the image of the destination is maintained, enhanced and continues to attract visitors. This has led to extensive research in tourism covering aspects that include competitive advantages of different destinations; the flow of tourists around the world as well as different tourism impacts on socio-cultural, environmental, and economic aspects, destination image (Ahmed, 1991), ecotourism and sustainability (Butler & Boyd 2000), strategies related to sustainable development (Clarke, 1997) as well as the importance of community involvement in decision-making (Puczko and Ratz, 2000).

3.2 Research Location & Infrastructure Background

Goa is India's smallest state by area and the fourth smallest by population (1.45 million). Located in south west India in the region known as the *Konkan*. Due to its scenic beauty and the architectural splendor of its temples, churches and monuments, Goa is a favorite spot for tourists from all over the world. Tourism has become a major industry in Goa and attracts domestic tourists and foreign tourists from all over the world for a glimpse into the complex heritage and natural spectacle of "Goa". Its' beautiful serene beaches, captivating cultural heritage and unique experiences within compact locations attract millions of tourists to Goa. Goa has impressive socio-economic indicators; with the growth rate under Primary sector increasing from (-) 39.89 percent to 9.86 percent, mainly due to the improvement in the sub-sectors of Agriculture, Forestry and Fisheries as a result of the proactive steps taken by the government; in the Secondary sector from 4.43 percent to 5.60 percent but a decline in the Tertiary sector from

10.26 percent to 8.64 percent due to decline in the sub-sectors Transport, Storage and Communication ([Economic survey, 2014-15](#)) Rated as the best among the emerging states in the country for its social infrastructure, the state government is furthering civic, information technology & transport facilities. The number of banking offices have increased as have the number of Micro, Small and Medium Enterprises due to the expansion of existing industrial estates. Moreover, in an attempt to boost environmentally sustainable industrial development, generate employment and create a robust industrial base, the state government has approved the Goa Investment Policy – 2014 as well as the setting up of an Investment Promotion Board. ([Economic Survey, 2014-15](#))

Tourism is now the largest industry in Goa after the ban on mining in the post-colonial era and is the “backbone of Goan economy” according to the State Department of Tourism, as a sizeable percentage of Goa’s population directly or indirectly derives its livelihood from tourism activities, thus influencing social, cultural and ecological aspects of life in the state. With its breathtakingly diverse natural beauty, captivating churches and temples and its diverse flora and fauna as well as its unique blend of Indo- Portuguese culture, Goa is widely accepted as the best tourism destination in India for both domestic and overseas visitors. In terms of Tourism specifically, the Government has initiated a series of efforts to diversify tourism activities and to provide, improve and maintain tourism related infrastructure for enhancing the level of tourist retention. Intensive beautification efforts in major tourist spots, creation of a mega tourism circuit in the Calangute, Candolim, Anjuna belt as well as the completion of the Panjim jetty, were undertaken, in order to improve facilities for tourists visiting the state, increase their satisfaction with the same and improve the carrying capacity of the state. Two much needed

tourism initiatives i.e. a Policy for Regulating Water Sports and a Mobile Based Tourist Guidance Service were recently finalized in the state. The Tourism department has stepped up its participation in national and international events and its promotional activities in print and electronic media, in order to boost awareness and promote tourism in the state. (**Economic Survey, 2014-15**) Goa has a well developed international airport with eTV, formerly visa on arrival and customs clearance facilities which is well connected to major cities of India, besides having facilities for chartered flights and international flights. It is connected by a well developed network - both rail and road, to major cities in other parts of the country and has a well developed internal water transport network formed by a grid of navigable rivers which is being planned to be used for development of backwater/hinterland tourism. The international Mormugao port which can accommodate over 50 ships in outer anchorage and has mechanized loading facility, an oil berth and general Cargo berth is being planned to be used to promote international cruise tourism.

3.3 Background of the study

3.3.1 Customer Satisfaction

Customer satisfaction is acknowledged as being of vital interest to any business and is equally essential to the tourism product. Tourist satisfaction is important to successful destination marketing because it influences the choice of a destination, the type and amount of products and services consumed and most importantly, the decision to return. Tourist Satisfaction is generally expressed as the difference between the tourist's expectation before consumption and the actual perceived value of the product or service after consumption. Measuring tourist satisfaction with

all the attributes of a tourist destination is of vital significance in tourism management of a destination because satisfaction or dissatisfaction with any attribute of a destination, can lead to overall satisfaction or dissatisfaction with the destination. Satisfied visitors will revisit the destination, complain less and recommend it to others. However, visitor satisfaction will not be achieved unless the quality received is greater than the price paid for the product or service. However, despite the increased number of studies related to tourism, only very recently a number of studies have been focusing on the importance of repeat visitors to the same destination. (Oppermann, 1999) While some studies on repeat visitation have focused on tourists' satisfaction in different destinations (Kozak, 2000, 2001) yet others have identified tourists' perception of the environment after years of visiting the same destination (Dymond, 1997; Pollard and Dominguez, 1993; Ryan, C., 1995; Puczko and Ratz, 2000). Visitor satisfaction is a major factor which determines repeat visitation and recommending the destination to others. Previous research findings demonstrate that there is a significant relationship among tourist satisfaction, intention to return, and positive 'word-of-mouth' recommendation. (Kozak & Rimmington 2000) Tourists are increasingly becoming more demanding and desire value for money and the provision of quality products and services. (Poon, 1993) Since the tourism product comprises many inter-related components such as accommodation, activities, transport and entertainment, a 'positive or negative *halo effect*' may occur wherein satisfaction or dissatisfaction with one of the components leads to satisfaction or dissatisfaction with the total tourism product or experience (Danaher & Arweiler 1996, Ryan 1995). Customer satisfaction is therefore a major goal of service-oriented businesses. Understanding the causes and nature of visitor satisfaction and dissatisfaction can help to promote and develop a tourism destination by measuring the 'health' of the industry for strategic planning purposes, understanding the customers reaction to a

product, encouraging both new and repeat visitation and comparing different sectors within the industry to determine areas that may need improvement. There is growing evidence that customer satisfaction is a driving force behind firm's business competitiveness and performance. (Parasuraman et al., 1985, 1988; Zeithaml et al., 1996) This is also true in the case of tourism, where concepts, models and tools aimed at evaluating customer satisfaction are widely employed. In order to evaluate the strengths and the weaknesses of a tourist destination and to improve its competitiveness, it is of vital importance to determine the views and expectations of tourists visiting the destination. The Tourism industry which is quite difficult to evaluate in quantitative terms, considers "satisfaction" to be one of the most widely accepted indicators of the state of its health. Satisfaction, for tourism, as well as for other industries, is also directly linked to the loyalty of "clients" and therefore, to the sources of competitive advantage.

3.3.2 Importance- Performance Analysis (IPA)

The Importance- Performance Analysis (IPA) is generally regarded as the conventional means of prioritizing attributes to improve service quality using the two dimensions of performance and importance through the development of a four quadrant grid (Bacon, 2003). The original IPA approach comprised three steps: first, the development of a set of attributes describing a product or service; second, getting respondents to rate the attributes on their importance and performance; third, calculating the means of importance and performance of each attribute and mapping them on a two dimensional grid. (Lai & Hitchcock, 2015) The two dimensional grid so developed has the horizontal axis indicating the visitors' perceptions of the service providers' performance on a given attribute and the vertical axis indicating the importance of the attribute to the visitor. The grid is divided into four quadrants that are formed based on the mean scores of

the importance and satisfaction attribute ratings. The matrix so formed guides firms to identify the most appropriate strategic options to enhance competitiveness. The various crosshair measures used include actual/data means, scale means and statistical means. (Oh, 2001; Tonge & Moore, 2007) While the original I-P mapping by Martilla & James (1977) used the scale mean as the cross points and Bacon (2003) referred to it as the 'scale centered quadrant approach' other researchers (Go & Zhang, 1997) used different cross-points based on their subjective judgement and requirements such as the 'target driven approach' where different cross-points were chosen for both attributes viz. three for importance and four for performance. A large majority of the results of the I-P mapping research indicated most of the attributes would be placed in the first quadrant 'keep up the good work' (Tonge & Moore, 2007) and as a result would suffer from a low discriminative power and predictive utility from the point of view of management. Rial et al., (2008), Alberty & Mihalik (1989), Gudagnolo (1985), Hollenhorst et al., (1992) proposed an alternative solution where they used the data means as the cross-points and Bacon (2003) referred to it as the 'data centered quadrant approach'. While this method offers a higher discriminative power and predictive utility from the point of view of management, researchers are continuously finding ways of refining the method of partition. Hawes & Rao, (1985) and Slack, (1994), used a diagonal line to differentiate the areas of differing priorities where the region above the line represents a high priority for improvement and corresponds to the 'Concentrate here' quadrant in the four quadrant mapping and the region below the line represents a lower priority for improvement and corresponds to the 'Keep up the good work' quadrant in the four quadrant mapping method. Bacon (2003) concluded through his empirical research that the performance of the 'diagonal line model' was generally better than the quadrant

models because it offers a more continuous transition in the inferred priorities and hence offered higher discriminative power and predictive utility from the point of view of management.

Despite its simplicity, the IPA suffers from specific limitations such as the lack of a definitive standard for setting the range of the horizontal and vertical axes, the measurement scale and the placement of the cross hairs (the horizontal and vertical lines) to divide it into four quadrants. Further, as it considers only its own performance and disregards that of its competitors, it does not allow a business to recognize its market share, thereby reducing its competitive edge. The reliability of decisions in terms of improving service quality, which is the fundamental purpose of the IPA, is further affected by the fact that the quadrants of the IPA plot into which the service attributes fall, is affected by **measurement bias** and **the placement of cross hairs**. Several research scholars have claimed that the Gap Analysis, based on the relative performance concept can be used to overcome the shortcomings resulting from **measurement bias** and **cross hair placement**. (Fallon & Schofield, 2006; Smith & Costello, 2008; Tonge & Moore, 2007; Taplin, 2012a) Although the relevance of Importance-Performance Analysis (IPA) as an instrument for the measurement of quality perception is well documented in marketing literature (Ennew et. al, 1993; Slack, 1994; Matzler et al., 2003), still there is a lack of research to provide empirical application to tourism destination management especially in *Mass Tourism* destinations, Goa being one such destination. So far no research has been carried out in Goa with respect to tourist's satisfaction using IPA, which makes this study unique and provides valuable inputs on otherwise unexplored area. Using the IPA as a tool for evaluating tourist satisfaction, this study attempts to fill in this gap by assessing the perceptions of tourists visiting Goa and for identifying the main factors and/or areas of intervention to improve the quality of the tourism product and

services offered, in accordance with tourists' perceptions. This study concentrates on the state of Goa as the research location in order to evaluate the importance given to and satisfaction of tourists toward the infrastructural facilities and attractions available in the state. With the evaluation of the tourist's importance and satisfaction, conclusions can be drawn in regard to these attributes and their need for enhancement and improvement, in view of the state's robust tourism growth. Therefore, the present study fills the gap by adding valuable knowledge, new perspectives and presents possibilities for consideration and offers valuable inputs for different stakeholders of tourism industry; especially the academic institutions, hotels and restaurants, tour operators, government as well as NGO's in the region to be studied.

3.4 Research Methodology

The objective of this research paper was to evaluate the importance given to and satisfaction with the infrastructure, facilities, services and amenities available for tourism in the state of Goa. The evaluation was based on perceptions of both foreign and domestic tourists visiting the state. The Study Area was the entire State of Goa and the Study Period was a fourteen month period from November 2013 to December 2014. The Sampling Method used was Convenience/Judgment sampling. The Sample Size was 1000 Tourists, above 18 years of age, who were surveyed in Tourist locations all over Goa. Response rate: Total Responses received – 805, Response rate - (80.5%), Total usable responses – 761, Final Response rate (76.1 %). The Data Collection Instrument used to collect primary data was a Four Part Structured Questionnaire with five point Likert scale based on a study of “Infrastructure Gaps in Tourism Sector” conducted by GOI, Ministry of Tourism, Market Research Division, prepared by GfK Mode Pvt. Ltd. **Part I** comprised Demographic & Biographic profile of the tourists & **Part II** comprised a Five point

Importance - Performance scale, which consisted of 34 variables which were used in this study. Secondary Data was collected from Research Journals, Published booklets and data procured from Department of Tourism, GTDC, other Government Departments & Government publications.

The Importance (expectation) - Performance (satisfaction) theories suggest that customers' satisfaction can be measured by the difference between a consumers' expectation of a product or service and his actual experience after service delivery. Ryan (1995) observes that *'if satisfaction is seen as the congruence of need and performance, then dissatisfaction can be perceived as the gap between expectation and experience'*. The average importance of the infrastructure, facilities, services and amenities available for tourism and the average level of satisfaction with these elements were calculated for all visitors to the state of Goa in the sample selected. The placement of each element on an importance-satisfaction scale was accomplished by using the means of importance and performance as the coordinates. Once these calculations were performed, they were plotted on a two dimensional grid called the *Importance-Satisfaction Matrix/Grid* (Joppe et al., 2001; Kozak and Nield, 1998; Pizam and Ellis, 1999; Ryan, 1995). Each element on the grid was then analyzed by locating the appropriate quadrant in which it fell. **Quadrant A** is termed *'Concentrate here'* and elements in it are rated very important, but the level of satisfaction is rated below average, therefore action/efforts & resources are required here. It is a critical area for research allocation with the goal being to achieve customer satisfaction. **Quadrant B** is termed *'Keep up the good work'* and elements in it are considered most important and satisfaction level is above average and one must work, as well as continue to invest resources, to maintain quality in these areas.

Quadrant C is termed *Low Priority* and elements in it are rated least important and the level of satisfaction is below average. Usually nothing is done about this area until some point in the future if or when respondents begin to view it as important. **Quadrant D** is termed '*Possible Overkill*' and elements in it are rated above average on satisfaction, but are rated below average on importance and usually the areas require no action or improvement and no further investment of resources. The findings will indicate those infrastructural facilities which meet with the satisfaction of the tourists and those that require to be developed further or require improvement on priority basis.

Data Analysis: Data was analyzed using **SPSS 20**. Statistical techniques and tools such as **Descriptive Statistics, Mean Analysis, Gap Analysis** (Importance – Satisfaction for infrastructure in terms of pre and post visit) & **Paired t-test** were used. The reliability of the scale & data was tested using **Cronbach's Alpha. Factor Analysis** was carried out on the original scale of 34 variables comprising infrastructure, facilities, services and amenities, evaluated by the tourists to condense or reduce them into factors with minimum loss of information. The **Mean Analysis** indicates the Tourists' perception of the Importance (Expectation) of & Performance (Satisfaction) with the Infrastructural facilities, amenities, services available in the state and is obtained from tourist responses on a 5 point Likert scale where 1=very unimportant/very unsatisfactory, 2=unimportant/unsatisfactory, 3=important/satisfactory, 4 = above average importance/ above average satisfaction, 5= very important /very satisfactory. If the mean value ranges from 3-5, it indicates that tourists agree that the infrastructure is important/satisfactory. For values ranging from 1-2, it means they

consider it to be unimportant/unsatisfactory. **Gap Analysis** indicates the difference in values between Satisfaction Mean (perceived performance mean after the trip) and the Importance Mean (estimated/expected mean before trip). (Tonge and Moore, 2007, Hanim et al., 2010) If the Gap value is zero or positive it indicates that the tourists' actual experience from use of infrastructure/facilities/ services/amenities is equal to their expectations or more than expectation, indicating satisfaction. If the value is negative, it means that their expectations were higher than their actual experience indicating dissatisfaction. Paired t-test has been carried out to determine whether the Gap (difference in mean values) was significant or otherwise. Statistically it was used to test the following hypotheses:

H1: *There is no significant difference between Tourist perception about the Importance given to and Satisfaction with*

(a) Tourist Assistance factors (F1)

(b) Infrastructure Factors (F2)

(c) Attraction/Destination Factors (F3) &

(d) Entertainment factors (F4)

which are available in the state for tourism, before and after the trip.

3.5 Analysis, Research Findings & Discussion

3.5.1 Demographic Profile of Respondents

The study of the demographic profile of respondents (*Refer Table 3.1*) indicated an approximately equal distribution in terms of Category of Tourist - Indian (49.3%) & Foreign

Demography	#	%	Demography	#	%
Tourist Category			Age		
Indian	375	49.3	18-27	247	32.5
Foreigner	386	50.7	28-37	208	27.3
Gender			38-47	140	18.4
Male	363	47.7	48-57	105	13.8
Female	398	52.3	58 & above	61	8.0
Reason for visit			Type of Accommodation		
Beach Tourism	218	28.6	Commercial	318	41.8
Adventure Tourism	116	15.2	Rented	263	34.6
Rest & Relaxation	305	40.1	Family/ Friends	120	15.8
Business	20	2.6	Others	60	7.9
Culture	12	1.6	Type of service Used		
Religious/Pilgrimage	11	1.4	Pub/Night life	190	25.0
Entertainment/night life	61	8.0	Restaurant/Hotel	227	29.8
Others	18	2.4	Transport	229	30.1
Marital Status			Culture	61	8.0
Single	375	49.3	Medical/Health	10	1.3
Married	386	50.7	Adventure/Water sports	44	5.8
Duration of Visit			Frequency of Visit		
Only 1 day	79	10.4	First time	256	33.6
Less than a week	275	36.1	Second Time	206	27.1
2 weeks or more	307	40.3	Frequent visitor	299	39.3
Uncertain	100	13.1			

Table 3.1: Demographic Profile of Tourists (n=761)

Source: Compiled from Primary Data

(50.7%) as well as in terms of Gender – Male (47.7%) & Female (52.3%). In terms of Age, 32.5% were in the age group 18-27 years, 27.3% in the age group 28-37 years, 18.4% were in the age group 38-47 years, 13.8% were in the age group of 48-57 years while 8% were in the age group 58 years & above. 39.3% of tourists stated that they were frequent visitors while 33.6% & 27.1% each stated they were 1st & 2nd time visitors. 41.8% availed of Commercial accommodation, 34.6% stayed in rented accommodation while 15.8% stayed with relatives & friends and 7.9% had other accommodation. In terms of Duration, 36.1% stayed in the state for less than a week while 40.3% stated that they stayed for 2 weeks or more, 13.1% were uncertain while 10.4% stated that they stayed for a day only. 40.1% tourists stated that the Main Purpose for the holiday was Rest & Relaxation followed by 28.6% as Beach tourism, while 15.2% & 8% came for Adventure & Nightlife respectively. Travelling for Business at 2.6%, Culture at 1.6%, Religious/Pilgrimage at 1.4% and Others at 2.4% were relatively negligible reasons. In terms of

Services used, 30.1% used Transport, 29.8% used Hotels & Restaurant, 25% used Nightlife & Entertainment while 5.8% used Adventure & Water Sports and 1.3% used Medical/Health services.

3.5.2 Factor Analysis

Factor Analysis of 34 Infrastructural variables used in the Tourist Questionnaire generated 4 Factors. The Principal Components factor method was used to generate the initial solution. The Eigen values along with the Scree plot suggested that a four factor solution which explained 47.843% of the overall variance be considered and the four factors with Eigen value greater than 1.0 and attributes with factor loadings greater than 0.3 were reported. The overall significance of the correlation matrix was 0.000 with a Bartlett test of Sphericity value of 11400.763. The statistical probability and the test indicated that there was a significant correlation between the variables and the use of Factor Analysis was appropriate. The Kaiser-Meyer-Olkin overall measure of sampling adequacy was 0.891 which was meritorious. (Hair et al., 1999) (**Refer Table 3.2**) To test the reliability and internal consistency of each factor, the Cronbach's alpha of each was determined. The results showed that the Cronbach's Alpha of the overall scale was 0.921 and the alpha coefficients of sub scales ranged from 0.885 to 0.724 for the four factors. (**Refer Table 3.2**) The results were considered more than acceptable since 0.50 is the minimum value for accepting the reliability test. (Nunnally, 1967) However, where an attribute is considered very important to the scale and is conceptually related it, values as low as 0.4 are deemed appropriate and included. (Diekhoff 1992; Nunally, 1978) The **first factor** was **F1-Tourist Assistance** having 9 variables and an alpha of 0.885 included the following variables - Knowledge and quality of help at tourist offices, Availability of tourist offices/guidance centers,

Variables	Loading	Importance	Performance	Gap (P) - (I)	t	p	Original*	Diagonal**	α
F1 – Tourist Assistance Factors: Eigen Value 9.827; % of Variance explained 28.904									
1. Knowledge/ quality of help at Tourist Office	0.744	3.97	3.41	-0.56	12.200	0.000**	A	A	0.885
2. Availability of Tourist guidance centres	0.730	3.88	3.40	-0.50	10.128	0.000**	C	A	
3. Availability of authorized tour operators	0.691	3.70	3.48	-0.22	4.912	0.000**	C	A	
4. Traffic management	0.667	4.07	3.16	-0.91	17.234	0.000**	A	A	
5. Power Supply situation	0.666	4.19	3.30	-0.89	17.681	0.000**	A	A	
6. Conditions of street lighting	0.660	4.13	3.14	-0.99	18.319	0.000**	A	A	
7. Availability & cost of private transportation	0.617	4.02	3.38	-0.64	13.670	0.000**	A	A	
8. Availability of public transportation	0.568	4.06	3.51	-0.55	11.880	0.000**	A	A	
9. Roadside signage's & their condition	0.518	4.01	3.23	-0.78	14.306	0.000**	A	A	
Factor Mean		4.00	3.33	-0.67					
F2 – Infrastructure Factors: Eigen Value 2.798; % of Variance explained 8.230									
10. Condition of the Airport/Railway station	0.715	4.10	3.61	-0.49	12.313	0.000**	B	A	0.831
11. Accessibility of the destination	0.689	4.15	3.72	-0.43	11.440	0.000**	B	A	
12. Quality/condition of Roads	0.655	4.12	3.39	-0.73	15.617	0.000**	A	A	
13. Assistance at (Airport/Railway Station)	0.609	4.04	3.66	-0.38	8.411	0.000**	B	A	
14. Garbage disposal	0.567	4.17	2.70	-1.47	24.147	0.000**	A	A	
15. Sewerage and drainage system	0.560	4.09	2.96	-1.13	18.891	0.000**	A	A	
16. Parking facilities	0.474	3.73	3.37	-0.36	7.797	0.000**	C	A	
17. Personal safety and security.	0.458	4.45	3.67	-0.78	16.281	0.000**	B	A	
Factor Mean		4.06	3.34	-0.72					
F3 – Attraction/ Destination Factors: Eigen Value 2.105; % of Variance explained 6.191									
18. Natural beauty & climate	0.607	4.30	4.16	-0.14	3.897	0.000**	B	A	0.812
19. Friendliness of the local people.	0.607	4.11	4.10	-0.01	0.266	0.790	B	A	
20. Diversity of cultural/historical attractions	0.563	3.98	3.92	-0.06	1.467	0.143	B	A	
21. Overall cleanliness of the destination.	0.552	4.30	3.54	-0.76	14.915	0.000**	A	A	
22. Tariff levels of Accommodation (all kinds)	0.537	3.89	3.65	-0.24	6.322	0.000**	D	A	
23. Quality / hygiene of wayside Eateries	0.528	4.19	3.32	-0.87	16.853	0.000**	A	A	
24. Availability & quality of Accommodation	0.490	4.06	3.84	-0.22	5.095	0.000**	B	A	
25. Opportunities for Rest & Relaxation	0.469	4.22	4.10	-0.12	3.321	0.001**	B	A	
26. Availability, quality & tariff of local cuisine	0.454	3.99	3.65	-0.34	7.742	0.000**	B	A	
27. Public Conveniences/Utilities along roads	0.389	4.00	3.35	-0.65	13.169	0.000**	A	A	
Factor Mean		4.10	3.76	-0.34					
F4 – Entertainment Factors: Eigen Value 1.414; % of Variance explained 4.158									
28. Casino and gambling offer.	0.817	2.76	3.61	0.85	-17.28	0.000**	D	B	0.724
29. Conference offer.	0.704	3.07	3.37	0.30	-6.941	0.000**	C	B	
30. Night life and entertainment.	0.678	3.72	3.91	0.19	-4.616	0.000**	D	B	
31. Availability of sport / recreational activities.	0.557	3.73	3.78	0.05	-1.241	0.215	D	B	
32. Possibilities for shopping.	0.473	3.82	3.85	0.03	-0.853	0.394	D	B	
33. Rural Tourism	0.459	3.55	3.45	-0.10	2.213	0.027**	C	A	
34. Wellness offer.	0.430	3.71	3.66	-0.05	1.408	0.160	D	A	
Factor Mean		3.60	3.66	0.06					
KMO 0.891 Bartlett's Test of Sphericity 11400.763 ** P<0.05									

Table 3.2: Factor & Gap Analysis, Comparison of Means & Grid Position (n=761), $\alpha=0.921$, 34 Items

Source: Compiled from Primary Data

- Importance or Expectation scores show the mean of tourist's perception of importance/expectation of infrastructure, amenities, services & facilities for tourism based on a five point scale where 1 is very unimportant and 5 is very important.
- Performance or Satisfaction scores show mean of tourist's satisfaction with infrastructure, amenities, services & facilities for tourism based on a five point scale where 1 is very unsatisfied and 5 is very satisfied.
- Q A: High Importance-Low Performance (Concentrate Here); Q B: High Importance-High Performance(Keep up the Good Work); Q C: Low Importance-Low Performance(Low Priority); Q D: Low Importance-High Performance(Possible Overkill)
- In Modified IPA Region A: High Priority (Concentrate Here); Region B: Low Priority (Keep up the Good Work)

Availability and cost of private transportation, Conditions of street lighting, Power supply situation, Traffic management, Availability of public transportation, Availability of authorized tour operators, Roadside signages and their condition. The *second factor* was **F2 - Infrastructure Factors** having 8 variables and an alpha of 0.831 included the following variables – Condition of airport/Railway station, Accessibility of destination, Quality& condition of roads, Assistance at airport/railway station, Garbage disposal, Sewerage& drainage system, Parking facilities, Personal safety & Security. The *third factor* was **F3 - Attraction/Destination** having 10 variables and an alpha of 0.812 included the following variables – Availability, quality & tariff of local cuisine, Availability, quality & hygiene of wayside eateries, Friendliness of locals, Tariff levels of accommodation, Availability& quality of accommodation, Overall cleanliness of destination, diversity of cultural/historical attractions, Natural beauty & climate, Opportunities for rest& relaxation, Public conveniences/utilities along roadside and finally, the *fourth factor* was **F4 - Entertainment** having 7 variables and an alpha of 0.724 included the following variables Casino & gambling offer, Conference offer, Nightlife & entertainment, Availability of sport and recreational activities, Possibilities for shopping, Wellness offer, Rural Tourism. (*Refer Table 3.2*)

3.5.3 Mean Analysis

Mean analysis indicated that the Grand Mean Value of the scale in terms for perception of **Importance** of Infrastructure (Expectation) was 3.95. For F1, (Tourist Assistance) it was 4.00 (Above average) for all variables except 3 i.e. Availability of authorized Tour Operators, Availability of tourist guidance centers & Knowledge and quality of help at tourist offices having slightly less than ‘above average importance’ values. For F2, (Infrastructure) it was 4.06 (Above

average) with only Parking facilities having slightly less than 'above average' importance. For F3, (Destination Attractiveness) it was 4.10 (Above average) for all variables except 3 variables i.e. Diversity of cultural and historical attractions, Availability, quality & Tariff of local cuisine & tariff levels of accommodation having marginally less than 'above average importance' values. For F4, (Entertainment) it was 3.60 (Average) for all variables except Casino & Gambling having 'below average' importance, thereby indicating Tourist Assistance, Attraction of Destination and Infrastructure (F1, F2 & F3) are generally considered to have 'above average' importance in a destination's appeal and attractiveness whereas Entertainment (F4), was considered to be only of 'average' importance.

The Grand Mean Value for **Satisfaction** (Actual) of these factors was 3.54 overall. For F-1 (Tourist Assistance) it was 3.33 with all variables showing only 'average' satisfaction. For F-2 (Infrastructure) it was 3.34, indicating 'average' level of satisfaction overall with 3 variables (Condition of airport/railway station, accessibility of destination and assistance at airport/railway station) tending towards the higher end of 'average' satisfaction, with 2 variables (Quality & condition of roads & Parking facilities) tending toward the lower end of 'average' satisfaction. 2 variables (Garbage disposal & Sewerage & drainage) had 'below average' values. For F-3 (Destination Attractiveness) it was 3.76 overall, indicating 'average' satisfaction, with 3 variables (Friendliness of locals, Natural beauty, Opportunities for rest and relaxation) having 'above average' satisfaction and 2 variables (Availability & quality of accommodation & Diversity of cultural & historical attractions) having slightly less than 'above average' satisfaction. For F-4 (Entertainment) it was 3.66 overall with all variables having 'average satisfaction' levels. However, 2 variables (Nightlife & Entertainment; Possibilities for shopping) tend towards the higher end of 'average' satisfaction and 2 variables (Conference offer and Rural

Tourism) tend toward the lower end of 'average' satisfaction thereby indicating Tourist Assistance, Attraction of Destination, Infrastructure & Entertainment (F1, F2, F3 & F4) are generally perceived to have 'average' performance/satisfaction in terms of the destination's appeal and attractiveness. However, whereas Destination Attraction (F3) & Entertainment (F4), tend towards the higher end of 'average' performance, Tourist Assistance (F1) & Infrastructure (F2) tend towards the lower end of 'average' performance. (*Refer Table 3.2*)

3.5.4 Paired t-Test

The Paired t-test results (*Refer Table 3.2*) indicate that for Friendliness of Local People & Diversity of Cultural & Historical Attraction in F3 (Destination Attraction Factor) and Availability of Sport & Recreational Activity, Possibility of Shopping & Wellness Offer in F4 (Entertainment Factor) where there is no significant difference in perception of tourists with regard to Importance given to infrastructure and their Satisfaction with it, the null hypothesis is accepted. In the case of all other variables in F2 & F3 and all variables in F1 & F4, there is a significant difference in perception of tourists with regard to Importance given to infrastructure and their satisfaction with it, thus rejecting the Null Hypothesis and accepting the alternate hypothesis.

3.5.5 Gap Analysis

Although Mean Analysis indicated 'average' Tourist satisfaction with all factors, Gap Analysis (*Refer Table 3.3*) indicated that both overall as well as for individual variables, the gap was negative for Factors F-1 (Tourist Assistance), F-2 (Infrastructure) & F-3 (Destination Attractiveness), indicating that expectations were higher than actual i.e. importance given was

more than satisfaction/performance delivered at the destination and that satisfaction level was low giving rise to an experience that is not completely satisfying and hence may not be repeated.

Factor Name	Gap between Means of Importance given to & Actual performance of Infrastructure/ Facility/Service/Amenity			
	Highest (Largest) indicating greatest dissatisfaction (variance) between Importance given to and Performance of (infrastructure/ facility, service/amenity) prior to visit and after actual visit		Lowest (Smallest) indicating least dissatisfaction (variance) between Importance given to and Performance of (infrastructure/ facility, service/amenity) prior to visit and after actual visit	
	Highest		Lowest	
F1–Tourist Assistance Factor (9 Variables)	Condition of street lighting	-0.99	Availability of Authorized tour Operators	-0.22
F2 – Infrastructure Factor (8 Variables)	Garbage Disposal	-1.47	Parking facilities	-0.36
F3–Destination Attraction Factor (10 Variables)	Availability & quality of wayside Eateries	-0.87	Friendliness of Locals	-0.01
F4 – Entertainment Factor (7 Variables)	Casino & Gambling	+0.85	Possibilities for shopping	+0.03

Table 3.3: Highest & Lowest Gap between Importance & Satisfaction for Factors

Source: Compiled from Primary Data

For F-4, (Entertainment) the overall gap was positive. With the exception of Rural & Wellness Tourism where the gap was negative, all the other variables (Casino & Gambling, Conference Offer, Nightlife, Sport & Adventure, Shopping) had positive values indicating satisfaction was much higher than expectation. Thus, while the highest and lowest gap values for F1, F2, F3 were negative indicating dissatisfaction, the highest and lowest gap values for F4 were positive indicating satisfaction. Variable ‘Condition of street lighting’ in F1 - ‘Tourist Assistance’, Variable ‘Garbage Disposal’ in F2 - ‘Infrastructure’, Variable ‘Availability, quality & hygiene of wayside eateries’ in F3 - ‘Attraction/Destination’ have the highest negative gap among the variables indicating greatest dissatisfaction. Further, they fall in Quadrant A (Concentrate here) indicating that greatest efforts and resources should be concentrated on it and be invested in it on a priority basis so as to improve tourist satisfaction. In F4 – ‘Entertainment’ variable ‘Casino & gambling’ has the highest gap which happens to be positive indicating greatest satisfaction but

falls in Quadrant D (Possible Overkill) indicating that it should be maintained at this level but probably no additional efforts and resources should be allocated due to its low importance. Whereas, 'Availability of authorized tour operators' in F1- 'Tourist Assistance' & 'Parking Facilities' in F2- 'Infrastructure' have the lowest gap and are negative but fall in Quadrant C (Low Priority) indicating that investing scarce resources to these variables will offer little strategic advantage and hence, little or no efforts and resources are to be deployed for them as tourists consider them to be of low importance and hence their satisfaction with them though low as well is relatively unimportant. Variable 'Friendliness of Locals' in F3 - 'Attraction/Destination' has the lowest gap and falls in Quadrant B (Keep up the good work) indicating that very little is needed to improve tourist satisfaction with it but that resources should continue to be directed towards this attribute so as to maintain quality at this level. Variable 'Possibilities for shopping' in F4 - 'Entertainment' has the lowest gap among the variables and falls in Quadrant D (Possible Overkill) indicating that it should be maintained at this level but probably no additional efforts and resources should be allocated due to its low importance. [*Refer Table 3.2 - Column Original, Table 3.3 & Figure 3.1*]

3.5.6 Importance – Performance Analysis (Original Grid)

The Importance- Performance Analysis (IPA) is generally regarded as the conventional means of prioritizing attributes to improve service quality using the two dimensions of performance and importance through the development of a four quadrant grid. (Bacon, 2003) Martilla and James (1977) who pioneered this technique highlighted that since IPA works with relative rather than absolute measures of importance, therefore the placement of crosshairs in relation to importance-satisfaction mean is subjective (Zeigler, J. et al., 2012).

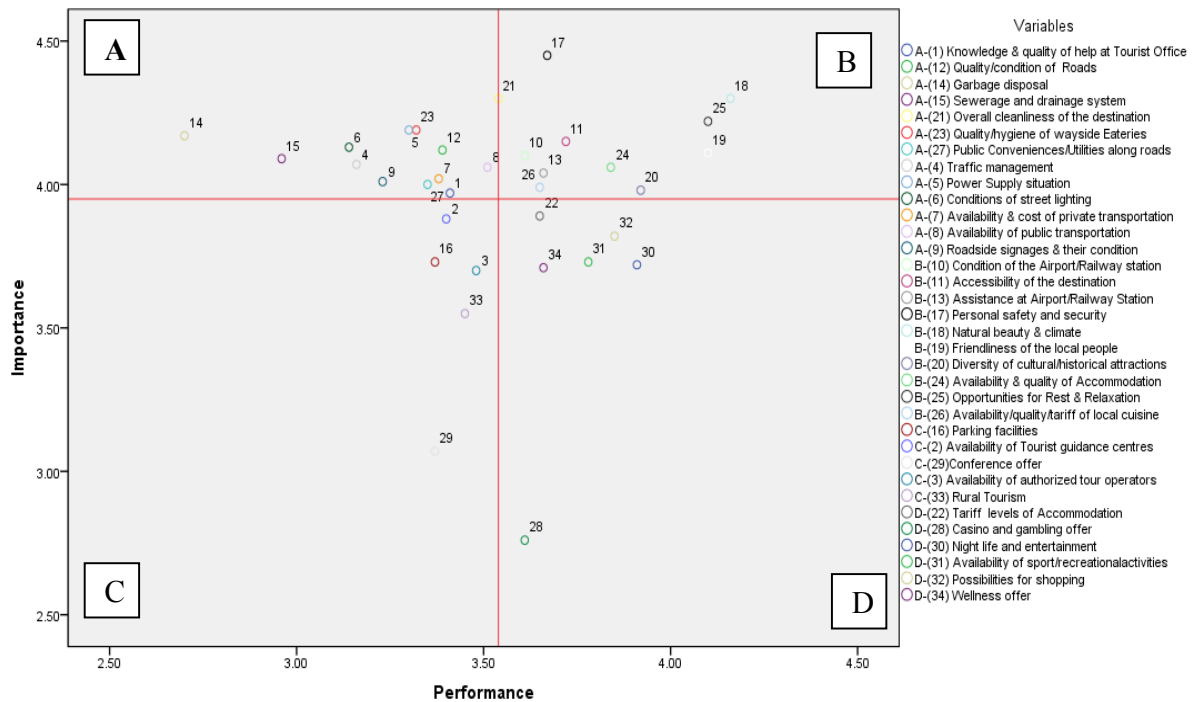


Figure 3.1: Importance - Performance Matrix (Original Grid Analysis)

Source: Compiled from Primary Data;

*Top left Q A Concentrate here; Top right Q B Keep up the good work;
Bottom left Q C Low Priority; Bottom right Q D Possible Overkill*

The IP matrix for this study was plotted and its cross hairs drawn using both scale mean as well as data mean. (Refer 3.3.2) Since the Original I-P mapping graph in the current study using scale mean or scale centered approach indicated that all 34 attributes were placed in the upper right hand quadrant i.e. ‘keep up the good work’, it had no discriminative power and no managerial utility in terms of decision making and it was therefore discarded. Further, the Original I-P mapping graph in the current study using data mean or data centered approach i.e. the Mean of Means or Grand Mean scores of Importance and Performance to determine the crosshairs in the grid in **Importance – Satisfaction Matrix, i.e., Grid Analysis** showed that [Refer Table 3.2 (Column Original) & Figure 3.1] the 13 variables falling in **Quadrant A (Concentrate Here)** include knowledge and quality of help at tourist offices, quality/conditions of roads, garbage disposal, sewerage and drainage systems, overall cleanliness of the destination, quality/hygiene

of wayside eateries, public conveniences/utilities along roads, traffic management, power supply situation, conditions of street lighting, availability and cost of private transportation, availability of public transportation, and roadside signages and their conditions, indicating that greatest efforts and resources should be concentrated on these variables and be invested in them on a priority basis so as to improve tourist satisfaction. The **10 variables** falling in **Quadrant B (Keep up the good work)** include condition of the airport/railway station, accessibility of the destination, assistance at airport/railway station, personal safety and security, natural beauty and climate, friendliness of the local people, diversity of cultural / historical attractions, availability and quality of accommodation, opportunities for rest and relaxation and availability/quality/tariff of local cuisines indicating that very little is needed to improve tourist satisfaction with these variables but that resources should continue to be directed towards them so as to maintain quality at this level.

The **5 variables** falling into **Quadrant C (Low Priority)** include parking facilities, availability of tourist guidance centers, conference offer, availability of authorized tour operators and rural tourism centers indicating that investing scarce resources in these variables will offer little strategic advantage and hence, little or no efforts and resources are to be deployed for them as tourists consider them to be of low importance and hence their satisfaction with them though low as well, is relatively unimportant. The **6 variables** falling into **Quadrant D (Possible Overkill)** include tariff levels of accommodation, casino and gambling offer, night life and entertainment, availability of sport /recreational activities, possibilities of shopping, and wellness offer indicating that it should be maintained at this level but probably no additional efforts and resources should be allocated due to its low importance.

3.5.7 Importance – Performance Analysis (Modified Grid)

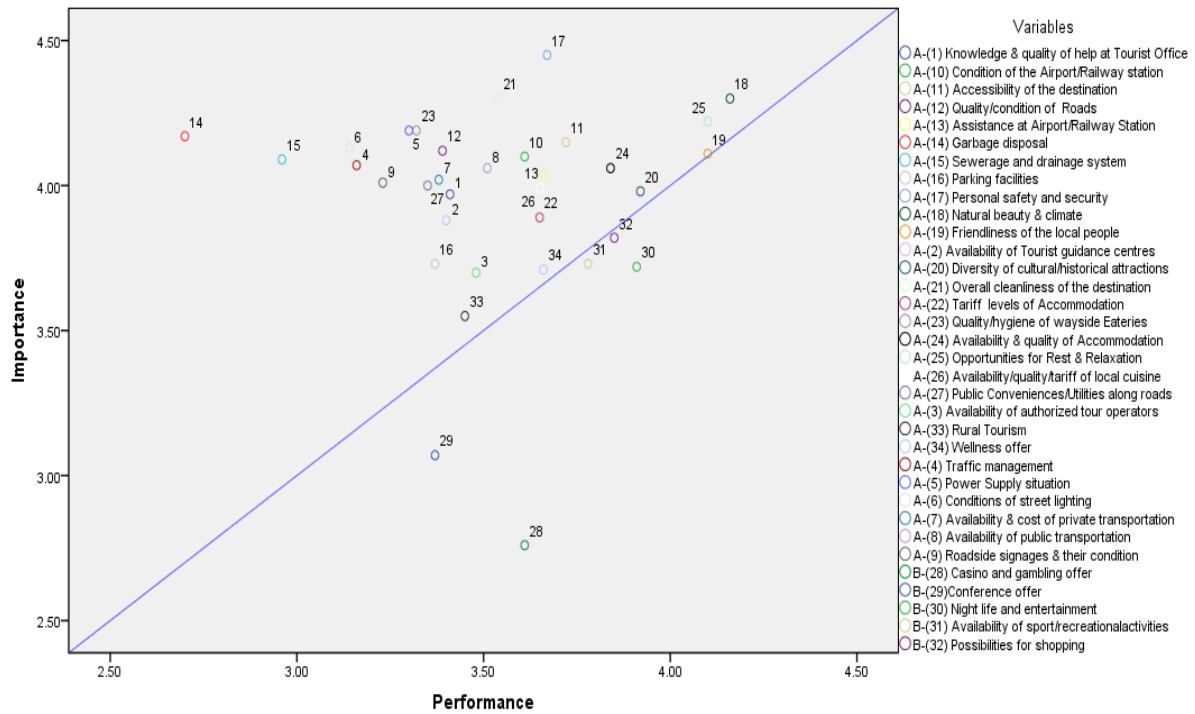


Figure 3.2: Importance - Performance Matrix (Modified Grid Analysis)
Above the diagonal line: REGION A, High Priority, Concentrate Here
Below the diagonal line: REGION B: Low Priority, Keep up the Good Work
 Source: Compiled from Primary Data

Since the I-P mapping graph in the current study using the diagonal drawn from the scale origin indicated that 33 attributes were placed in the region below the diagonal i.e. ‘keep up the good work’, and only 1 in the region above the diagonal i.e. ‘concentrate here’, it had no discriminative power and no managerial utility in terms of decision making and it was therefore discarded. The Modified I-P mapping graph in the current study using the diagonal drawn from the modified origin (*Refer Table 3.2 Column Diagonal and Figure 3.2*) indicated that 29 variables falling above the diagonal line, come under *Region A (Concentrate Here)* and include Availability of Tourist guidance centers, Knowledge & quality of help at Tourist Office, Traffic management, Power

Supply situation, Availability & cost of private transportation, Availability of public transportation, Roadside signages & their condition, Conditions of street lighting, Quality/condition of Roads (Internal/Highways), Garbage disposal, Sewerage and drainage system, Parking facilities, Overall cleanliness of the destination., Availability, quality & hygiene of wayside Eateries, Public Conveniences/Utilities along roads, Rural Tourism, Wellness offer, Accessibility of the destination, Availability of authorized tour operators, Assistance at (Airport/Railway Station), Condition of the Airport/Railway station, Natural beauty & climate, Friendliness of the local people, Diversity of cultural/historical attractions, Personal safety and security, Tariff levels of Accommodation (all kinds), Availability & quality of Accommodation, Opportunities for Rest & Relaxation, Availability, quality & tariff of local cuisine. Serious efforts are required to manage the resources in this region so that the destination attraction can be sustained in the coming years. Only 5 variables fall in **Region B (Keep up the Good Work)** i.e. region below the diagonal and come under **F4** (Entertainment), viz., casinos and gambling offer, conference offer, night life and entertainment, availability of sport / recreational activities, and possibilities for shopping. These attributes too, need to be managed carefully and all efforts are to be made and resources deployed to ensure that quality and satisfaction levels are maintained at a high level through sustainable investment or utilization of resources.

Though the original IPA resulted in only **13** out of the **34** variables coming under **Region A**, **7** fell under **F1** (tourist assistance), **3** fell under **F2** (infrastructure), and **3** fell under **F3** (attraction/destination). However, in the case of the modified IPA, **29** out of **34** variables come under **Region A** – i.e. all of the variables under the three factors **F1** (tourist assistance), **F2** (infrastructure), and **F3** (attractions / destination) and only **2** out of the remaining **7** variables of **F4** fall under **Region A**. The entire picture is a clear cut indication that the facilities

available for tourism in the state of Goa are almost non-existent or improperly managed. This is a serious issue which needs to be tackled by the concerned authorities on a war footing or else more of the negative impacts of tourism will creep into the Goan tourism industry, than the positive impacts. [*Refer Table 3.2 (Column Diagonal) & Figure 3.2*]

3.6. Summary

This research has been undertaken in order to evaluate the importance and satisfaction of tourists' towards the infrastructure, facilities, amenities and services offered by the tourist destination of Goa. The study has significant implications both for practitioners and academics. From the management perspective the results may provide clear guidance for the improvement of the tourist offer, by identifying the main areas where intervention is both necessary and desirable according to the tourists' perceptions, particularly in view of sustaining the destination's competitiveness. Mean Analysis of 34 variables shows 'average' level for both Importance (3.95) & Satisfaction (3.49), This indicates that in general, while tourists are satisfied with the tourist offer as a whole, the level of satisfaction is not very high. In terms of the hypothesis framed with respect to the four factors, except for two constructs in **F3** - Attraction / Destination Factor and three constructs in **F4** - Entertainment Factor which are not significant the remaining twenty nine constructs in the four factors are significant before and after the trip. **Thus the hypothesis is rejected and in general, tourists visiting the state are not satisfied with the four factors.**

H1: There is no significant difference between Tourist perception about the Importance given to and Satisfaction with

- (a) Tourist Assistance Factor (**F1**)
- (b) Infrastructure Factor (**F2**)
- (c) Attraction/Destination Factor (**F3**) &
- (d) Entertainment Factor (**F4**)

which are available in the state for tourism before and after the trip. (*Refer Table 3.2*)

The IP analysis has been carried out both, as per the original IPA as shown by Martilla & James using four quadrants, as well as per the modified IP analysis approach using the diagonal and having 2 regions. In particular, as per the original IPA having 4 quadrants, **13** variables altogether (7 variables from F1-Tourist Assistance, 3 from F2 - Infrastructure and 3 from F3 - Destination factors) fall in **Quadrant A** and urgently require concentration of efforts and resources for improvement particularly **Garbage & sewerage, Condition of street lighting, Availability & Quality of wayside eateries**, which have the largest gap and are therefore, undoubtedly the most important area of concern to be improved on a priority basis fall in this quadrant. The variables falling in **Quadrant A** relate to services, facilities and amenities which are rated high in importance so they are perceived as relevant determinants of tourism experience and if satisfaction is low, they will definitely affect the tourism experience, the decision to return and to recommend it to others. **10** variables in just two factors (6 from Destination/Attraction & 4 from Infrastructure Factors) are rated high both in importance & satisfaction and fall in **Quadrant B** including **Friendliness of the locals** which also has the lowest gap value as per the Gap Analysis. Efforts are to be made and resources deployed to ensure that quality and satisfaction levels are maintained at a high level. **5** variables altogether (2 from F1-Tourist Assistance, 2 from F4-Entertainment and 1 from F2-Infrastructure) fall in **Quadrant C**. These

variables are considered Low priority and no further resources are to be allocated to them as they offer little strategic advantage and generally may be ignored until some point at which tourists begin to view them with more importance. 6 variables overall (5 from F4-Entertainment Factor and 1 from F3 - Attraction/Destination) fall in **Quadrant D** which represent attributes of lesser importance, but high performance/satisfaction which should be maintained. However, high satisfaction here could indicate wasteful deployment of resources which could be better utilized in priority areas.

As per the modified IP analysis, using the diagonal approach, 29 attributes fall in **Region A** - the region above the diagonal ('Concentrate here/ high priority) and 5 attributes fall in **Region B** - the region below the diagonal ('Keep up the good work'/ low priority) respectively. In **F1 - Tourist Assistance Factor**, of the 9 attributes originally present in the factor, 7 attributes were in Quadrant A (Concentrate here) and continue to remain there while the remaining 2, which were in Quadrant C i.e. Availability of authorized tour operators and Availability of tourist guidance centers have shifted to Quadrant A, thereby indicating that tourist assistance factors generally require priority action for improvement. In **F2 - Infrastructure Factor**, out of the 8 attributes originally present in the factor, 3 attributes which were in Quadrant A (Concentrate here) continue to remain there; 4 attributes which were in Quadrant B (Keep up the good work) i.e. Personal safety and security, Condition of airport/railway station, Accessibility of the destination and Assistance at airport/railway station, has shifted from Quadrant B (Keep up the good work) to Quadrant A (Concentrate here) while one attribute i.e. Parking facilities having the lowest gap has shifted from Quadrant C (Low priority) to Quadrant A (Concentrate Here) i.e. requiring higher priority for improvement. Further, in **F3 - Attraction/Destination Factor**, out

of the 10 attributes present in the factor, 6 attributes which were present in Quadrant B (Keep up the good work) i.e. Natural beauty & climate, Friendliness of the local people, Diversity of cultural/historical attractions, Availability & quality of Accommodation, Opportunities for Rest & Relaxation, Availability, quality & tariff of local cuisine have shifted to Quadrant A (Concentrate here) and 3 attributes i.e. Overall cleanliness of the destination, Availability, quality and hygiene of wayside eateries and Public conveniences along the roadside were in Quadrant A (Concentrate here) continue to remain there indicating high priority for improvement. One attribute i.e. Tariff levels of accommodation has moved from Quadrant D (Possible Overkill) to Quadrant A (Concentrate here). In **F4 - Entertainment Factor**, out of the 7 attributes originally present 5 attributes i.e. Casino and gambling offer, Night life and entertainment, Availability of sport & recreational activities, Possibilities for shopping, Wellness Offer have shifted from Quadrant D (Possible Overkill) to Quadrant B (Keep up the good work). 2 attributes i.e. Conference offer & Rural Tourism have shifted from Quadrant C (Low priority) to Quadrant A (Concentrate here) thus indicating that in the diagonal IP mapping most of the attributes are considered unsatisfactory.

Gap Analysis however, shows the existence of a gap between the estimated/expected mean and the perceived mean i.e. -0.67 for F1 (Tourist Assistance), -0.72 for F2 (Infrastructure, -0.34 for F3 (Attraction/Destination), +0.06 for F4 (Entertainment) &). For F1, F2 & F3, the satisfaction values are less than expectation - as indicated by the negative gap values, For F4, the satisfaction values are more than expectation (generally) as indicated by the positive gap values. However, when considered with their position on the Grid, F4 variables all fall in **Quadrant C (Low Priority) & Quadrant D (Possible Overkill) [Original IPA]** and **Below the diagonal line i.e.**

Region B [Modified IPA], which possibly indicates that the gap value though positive, is not very promising as they occur for variables that tourists appear to value highly. The High gap value for -0.67 for F1 - Tourist Assistance) & -0.72 for F2 - Infrastructure (closer to 1) indicates a lack of balance between perception of importance and actual satisfaction with the same and a consequent need for Government, Service Providers and those responsible for tourism in the state, to improve the tourist offer by identifying the main areas where intervention is both necessary and desirable according to the tourists' perceptions, particularly in view of sustaining the destination's competitiveness. From the perspective of research, this study supports the adoption of the IPA as a framework for evaluating tourist satisfaction and the framework used for the State of Goa could be used in other Mass tourist destination, as a benchmarking tool. Such a framework can also be utilized in further research on tourist satisfaction in terms of different segments i.e. the differences in perceptions among domestic & International tourists as well as differing perceptions among International tourists so as to make promotion segment specific and hence more effective.

CHAPTER 4

RESIDENTS' PERCEPTION ABOUT IMPACTS OF TOURISM

4.1 Introduction

Tourism is one of the most dynamically developing sectors in the world economy and the largest Global Industry (Goeldner and Ritchie, 2006). It has been often referred to as “the goose that lays a golden egg, but also fouls its own nest” (Julio, 2001) since, if carried out without planning and due consideration of local values and environment may result in socio-cultural, environmental and economic degradation to the host population. The growth of tourism causes important impacts worldwide and locally which are both positive and negative (Gursoy *et al.*, 2002; Haley *et al.*, 2004). An increasing amount of research has been conducted to understand the impact of tourism development from the point of view of local residents, (Ap, 1992; Getz, 1994; Lankford and Howard, 1994; Jurowski *et al.*, 1997 *etc.*) probably due to the fact that while tourism helps both the community and the nation to grow, it does create certain inevitable economic, socio-cultural, environmental impacts on the people or the host community and the destination. (Allen *et al.*, 1988; Chen and Chen, 2010; Kuvan and Akan, 2005; Long and Kayat, 2011; Long, 2011; Liu *et al.*, 1987; Liu and Var, 1986; Perez and Nadal, 2005; Nepal, 2008; Jackson, 2008; Long *et al.*, 1990) Economic effects of tourism affect the economic base of residents and its positive impacts include employment opportunities, economic growth, higher

standard of living, infrastructure development while its negative aspects include inflation, economic instability, seasonal temporary employment, tax burdens. Socio-cultural impacts affect the fabric of the social and cultural life of residents and have as their positive aspects, quality of life improvement, intercultural communication and understanding, resurgence of traditional practices, community pride, while the negative aspects include increase in crime rates, loss of authenticity, worsening residents' attitude etc. Environmental tourism impacts include impacts of tourism on the environment comprising positive elements such as preservation of historical buildings and monuments, improved area's appearance while negative elements include crowding, pollution of air, soil, water, noise, litter, traffic and parking congestion, depletion of natural resources, land construction etc.

The tourism industry relies heavily on the goodwill, participation and support of the local residents or host community who play a vital role in developing a healthy and prosperous tourism industry (Ap, 1992; Latkova 2012). Tourism should therefore be developed according to local residents' needs and desires and a thorough understanding of local residents' perception of tourism impacts and their consequent attitude towards the development of tourism is vital to the success and sustainability of tourism in any destination. (Allen et al., 1988; Gursoy et al., 2009; Kuvan and Akan, 2005; Lankford and Howard, 1994; Yoon et al., 2001) The aim of this chapter is to study the perceptions of all categories of residents, (locals engaged and not engaged in tourism related businesses, those employed in tourism in both government as well as private sector, those from tourist centric as well as non tourist centric areas, from both districts, north as well as south Goa) towards tourism in the state.

In any empirical research investigating the perception of tourism's impacts on residents of the host community, both its multi-dimensional impact and its duality (negative-positive) should be taken into consideration. In general, there is a divergence of perceptions about tourism's impacts on the host community wherein residents who perceive tourism's impacts positively are more likely to support additional tourism and willingly participate in exchanges with tourists visiting the destination. Residents who view its impacts more negatively and believe its costs outweigh its benefits, are more likely to oppose tourism development. (Chen and Chen, 2010; Liu and Var, 1986; Jackson, 2008; Lankford and Howard, 1994) This trade-off between costs and benefits of tourism is explained on the basis of the Social Exchange Theory which suggests that individuals will engage in and support activities where they believe the benefits outweigh the costs and consequently, in tourism too, if residents believe that the benefits accruing from tourism and its development will exceed its potential costs they will willingly participate in the same and extend their support to further tourism development. (John, 1990; Yoon et al., 2001; Jurowski & Gursoy, 2004)

Tourism in Goa capitalizes on what has traditionally been considered its 'Unique Selling Proposition' i.e. its beaches and its sunshine along with its unique blend of indo-portuguese cultural and historical heritage. The state promotes a kind of heterogeneous tourism development wherein both upscale as well as charter tourism exist and both international as well as domestic tourists visit. The growth of coastal tourism in particular, in the state, has been rampant, rapid and uncontrolled resulting in impacts which have had a widespread effect on the local life and environment. Despite an awareness of the impacts of tourism, the complex mixture of customary rights, land ownership, a variety of stakeholders with differing interests and ineffective

institutional and political structures, all combine to make it difficult to define and implement a tourism strategy for the state. (Sawkar et al., 1998) Unlike in many other tourist destinations of the world, in Goa, due to the lack of specifically demarcated areas for tourists and residents and the consequent vying for the use of local resources such as water, beaches, transport etc. conflicts frequently arise. Compounding this, is the porosity of the state's borders with the neighbouring states which though encourages domestic tourism, also gives rise to a large inflow of migrant labour force and further exacerbates the social impacts. While various mechanisms (panchayats, comunidades, courts) do exist to resolve conflicts among various stakeholders, the delays and dissatisfaction in resolution of the same is indicative of the need for an improved institutional response. (Sawkar et al., 1998) Yet, Goa does have a fairly active and aware lobby among its citizens which highlights, documents and brings to the notice of the public a variety of issues, including tourism related concerns, for their active participation, which is essential for the sustainability of the tourism industry in the state in the long run.

The attitude of residents towards tourism is gaining importance as a field of research for a number of reasons and residents are considered a critical factor for the success of tourism industry. Since they are one of the most important stakeholder groups in development of any region as a tourism destination (Choi and Sirkaya, 2005) their support is required for increased taxes to develop and maintain tourism related infrastructure development, for creating a hospitable and attractive environment (Var et al. 1977) which makes tourists feel welcomed, motivates them to revisit and act as advertising medium which results in the inflow of more tourists. (Andriotis, 2005; Yoon et al., 2001) A study of residents' attitude assumes importance particularly because residents fall into various categories including local residents who may be

involved in the tourism industry and may be termed entrepreneurs, those not engaged in tourism related businesses, those working in the tourism industry in both the private sector as well as the government departments, non-governmental organizations involved in social activism etc.; all of whom may be considered important stakeholders in the tourism industry. This diversity in stakeholder groups will influence their attitudes, perceptions and motivations towards tourism, and consequently their support for it.

Though many studies have been carried out on assessing the factors influencing the attitude of residents towards development of tourism in various destinations, the present study tries to identify the local resident's attitude towards tourism development in Goa. As far as the authors' knowledge goes, no similar study has been carried out so far, addressing the above mentioned issues, which makes this study more significant because it throws light on an otherwise unexplored area, which needs to be studied in detail for promoting the tourism industry in the state and for ensuring sustainable development leading to socio-economic transformation. Despite extensive research on this topic, eminent researchers have suggested the need to replicate such studies in different locations and at different times in order to validate previous finding and/or identify new factors influencing the same. (Andriotis *et al.* 2003, Cavus and Tanrisevdi, 2003) Therefore, this study fills the gap by adding valuable knowledge, new perspectives and presents possibilities for consideration and offers valuable inputs for the tourism business community, NGO's, Government and other stakeholder groups.

4.2 Background of the Study

When Goa joined the Indian union in 1961, immediately post liberalization, it had very little development and its main industry was the mining sector with its exports of iron and manganese. However, its rich coastal biodiversity, plentiful natural resources, practically unspoiled natural beauty, peace loving people, its relatively low population pressure all contributed to a superior quality of life for locals and a haven for visitors, particularly the flower children of the west. Recognizing this and fearing industrial pollution, Tourism was adopted as a key sector of the economy in preference to industry in order to generate income and employment of all kinds, but most specifically non-manual employment for the increasingly educated Goan workforce in a scenario of limited industrial growth.

Despite Goa's myriad natural and historical attractions, most of tourism in the state is concentrated along the coast, particularly in the talukas of Bardez, Tiswadi, Salcete and Mormugao.(Ambli, 1991) As a result, Tourism in the state has developed a perceptibly lopsided approach both geographically (in the coastal areas) and in terms of the product offered (beach tourism). Visitors to the state comprise both domestic tourists who make up the bulk of visitors and international tourists who comprise a minority but can be differentiated into backpackers, charter tourists and very few elite. While the domestic tourists flock to the state to experience its unique culture, relative freedom of lifestyle and dress, its nightlife and its beaches, the international tourists visit the state for its sun-kissed beaches, warm climate and laid back atmosphere. However, while backpackers prefer to mingle with locals and stay as paying guests or in rented premises, charter tourists prefer to stay in the relative luxury of five star hotels. Further, while a tourist season was clearly identifiable in the past, today, while most international

tourists visit the state from October to March, no particular season exists for the domestic tourists, who visit the state all year round, albeit in larger numbers during the non-monsoon season, perhaps in part, due to extensive promotion of the state as an all year, all season destination.

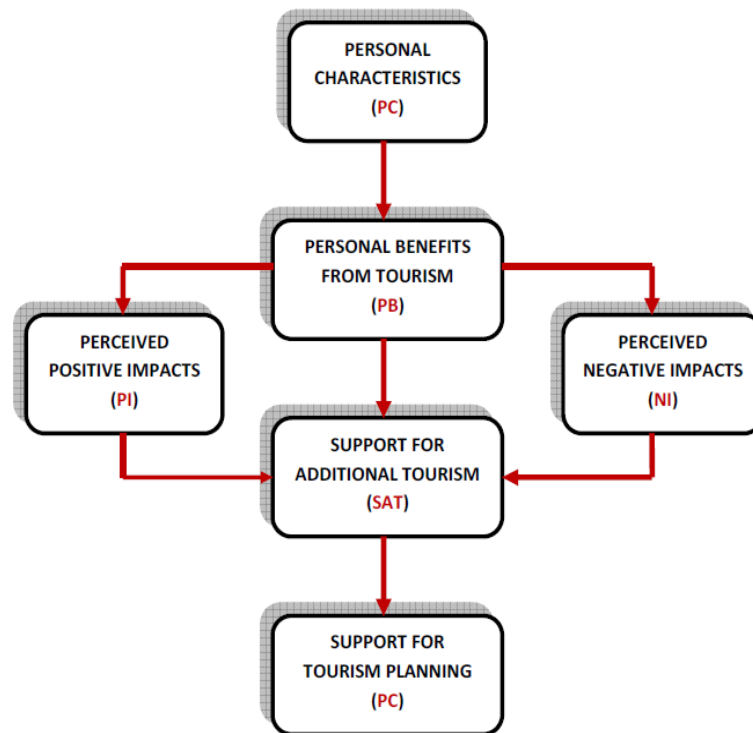
Such extensive promotion of tourism has undoubtedly increased the number of visitors to the state and in turn put pressure on the state's limited resources. The carrying capacity of the destination is being severely tested in terms of the existing infrastructure, services, facilities and resources which have to be shared between visitors and local residents, many of whom do not receive any direct and sometimes even indirect benefits from tourism. (Akhtar and Shah, 2012)

While Goa's infrastructure has been developed to a much greater extent in the past decade, it still is fairly unplanned and while some stakeholders, particularly those in tourism related public undertakings believe further infrastructural development and up gradation of existing infrastructure is needed, (GTDC, 2009) others feel that no further infrastructural additions are needed as the state needs no more tourist arrivals, since infrastructure created to cater to peak season demand remains unutilized in the off season (Planet, 2005). Issues regarding environmental degradation due to tourism and tourism related activities (ground water pollution, solid waste disposal, pollution of water bodies due to off shore casinos, sand dune degradation, etc.) social degradation due to tourism (casinos and gambling, drugs, child sex trafficking and prostitution etc.), urbanization and construction due to tourism (conversion of agricultural land and rural areas into amusement and water parks, unplanned and unprecedented constructions of tourist accommodation, migration of labour from agricultural sector to service sector), economic impacts due to tourism (leakage of foreign exchange, benefits accruing to outsiders since

majority of jobs are held by non-goans as opposed to locals, loss/leakage of potential income due to dependency of food products on neighbouring states) raise further concerns about the impacts of tourism and its continued sustainability in the state. Tourism industry in any region can grow and develop only when local residents have a positive attitude towards it and when they feel they have a role to play in the process of tourism planning, development, and management. A healthy nexus should exist between the local residents and the government at every stage of tourism planning and development. Therefore, the perception of local residents about the impacts of tourism on their home destination assumes great significance and becomes a vital area of concern in the assessment of the destination's future sustainability.

The Social Exchange theory (Allen *et al.*, 1993; Jurowski *et al.*, 1997; Andereck *et al.*, 2005; Gursoy *et al.*, 2002) states that people evaluate any exchange based on the costs and benefits received as a result of that exchange. When residents find the exchange, in terms of tourism, beneficial to them and increases their well being, they will most likely have positive attitudes towards tourism and therefore support tourism development and vice versa. Using the Social Exchange Theory as a foundation, this study attempts to explore the following research questions; viz.; **RQ1**: Whether *personal characteristics* affect the *perception of the impacts* of tourism when considered along with the *personal benefit* derived from Tourism; **RQ2**: Whether the extent to which *personal benefit* from tourism development influenced *perceived positive impacts, perceived negative impacts* and *support for additional tourism*; **RQ3**: Whether the extent to which *personal benefit* from tourism development, *perceived positive impacts of tourism and perceived negative impacts of tourism* affected *support for additional tourism*; and **RQ4**: What *variables* contributed to *support for tourism planning*?

Figure 4.1 Research Framework



Source: Perdue et al., 1990

In most studies regarding the perceptions of residents towards tourism in a destination, the Social Exchange Theory (which basically compares the costs versus benefits received from tourism) plays a major role as it helps to understand how the residents of a community perceive and react to the complex phenomenon of tourism in their destination, given the fact that it affects their lives both positively and negatively. Personal benefit refers to the extent to which a resident derives benefit directly and indirectly from tourism and is generally believed to have a direct relationship with perception of impacts. Further, perceptions of impacts are also influenced by

determinants such as personal benefit derived from tourism as well as biographic variables such as age, income, gender, education, years of residence, birth place, place of residence etc. In this study, Personal benefit derived from tourism when considered along with personal characteristics, perception of positive and negative impacts is hypothesized to influence the support for development of additional tourism. Further, Personal benefit derived from tourism, perception of positive and negative impacts and support for development of additional tourism is hypothesized to influence the support for tourism planning. The research framework for the present study based on the four research questions is shown in **Figure 4.1**

The hypotheses framed in respect of the research questions are:

H_{2a}: Personal Characteristics along with Personal Benefit (PB) from tourism affects residents' perception of Negative Impacts (NI) of tourism.

H_{2b}: Personal Characteristics along with Personal Benefit (PB) from tourism affects residents' perception of Positive Impacts (PI) of tourism.

H₃: Extent of Personal Benefit (PB) derived from tourism influences residents perception of positive (PI) and negative (NI) impacts of tourism as well as Support for Additional Tourism (SAT);

H₄: Extent Of Personal Benefit (PB) derived from tourism, residents perception of positive (PI) and negative (NI) impacts of tourism & Support for Additional Tourism (SAT) influences Support for Tourism Planning (STP)

4.3 Research Methodology

A structured questionnaire developed based on previous research studies carried out by **Lankford & Howard (1994)** **Allen et al., (1993)**; **Long et al., (1990)**, was administered to 1000 residents

who were above 18 years of age from the state of Goa, out of which 809 fully completed were received back giving a response rate of 80.9%. The survey was carried out during September 2013 to December 2014. The questionnaire used had three parts: **Part I**- Biographical Data, **Part II** – Determinants Influencing Residents Attitude towards Tourism Impacts, **Part III**- Statements on Tourism Impacts. Part III used a 5 point Likert Scale type format where 1 = strongly disagree and 5 = strongly agree, with 3 was the neutral point. Variables used for the survey include several composite scales developed ad hoc from the attitude items and one additional variable measuring perceptions of *personal benefit* from tourism. The first subscale was composed of 9 items that measure residents opinions about *negative impacts* of tourism (**NI**); the second, 14 items that measure residents opinions about *positive impacts* of tourism (**PI**); the third, 2 items that measure residents opinions about perceived *personal benefits* from tourism (**PB**); the fourth, 2 items that measure residents *support for tourism planning* (**STP**); and the fifth, 8 items that measure residents opinions about *support for additional tourism* (**SAT**). (**Table 4.1**) The scale had an reasonably high overall alpha coefficient of 0.834, with Positive Impacts (PI) having alpha of 0.797, Negative Impacts (NI) having alpha of 0.769, Support for Additional Tourism (SAT) having alpha of 0.874, and Support for Tourism Planning (STP) having alpha of 0.835; where as Personal Benefits (PB) from tourism with alpha of 0.341, but as it is conceptually related, it was deemed appropriate and included. (Diekhoff 1992; Nunally, 1978)

The **Mean Analysis** indicates the Residents' perception of the positive and negative impacts of tourism in the state, the benefit they derive from it, their support for additional tourism development and tourism planning and is obtained from resident responses on a 5 point Likert scale where 1 = very unimportant /very unsatisfactory, 2 = unimportant / unsatisfactory,

Tourism Attitude Items	SD 1	D 2	N 3	A 4	SA 5	Mean
Personal Benefits from Tourism (PB):						
I benefit personally from tourism development in my community	8.7	26.5	31.1	20.5	13.2	3.03
Tourism in my community benefits me personally to a great extent	14.0	10.5	22.7	33.4	19.4	3.34
Scale Mean=3.19, alpha=0.341, 2 items						
Tourism Positive Impacts (PI):						
Tourism development in my community has provided more jobs opportunities & employment for local people	6.7	11.9	20.5	45.0	15.9	3.52
Standard of living has increased considerably because of tourism	0.5	5.9	18.0	52.5	23.0	3.92
Tourism has given economic benefits to local people and small businesses.	2.2	3.8	13.7	56.9	23.4	3.95
Tourism development in my community has attracted more public& private investment	1.0	8.5	27.6	46.6	16.3	3.69
Tourism development helps to maintain assets for local Community	3.0	12.0	31.5	44.3	9.3	3.45
Tourism has encouraged a variety of cultural activities by the local residents	0.9	11.4	22.1	51.5	14.1	3.67
Tourism has resulted in more cultural exchange between tourists and Residents	0.9	9.1	25.0	52.3	12.7	3.67
Tourism has resulted in positive impacts on the cultural identity of the community	3.1	19.4	29.5	35.7	12.2	3.35
Tourism development has led to an increase in quality of life in the host community	2.3	6.9	26.6	52.2	12.0	3.65
Tourism has provided an incentive for the restoration of historical buildings and for the conservation of natural resources	0.7	7.2	22.0	48.5	21.6	3.83
Tourism provides more parks and other recreational areas/facilities for local residents	6.1	19.0	26.5	42.3	6.2	3.23
Shopping opportunities are better in my community as a result of tourism	2.0	13.1	21.0	50.4	13.5	3.60
The quality of public services has improved due to more tourism in my community	7.3	20.8	25.6	37.6	8.8	3.20
Roads and other public facilities are kept at a high standard	13.3	28.1	28.6	23.9	6.2	2.81
Scale Mean=3.54, alpha=0.797, 14 items						
Support for Tourism Planning (STP):						
Locals are to be encouraged to take part in decision making process to influence tourism development in the community	0.6	2.2	13.6	45.4	38.2	4.18
Community should be more involved in the management of local resources	0.4	2.7	13.3	48.1	35.5	4.16
Scale mean= 4.17, alpha=0.835, 2 items						
Negative Impacts (NI):						
The prices of goods and services have increased because of tourism	0.7	4.8	9.9	41.4	43.1	4.21
Tourism industry has larger financial leakages than other Industries	0.6	8.7	46.1	34.6	10.0	3.45
Tourism development in my community has provided employment for only limited periods due to seasonality	0.9	6.3	21.8	48.9	22.1	3.85
Tourism has negatively altered traditional culture of the area.	5.4	21.4	26.9	32.4	13.8	3.28
Tourism has increased the crime and vandalism rate in the area.	3.5	15.3	20.4	34.7	26.1	3.65
Construction of hotels and other tourist facilities have destroyed the natural environment.	1.0	8.3	10.8	42.0	37.9	4.08
Tourism has resulted in traffic congestion, noise and pollution.	0.5	4.3	9.6	45.5	40.2	4.20
Tourism has resulted in unpleasantly overcrowded beaches, hiking trails, parks and other outdoor places in the community.	0.5	6.2	12.6	45.7	35.0	4.09
There is more litter in my community due to tourism	1.7	11.6	26.1	34.4	26.2	3.72
Scale mean= 3.84, alpha=0.769, 9 items						
Support for Additional Tourism (SAT):						
I support tourism and would like to see it become the main industry in my community	3.7	9.4	24.5	39.8	22.6	3.68
The government should improve the promotion of tourist facilities in this community	1.4	6.3	19.2	57.4	15.8	3.80
Tourism businesses should be encouraged in the community	2.7	13.7	27.7	43.3	12.6	3.49
I believe tourism should be encouraged in the state of Goa	1.9	4.2	20.4	47.5	26.1	3.92
I support tourism as having a vital role in my community	1.9	9.5	23.2	44.9	20.5	3.73
My community is growing rapidly due to tourism	3.1	13.8	28.2	39.2	15.7	3.51
My community should become more of a tourist destination	4.6	19.4	25.7	35.7	14.6	3.36
My community should encourage more intensive development of tourist facilities	3.3	10.1	25.1	45.9	15.6	3.60
Scale mean=3.64, alpha=0.874, 8 items						

Table 4.1: Tourism Attitude Items and Composite Scales (N = 809) Scale alpha = 0.841 (35 items)

Source: Compiled from Primary Data

3 = Important / satisfactory, 4 = above average importance/ above average satisfaction, 5= very important /very satisfactory. If the mean value is from 3-5, it indicates that tourists agree that the infrastructure is important/satisfactory while values from 1-2, mean that they consider it to be unimportant/unsatisfactory.

4.4 Analysis, Research Findings and Discussion

4.4.1 Demographic Profile of Respondents

General profiling of residents based on the survey is shown in **Table 4.2**. Standard demographic questions were asked of each respondent including age, where the age group 18-27 years had the largest number of respondents – 24.7% followed by 38-47 years with 23% and 28-37 years with 22.2% , gender (approximately even with males being 51.3% and females being 48.7%, education (the largest number of respondents were Graduates – 43.4% followed by Post Graduates – 18.4%, income (most respondents – 74.1% fell in the 10000-70000 p.m. categories which covered the low to medium income groups) with the largest number – 32.8% falling in the 10001-30000 p.m. category followed by 22.4% & 18% in the 30001-50000 & 50001-70000 categories. In terms of length of residence in the community, the largest number of respondents – 31.4% had lived there for 16-25 years followed by an equal number – 26% in 26-35 & 36 years & above categories indicating a pattern of long term residence, place of residence i.e. whether they were living in tourist centric – 54.9% or non tourist centric regions - 45.1%, birth place – whether respondents were born in the community or not with a large majority – 77.9% being born in Goa while 22.1% having been born outside Goa. In terms of category of employment, the largest group were employed – 54.9%, followed by 19.9% and 11.1% being self-employed and

Demography	#	%	Demography	#	%
Age			Area of Residence		
18-27	199	24.7	Tourist centric	444	54.9
28-37	180	22.2	Non Tourist centric	365	45.1
38-47	186	23.0	Occupation		
48-57	158	19.5	Employed	444	54.9
58& Above	85	10.5	Self employed	262	19.9
Gender			Unemployed	15	1.9
Male	415	51.3	Retired	46	5.7
Female	394	48.7	Student	90	11.1
Education			Homemaker	39	4.8
SSC & below	102	12.6	Other	14	1.7
HSSC	144	17.8	Involvement in Tourism decision making		
Graduate	351	43.4	Involved	167	20.6
Post Graduate	146	18.0	Not involved	642	79.4
Professional	66	8.2	Interaction with Tourists		
Income			No interaction	116	14.3
Below 10,000	89	11.0	1-3 times a year	242	29.9
Between 10,001-30,000	265	32.8	4-6 times a year	148	18.3
Between 30,001-50,000	181	22.4	7-9 times a year	79	9.8
Between 50,001-70,000	153	18.9	10 & above times a year	224	27.7
Between 70,001-90,000	56	6.9	Evaluation of degree of community growth		
Above 90,000	65	8.0	Very slow	31	3.8
No. of years of Residence			Slow	135	16.7
Below 5 years	36	4.4	Moderate	421	52.0
6-15 years	95	11.7	Rapid	199	24.6
16-25 years	254	31.4	Very Rapid	23	2.8
26-35 years	212	26.2	Evaluation of degree of Tourism Development in community		
36 years & above	212	26.2	Very Limited	76	9.4
Birth place			Limited	167	20.6
Born in Goa	630	77.9	Moderate	321	39.7
Born outside Goa	179	22.1	Extensive	216	26.7
			Very Extensive	29	3.6

Table 4.2: Demographic Profile of Residents (n= 809)
Source: Compiled from Primary Data

students respectively; while in terms of involvement in tourism decision making, an overwhelming majority – 79.4% were not involved in any sort of tourism decision making. With respect to interaction with tourists (48.2% of the respondents indicated medium interaction with tourists while 27.7% and 14.3% indicated a high degree of interaction and no interaction respectively; for evaluation of the degree of community growth – 79.4% of respondents noted moderate to rapid growth of their community and finally for evaluation of the degree of tourism development in the community - 70% of the respondents noted moderate to extensive degree of tourism development in the community.

4.4.2 Mean Analysis

Mean analysis (Refer Table 4.1) indicated that the **grand mean** value of the scale or the **overall scale mean** for the Tourism Attitude Items and Composite Scale was 3.64 indicating an average perception. For Sub scale **Personal Benefits from Tourism (PB)**, it was 3.19 (average, tending towards the lower end of the average scale), for Sub scale **Tourism Positive Impacts (PI)**, it was 3.54 (average), for Sub scale **Tourism Negative Impacts (NI)**, it was 3.84 (average, tending towards the higher end of the average scale), for Sub scale **Support for Additional Tourism (SAT)**, it was 3.64 (average) and for Sub scale **Support for Tourism Planning (STP)**, it was 4.17 (above average). Thus, the mean value for subscales is mid-average in keeping with the overall scale mean (which is mid-average) except for STP which is above-average and PB which is a low-average. Further, this indicates that residents' generally have a higher perception of the requirement and support for tourism planning.

4.4.3 Regression Analysis

Based on the model developed by *Perdue et al. (1990)* and later modified by *Mc Gehee et al (2002)*, a series of multiple regression analysis were performed, result of which are shown in **Table 4.3**, to explore the relationship among the variables based on four models. **Model – 1** examined the relationship of tourism's Negative Impacts (NI) as the dependent variable in relation to independent variables like Personal Benefits (PB) from tourism, and Residents' Characteristics (age, gender, education, income, number of years of residence, birth place, and location). **Model – 2** examined the relationship between tourism's Positive Impacts (**PI**) as the dependent variable in relation to the independent variables like Residents' Characteristics (age, gender, education, income, number of years of residence, birth place, and location) and Personal

Benefits (**PB**) from tourism. **Model 3** tests the relationship between Personal Benefit from Tourism, Tourism Positive and Negative Impacts, and Support for Additional Tourism Development. Finally, **Model 4** determines the variables that predict resident support for tourism planning from among the variables: Personal Benefit, Tourism's Positive and Negative Impacts as well as Support for Additional Tourism.

As a result of the analysis, a number of interesting findings were thrown up through the different models analyzed. **Model 1**, indicates that while **Personal Benefit** was not significant, **Education** (beta = 0.085) has a statistically significant **positive** relationship & **Place of Residence** (beta = -0.093) has a statistically significant **negative** relationship with **Negative Impacts of tourism**. These findings indicate that personal benefits received from tourism do not influence the residents' perception of tourism's negative impacts. However, Education shares a statistically significant relationship in the positive direction with tourism's negative impacts indicating that as the level of education of residents' increases, their perception of tourism's negative impacts also increases. Further, Place of residence shares a statistically significant negative relationship with tourism's negative impacts indicating that the location of residence (i.e. tourist centric or non tourist centric) influences, their perception of tourism's negative impacts i.e. those residents in tourist centric areas tended to view tourism's impacts less negatively while those in non tourist centric areas tended to view it more negatively. **Model 1** explains a **negligible 1.2%** of the variation between **Dependent Variable - Negative Impacts (NI)** and **Independent Variables - Personal Benefits derived from Tourism (PB), Age, Gender, Education, Income, Number of years of Residence, Birthplace, Tourist Centric/Non Tourist Centric (Location of**

Residence) which indicates that it is not a very reliable model and hence the results must be considered with this in mind.

Independent Variable	Dependent Variable		
	Beta	T	Sig
Model 1	Negative Impacts of Tourism		
Personal benefit from tourism	0.022	0.593	0.553
Age	0.037	0.969	0.333
Gender	0.047	1.318	0.188
Education	0.085	2.133	0.033*
Income	-0.057	-1.447	0.148
No. of years of residence	0.059	1.588	0.113
Born in Goa	0.033	0.923	0.356
Tourist centric/Non tourist centric	-0.093	-2.593	0.010*
Model statistics	Adjusted R ² = 0.012, F=2.198, p=0.05		
Model 2	Positive Impacts of Tourism		
Personal benefit from tourism	0.255	7.333	0.000*
Age	-0.096	-2.646	0.008*
Gender	-0.055	-1.612	0.107
Education	-0.092	-2.441	0.015*
Income	0.058	1.561	0.119
No. of years of residence	0.000	-0.009	0.993
Born in Goa	-0.132	-3.840	0.000*
Tourist centric/Non tourist centric	-0.002	-0.067	0.947
Model statistics	Adjusted R ² = 0.104, F=12.774, p=0.05		
Model 3	Support for Additional Tourism		
Personal benefit from tourism	0.368	13.768	0.000*
Positive Impacts of Tourism	0.468	17.446	0.000*
Negative Impacts of Tourism	-0.121	-4.683	0.000*
Model statistics	Adjusted R ² = 0.466, F=236.262, p=0.05		
Model 4	Support for Tourism Planning		
Personal benefit from tourism	0.087	2.202	0.028*
Positive Impacts of Tourism	-0.016	-0.381	0.703
Negative Impacts of Tourism	0.210	6.045	0.000*
Support for Additional Tourism	0.113	2.411	0.016*
Model statistics	Adjusted R ² = 0.061, F=14.179, p=0.05		

Table 4.3: Regression Analysis of Relationship between Variables

* indicates significance at the $p < 0.05$ level

Source: Primary Data

As a result of the analysis in **Model 2**, it was found that **Personal benefit** (beta = 0.255) has a statistically significant relationship in a **positive** direction with the dependent variable **Tourism's Positive Impacts** indicating that the more a respondent perceives a gain in personal benefits from tourism, the more likely she/he will agree with the positive impacts of tourism.

Age (beta = -0.096), **Education** (beta = -0.092), and **Birth place** (beta = -0.132) enjoy a small but **negatively** significant relationship with **Tourism's Positive Impacts** indicating that as they

increase, perception of positive impacts of tourism decreases i.e. the less likely they are to agree with the statements about positive impacts of tourism. Model 2 explains only **10.4%** of the variation between the **Dependent variable - Positive Impacts (PI)** and the **Independent Variables - Personal Benefits from Tourism (PB), Age, Gender, Education, Income, Number of years of Residence, Birthplace, Tourist Centric/Non Tourist Centric (Location of Residence)**. A note of caution is worthwhile while considering the results of Model 2 because of its relatively low R square value which though acceptable in social sciences research, suggests that it is not a very reliable model and hence the results must be considered with this in mind. [**R² values between 0.10-0.20 though low, are acceptable in social science research (Gaur & Gaur 2006)**]

Model 3 tests the relationship between Personal Benefit derived from tourism, Tourism's Positive and Negative Impacts and Support for Additional Tourism Development. The analysis interestingly indicates that when Support for Additional Tourism Development is used as the dependent variable, all three independent variables (Personal Benefit, Negative Impacts and Positive Impacts) are statistically significant. Negative Impacts (beta = -0.121) are significant in a negative direction indicating that as the perception of negative impacts of tourism increases, residents support for additional tourism in the community will decrease. Personal Benefits (beta = 0.368) and positive Impacts (beta = 0.468) are significant in a positive direction, indicating that residents who perceive personal benefit from tourism and tended to agree with the positive impacts of tourism were more likely to support the growth of additional tourism in their community. Model 3 explains 46.6% of the variation between Dependent Variable - Support for

Additional Tourism Development (SAT) and Independent Variables - Personal Benefit derived from tourism (PB), Tourism's Positive Impacts (PI) and Negative Impacts (NI).

Finally, in **Model 4**, the focus is on tourism planning and the analysis helps to determine the variables that predict resident support for tourism planning. There is a statistically significant **positive** relationship between **Support for Tourism Planning, Personal Benefit** (beta = 0.087), **Support for Additional Tourism** (beta = 0.113) as well as **Tourism's Negative Impacts** (beta = 0.210). The variable **Personal Benefit** (0.087) shares a statistically significant **positive** relationship with **Support for Tourism Planning** and is a significant predictor of **Support for Tourism Planning**, indicating that, support for planning is related to the extent to which people benefit from tourism. Further, despite being aware of the negative impacts of tourism and perhaps because of them, residents support additional tourism because of the personal benefit they derive from it but at the same time recognize the need for tourism planning. There is a no statistically significant relationship between **Support for Tourism Planning** and **Tourism's Positive Impacts** indicating that it is not a significant predictor of support for tourism planning. **Model 4** explains **6.1%** of the **variation between Dependent variable - Support for Tourism Planning (STP) and Independent Variables – Personal Benefit from Tourism (PB), Tourism's Positive Impacts (PI), Tourism's Negative Impacts (NI) and Support for Additional Tourism (SAT)** which indicates that it is not a very reliable model and hence the results bearing this in mind must be considered with caution.

4.5 Summary

In terms of the research questions posed at the beginning of this research study, the following answers may be put forward. In general, in terms of the *first research question* answered in Model 1 and 2, as to whether personal characteristics affect perceptions of the impacts of tourism when controlling for personal benefit from tourism, While **Personal Benefit (PB)** does not have a statistically significant relationship with **Tourism's Negative Impacts (NI)**, two **Personal Characteristics (PC)**, **Education** (positive) & **Place of residence** (negative) are statistically significant indicating that as education increases, perception of tourism's negative impacts also increases and that residents from tourist-centric areas have a lower perception of tourism's negative impacts & vice-versa [(generally consistent with the findings of *Perdue et al.(1990) & Mc Gehee et al. (2002)*]. **Personal benefit** has a statistically significant positive relationship with **Tourism's Positive Impacts (PI)** indicating that with increasing gains from tourism, likelihood of agreement with the positive impacts of tourism increases. **Age, Education & Birthplace** enjoy a small but negatively significant relationship with **Tourism's Positive Impacts** indicating that as they increase, perception of positive impacts of tourism decreases [generally consistent with the findings of *Perdue et al. (1990) but inconsistent with Mc Gehee et al.(2002)*].

Model 3 provided findings that answer the *second research question*. The variables Personal Benefit from tourism, Positive Impacts of tourism (both having positive relationship) and Negative impacts of tourism (negative relationship), predicted support for additional tourism (positive relationship), which was consistent with *Perdue et al., (1990)* and with the findings of *Mc Gehee et al., (2002)*, If a respondent perceived personal benefited from tourism, she/he was

more supportive of additional tourism in the community. Further, those who perceived the impacts of tourism to be positive were supportive of additional tourism, while residents who perceived tourism more negatively were less supportive of additional tourism. This finding corroborates the findings by *Andereck and Vogt, (2000) and King et al., (1993)*; who concluded that support for tourism development, could be associated with the belief that tourism induced positive as well as negative impacts. Despite their awareness of tourism's negative impacts, the local residents still support tourism development.

Model 4, which provided the required information needed to answer *third* research question as to which variables contributed to support tourism planning, **Personal Benefit (PB), Support for Additional Tourism (SAT) and Tourism's Negative Impacts (NI)** have a statistically significant **positive** relationship with **Support for Tourism Planning (STP)** indicating that as Personal Benefit from tourism, perception of tourism's negative impacts and support for additional tourism increase, Support for tourism planning will increase. The **positive** relationship between **NI & STP** indicating that residents are aware that negative impacts originate from and escalate as a result of lack of tourism planning and is **consistent** with *Perdue et al. (1990) & Mc Gehee et al. (2002)* but the **positive** relationship between **SAT & STP** indicating that Support for additional tourism was a predictor of tourism planning is **inconsistent** with *Perdue et al. (1990)* but **consistent** with *Mc Gehee et al. (2002)*. However, **in contrast** to both *Perdue et al. (1990) & Mc Gehee et al. (2002)*, **PB** shares a statistically significant **positive** relationship with **STP** indicating that those who received personal benefit from tourism were supportive of additional tourism but recognizing the reality of negative impacts of tourism also recognized the

need for tourism planning. In general, in terms of accepting or rejecting the hypotheses framed with respect to the research questions:

*H_{2a}: Personal Characteristics along with Personal Benefit (PB) from tourism affects residents perception of: Negative Impacts (NI): **Accepted** [since Personal Benefit and only two out of seven personal characteristics viz. Education & Place of Residence are significant]*

*H_{2b}: Personal Characteristics along with Personal Benefit (PB) from tourism affects residents perception of Positive Impacts (PI) of tourism: **Accepted** [for four out of seven personal characteristics viz. Gender, Income, Number of years of Residence and Place of Residence which are not significant]&*

***Rejected** [for Personal Benefit and three out of seven personal characteristics viz. Age, Education & Birth Place which are significant]*

*H₃: Extent of Personal Benefit (PB) derived from tourism influences residents perception of positive (PI) and negative (NI) impacts of tourism as well as Support for Additional Tourism (SAT): **Rejected** since all are significant**

*H₄: Extent Of Personal Benefit (PB) derived from tourism, residents perception of positive (PI) and negative (NI) impacts of tourism & Support for Additional Tourism (SAT) influences Support for Tourism Planning (STP) **Rejected** since three out of four constructs viz. Personal Benefits, Negative Impacts & Support for Additional Tourism are significant* (Refer table 4.3)*

In terms of support for social exchange theory, this study fully supports **Social Exchange Theory (SET)**. Those who receive greater personal benefits from tourism were more likely to view its impacts positively and support additional tourism. Further, **Personal Benefit is a**

significant predictor of support for tourism planning (inconsistent with *Perdue et al.(1990) & Mc Gehee et al.(2002)* which **aligns with SET** validating the fact that residents who have a vested interest in tourism development would like to see it properly planned. This study also lends support to *Perdue et al. (1990)* assertion that residents should be informed on a priority basis **about tourism's** positive and negative economic, social cultural and environmental **implications**, the various types of tourism development in their community along with their respective benefits and drawbacks and the need for planned and managed tourism development and growth, *such that they are able to make informed decisions about the type and levels of tourism development that are most attractive to them and which they are willing to support and which would suit their community needs best.*

When viewed in totality this research has certain imperfections which can be addressed through future research. Chief among them would be the *personal benefit from tourism variable* which is defined in the questionnaire used in this study using only two statements (perhaps accounting for the low alpha of 0.341). However, the variable itself is an abstract concept and irrespective of the number of defining statements, may be subjectively interpreted by each respondent. Further, since the aim of the study is to evaluate resident attitude using the social exchange theory as the basis the variable indicating benefits should either be quantifiable or economic in nature. However the items measuring personal benefit are neither. In addition, from the point of view of tourism research, the variable personal benefit should not only describe the level of resident attitude toward benefits received from tourism but should also explain how and why they perceive they are benefitting from tourism, which has not been answered in this study.

Further, the social exchange theory itself postulates that the decisions making process is one which consistently results in gains for the individual and that individuals constantly make decisions from the point of view of winning or gaining. This reasoning in itself is questionable since, if every exchange results in gains for all parties concerned there would be no losers. Also, many individuals or groups particularly NGOs and other citizens' forums enter into exchanges in tourism knowing that they will not personally benefit from their actions yet do so for the greater good.

Max Weber's theory of Substantive and Formal Rationality provides a possible theoretical alternative to the social exchange theory wherein the formal or market and economic based elements as well as the less quantifiable, substantive or value and belief based elements of decision making and risk assessment can be used to understand and interpret resident attitude toward tourism and its planning and development.(McGehee & Meares, 1998) Despite the progress in this field, much scope exists for further research. However, irrespective of the future direction of research, its aim must be to consider the view point as well as the involvement of all stakeholders in tourism related decision making.

CHAPTER 5

MULTI-STAKEHOLDERS PERCEPTION TOWARDS SUSTAINABLE TOURISM

5.1 Introduction

Tourism as an economic activity is widely linked to a variety of economic sectors and activities. As a result of these linkages it enjoys positive multiplier effects and acts as a spur for economic development in general of any region. It creates opportunities for employment and income generation at all levels. More specifically, it encourages local and regional economic development for destinations with limited options for development. Tourism has been identified as one of the primary industries with potential to assist local communities in developing economic diversity. (Long et al., 1990; Allen et al., 1993; Hassan, 2000; Davis & Morais, 2004; Mc Gehee & Andereck, 2004). Gunn (1994) states that there is no other form of development “that has so many far reaching tentacles as tourism.” However, tourism cannot be considered an all purpose remedy to prevent economic decline. The tourism industry inherently has both positive and negative impacts on the community, the economy and the environment in which it exists. The unplanned growth of tourism has damaged the natural and socio-cultural environments of destinations all over the world. Inskip (1991) emphasized the importance of responsible tourism stating that, “ill conceived and poorly planned tourism development can erode the very qualities of the natural and human environment that attract visitors in the first place.” Carrying this concept further, Martin, 1994; Yuskel et al., 1999; Puzcko & Ratz, 2000;

Southgate & Sharpley, 2002; De Oliviera, 2003; stated that only if tourism is responsibly planned and managed can it be successful and sustainable, which make the concept of tourism planning central to the concept of tourism's sustainability. Sustainability therefore, has become a key concern in relation to tourism planning and development.

Tourism has often been considered a double edged sword – bringing economic benefits on one hand while strengthening environmental pressures on the other, thus playing a critical role in sustainable regional development. (Nijkamp and Bergh, 1990) While the economic impacts are more readily measurable and perceivable particularly when it comes to measuring achievement, the social, cultural and environmental aspects require a great deal of investigation, especially since the perception of these impacts varies, depending on the stakeholder group being studied as well as the kind of impacts themselves, wherein economic impacts are generally perceived as more positive than socio-cultural or environmental impacts. (Ratz, 2000; Tosun, 2002) When perceived negative impacts reach an unacceptable level or perceived benefits do not reach an acceptable level, negative views are likely to emerge. (Ap, 1992) Jurowski et al. (1995) believe that length of residence in the community, economic dependence, development of the tourism industry in the community as well as benefits received, influence **residents'** perceptions of tourism's impacts. It is generally perceived that rapid and large scale development of a community tends to have less favorable impacts than slower and smaller scale development of the same. (Pearce, 1989; Ratz, 2000) Tosun, 2002, states that when such development takes place without the involvement of the local community and is accompanied by the government's biased policies, the seeds of unsustainable development are sown. **Tourists or visitors** to the

destination are more sensitive to the direct impacts resulting from environmental and socio-cultural triggers such as vandalism, crime, garbage and waste etc.

Sustainability as a concept was formalized in the World Commission on Environment and Development's (WCED) Brundtland Report in 1987, wherein it is defined as a form of development that incorporates holistic planning and strategizing, preserves essential ecological processes, balances opportunities between nations, protects human heritage and diversity and 'meets the needs of the present without compromising the ability of future generations to meet their own needs.' (WCED, 1987:43) In terms of tourism, the definition of sustainable tourism most commonly used in tourism literature was developed by the World Tourism Organization, (WTO, 2004) which addresses six main principles: 1) high level of tourist satisfaction 2) optimal use of environmental resources 3) respecting the socio-cultural authenticity of host communities 4) providing socio-economic benefits to all stakeholders 5) constant monitoring of all impacts and 6) informed participation of all relevant stakeholders as well as strong leadership. Out of these six principles, relevant stakeholder participation has been identified as a key requirement for sustainability wherein 'relevant stakeholders' refer to the local community (residents, government officials and business owners or entrepreneurs) as well as visitors to the area and in terms of 'informed participation', they must have an understanding of sustainable tourism and the various issues relating to it, if they are to be able to support it. (Byrd, 2007) However, before the concept of stakeholder support for tourism can be measured, the community's knowledge of the principles and issues relating to sustainable tourism should be assessed so as to give destination management planners and organizers baseline information in this regard. This will not only provide an understanding of the community's perceptions about sustainability but will

also help to identify gaps in their knowledge which can provide the basis for development of programmes and policies to bridge this gap and ultimately assist in the development of sustainable tourism. (Byrd et al., 2008)

An important factor in the successful development and implementation of sustainable tourism is the support and involvement of the stakeholders of the community without whose support, it is practically impossible to develop tourism in a sustainable manner. (Ap, 1992; Gunn, 1994; Andereck & Vogt, 2000; Gursoy et al. 2002; Andriotis, 2005) Recognizing the importance of the role that stakeholders play in sustainable tourism development, most of the research done in the past, in this area, focuses on the perceptions and attitudes of individual stakeholder groups and their relationship with tourism. (Murphy, 1985; Long et al., 1990; Brunt & Courtney, 1999; Pizam et al., 2002; Andereck & Vogt, 2000; Gursoy et al. 2002; Andriotis & Vaughn, 2003; Weaver & Lawton, 2004).

In comparison to the magnitude of research work carried out on individual stakeholder groups, relatively limited amount of research has been done on comparison of the perceptions of multiple stakeholder groups. Hardy & Beeton (2001) emphasized the need to carry out research studies that compare multiple stakeholder groups based on their interests. Research studies conducted between various stakeholder groups such as Residents and Entrepreneurs (Pizam, 1978; Andriotis, 2005); Residents & Tourists (Puzcko & Ratz, 2000); Residents, Entrepreneurs and Tourists (Kavallinis & Pizam, 1994); Residents, Entrepreneurs and Government Officials (Murphy, 1983; Lankford, 1994) indicated that differences do exist between groups in terms of their attitudes and perceptions about tourism. However, very few studies have been done on

comparison of all four stakeholder groups together; viz.; Residents, Tourists, Entrepreneurs and Government Officials as well as in terms of their perceptions about the sustainability of tourism. Even where research has been carried out to investigate the perceptions of multiple stakeholder groups, the bulk of research concentrates on the differences in their perception of tourism's impacts. Statistically significant differences in perceptions existed between Tourists and Residents (Puzcko & Ratz, 2000), Residents, Entrepreneurs and Tourists (Kavallinis & Pizam, 1994); Residents, Entrepreneurs and Government Officials (Murphy, 1983; Lankford, 1994), depending on the issues researched. However, it was found that while Entrepreneurs and Government Officials did not differ significantly in their perceptions of tourism development between themselves, they did differ from the perceptions of Residents and Tourists. The term "multi-stakeholder" refers to the equitable representation of three or more stakeholder groups and their views on processes that encompass dynamic relationships and social interactions. In terms of tourism sustainability, multi-stakeholders' participation and collaboration allows them to evolve from passive informants to active collaborators in the tourism process. Multi-stakeholder perception on sustainability of tourism as an issue has been researched to a very limited extent; hence, the main aim of this chapter is to study the perspective of four groups of tourism stakeholder's; viz.; Residents, Tourists, Entrepreneurs and Government Officials state about various dimensions of sustainable tourism in the state and to discover if differences exist about their respective perceptions about the same. The research result will provide insights on an otherwise unexplored area and will fill the gap by adding valuable knowledge, new perspectives, and present possibilities for consideration for different stakeholders of tourism industry, especially residents, entrepreneurs, tourists, government, academic institutions, NGO's, tour operators, and financial institutions who may plan on investing in sustainable tourism ventures.

5.2 Background of the Study

The failure / closure of the mining industry which, in the past, contributed greatly to the state's exchequer, pushed tourism, the other industry of importance and also a major contributor to the state's coffers, further into the forefront in the state. Tourism being a highly competitive industry internationally, where switching costs are relatively low for tour operators and practically non-existent for tourists themselves, it is essential for the destination to create a competitive edge for itself, if, the tourism industry to become and remain successful and profitable. Tourism is by nature an interactive industry where tourists, local residents, entrepreneurs, government officials, other interested parties (NGO's) and the environment interact with each other in a number of ways, on a variety of issues and dimensions, giving rise to a number of consequences. (Mason, 2008)

The question of sustainability assumes greater importance in the context of coastal tourism particularly as the activity involves interface between humans, land and water and in the state of Goa in particular, which has long been recognized as an international coastal tourism destination. (Noronha et al.; 2002) Tourism in Goa being predominantly oriented towards the coast, has as its core, the triad of sun, sand and sea. Despite the attempt to promote the destination as a year round tourist hotspot, a certain element of seasonality, due to the monsoon season particularly, shapes the choices made by the tourism industry. NGOs, researchers and local resident activist groups believe that tourism in Goa is suffering from the classic 'golden goose' predicament where the very resource that is central to the activity/industry, is being flogged until it can no longer support itself. Such a situation is alarming not only for its obvious environmental

implications (degradation), its economic implications (loss of earning capacity / revenue) but also for its far reaching socio-cultural implications through the displacement of traditional activities (changed skills of locals, changing priorities etc.)

The concept of sustainability is still highly debated particularly in terms of the decision to include/exclude its various components. This will depend upon the relative weights attached to these components based on the view points of the various stakeholders. In order to address this issue correctly, it is essential to determine how the benefits of tourism can be equitably distributed amongst all stakeholders, especially local communities, but at the same time ensure that the long-term interests of the tourist destination are safeguarded, rather than the strategic interests of any one particular stakeholder group. Understanding the views and opinions of all groups of stakeholders in this industry as well as the social and ecological systems is essential so that proper planning and management of tourism results, ensuring development that lasts not only for tourism, but also for the host destination. However, the resolution of such complex and interrelated issues requires the adoption of a multi stakeholder perspective on sustainability, understanding, balancing and establishing various stakeholder positions through ongoing negotiations as well as acknowledging and addressing the legitimate concerns of stakeholders. Involving local stakeholders in tourism planning and the determination of the future of tourism industry in the state, will be a good way forward, to help in policy making for tourism related developmental activity as it increases local goodwill, a vital attribute for sustainable tourism.

(Noronha et al.; 2002)

5.3 Research Methodology

5.3.1 Research Location

The study examined stakeholder attitudes and perceptions towards sustainable tourism in the state of Goa. A sample of stakeholders who were above the age of 18 years, which included 1000 Domestic and International Tourists who visited the state of Goa as well as 1000 local Residents comprising residents engaged in tourism businesses, not engaged in tourism businesses, Entrepreneurs engaged in tourism the Tourism Sector as well as Government Officials employed in the Tourism Sector. Four types of stakeholders were surveyed, viz., tourists, residents, entrepreneurs, and government officials.

5.3.2 Questionnaire Development

A structured questionnaire was developed based on previous similar research studies carried out by [Byrd et al., 2008](#); [Kruja, D. & Hasaj, A., 2010](#); [Quintano et al., 2011](#); [Ong & Smith, 2013](#). The questionnaire had four parts, Part I with Biographical Details and Part IV with Tourism Sustainability Issues was used for this research paper. Part IV included 44 items or statements covering aspects of sustainable tourism such as the (a) understanding of sustainability, (b) focus of sustainable tourism, (c) sustainable tourism management, (d) attitude towards sustainable tourism development, (e) participation in sustainable tourism development, (f) economic focus of sustainable tourism and (g) the tourism industry and sustainability. Each statement was represented on a five point Likert scale as recommended by [Maddox \(1985\)](#), where 1 represented a response of “strongly disagree”, 5 represented a response of “strongly agree” and 3 represented the “neutral” point.

5.3.3 Data Collection and Analysis Techniques

Primary and secondary data was collected for the study. The sample size for the collection of primary data was determined using Judgement/Convenience sampling method. Of the 2000 questionnaires given out (1000 residents & 1000 tourists), 1657 questionnaires were returned (805 tourists and 852 residents), giving a response rate of 82.8%. However, the total number of usable questionnaires was 1570 giving a final response rate of 78.5%. Secondary data was collected from relevant research journals, data procured from Department of Tourism (Government of Goa), Goa Tourism Development Corporation (GTDC), other relevant government departments, from booklets and other relevant government publications like the Economic Survey etc.

Data collected was analyzed using SPSS 20. Descriptive statistics, Mean Analysis, Factor Analysis and One Way ANOVA using Scheffe's Post Hoc test were used. **Mean Analysis** was used to find out the mean of stakeholders perceptions about the sustainability of tourism in the state and was obtained from their responses to the Tourism Sustainability Issues statements. **Factor Analysis** is a statistical approach that can be to analyze the interrelationships between a large number of variables and to explain these variables in terms their common underlying dimensions or factors. The original objective is to find a way of condensing the information contained in the original variables into a smaller set of factors with minimum loss of information. There are basically two types of factor analysis both of which are based on the Common Factor Model: Exploratory and Confirmatory. **Exploratory Factor Analysis (EFA)** which attempts to discover the nature of constructs influencing a set of responses and has been used in this study

and was used to reduce the original set of 44 Tourism Sustainability Issues statements into 7 factors.

ANOVA is used to compare the means of more than two populations and test if the means of the groups formed by a combination of independent variables are significantly different. Specifically in this study, it was used to discover if differences existed among the stakeholder groups in terms of each of the seven dimensions of tourism sustainability for all four groups of stakeholders. ANOVA tests the null hypothesis that the means of all groups being compared are equal and produces a statistic called the F statistic which indicates that at least one difference exists. In order to assess which group means differ from each other, post hoc multiple comparisons are performed. **Scheffe's Post Hoc** which is the most conservative test (and allows every possible unplanned comparison to be made) was conducted to determine which groups were different. **While a variety of post hoc tests exist to assess which group means differ from each other, Scheffe's post hoc test which is particularly appropriate for use in testing unequal sample sizes is used here, due to the unequal sample sizes of the four stakeholder groups being studied.** A Scheffe's test is run to determine which groups differ significantly from each other by comparing each group with all other groups, one at a time, by finding the mean difference for each set of comparisons viz. (I-J). The degree of difference is determined by the negative or positive sign placed before the mean difference i.e. (I-J) as well as the numerical value of the mean of means of each category. This allows for the determination of the relative strength of perceptions of each group.

Hypothesis developed for the final testing is:

H₅: There is no significant difference in the perception of Stakeholders; viz.;

(2) Residents, (2) Tourists, (3) Entrepreneurs and (4) Government Officials with respect to:

(F1) Understanding of Sustainability [US],

(F2) Focus of Sustainable Tourism [FST],

(F3) Sustainable Tourism Management [STM],

(F4) Attitude towards Sustainable Tourism [AST],

(F5) Participation in Sustainable Tourism Development [PST],

(F6) Economic Focus of Sustainable Tourism [EFST], and

(F7) Tourism Industry & Sustainability [TIS]

5.4 Analysis, Research Findings and Discussion

5.4.1 Demographic Profile of Stakeholders

Of the 1570 stakeholders (respondents) who completed the survey (*Refer Table 5.1*), the largest percentage of stakeholders were youngsters in the age group 18-27 years (28.5%), followed by those in the age group 28-37 (24.7%) and 38-47 (20.8%). The percentage of males and females surveyed were approximately equal with males accounting for 49.6% and females 50.4%. In terms of education, the largest number of respondents 47.6% reported graduation as their level of education, followed by post graduation at 21.1% and HSSC/ Pre-University at 15.5%, age and education level indicating that youngsters having high level of education are better able to understand the concept of sustainability. With respect to marital status, 53.9% of respondents

were married and 46% were single. Further, in terms of stakeholder category, tourists constituted 48.5%, residents were 37.5%, entrepreneurs involved in tourism businesses were 7.5% and government employees involved in tourism were 6.5%. The lowest response rate from entrepreneurs and Government officials results both from the fact that these two groups are relatively smaller in number in the general population in comparison to the other two groups and also, more disturbingly, from the lethargic attitude towards providing their opinion about sustainability status of tourism in Goa. Though these two stakeholders groups directly benefit from tourism, they are reluctant about providing their opinion on sustainability of tourism in the state. In terms of location, 52.4% were from North Goa while 47.6% were from South Goa.

Demography	#	%
Age		
18-27	447	28.5
28-37	388	24.7
38-47	326	20.8
48-57	263	16.8
58 & Above	146	9.3
Gender		
Male	778	49.6
Female	792	50.4
Education		
SSC & below	104	6.6
HSSC/Pre University	244	15.5
Graduate	748	47.6
Post Graduate	332	21.1
Professional	142	9.0
Marital Status		
Married	846	53.9
Single	724	46.1
Location		
North Goa	822	52.4
South Goa	748	47.6
Stakeholder Category		
Tourist	761	48.5
Resident	589	37.5
Entrepreneur(Tourism)	118	7.5
Government(Tourism)	102	6.5

Table 5.1: Demographic Profile of Stakeholders (N=1570)

Source: Compiled from Primary data

5.4.2 Factor Analysis

Factor Analysis of 52 original variables used in the Tourist Sustainability Issues Scale using the Principal Component factor method was used to generate the initial solution. The Eigen values along with the Scree plot suggested that a seven factor solution, having Eigen values greater than 1.0, explaining 49.623% of the overall variance be considered. 44 attributes with factor loadings greater than 0.3 were considered and reported with minimum loss of information. The overall significance of the correlation matrix was 0.000 with a Bartlett's test of Sphericity value of 23874.558. The statistical probability and the test indicated that there was a significant correlation between the variables and the use of Factor Analysis was appropriate. The Kaiser-Meyer-Olkin overall measure of sampling adequacy was 0.910 which was meritorious. (Hair et al., 1999) (*Refer Table 5.2*) To test the reliability and internal consistency of each factor, the Cronbach's Alpha of each was determined. The results showed that the Cronbach's Alpha of the overall scale with n= 1570 had a very high alpha coefficient of 0.924 and the alpha coefficients of sub scales ranged from 0.884 to 0.639 for the seven factors. The results were considered more than acceptable since 0.50 is the minimum value for accepting the reliability test. (Nunnally, 1967) The final Tourism Sustainability Issues Scale (44 items) had the following subscales: (*Refer Table 5.2*)

The first factor, **F1- Understanding of Sustainability (US)** had 8 items and a Cronbach's alpha of 0.884, and included the following items: Environmental care involving a need for economic growth & viability, Environmental care involving a long-term view, Economic growth and viability involving a long-term view, Resource and environmental management, Environmental care with consideration for social factors, Maintaining and preserving resources for future

generations, Carrying capacity considerations & using codes of practice, Environmental care along with consideration for visitors. The second factor, **F2 - Focus of Sustainable Tourism – (FST)** having 9 items and a Cronbach's alpha of 0.848, included the following items: Protection of high scenic value, Reduction of damage to the physical environment, Protection of wildlife breeding colonies, The protection of areas of high habitat value, The quality of the visitor experience, The reduction of disturbance of the attraction, Preservation and conservation of all resources, Organized regional plans for tourism., Consultation between Government, Industry and Local Residents. The third factor, **F3 - Sustainable Tourism Management – (STM)** having 7 items and a Cronbach's alpha of 0.761 included the following items: Long term sustainability of tourism is the priority, Education of tourism staff is important in the implementation of sustainable tourism practices, Administration of sustainability legislation should be the responsibility of local and Regional Government, Sustainable tourism development should encourage the spread of tourists throughout the country, The tourism industry has the greatest role to play in implementing sustainable tourism development policy, Marketing is a useful tool for sustainable tourism development, Tourism must be carefully managed in order for it to be sustainable.

The fourth factor, **F4 - Attitude Towards Sustainable Tourism – (AST)** having 5 items and a Cronbach's alpha of 0.802 included the following items: Help improve the quality of community life, Help support the maintenance & improvement of Goa's environment & heritage, Help strengthen respect for Goa's natural areas and historic places, Help promote cultural appreciation and understanding, Help ensure implementation of code of conduct to guarantee sustainable tourism. The fifth factor, **F5 - Participation in Sustainable Tourism Development – (PST)**

having 5 items and a Cronbach's alpha of 0.752 included the following items: Willing to participate in management of local resources, Willing to contribute to ensure greater benefits to community, Willing to participate in sustainable tourism decision making, Willing to contribute to protection & conservation of resources, Willing to contribute to funding and management of solutions for tourism related problems. The sixth factor, **F6 - Economic Focus of Sustainable Tourism – (EFST)** having 4 items and a Cronbach's alpha of 0.726 included the following items: Attracting more high spending domestic tourists, Attracting more high spending foreign tourists, Tourism Industry should focus on attracting more Foreign Tourists., The number of tourists visiting Goa should be increased. The seventh factor, **F7- Tourism Industry and Sustainability – (TIS)** having 6 items and a Cronbach's alpha of 0.639 included the following items: Tourism needs greater industry control, Tourism is inherently sustainable, Tourism in the most developed locations is unsustainable, Tourism needs greater Government control, Tourism is more sustainable than other industries, Tourism needs greater local resident control.

5.4.3 Mean Analysis

Mean analysis (*Refer Table 5.2*) indicated that the scale mean value of **Factor 1 - Understanding of Sustainability (US)** was 4.05 overall showing agreement. However, 3 statements, 'Economic growth and viability involving long term view' (3.97), 'Environmental care along with consideration for visitors' (3.93), 'Carrying capacity considerations and using codes of practice' (3.88) are slightly below average. The first two could be indicative of a shift in perception of sustainability from the commonly considered economic and environmental perspective while the third may be as a result of lack of clarity about the concept of carrying capacity. With respect to **Factor 2 - Focus of Sustainable Tourism (FST)**, the scale mean value was 4.18 with all 9

statements showing above average i.e. agreement. In terms of **Factor 3** - Sustainable Tourism Management (**STM**), the mean value was 4.04 with 3 items out of 7 are having slightly below average values. 'Administration of Sustainability legislation should be the responsibility of Local and Regional Government' (3.92), 'Tourism Industry has the greatest role to play in implementing Sustainable Tourism development policy' and 'Marketing is a useful tool for Sustainable Tourism development' (3.93) are indicative of the need for combined action from stakeholders to bring about Sustainable Tourism Management. (*Refer Table 5.2*)

For **Factor 4** - Attitude towards Sustainable Tourism (**AST**), the scale mean is 4.16 with 3 out of 5 factors having above average perceptions. 'Help ensure implementation of Code of Conduct to guarantee Sustainable Tourism' (3.98) though below average, is tending towards the highest end of the scale and could possibly be because of lack of clarity of the concept 'Code of Conduct'. In terms of **Factor 5** - Participation in Sustainable Tourism Development (**PST**), the scale mean value was 4.02 with 3 of the 5 items having above average values. 'Willingness to participate in management of local resources' (3.92) and 'Willingness to contribute to funding and management of solutions for tourism related problems' (3.99), though slightly below average, is tending towards the highest end indicating a slightly lower support for Sustainable Tourism initiatives. This could perhaps be attributed to the large number of tourists surveyed as stakeholders, which, given the fact that tourists do not have as great an attachment to the destination as Residents, Entrepreneurs and Government Officials is understandable and explainable. **Factor 6** - Economic Focus of Sustainable Tourism (**EFST**) with a scale mean of 3.78 indicates an average perception, indicative of where the Economic Focus of Sustainable Tourism should lie. However, given that 2 of the 4 statements - 'Attracting more high spending

Tourism Sustainability Issues (44 items, N = 1570, Scale alpha= 0.924)	Variable Label	Variable Loading	SD 1	D 2	N 3	A 4	SA 5	Mean
[F1] Understanding of Sustainability Scale Mean = 4.05, alpha = 0.884, 8 items, Eigen value = 9.973 % of Variance explained = 22.66								
Environmental care involving a need for economic growth & viability	S1	.770	0.5	2.0	16.8	53.1	27.7	4.05
Environmental care involving a long-term view	S2	.769	0.8	2.8	17.3	42.6	36.5	4.11
Economic growth and viability involving a long-term view	S4	.768	0.7	3.7	21.8	45.7	28.2	3.97
Resource and environmental management	S5	.751	1.1	2.7	13.5	45.2	37.5	4.15
Environmental care with consideration for social factors.	S0	.738	1.5	3.1	17.8	48.4	29.3	4.01
Maintaining and preserving resources for future generations	S7	.728	2.1	2.6	12.4	30.5	52.4	4.28
Carrying capacity considerations & using codes of practice	S6	.711	0.7	4.0	26.7	43.6	25.0	3.88
Environmental care along with consideration for visitors	S3	.702	0.6	4.1	20.6	51.3	23.4	3.93
[F2] Focus of Sustainable Tourism Scale Mean = 4.18, alpha = 0.848, 9 items, Eigen value = 2.697, % of Variance explained = 6.130								
The protection of high scenic value	SF2	.780	0.2	2.3	10.2	46.8	40.6	4.25
The reduction of damage to the physical environment	SF3	.771	0.1	1.8	10.4	41.1	46.5	4.32
The protection of wildlife breeding colonies	SF0	.742	0.8	2.0	17.1	42.6	37.5	4.14
The protection of areas of high habitat value	SF4	.675	0.5	2.0	12.6	47.5	37.3	4.19
The quality of the visitor experience	SF1	.610	0.5	1.3	15.0	53.9	29.2	4.10
The reduction of disturbance of the attraction	SF5	.576	0.2	3.3	20.3	46.1	30.1	4.05
Preservation and conservation of all resources	SF11	.537	0.1	1.9	10.4	36.1	51.7	4.37
Organized regional plans for tourism.	SF9	.513	0.2	3.4	19.3	50.6	26.5	4.00
Consultation between Government, Industry and Local Residents	SF10	.420	0.7	2.0	15.8	42.4	39.2	4.17
[F3] Sustainable Tourism Management Scale Mean = 4.04, alpha = 0.761, 7 items, Eigen value = 2.520, % of Variance explained = 5.726								
Long term sustainability of tourism is the priority	GAT3	.711	0.9	3.5	18.3	42.5	34.8	4.07
Education of tourism staff is important in the implementation of sustainable tourism practices	GAT10	.705	0.6	1.3	11.6	45.2	41.3	4.25
Administration of sustainability legislation should be the responsibility of local and Regional Government	GAT8	.663	0.2	3.6	27.1	50.3	22.7	3.92
Sustainable tourism development should encourage the spread of tourists throughout the country.	GAT4	.652	0.2	3.9	18.6	49.4	28.0	4.01
The tourism industry has the greatest role to play in implementing sustainable tourism development policy	GAT13	.562	0.5	3.0	22.5	41.1	22.8	3.93
Marketing is a useful tool for sustainable tourism development	GAT14	.526	1.0	4.6	21.5	46.1	26.9	3.93
Tourism must be carefully managed in order for it to be sustainable	GAT1	.497	0.5	1.2	10.9	52.5	34.9	4.20
[F4] Attitude towards Sustainable Tourism Scale Mean = 4.16, alpha = 0.802, 5 items, Eigen value = 2.304, % of Variance explained = 5.237								
Help improve the quality of community life	AST5	.823	0.3	2.4	12.4	50.4	34.5	4.16
Help support the maintenance & improvement of Goa's environment & heritage	AST2	.749	0.4	2.2	10.7	46.1	40.6	4.24
Help strengthen respect for Goa's natural areas and historic places	AST1	.733	0.1	1.7	8.8	47.8	41.6	4.29
Help promote cultural appreciation and understanding	AST4	.694	0.2	1.8	13.7	52.2	32.2	4.14
Help ensure implementation of code of conduct to guarantee sustainable tourism	AST7	.589	0.8	3.8	20.3	47.1	28.2	3.98
[F5] Participation in Sustainable Tourism Development Scale Mean = 4.02, alpha = 0.752, 5 items, Eigen value = 1.531, % of Variance explained = 3.479								
Willing to participate in management of local resources	PST2	.810	1.2	3.9	21.1	49.6	24.1	3.92
Willing to contribute to ensure greater benefits to community	PST3	.741	0.5	2.7	19.2	44.8	32.8	4.07
Willing to participate in sustainable tourism decision making	PST4	.730	0.4	3.1	15.8	46.4	34.3	4.11
Willing to contribute to protection & conservation of resources	PST1	.723	0.3	3.2	17.3	50.6	28.6	4.04
Willing to contribute to funding and management of solutions for tourism related problems	PST5	.515	0.6	3.3	20.1	49.0	27.0	3.99
[F6] Economic Focus Of Sustainable Tourism Scale Mean = 3.78, alpha = 0.726, 4 items, Eigen value = 1.474, % of Variance explained = 3.351								
Attracting more high spending domestic tourists	SF13	.776	2.5	8.0	31.1	32.1	26.3	3.72
Attracting more high spending foreign tourists	SF1	.763	1.1	5.2	24.5	36.9	32.2	3.94
Tourism Industry should focus on attracting more Foreign Tourists.	TI 3	.652	1.7	10.1	22.0	39.6	26.7	3.80
The number of tourists visiting Goa should be increased.	TI 9	.612	2.6	11.3	25.0	38.7	22.3	3.67
[F7] Tourism Industry and Sustainability Scale Mean = 3.65, alpha = 0.639, 6 items, Eigen value = 1.335, % of Variance explained = 3.304								
Tourism needs greater industry control.	TI 5	.607	1.5	6.5	24.5	46.2	21.3	3.79
Tourism is inherently sustainable	GAT 0	.604	2.7	11.0	33.8	41.9	10.6	3.47
Tourism in the most developed locations is unsustainable.	TI 7	.590	2.0	14.3	39.6	34.7	9.5	3.35
Tourism needs greater Government control	TI 1	.587	2.9	6.1	17.0	42.8	31.1	3.93
Tourism is more sustainable than other industries.	TI 6	.572	1.5	6.5	24.5	46.2	21.3	3.57
Tourism needs greater local resident control.	TI 8	.464	1.2	5.8	23.7	49.4	19.9	3.81

KMO = 0.910; Bartlett's Test of Sphericity = 23874.558; df = 946; p = 0.00**

**Table 5.2: Tourism Sustainability Issues Scale (44 items, N = 1570, Scale alpha= 0.924,
Source: Compiled from Primary data**

foreign tourists' (3.94) and 'Attracting more foreign tourists' (3.80) have the highest values in this scale or factor, perhaps a shift in focus to attracting foreign tourists to the destination is seen as an economic path to sustainability. With respect to **Factor 7** Tourism Industry and Sustainability (**TIS**), the scale mean is 3.65, i.e. average. However, 3 of the 6 statements which have the highest means refer to the aspect of control for sustainability. 'Tourism needs greater industry control' (3.79); 'Tourism needs greater Government control' (3.93); 'Tourism needs greater local resident control' (3.81) seem to indicate that the tourism industry needs the concerted control of all 3 major players- government, industry and local residents for sustainability. (*Refer Table 5.2*)

5.4.4 Comparison of Means - One Way ANOVA with Scheffe's Post Hoc Test

One Way ANOVA was carried out (*Refer Table 5.3*) to assess whether any significant difference exists between 4 different stakeholder groups for each of the 7 sustainability factors and the test indicated that statistically significant differences ($p < 0.05$) exist between 4 stakeholder groups for 6 of the 7 factors, i.e., Understanding of Sustainability – **US**, Focus of Sustainable Tourism – **FST**, Sustainable Tourism Management – **STM**, Attitude Towards Sustainable Tourism – **AST**, Participation in Sustainable Tourism Development – **PST**, Economic Focus of Sustainable Tourism – **EFST**. However for Tourism Industry and Sustainability – **TIS** (Factor 7) no significant difference exists. Findings of this study support the idea that differences in perception about the sustainability of tourism do exist between 4 different stakeholder groups. For each of the 6 factors, where there was a statistically significant difference between groups, a Scheffe's test was conducted to determine which specific groups were different (*Refer Table 5.3*)

Variable	MEAN				F ratio	P value	Welch's Test	Scheffe's Test P<0.05
	Tourists n=761 (T)	Residents n=589 (R)	Entrepreneurs n=118 (E)	Govt. Officials n=102 (GO)				
Understanding of Sustainability (F1) US	3.9169 (4)	4.1118 (3)	4.3750 (1)	4.2941 (2)	31.113	0.00*	0.00*	T<R<GO<E E,GO >R E,GO >T
Focus of Sustainable Tourism (F2) FS	4.1126 (4)	4.1969 (3)	4.4153 (1)	4.2810 (2)	12.705	0.00*	0.00*	T<R<GO<E E>R,T GO>T
Sustainable Tourism Management (F3) STM	4.0528 (3)	3.9590 (4)	4.1852 (2)	4.3067 (1)	18.227	0.00*	0.00*	R<T<E<GO E>R GO>T,R
Attitude toward Sustainable Tourism (F4) AST	4.0468 (4)	4.2458 (3)	4.3305 (2)	4.3745 (1)	24.263	0.00*	0.00*	T<R<E<GO GO,E,R>T
Participation in Sustainable Tourism Development (F5) PST	4.1180 (1)	3.9260 (3)	3.9797 (1)	3.9373 (2)	13.082	0.00*	0.00*	R<GO<E<T T>GO,R E>GO,R
Economic Focus of Sustainable Tourism (F6) EFST	3.7290 (4)	3.7436 (3)	4.0869 (1)	4.0098 (2)	12.106	0.00*	0.00*	T<R<GO<E E>R,T GO>R,T
Tourism Industry & Sustainability (F7) TIS	3.6658 (1)	3.6553 (3)	3.5650 (4)	3.6650 (2)	1.178	0.317	0.249	None are significant

Table 5.3: Test of significance between Tourists, Residents, Entrepreneurs & Government Officials (One-Way Analysis of Variance with Scheffe's Test, * indicates significance at the p<0.05 level)

Source: Compiled from Primary data

In terms of the seven factors:

F1) Understanding of Sustainability (US) – Entrepreneurs (E) > Government Officials (GO) >Residents (R) >Tourists (T) Although E & GO had the highest/greatest understanding about sustainability there was no significant difference between their means and therefore, their perceptions. However, there was a significant difference between the perception of understanding of sustainability between E and R, T where the perception of E was greater than R & T; between GO and R, T where the perception of GO was greater than R & T; and R & T where the perception of R was greater than T ; T had the lowest perception. Perception of tourists could be lowest possibly because being visitors to the destination; they lack economic and

emotional connection or involvement with the State. Further, perception of Entrepreneurs, Government Officials and Residents is higher possibly because being residents of the State they are more emotionally connected with the destination and possibly also derive personal benefit from tourism. (*Refer Table 5.3*)

F2) Focus of Sustainable Tourism (FST) - E>GO>R>T, Although E & GO had the highest or greatest understanding or perception about Focus of Sustainable Tourism there was no significant difference between their means as well as the means of GO & R and between the means of R & T. However, there was a significant difference between the means and therefore the perception/understanding about Focus of Sustainable Tourism between E & R, T where the perception of E is greater than that of R as well as T and between GO and T where the perception GO is greater than T; T had the lowest perception possibly because being only visitors, they are not sufficiently engaged with the destination and with the concept of sustainable tourism for the state. Perception of E is higher than R probably because they derive greater Personal benefit from it than R. (*Refer Table 5.3*)

F3) Sustainable Tourism Management (STM) – GO>E>T>R. Although GO&E had the highest perception / greatest understanding about Sustainable Tourism Management there was no significant difference between their means neither the means of E & T nor T & R. However, there was a significant difference between the perception/understanding about Sustainable Tourism Management between GO & T, R and between R & E where R had the lowest perception. A possible reason for Residents' having a lower / more negative view of Sustainable tourism Management, could be because although they have a close emotional attachment to the

destination they are rarely involved in tourism planning and decision making. The higher perceptions of Government Officials and Entrepreneurs could be attributed to the greater degree of their involvement in Sustainable Tourism Management. (*Refer Table 5.3*)

F4) Attitude towards Sustainable Tourism (AST) - GO>E>R>T Although GO, E & R had the most positive perception in terms of Attitude towards Sustainable Tourism there was no significant difference between their means. However, there was a significant difference between the mean of GO, E, R and T about Attitude towards Sustainable Tourism where T tourists had the least positive perception of the same. Perception of T is lowest possibly due to the fact that Government Officials, Entrepreneurs and Residents, all being residents of the State have more vested interest in Sustainable Tourism for the state than do Tourists, who as visitors, lack motivation and commitment to be more deeply involved in the State. (*Refer Table 5.3*)

F5) Participation in Sustainable Tourism Development (PST) – T> E>GO>R. T had the most positive attitude towards PST. While there was no significant difference between the means of GO, R, E as well as T & E, there was a significant difference between the means and therefore the perceptions of T and GO, R as well as E and G, R. As this factor covers the willingness of stakeholders to participate as well as contribute to Sustainable Tourism, a possible reason for the higher perception of tourists could be, that being visitors, their contribution would be limited to the duration of their visit. R had the lowest perception about PST (lower than Entrepreneurs and Government Officials). Their low perception could possibly be because they generally have the greatest attachment to the destination, yet are perhaps least included and involved in its management and sometimes derive the least personal benefit from it while having to make the

most long term contribution to sustainable tourism development and/or suffer the greatest consequences of unsustainable tourism development. (*Refer Table 5.3*)

F6) Economic Focus of Sustainable Tourism (EFST) – E>GO>R >T Although E & GO had the most positive perception about Economic Focus of Sustainable Tourism there was no significant difference between their means. Though R & T had the lowest perception about Economic Focus of Sustainable Tourism there was no significant difference between their means. However, there was a significant difference between the means and consequently the perceptions of E and R, T as well as GO and R, T. A possible reason for this could be that both Entrepreneurs as well as Government Officials derive greater economic benefit from tourism than Residents and hence, are more concerned with its economic gains. Further, tourists being only visitors to the destination are generally not concerned with economic focus or long term gains. (*Refer Table 5.3*)

F7) Tourism Industry & Sustainability (TIS) – This factor which includes/covers the nature and focus of control of the industry, finds none of the groups having statistically significant differing perceptions of sustainable tourism and its long term focus or gains. This could possibly be because all four stakeholder groups agree that a concerted effort from all stakeholders is needed to ensure the sustainability of the industry. (*Refer Table 5.3*)

5.5 Summary

As a result of the comparison of the perceptions between 4 different stakeholder groups about Sustainable Tourism Issues in the state of Goa, the study concludes that there exist considerable

differences in the perceptions of the various stakeholder groups, a result which is supported by previous research studies in this area of sustainability. (Pizam, 1978; Murphy, 1983; Puczko and Ratz, 2000; Andriotis, 2005; Byrd et al, 2008; Kruja, 2010; Quintano et al, 2011) It is vitally important to understand the differing interests of the four different stakeholder groups and to ensure that all groups are included in discussions about tourism development if it is to succeed. While Government and Entrepreneurs may give greater focus or emphasis to the economics of tourism and the distribution and allotment of resources primarily for their economic gain, community and local residents may be largely concerned with the protection of their livelihood and the maintenance of an attractive living environment and tourists may be concerned with enjoying high quality travel related activities along with an experience that is educative, such that their experience at the destination becomes more affective (involving the emotions) and interactive. Ryan (2002) emphasizes that for sustainability in tourism, value addition for all stakeholders, through their equitable participation and involvement is essential.

The results of the study indicated that there were statistically significant differences in the perceptions about the sustainability of tourism between stakeholder groups studied. Thus, it is concluded that for **Five of the seven factors** namely **Understanding of Sustainability, Focus of Sustainable Tourism, Sustainable Tourism Management, Attitude towards Sustainable Tourism, Economic Focus of Sustainable Tourism, GO & E** have the highest/most positive perception about sustainability which is a possible outcome of their close involvement with tourism planning & management and the high level of personal benefit they derive from it. For **four of the seven factors** namely **US, FST, AST & EFST, Tourists** have the **lowest** or least positive perception about sustainability of tourism, which given the fact that they are only

visitors to the state and have very little emotional or economic connection with it is a logical outcome. However, for **Participation in Sustainable Tourism Development, Tourists** have the **highest** perception. Further, For **Sustainable Tourism Management (STM) & Participation in Sustainable Tourism Development (PSTD), Residents** have the lowest/least positive perception which is understandable given that they are most emotionally attached to the destination and can view the effects of tourism development most closely, possibly derive the least personal benefit from tourism yet perhaps pay the highest price for it. In terms of **Tourism Industry & Sustainability (TIS), none** of the groups has **significantly differing perceptions.** (*Refer Table 5.3*)

Hence, in terms of the hypothesis generated:

*H₅: There is no significant difference in the perception of Stakeholders; viz.: (1)Residents, (2) Tourists, (3) Entrepreneurs and (4) Government Officials with respect to: (F1) Understanding of Sustainability [US] *, therefore the null hypothesis is **Rejected**, (F2) Focus of Sustainable Tourism [FST] *, therefore the null hypothesis is **Rejected**, (F3) Sustainable Tourism Management [STM] *, therefore the null hypothesis is **Rejected**, (F4) Attitude towards Sustainable Tourism [AST] *, therefore the null hypothesis is **Rejected**, (F5) Participation in Sustainable Tourism Development [PST] *, therefore the null hypothesis is **Rejected**, (F6) Economic Focus of Sustainable Tourism [EFST] * therefore the null hypothesis is **Rejected**, (F7) Tourism Industry & Sustainability [TIS] therefore the null hypothesis is **Accepted** (*Refer Table 5.3*)*

The Research suggests that in keeping with previous studies, stakeholder groups do differ in their perceptions of tourism development in their community and its sustainability.(Andriotis, 2005; Byrd, 1997; Lankford, 1994; Murphy, 1983; Pizam, 1978) Further, this study suggests that Government Officials and Entrepreneurs are more closely involved in Sustainable tourism planning and management than Residents or Tourists and in keeping with tradition, their primary focus has been on tourists, creating awareness about the destination and promoting its attractions in an effort to boost travel to the destination. Thus, Community Planners / Government / Destination Management Organizations need to focus not only on the tangible component of the tourism product (rooms, infrastructure and natural resources) but also the intangible component of the tourism product (the overall experience for all stakeholders) and be involved in communication with both the local community and tourists. Communication with tourists to market the destination competitively to them is important to ensure economic, socio cultural and environmental sustainability of the destination. However, educating and informing local community about all aspects of tourism including its impacts will clarify the perceived as well as actual impacts of tourism in the destination and strengthen the industry by enabling all stakeholders to make informed decisions about the level and kind of tourism activities they will support in their community.

Stakeholder inclusion in tourism development, though considered important and well researched (Ap, 1992; Yuskel et al, 1999; Andereck and Vogt, 2000; Gursoy et al, 2002; Andriotis, 2005) has not been fully realized because of the practical difficulties involved in its implementation. However, understanding and awareness of the differing perceptions and awareness of 4 different stakeholder groups, yet offering a common platform for interaction will provide stakeholder

inclusion, education, opportunities to generate awareness, understanding as well as open minded communication between all stakeholder groups. Stakeholder inclusion will ensure better and more informed decisions utilizing collective wisdom of stakeholders. This, in turn, will ultimately increase understanding, forge commitment, develop a stronger tourism product as well as lead to a more fulfilling and satisfying experience for all stakeholders, thus ultimately contributing to the sustainability of tourism in the destination and giving it the greatest chance of success.

This research suggests GO & E are more greatly involved in tourism planning & management than Residents or Tourists. Community planners and destination management organizations (DMOs) need to:

- understand the differing interests of all the stakeholder groups and
- include all stakeholder groups in discussions about tourism development and
- involve residents to a much greater extent if sustainable tourism development to have the greatest chance of success.

CHAPTER 6

SUSTAINABLE TOURISM IN GOA: A MULTI-STAKEHOLDER PERSPECTIVE USING STRUCTURAL EQUATION MODELING

6.1 Introduction

It is an undisputable and well researched fact that tourism development in any given destination impacts the life styles and habits, the customs and culture, the leisure and spending, of the local community both positively and negatively. Increase in employment, both directly and indirectly in the tourism sector, increase in income levels and consequently spending capacity, infrastructure development, increase in leisure and recreational opportunities for locals and tourist use, are a few of the well known positive impacts of tourism. Unfortunately, like most phenomena, there is a flip side which accompanies the positives and this is manifested in terms of the numerous obvious negative impacts of tourism development such as environmental pollution (air, water, land), socio-cultural impacts such as negative changes in culture, traditions and lifestyle patterns of hosts leading to loss of ethnicity, economic impacts such as increase in prices of goods and services, land, accommodations, financial leakages, as well as more insidious changes like migration of labour from traditional occupations and internal rural areas to more tourist centric areas and occupations. Thus, while rural areas remain underdeveloped and to a great extent unexploited, coastal areas experience rapid urbanisation and growth, most often unplanned and irreversible, which ultimately end up destroying the very natural resources that drew visitors to it in the first place (Kristnic Nizic et al., 2009).

A community that plans and uses tourism as an alternative means of strengthening its economic development must develop sustainable tourism in order to meet the needs and demands of its resident community; viz.; local residents, entrepreneurs and also the government (Puczko & Ratz, 2000). Sustainable tourism development depends largely on the local residents' attitudes since they form the key stakeholder group involved in critical tourism related decision making, as well as the labour resource base, for tourism planning and development in their community. (Park et al., 2010) However, tourism research has, for over three decades focused its attention largely on residents' attitude towards tourism and its consequent support for tourism development primarily along four dimensions viz.; [1] *Economic dimension*- employment opportunities, tax revenues, additional income (Akis et al., 1996; Dritsakis, 2004; Lee and Chang, 2008); [2] *Social dimension* - interactions between residents and tourists, education and entertainment of visitors, increase in crime (Akis et al., 1996; Byrd et al., 2009; Dyer et al., 2007; Kang et al., 2008; Kuvan and Akan, 2005); [3] *Cultural Dimension* - quality of life, conservation of local traditional values, increased cultural recognition – (Jurowski et al., 1997; Yoon et al., 2001; Huttasin, 2008); [4] *Environmental dimension* - air pollution, sound pollution, crowding, depletion of natural resources (Byrd et al., 2009).

While the *host* community includes local residents, entrepreneurs, government officials, NGOs etc. who are among the key stakeholders in the tourism industry, another key stakeholder is the tourist or the visitor (*guest*) to the destination. Increasingly, visitors to destinations are aware of the problems of mass tourism development and wish to do their part in protecting the destination from the ill effects of mass tourism. Several studies have shown that tourists, who visit a

destination and spend their money there, support sustainable tourism with respect to economic, social, cultural and environmental dimensions. (Weaver and Lawton, 2004) However, in comparison to the large body of work on residents' perception and attitude towards tourism, relatively little research has been done on tourist attitudes towards sustainable tourism development. *Tourism, therefore, is an economic sector which must be approached in a special way due to the interlinking of all the stakeholders involved in tourism activities - both those based in the destination (local residents) and those who travel to such places. (visitors)* (Castellanos & Orgaz, 2013)

6.2 Background of the Study

Despite the state of Goa being a well acclaimed global tourist destination with its concomitant tourism related issues of both negative and positive nature, far no research has been carried out with respect to identifying multi-stakeholders perceptions towards sustainable tourism, which makes the study unique and provides valuable inputs in an otherwise unexplored area. This study concentrates on the state of Goa as the research location in order to evaluate the perceptions of four stakeholder groups; viz.; local residents, entrepreneurs, government officials (*hosts*); and tourists (*guests*), towards developing and supporting sustainable tourism. Therefore, the present study fills the gap by adding valuable knowledge, new perspectives and presents possibilities for consideration and offers valuable inputs for different stakeholders of tourism industry; especially the academic institutions, hotels and restaurants, tour operators, government as well as NGO's which will ultimately lead to empowerment of local residents in the coming years.

6.2.1. Sustainability and Sustainable Tourism Models

Tourism as an industry has gained tremendous importance over several decades in countries across the world for its undisputed power to transform the economies and lives of citizens in those countries. When viewed both from a global as well as local perspective, tourism is now, an important avenue of regional development with interest increasingly being focused on making it sustainable, particularly in main destination areas. It being a resource-intensive industry, the onus of being accountable in terms of sustainability, at the global as well as local level, lies principally with the industry itself. In terms of the debate on environmentally integrated tourism development, Sustainable tourism is the focal point, however, existing research indicates that sustainability is a diverse and complicated concept requiring continuous, comprehensive and critical analysis. (Butler, 1999; Mowforth & Munt, 2003) While the work done by influential tourism research scholars (Wall, 1997; Hunter, 1997; Butler, 1999; Collins, 1999; Farrell & Twining-Ward, 2004) has contributed greatly to the understanding of the inter-relatedness of this highly complex subject in terms of the quality of life, equity and the environment, further research is needed so as to meaningfully and critically evaluate its various implications in different settings over different time periods. Sustainable tourism can therefore best be viewed either as an “adaptive paradigm” (Hunter, 1997) or as “adaptive management” (Farrell & Twining-Ward, 2004) which address the issues of unpredictability and uncertainties of events and their outcomes as well as complexities of scale and time. Despite the diversity of sustainable tourism models in terms of the research objectives, the types of tourism or the destinations covered and the problems inherent in the study of determining a model of sustainable tourism, a common thread through these models is the need for stakeholder participation in the process of sustainable tourism. Keeping this in mind, in the present research an attempt is made to gauge

Author & Year of Publication	Key points of the Study
Keogh, 1990	Two schools of thought with regard to sustainability: a reactive view where residents have little or no influence on development of the destination and at best react to consequences of planning imposed on them by outside bodies, a functional view where tourism is considered as a proactive force which if managed by stakeholders in an appropriate manner will maximize returns while minimizing costs.
Jamal & Getz, 1995	Sustainable Tourism is viewed as a collaborative effort involving joint decision making by key autonomous stakeholders of an inter-organizational, community domain to manage/resolve issues related to the planning and development of the domain.
Hunter, 1997	Conceptualized the degrees of development of Sustainable Tourism by contrasting the position of tourism vis à vis the position of sustainable development in a destination.
Fennel, 1999	Sustainable Tourism is explained in relation to the various aspects of its product as well as the kind of degrees or stages of tourism in a destination.
Weaver, 2001	Sustainable Tourism is viewed as a continuum with mass tourism being closer to unsustainable tourism on one side and alternative tourism being closer to sustainable tourism on the other.
Johnston & Tyrell, 2005	Suggested a mathematical model which assumed two main primary interest stakeholder groups (permanent residents and tourism planners) interested in the existence and outcomes of tourism. It stressed the impossibility of an universally sustainable environmentally optimal solution across all stakeholder groups while attempting to assist tourism planners to understand the choices and trade-offs inherent in Sustainable Tourism and thus clarify and structuralize the concept.
Okazaki, 2008	Advocates community participation in tourism planning in a community as a means of implementing sustainable tourism and used the major theories of community participation as a basis for defining a community based tourism model empirically tested in Palawan, Philippines assessing the status of a community regarding actual levels of participation in a tourist destination using a two dimensional graph.
Shikida et al., 2010	Proposed a simple tourism relationship model depicting the relationship between community and extra-community stakeholders to enable the effective development of sustainable tourism while attempting to balance the economic value (favoured by extra- community stakeholders) and the existence value (favoured by community stakeholders) through a 'circular mechanism' and 'control flow' mechanism used by an intermediary or subsystem of the model.
Durydiwka et al., 2010	Sustainable Tourism is related to three main types of tourism viz. natural environment (ST Natural), Cultural environment (ST Cultural) and requiring certain skills from tourists (ST Qualifying) and the holistic conception of Sustainable Tourism should be understood as a combination of various forms of tourism complemented by common objectives.
Butowski, 2012	Presented a Sustainable Tourism model which provided a universal theoretical basis for application models to strive for a state of equilibrium in fulfilling the needs of the two main stakeholder groups- community residents and tourists while considering tourism development and its benefits versus resource degradation as an unavoidable cost incurred due to tourism development.
Weaver, 2012	Increasing awareness of global resource scarcity, climate change, development of green technology combined with the established norm of growth desirability, indicate the need for the acceptance of sustainability as the new norm and consequence, the positioning of sustainable mass tourism as the logical and desirable outcome for most destinations. This paper offers three models to sustainability of tourism in destinations: the market driven 'organic' path (conventional tourism area life cycle model); the regulation driven 'incremental' path (deliberate alternative tourism) and the hybrid 'induced' path (mega resorts conceived as growth poles).
Nizic & Drpic, 2013	Suggest a management model of Sustainable Tourism based on the SWOT analysis of the tourism development of the destination using an association of various clusters of stakeholder groups designed and coordinated by a central body to provide synergy in the effort towards Sustainable Tourism by eliminating the negative aspects of tourism while emphasizing its advantages both individually for each stakeholder and collectively for the destination.
Chiabai et al., 2013	This study presents a bottom up approach for cultural tourism management in Italy using an e-participation website in which stakeholders are the central focus of the decisional process using innovative information technology and communication techniques to foster stakeholder engagement such that the cultural tourism offer is personalized according to stakeholder perspectives and destination specific characteristics.
Camus et al., 2014	Presented a model of Sustainable Tourism based on systematic analysis viewing the tourist sector as a complex social system involved in multiple mutual interactions which successfully integrate the principles of sustainable development so as to ensure long term sustainability of tourism.

Table 6.1: Summary of Literature Review on Sustainable Tourism Models

Source: Author's own compilation

the understanding of various aspects of tourism from the point of view of multi-stakeholders in the tourist destinations with a view to suggesting a model of sustainable tourism that is suitable for the state.

6.2.2 Sustainable Tourism and Structural Equation Modeling (SEM)

Structural Equation Modeling (SEM) is a renowned and widely used statistical technique to test theory in a number of academic disciplines (Hair et al., 1998; Schumacker and Lomax, 2004) and behavioural sciences as well. The development of SEM methods and software (methodological advances as well as improvement of user interfaces) has been rapid since the 1970's and it is these improvements that have made SEM both accessible and popular in addressing a variety of issues in psychological research. SEM can be viewed as a combination of multivariate statistical techniques i.e. factor analysis, discriminant analysis and regression analysis or path analysis where the relationship between the theoretical constructs (represented by latent factors) are represented by regression or path coefficients between the factors. (Klem, 2000; Hox & Bechger, 1998) SEM is a technique used for specifying and estimating models of linear relationships among variables. These variables may be measured/observed - those which can be directly measured are called measured variables (MV) while those hypothetical constructs which are latent or cannot be directly measured are called latent variables (LV). A structural equation model is a hypothesized pattern of directional and non directional linear relationships among a set of MVs and LVs, where a directional relationship implies some sort of directional influence of one variable on another while a non directional relationship being largely correlational, implies no directional influence. (MacCallum and Austin, 2000) The main

Author & Year of Publication	Stakeholders covered	Geographical area covered	Variables Used In The Study	Findings & Results
Lindberg & Johnson (1997)	Residents	Australia	Demographic variables; values (net economic gain; minimal disruption of daily life; adequate recreation facilities; aesthetically pleasing environment; satisfying interaction with non residents; affirmation of community/culture; influence over community decisions); attitudes towards tourism development.	Two specific models are evaluated using SEM a) value attitude model which indicates that the strength of residents values in terms of economic gain predict attitude better than values regarding disruption within the community while the b) expectancy value model indicates that perceived economic and congestion impacts have greater effect on attitude than perceived crime and aesthetic impacts. Further, the hypothesis that demographic variables affect attitude indirectly through values is supported.
Gomez – Jacinto et al., 1999	Tourists	Costa del Sol, Spain	Attempts to determine the factors influencing attitudinal change in tourists as a result of intercultural interaction of tourists with the destination visited and proposes that the influence of intercultural interaction, tourist activities and service quality and stereotype is completely indirect, mediated by holiday satisfaction.	While Attraction of the destination has no effect, cultural motivation increases the quantity of activities engaged in, psycho-social motivation significantly affected inter-cultural interaction, original stereotype positively influenced holiday satisfaction and final stereotype but not change of attitude. Holiday satisfaction is positively influenced by the quantity of activities, inter-cultural interaction and quality of services, increases positive attitude change and improves final stereotype of hosts.
Yoon et al. (2001)	Residents	Norfolk/ Virginia/ Newport News, US	Four exogenous constructs including economic impact, social impact, cultural impact, environmental impact, two endogenous variables including total impact (TI) and Residents support for tourism development (RSTD)	Findings support all five hypotheses that, there is a direct relationship between residents perceived TI and RSTD, indirect relationship between perceived economic impacts and RSTD, indirect relationship between perceived social impacts and RSTD, indirect relationship between perceived cultural impacts and RSTD, indirect relationship between perceived environmental impacts and RSTD, all of which are mediated by total impacts.
Gursoy et al. (2002)	Host community/ Residents	Virginia, US	Community concern; Community attachment; Ecocentric attitude; Utilization of tourism resource base by residents; The state of the local economy; Perceived benefits; Perceived costs; Support for tourism based in two typologies (cultural and historic attractions; and cultural and folks events)	Findings indicate that host community support for tourism development is affected by the level of concern, Ecocentric values; Utilization of tourism resource base by residents; Perceived benefits; and costs of tourism development.
Ko & Stewart, (2002)	Residents	Cheju Island, Korea	Examined five latent constructs including Positive and negative impacts of tourism, personal benefits derived from tourism, overall community satisfaction and attitude toward additional tourism development and nine path hypotheses.	Findings indicate that residents' community satisfaction was closely related to 'perceived positive and negative tourism impacts' and were directly influencing 'attitude towards additional tourism development'. However, the hypothesized path relationships between personal benefit from tourism and the constructs,

				perceived negative tourism impacts and overall community satisfaction were rejected concluding that community satisfaction was influenced by tourism impacts.
Gursoy & Rutherford (2004)	Residents	Washington & Idaho, US	Community concern; Community attachment; Ecocentric attitude; Utilization of tourism resource base by residents; The state of the local economy; Perceived economic, social and cultural benefits; Perceived social and cultural costs; Support for tourism based in three types (nature based developments, cultural or historic based development and nature programs)	Results indicate that residents support for tourism development is affected directly and indirectly by the following nine determinants Community concern; Community attachment; Ecocentric attitude; Utilization of tourism resource base; The state of the local economy; Perceived economic, social and cultural benefits; Perceived social costs. Further, they indicated that interactions exist among the five dimensions of impacts.
Gursoy & Kendall (2006)	Residents	Salt Lake City, Utah, US	Community concern, Community attachment, ecocentric attitude, Perceived benefits, perceived costs, Support for Mega Events	Results confirm that community backing for mega events is affected directly or indirectly by five determinants of support Community concern, Community attachment, ecocentric attitude, Perceived benefits, perceived costs. Further, interactions exist between cost and benefit factors while support relies more strongly on perceived benefits than perceived costs.
Dyer et al. (2007)	Residents	Sunshine Coast, Australia	Impact of five factors- negative socio- economic impact, positive social impact, negative social impact, positive cultural impact, positive economic impact and support for further tourism development	Testing of the model indicates that in the five factor impact scale used only perceived economic and perceived cultural benefits have significant positive direct impact on local residents' support for tourism development which reaffirm findings by other similar studies
Gross & Brown, (2008)	Tourists	South Australia	Examines the predictive relationship between involvement conceptualized as a multidimensional construct consisting of attraction, centrality to lifestyle, self-expression, food and wine) and place attachment (conceptualised as a multidimensional construct of place dependence and place identity)	The SEM model developed and tested was found to reliably and validly measure the predictive relationships between the two multi dimensional constructs of involvement and place attachment. The findings further indicated that the combined use of involvement and place attachment which measure attitude towards tourism experiences, is applicable in the tourism context.
Oviedo-Garcia, et al., (2008)	Residents	Santiponce, Spain	Residents' perceptions on economic, cultural and environmental effects of tourism which are considered to be determinants of residents attitude towards or support for tourism development and planning.	The study developed and empirically tested a conceptual model where the results support the basic hypothesis that the level of personal benefits residents receive from tourism influence their perceptions of tourism impacts and consequently their support for tourism development and planning
He & Song, (2009)	Tourists	Hongkong	Studies the mutual relationships among tourists' perceived service quality,	Research shows that quality perceptions have a direct effect on tourists' repurchase intentions this study also

			value, satisfaction, and intentions to repurchase packaged tour services from travel agents	indicates that such an effect is fully mediated by tourist satisfaction and this role is further supported by an examination of the direct and indirect effects of perceived value on tourists repurchase intentions.
Nicholas et al. (2009)	Residents	Pitons Management Area, St Lucia, Caribbean	Community attachment, environmental attitudes, level of involvement in Pitons Management Area (PMA), perception of the PMA, Support for sustainable tourism development in the PMA, Support for the PMA as a World Heritage Site	Results of SEM suggest that Community attachment has a significant positive direct influence on support behavior while Environmental Attitudes indirectly influences support behavior through perceptions about PMA. The level of involvement in the heritage site was not significant and this notable lack of involvement presented important sustainability related research implications for the site.
Gursoy et al. (2009)	Local residents	Sunshine Coast, Australia	Community concern; Community attachment; Ecocentric attitude; Utilization of tourism resource base by residents; The state of the local economy; Perceived economic, social and cultural benefits; Perceived social and socio-economic costs; attitudes towards two different types of tourism development: mass tourism and alternative tourism	Findings indicate that the resident community support is directly and/or indirectly affected by the level of community concern, Community attachment; Ecocentric attitude; Utilization of tourism resource base by residents; the state of the local economy; Perceived impacts of tourism. Further, though some factors influence attitude towards both forms of tourism, attitude towards each form is likely to be formed based on the perceptions of different factors.
Hsieh et al., (2010)	Residents and Tourists	Penghu Island, Taiwan	Residents and Tourists Perceptions about Tourism's positive economic impact, positive social impact, negative social impact, positive cultural impact, negative environmental impact and support for sustainable tourism studied simultaneously in two models viz. Resident & Tourist Model.	The Resident Model showed that residents perceived positive economic impact and positive cultural impact significantly affected their support for tourism development. However, the Tourist model showed that tourist attitude towards positive economic impact, positive cultural impact, positive social impact and negative social impact significantly affected their support for tourism development.
Nusair & Hua (2010)	Student travel purchasers	Orlando, Florida, US	Influence of satisfaction, trust and investment on affective commitment towards purchase of travel products	Satisfaction, trust and investment size are positively associated with affective commitment and trust is positively associated with investment size. Further, SEM as a technique is most appropriate when multiple constructs are being investigated and it is a more effective technique than Multiple regression in finding the 'best-fitting model'
Nunkoo & Ramkissoon, (2011)	Residents	Grand-Baie, Mauritius	Residents level of trust tourism institutions, residents perceived level of power to influence development, Residents satisfaction with neighborhood conditions are antecedents of perceived costs and benefits and overall satisfaction with community which ultimately influence	Results indicate that community support for tourism was influenced by perceived benefits, perceived costs and community satisfaction. Perceived benefits were influenced by power to influence tourism, community satisfaction, institutional trust and neighborhood conditions. There was no significant influence of community satisfaction and neighborhood

			support for tourism development	conditions on perceived costs nor power to influence tourism on community satisfaction.
Ballantyne et al., (2011)	Tourists/Visitors	Queensland Australia	Measured the effect of visitors' entering attributes (pre-visit environmental orientation and motivation for visit) salient aspects of experience and short and long term learning and environmental behavior change outcomes	Findings suggest that attributes such as pre-visit commitment and motivation to learn were among the best predictors of the long term impact of the visit experience, aspects of the experience such as reflective experience and reflective engagement were also found to be associated with short and long term environmental learning outcomes.
Vargas-Sanchez et al., (2011)	Residents	Huelva, Spain	Personal benefits from tourism development; Perception of Positive and Negative impacts of tourism; Community Satisfaction Community attachment, ecocentric attitude, stage of development of local community, community concern, tourist density, level of tourism development and variables on perceptions of tourist behaviour	Results indicate that perception of positive impacts outweighs negative impacts and is the most powerful predictor of residents' attitude while the negative influence of residents' perception that the impacts are negative on their attitudes is rejected. Further, residents' perception of tourist respectful behavior has a strong positive influence on their overall perception of tourism's positive impacts, while density of tourists and level of tourism development negatively influence resident attitude towards tourism.
Hallack et al., (2012)	Tourism Entrepreneurs	Adelaide, South Australia	Examines how identity, entrepreneurial self-efficacy and support for community influence entrepreneurial performance of small and medium tourism enterprises	Results of SEM support a model suggesting that place identity of tourism entrepreneurs has a significant positive direct effect on entrepreneurial self-efficacy and support for community and an indirect effect on entrepreneurial performance (i.e. it contributes to entrepreneurial success)
Assanthe et al., (2012)	Residents	O'ahu, Hawaii	To understand residents support for tourism development, a model adapted from Ko & Stewart (2002) was developed and tested and the following variables were examined. Residents perception of tourism environmental impacts and their perception of Government management of tourism's impact, overall community satisfaction and, government management of tourism and attitude towards sustainable tourism development.	Five of the six hypotheses including government management of tourism and community satisfaction, government management of tourism and environmental impacts, environmental impacts and community satisfaction, environmental impacts and attitude toward sustainable tourism, government management and attitude toward sustainable tourism were accepted, while community satisfaction and attitude toward sustainable tourism was rejected.
Ong & Musa (2012)	Scuba Divers	Malaysia	Examines causal relationships between experience, personality and attitude on behavior of scuba divers.	Results indicate that all three constructs have a positive significant effect on responsible underwater behavior. The most important factor explaining underwater behavior was experience followed by diving attitude and personality and it was found that diving attitude partially mediates the relationship between past experience and underwater behavior. Further, while personality shared a significant

				relationship with diving attitude, the mediating effect of diving attitude was not significant in the personality-underwater behavior relationship.
Lee (2013)	Community Residents	Cigu, Taiwan	Examines the concept of Sustainable Tourism (ST), Assessment of residents support for sustainable tourism development (SSTD) using latent variables of community attachment (CA), community involvement (CI), perceived benefits (PB), perceived costs (PC)	CA & CI are critical factors affecting level of SSTD and PB of host residents significantly affect the relationship between CA & SSTD and between CI & SSTD
Ramkisoorn et al., (2013)	Visitors	Dandenong Ranges national Park, Australia	Investigated place attachment as a second order construct involving (Place dependence, Place identity, Place affect, Place social bonding and its relationship with Place satisfaction and visitors high and low pro-environmental behavioural intentions	Results supported the four dimensional second order factor of place attachment and indicated significant, positive effect of place attachment on both low and high effort pro-environmental behavioural intentions of park visitors and on place satisfaction and significant, positive effect of place satisfaction on low effort pro-environmental behavioural intentions and significant, negative effect of place satisfaction on high effort pro-environmental behavioural intentions.
Kim et al., (2013)	Community Residents	Virginia, USA	Residents perceptions of tourism's economic, social environmental and cultural impacts, sense of material well-being, sense of community, well-being, sense of emotional well-being, sense of health and safety on Overall Life satisfaction mediated by stage of tourism development in the community	The results mostly supported the view that Residents perceptions of tourism's economic, social environmental and cultural impacts is linked to their satisfaction with particular life domains (material, community, emotional, health and safety well being) and overall life satisfaction and the strength of these perceptual relationships is moderated by the stage of tourism development in the community.
Deng & Li, (2013)	Tourists	Shanghai, China	Examines the relationship between event image, destination image, overall attitude towards destination and behavioural intentions towards the destination	Results indicate that event image and tourists psychological responses significantly, directly and positively influence destination image thus supporting image transfer theory empirically but direct effect of event image on tourists' overall attitude towards the destination was not statistically significant due to mediation effect of destination image.
Arsezen-Otamis & Yusbasioglu, (2013)	Tourism Networks Clusters i.e. tourism certified enterprises, NGOs and University	Antalya, Turkey	Studied impact of Diamond Model (factor conditions, demand conditions, work and competition structures, related and supporting structures and State) on perceived performance of Antalya tourism clusters	The results show a statistically significant positive relationship between state dimension and perceived performance, no statistically significant positive relationship between demand and perceived performance and partially statistically significant positive relationship between Work structure & competition and elated and supportive services dimension and perceived performance
Ali et al., (2013)	Tourists	Malaysia	Physical environment, Perceived value, Image &	Results indicated that the relationship between perception of physical

			behavioural intentions	environment and a) perceived value, b) image c) behavioural intentions is direct, positive and significant. The relationship between perception of image and perceived value as well as perceived value and behavioural intentions is direct, positive and significant. However the relationship between image and behavioural intentions is not significant.
Cottrell et al., (2013)	Residents	Germany	Examined the relative influence of four sustainability dimensions-economic, socio-cultural, environmental and institutional in predicting resident 'perceived satisfaction' with sustainable tourism development	SEM supported the hypotheses that all four dimensions were significant predictors of perceived satisfaction, however economic dimension was the strongest predictor followed by institutional, social and environmental, thus indicating the need for inclusion of all four dimensions for holistic approach to planning and monitoring sustainable tourism development.
Untong & Kaosa-ard, 2014	Local Government Authorities	Thailand	3 Latent variables – Structure (S) (exogenous), Private investment (PI), Conduct of local government (LGC) (endogenous) influencing the success of sustainable tourism development	Structure significantly influences tourism development directly impacting visitor numbers and indirectly impacting performance through PI. Good structure provides direct incentives for PI & LGC. PI has a direct positive effect on (increases) number of tourists while LGC affects awards but does not affect visitor numbers and has a minor role in tourism development insufficient for promoting sustainable development.
Xu & Fox, (2014)	Tourists	China & UK	Examines whether Anthropocentric (humans are most important life form) and ecocentric (nature must be preserved for its intrinsic value) attitudes (value) attached to tourism and the environment, conservation and sustainable tourism development	Results indicate a strong causal relationship between people's attitude towards nature and their attitude towards tourism and associated activities and both anthropocentric and ecocentric values significantly influence people's attitude to tourism and sustainable development.
Romao et al., (2014)	Tourists	Shiretoko Peninsula, Japan	Examined the effect of tourist and trip characteristics on tour choice and the effect of this choice on tourists' satisfaction and loyalty. A path model was proposed to test the correlation between the boat tours, satisfaction, dissatisfaction and loyalty with the destination	While the model it demonstrated adequate fit indices, the multi group analysis of the three groups a) respondents with past experience of same type of boat tour b) respondents with past experience of different type of boat tour c) visitors without previous experience, indicated that for the majority of relationships, no statistically valid differences were found in the model.
Stylidis et al., (2014)	Residents	Kavala, Greece	Using the triple bottom line approach for tourism impacts and adopting a non forced approach to measure these impacts the study explores Residents place image, its effect on their perception of tourism impacts (economic, socio-cultural and environmental) and	Emphasizing the need for a more flexible and resident centered approach to the measurement of tourists' impacts the results reveal that the more favourable the perceptions of impacts, the greater the support for tourism development. Further, the results indicate the significance of place image in shaping residents perceptions of tourists' impacts and their level of

			consequently their support for tourism development.	support for tourism development.
Valliammal, (2014)	Residents	Papanasam, Tamil Nadu, India	Examined the environmental impact of tourism on the well being of community residents.	Pollution due to solid waste, littering, sewage disposal, vehicles, oil and chemicals from tourism significantly impacted the health well being of residents and the same factors except for sewage significantly impacted safety wellbeing of residents
Woo et al., (2015)	Residents	New York, Orlando, Las Vegas, Virginia, Nevada, US	Explored Residents perceived value of tourism development (exogenous variable), Life domain satisfaction (material & non-material), Overall quality of life satisfaction in their community in understanding local Residents support for further tourism development(endogenous variables)	The results of a SEM approach indicate that all five hypotheses were supported and that higher the residents' perceived value of tourism development, higher is the satisfaction with nonmaterial and material life domains. Further, satisfaction with material and & nonmaterial life domain did positively influence overall quality of life and that perceived value of tourism development positively affects residents quality of life which in turn affects support for tourism development.
Al-Refaie, (2015)	Hotel employees (managerial & non-managerial) & Customers	Jordan	Impact of HRM practices, service quality, employee satisfaction, employee loyalty, customer satisfaction, customer loyalty on hotel performance.	Findings indicate that HRM practices, service quality, Employee loyalty and satisfaction, customer loyalty and satisfaction, positively influence improvement in hotel performance in the financial and innovation domains.

Table 6.2: Summary of Literature Review on Structural Equation Models

Source: Author's own compilation

advantages of SEM over other statistical techniques is that it allows for the estimation of a series of independent multiple regression equations simultaneously and has the ability to incorporate latent variables into the analysis accounting for measurement of errors in the estimation process. (Hair et al., 1998)

6.2.3 SEM Guidelines for Determining Model Fit

Structural Equation Modeling has become a technique of choice for multi-disciplinary researchers but is increasingly considered a must, for social science researchers. Yet, the 'model fit' or how the model that best represents the data reflects underlying theory, is still a matter of contention. In addition, the large numbers of fit indices along with the wide disparity in agreement of which indices to report and the acceptable limits or cut-offs of the respective

indices further confuse the researcher. (Hooper et al., 2008) Statisticians are constantly researching and debating on SEM to refine and develop new and improved indices in an attempt to improve the technique as well as to better explain some facet of model fit previously unaccounted for. To prevent researchers from choosing and reporting only those indices which indicate good model fit from the wide variety available, the most widely used, reported and respected fit indices along with their interpretive value in assessing model fit and suggestions to improve model fit, were presented in a paper by Hooper et al, 2008.

Indices may be a) **Absolute fit indices**, which determine how well an a priori model fits the sample data and indicate which proposed model has the most superior fit and includes relative/normed chi-square, RMSEA, GFI, AGFI, RMR & SRMR. b) **Incremental/relative/comparative fit indices** which do not use the chi-square in its raw form but instead compare it to a baseline model and include NFI, CFI. c) **Parsimony fit indices** have been developed to overcome the problem of estimation arising from a nearly saturated complex model which as a result, conversely produces a less rigorous model with better fit indices and includes PGFI & PNFI, AIC & CAIC. For this study, since the calculation of indices does not rely on comparison with a baseline model but is a measure of how well the model fits in comparison to no model at all, (Joreskog & Sorbom, 1993) the absolute fit indices have been considered and reported and one incremental fit index i.e. NFI has been reported.

1) Model Chi-Square value which is a traditional measure for evaluating overall model fit but suffers from certain limitations, as a result of which, even models which are properly specified may be rejected. Hence, alternative indices have been devised and Wheaton et al. 's (1977)

Relative/Normed Chi-Square (Chi-Square/df) or CMIN is used where despite a lack of consensus about an acceptable ratio for this statistic, values ranging between as high as **5.0** (Wheaton et al., 1977) to as low as **2.0** (Tabachnick and Fidell, 2007) are considered acceptable.

2) Root Mean Square Error of Approximation (RMSEA) was first developed by Steiger and Lind (1980), which tells how well the model with unknown but optimally chosen parameter estimates would fit the population covariance matrix. While RMSEA cut-off points have reduced considerably in the past two decades, it is generally considered that an RMSEA between 0.8 and 0.10 indicates mediocre fit and below 0.8 shows good fit and those above 0.10 indicate poor fit. (MacCallum et al., 1996) Recently cut-off values closer to 0.6 (Hu & Bentler, 1999) or stringent upper limit of 0.7 (Steiger, 2007) seem to be the general consensus.

3) Goodness of Fit Index (GFI) and Adjusted Goodness of Fit Index (AGFI). The GFI was created by Joreskog and Sorbom as an alternative to the Chi-square test and the statistic traditionally ranges from 0 to 1 with larger samples size (Bollen, 1990; Miles and Shevlin, 1998) and larger number of parameters increasing its value. (MacCallum and Hong, 1997) Traditionally an omnibus cut-off point of 0.9 has been recommended for GFI to indicate well fitting models. The AGFI which adjusts GFI based on degrees of freedom tends to increase with sample size and as with GFI traditionally ranges from 0 to 1 and it is generally accepted that values of 0.9 or greater indicate well fitting models. (Tabachnick & Fidell, 2007) However, given the often detrimental effect of sample size on these two indices they are generally not used as stand-alone indices but reported in covariance structure analyses.

4) Root Mean Square Residual (RMR) is the square root of the difference between the residuals of the covariance matrix and the hypothesized covariance model. The range of the RMR is based on the scales of each indicator (for scales with varying scale levels - 5 point, 7 point etc. **SRMR or Standardized Root Mean Square Residual** is calculated) Values for Root Mean Square residual (**RMR**) range from 0 to 1 where values < 0.05 are indicative of a good model fit (Byrne, 1998; Diamantopolous & Sigaw, 2000). However values as high as 0.08 are deemed acceptable. (Hu and Bentler, 1999)

5) Normed-Fit index (NFI) is an incremental or comparative fit index which assesses the model by comparing the chi-square value of the model to the chi-square value of the null model, where the null model is the worst case scenario as it specifies that all measured variables are uncorrelated. (Hooper et al., 2008) Values for this statistic range from 0 to 1 with Bentler and Bonnet, 1980, recommending that values greater than 0.9 indicate a good fit. More recently, Hu & Bentler, 1999, suggest ≥ 0.90 as acceptable and ≥ 0.95 as a good fit.

6) Comparative Fit Index (CFI) was first introduced by Bentler (1990) and is a revised form of the NFI which takes into account sample size and performs well even when sample size is small. Precisely because of it being a measure least affected by sample size (Fan et al, 1999) it is one of the most popularly reported indices and included in all SEM programmes. Like the NFI, it assumes that all latent variables are uncorrelated (null/independence model) and compares the sample covariance matrix with this null model and states that values for this statistic range from

0 to 1 with values closer to 1 indicating good fit and CFI values of ≥ 0.95 being presently recognised as indicative of good fit (Hu and Bentler, 1999).

6.3 Research Methodology

The research location and background (*Refer Chapter 5, Section 5.3.1*), questionnaire development (*Refer Chapter 5, Section 5.3.2*), data collection (*Refer Chapter 5, Section 5.3.3*), and some of the techniques of analysis viz. Descriptive Statistics (*Refer Chapter 5, Section 5.4.1 & Table 5.1*), Exploratory Factor Analysis (*Refer Chapter 5, Section 5.4.2 & Table 5.2*), and Mean Analysis (*Refer Chapter 5, Section 5.4.3 & Table 5.2*), were the same for objective 3 and 4. The main difference was the use of Strategic Equation Modeling in an attempt to develop a model of sustainable tourism in the state. After the EFA was conducted and the dimensions were identified, a Cronbach's Alpha reliability test was conducted to evaluate the reliability of each sub-measurement scale. A hypothesized model (*Refer Figure 6.1*) was drawn up to test the strength of the relationship between the 7 Sustainability Issues so identified and Sustainable Tourism. Structural Equation Modeling using AMOS 22 was used on the hypothesized/proposed model and a path diagram resulted.

6.3.1 Structural Model: Stakeholder Perception of Sustainable Tourism and their willingness to Support Sustainable Tourism

After identifying the stakeholders perception of sustainable tourism, the influence of these perceptions on their willingness to support sustainable tourism was assessed. The relationship between stakeholder perception and attitude towards sustainable tourism and their consequent support /opposition towards it, is supported by the Theory of Reasoned Action [TRA](Fishbein

& Ajzen, 1975; Ajzen & Fishbein, 1980). The theory postulates that individuals are all rational beings who ensure possession of all pertinent information and who evaluate all possible repercussions and implications of their actions before deciding to engage in them. (Ajzen, 1985)

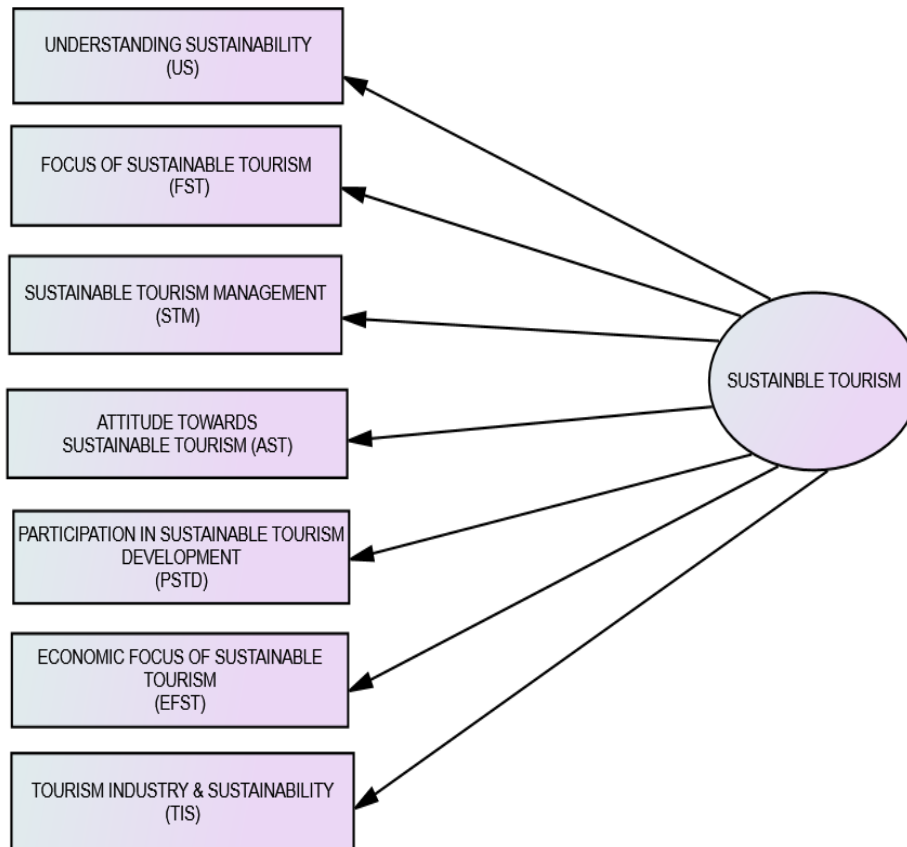


Figure 6.1: Hypothesized Model of Multi-stakeholder perception and support for Sustainable Tourism

According to the Theory of Reasoned Action (TRA), the factor most pertinent to the prediction of behaviour is the intention of the individual, which in turn is the antecedent of actual behaviour. The term 'intention' includes all the motivational factors that affect behaviour and indicate how much effort an individual will be willing to put in in order to engage in that behaviour. Ultimately the theory states that the more favorable an individual's attitude or perception is

towards a behaviour, the more he/she intends to perform it. Based on this theoretical concept, an exploratory structural model was constructed to test the validity of the seven factor measurement scale representing stakeholder perception of tourism sustainability in the state of Goa, wherein the seven factors were examined as exogenous variables and sustainable tourism was examined as an endogenous variable. The model was used to test the following hypothesis:

H₆: *There is no significant relationship between*

- a) Understanding of Sustainability (US)*
- b) Focus of Sustainable Tourism (FST)*
- c) Sustainable Tourism Management (STM)*
- d) Attitude towards Sustainable Tourism (AST)*
- e) Participation in Sustainable Tourism Development (PST)*
- f) Economic Focus of Sustainable Tourism (EFST)*
- g) Tourism Industry and Sustainability (TIS) and Sustainable Tourism (ST) with respect to Stakeholder perception*

6.4 Analysis, Research Findings and Discussion

The aim of this study was to investigate between the relationship between stakeholder perception of Sustainability and Sustainable Tourism. To this end, data was collected from stakeholders in the state of Goa and was analyzed using a range of techniques including Exploratory Factor Analysis, Mean Analysis and Structural Equation Modeling (SEM). The findings of the study, to a certain extent being similar to Chapter 5, are as follows: Demographic profile of Respondents

(Refer Chapter 5, Table 5.1, Section 5.4.1); Exploratory Factor Analysis (EFA) **(Refer Chapter 5, Table 5.2, Section 5.4.2 & Mean Analysis (Refer Chapter 5, Table 5.2, Section 5.4.3)**

6.4.1 Structural Model / Path Design

In SEM, the development of the hypothetical model depicting the linkages between the latent constructs and their empirically observed indicators is considered as a *Measurement Model*, while the theoretical relationship between constructs is referred to as a *Structural Model* (Bollen, 1989a; Bollen, 1989b; Joreskog, 1993; Byrne 1998). An analysis of the estimated standard path coefficients in the *Measurement Model*, carried out using Maximum Likelihood Method of Estimation, revealed the strength, significance and direction of each hypothesized relationship. A SEM Model was used to examine the hypothesized relationships between the constructs (factors) in the model using Maximum Likelihood Estimates. Model fit was initially tested using the Overall Fit and Regression Paths to determine whether observed variables were generated by corresponding latent factors. The hypothesized model was then analyzed. **Figure 6.2** shows the standardized path diagram as estimated by AMOS 22. Each of the observed variables is displayed as a rectangle while each of the latent constructs is shown as an oval. The evaluation of Goodness of Fit indices indicate mediocre to acceptable levels of fit; viz.; **(Refer Section 6.2.3)**

Chi Square/df (CMIN) = 4.801 which is *acceptable* [acceptable ratio ranges from as high a 5.0 (Wheaton et al., 1977) to as low as 2.0 (Tabachnick & Fidell, 2007); Goodness of Fit Index (GFI) = 0.883; and Adjusted Goodness of Fit Index (AGFI) = 0.871; both of which are in the

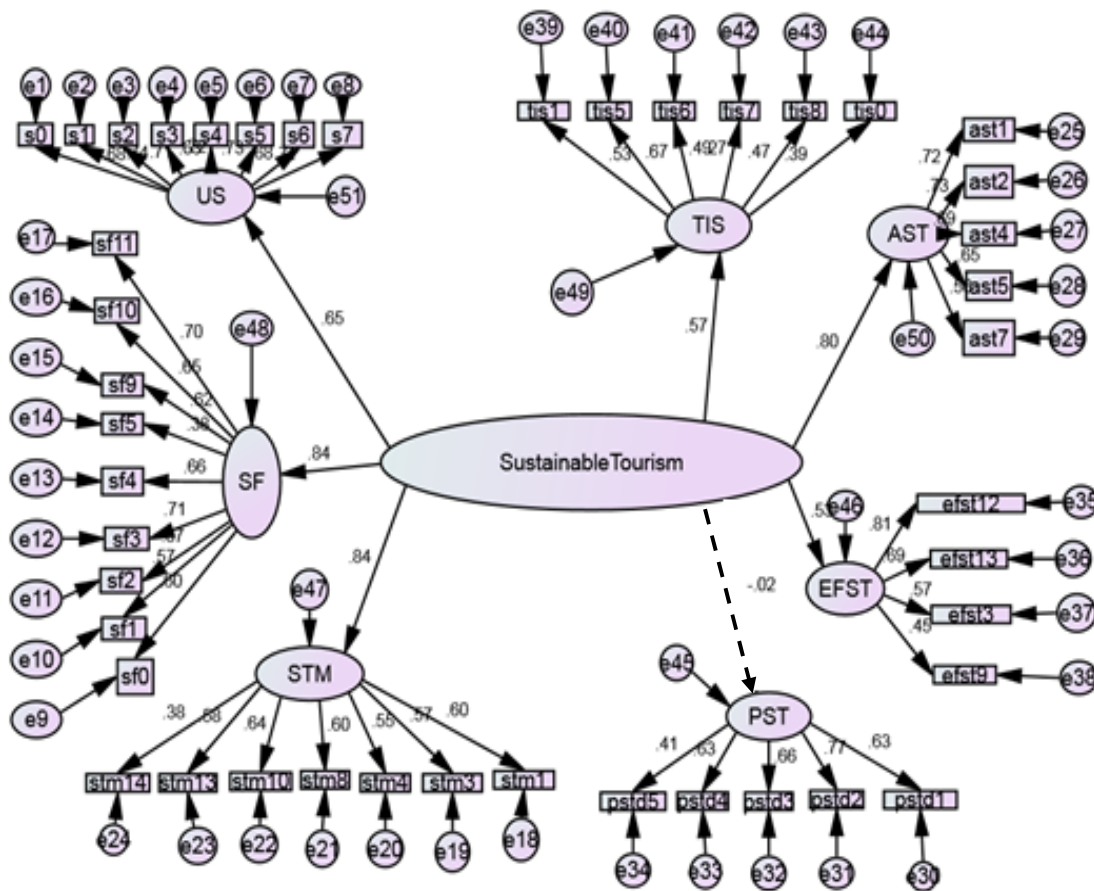


Figure 6.2: Standardized Estimated Path Diagram indicating significance at $p < 0.05$ level (incomplete lines indicate paths not significant at $p < 0.05$ level)

acceptable range as values of 0.90 or greater indicate well fitting models. (Tabachnick & Fidell, 2007); Root Mean Square Error of Approximation (RMSEA) = 0.049; Values below 0.8 show good fit (MacCallum et al., 1996). Recently values closer to 0.6 (Hu & Bentler, 1999) or stringent upper limit of 0.7 (Steiger, 2007) seem to be the general consensus. Root Mean Square residual (RMR) = 0.035 is a good fit where values < 0.05 are indicative of a good fit (Byrne, 1998; Diamantopolous & Sigaw, 2000); Normed- Fit Index (NFI) = 0.822; mediocre to acceptable; while cutoffs as low as 0.80 have been proffered as acceptable, Hu & Bentler, 1999, suggest ≥ 0.90 as acceptable and ≥ 0.95 as a good fit. (Refer Figure 6.2)

Comparative Fit Index (CFI) = 0.853, mediocre; while values ≥ 0.90 were initially advanced as acceptable, [Hu & Bentler, 1999](#), suggest that values ≥ 0.90 are necessary in order to ensure that mis-specified models are not accepted and values ≥ 0.95 as considered a good fit. (*Refer Figure 6.2*)

As the Goodness of Fit Indices do not support the proposed model completely, the measurement model is retained as a path diagram indicating relationships between Sustainability Issue factors and Sustainable Tourism.

Hypothesis	Hypothesis Path	Path Coefficient	P value	Accept / Reject
H ₆ a	US \longrightarrow ST	0.65	0.00*	Rejected
H ₆ b	SF \longrightarrow ST	0.84	0.00*	Rejected
H ₆ c	STM \longrightarrow ST	0.84	0.00*	Rejected
H ₆ d	AST \longrightarrow ST	0.80	0.00*	Rejected
H₆ e	PST \longrightarrow ST	-0.02	0.571	Accepted
H ₆ f	EFST \longrightarrow ST	0.53	0.00*	Rejected
H ₆ g	TIS \longrightarrow ST	0.57	0.00*	Rejected

Table 6.3: Summary of Hypothesis Test Results, * indicating significance at $p < 0.05$ level

6.5 SUMMARY

The purpose of this research was to test the model of stakeholder perceptions about sustainable tourism and their consequent support for sustainable tourism by examining the path relationship between factors related to Sustainability and Sustainable Tourism. Six of the seven hypotheses framed are **rejected** at the $p < 0.05$ level of significance. *Focus of Sustainable Tourism & Sustainable Tourism Management* (0.84 each), along with *Attitude towards Sustainable Tourism* (0.80) indicate a high positive association with *Sustainable Tourism*. *Understanding of*

Sustainability (0.65) shows an above average positive association with *Sustainable Tourism*. *Tourism Industry & Sustainability* (0.57) and *Economic Focus of Sustainable Tourism* (0.53) show a positive, moderate association with Sustainable Tourism.

Finally, only with respect to *Participation in Sustainable Tourism* (-0.02) shows a low, negative relation to Sustainable Tourism. (Figure 6.2, Table 6.4) The null hypothesis stating that there is no significant relationship between Participation in Sustainable Tourism Development and Sustainable Tourism is **Accepted**. A possible explanation for this could be that even when stakeholders in a destination have an awareness, understanding and positive attitude toward sustainable tourism, when it comes to actual involvement of their time, efforts and resources, commitment is lacking. Further, a large section of the stakeholders surveyed were tourists, who have very little or no emotional and economic connection with the destination and given the short duration of stay in the destination their agreement/willingness to participate in sustainability efforts for the destination will naturally be lower than other stakeholders and will dilute the results.

Hence, in terms of the hypothesis generated:

*H₅: There is no significant difference in the perception of Stakeholders; viz.: (1) Residents, (2) Tourists, (3) Entrepreneurs and (4) Government Officials with respect to: (F1) Understanding of Sustainability [US] *, therefore the null hypothesis is Rejected, (F2) Focus of Sustainable Tourism [FST] *, therefore the null hypothesis is Rejected, (F3) Sustainable Tourism Management [STM] *, therefore the null hypothesis is Rejected, (F4) Attitude towards Sustainable Tourism [AST] *, therefore the null hypothesis is Rejected, (F5) Participation in*

*Sustainable Tourism Development [PST] not significant, therefore the null hypothesis is Accepted, (F6) Economic Focus of Sustainable Tourism [EFST] * therefore the null hypothesis is Rejected, (F7) Tourism Industry & Sustainability [TIS]* therefore the null hypothesis is Rejected (Refer Figure 6.3)*

Several limitations were observed in this study including the questions asked in the survey, the nature of the sample, the procedures for data collection, the ability of the proposed model to explain stakeholder attitudes to sustainable tourism, to name but a few. The survey was designed to explore stakeholder perceptions in terms of different factors relating to sustainable tourism in the state of Goa. The stakeholders' ability to convey their attitudes and perceptions was related to their understanding of the survey statements which included technical terms and which could affect their responses. Further, stakeholders seemed fairly comfortable with the existing model of Mass Tourism in the state which has existed for over thirty years and are less familiar with the relatively newer concept and characteristics of Sustainable Tourism.

Despite the limitations, this study proves useful in understanding the attitudes of stakeholders towards sustainable tourism. While the Path Diagram which resulted provides a valid basis for the implementation of a Multi - Stakeholder Involvement Model (MSIM) Framework for sustainable tourism in the state, further research need to be carried out in this context to transform it into an acceptable model and to provide inputs for the understanding of the non-significant relationship between Participation in Sustainable Tourism Development and Sustainable Tourism. Further analysis between the demographic variables and stakeholder attitude toward sustainable tourism could do much to align the goals of the various stakeholders

(Industry, Government, Entrepreneurs and Residents) of tourism in a destination such that sustainable tourism becomes a reality for the destination through participation and involvement of all stakeholder groups.

CHAPTER 7

SUMMARY, FINDINGS, CONCLUSIONS AND SUGGESTIONS FOR FURTHER RESEARCH

7.1 Introduction

Goa is undoubtedly one of the most sought after tourist destinations in the world. When travelogues and travel brochures describe Goa in the stereotypical fashion highlighting its sunny beaches, its golden sands, its balmy climate, its verdant greenery, its tiny hamlets with their trademark white washed churches, abounding with streams and natural springs, its laid back friendly locals, one really must agree with it all, irrespective of whether one is a tourist or a resident because Goa truly is all of that, and more. Goa's unique culture with its blend of east and west, tradition and modernity, faith as well as scientific temper all go to create an experience one neither can, nor wants to forget. The ever increasing number of tourists who throng Goa's shores not only during season time but throughout the year bear testimony to the special place that Goa occupies in the hearts of tourists, worldwide. However, to maintain this exalted position and to seek further opportunities for the right kind of growth will not be an easy task, but grow, we must. We, the people, (stakeholders) can no longer afford to live in our ivory towers or like the proverbial ostrich, bury our heads in the plentiful sand and refuse to acknowledge our duties, our obligations and our commitment to our state. We have to critically assess the current scenario and chalk out the future course of action keeping in mind the carrying capacity of our small yet well endowed state, not only from the economic and environmental standpoint as is so often the

case, but also from the equally fragile and often ignored socio-cultural standpoint. This may require a paradigm shift in our thinking and approach, but, if Goa's unique character is to sustain itself, change is a must. It is in precisely this context that the research study in question was undertaken – an attempt to understand what ails Goan tourism, not merely from the point of view of the “Babus” or in Goa's case, the “Patrões” who decide for us, but from the point of view of the stakeholders in this destination - the residents, the tourists, the entrepreneur and the government as well. It was an attempt to find out what the real Goan thinks about the ‘state’ of our State. Keeping all trivia aside, it is an indisputable fact that Tourism in Goa needs to be planned, managed and sustained. But this planning cannot be a top-down affair with policies, guidelines and regulations thrust on us (the locals), expecting blind obedience and acceptance. To ensure that we protect, maintain and sustain our abundant natural and manmade treasures, we the stakeholders, must be made party to these efforts, by creating awareness, by education, by transparency, good governance and by involvement and participation in every aspect of planning and decision making that affects our lives and livelihood in the state.

7.2 Summary

While sustainable planning and development particularly in terms of tourism appear to be a catch phrase for all tourism destinations with regard to the preservation of natural and man-made tourist attractions, the importance of physical planning in the conservation of resources, both natural and man-made, as well as for the achievement of a desirable pattern of development, was emphasized by Crooks (1973). The increasing interest in sustainability as an approach to planning has resulted in a renewed emphasis on planning for development and how tourism is being integrated into the process. (Page & Thorn, 1997) Earlier studies on sustainability have

focused on the need for certain preconditions such as cooperation, industry coordination etc. to achieve a sustainable approach to planning, (Dutton & Hall, 1989) a paradigm shift in the operation and consequent effects on tourism by the tourism industry and public sector, (Page & Thorn, 1997) difficult choices based on trade-offs in-terms of environmental, economic and social implications involving a larger view than the traditional community planning and decision-making etc. (McIntyre et al., 1993) However, Pigram (1990), states that despite increasing awareness of sustainable tourism and its concomitant planning, a gap exists between policy endorsement and implementation as a result of conflicts between the various stakeholder groups in tourism and stressed that continuous education of all tourism interest groups is compulsory, if greater tourism-environment compatibility is to be achieved. Wanhill (1997), emphasizes that while policy acceptance of the principles of sustainable development is the first step toward sustainable tourism, commitment through action, in the form of stakeholder involvement in planning and developing tourism strategy is essential. These and other studies emphasized the necessity of investigating tourism in a destination, understanding the various stakeholder perspectives about the same, increasing stakeholder involvement in the process of planning and developing tourism in a destination and emphasized that such research would provide a thorough understanding of the challenge of sustainable tourism to a destination and thus help destination managers, planners and all tourism practitioners to formulate realistic, acceptable and sustainable strategies for tourism. Understanding of the reasons why residents do or do not support the tourism industry and its growth would help to develop models for tourism development in a community that would minimize their negative impacts while maximizing support for them, thus giving credence and relevance to the need and importance of research in this field (Vargas- Sanchez et al., 2009).

With these objectives in mind, this study was carried out to evaluate the state of tourism in Goa and through the findings, suggest how tourism could be managed sustainably in the state. This study on managing tourism sustainably and successfully in the state had four main objectives, which then had corresponding hypotheses developed around them for evaluating the destination's health from the point of view of all its stakeholders.

Chapter 1 was an **Introduction the state of Goa**, a brief history tracing its evolution to the current day, a representation of its infrastructure and facilities both tourism and non-tourism related, the rationale of the research, a brief on the stakeholders of tourism in the state, their role in tourism development, an introduction to the concept of sustainable tourism, the research gap, the methodology, the objectives and the hypotheses raised, the limitations of the study and the chapterization scheme.

Chapter 2 contained the **Review of Literature** which provided the theoretical background of the study and included a content analysis of relevant tourism literature carried out objective wise and in consolidation, so as to elucidate studies done in the past on related issues, to identify the research gap as well as to establish the uniqueness of the study.

Chapters 3, 4, 5 & 6 dealt with each of the **Objectives and Hypotheses** which were framed for the study namely: Assessment of infrastructure and facilities available for tourism in the state from the point of view of tourists (**Objective 1, Chapter 3**), Evaluating the perception about the impacts of tourism in the state from the point of view of residents and investigating whether

these perceptions influenced residents' support for additional tourism development and support for tourism planning (**Objective 2, Chapter 4**), Studying Multi-Stakeholder perception about sustainability of tourism in terms of various tourism related sustainability issues in Goa and determining between which specific groups these differences exist (**Objective 3, Chapter 5**), and finally, Developing and testing the hypothesized model of stakeholder perceptions about sustainable tourism and their consequent support for sustainable tourism, by examining the path relationship between factors related to sustainability and sustainable tourism in an attempt to suggest a model for tourism in Goa that would be sustainable, integrative and participative. (**Objective 4, Chapter 6**)

Chapter 7 lists the **Findings** of the study based on the testing of the hypotheses designed so as to be able to draw the necessary inferences for the conclusion and based on the research implications of the study, to make suggestions for further research.

7.3 Findings

For each of the objectives framed, a separate hypothesis was drawn up and was dealt with in a separate chapter which was tested with appropriate statistical tools as indicated from the findings of Literature review, so as to draw appropriate conclusions for the research study.

7.3.1 Findings of Chapter 2

Chapter 2 dealt with the **Literature Review** and research works (local, national and international) from all relevant tourism and related sources (journals, as well as theses) were

reviewed according to the objectives studied and a 'Content Analysis' of Literature relating to the following aspects was prepared objective wise:

7.3.1.1 For Objective 1 - Research articles relating to **Tourist** preferences, their perceptions, their satisfaction with a destination and in particular, literature relating to the use of the Importance-Performance Analysis (IPA) Matrix or Grid as a tool for evaluating tourist satisfaction with a destination's offer and consequently destination competitiveness was studied. Literature review revealed the IPA to be one of the simplest, easiest and most commonly used tools in evaluating tourist satisfaction with a destination's offer which is essential to successful destination marketing and could provide Destination Management Organisations (DMOs) both private and public, with valuable inputs on how to improve the product on offer and increase its competitive value. Thus, literature review revealed the IPA proposed by Martilla & James (1977), to be a low cost – easily managed tool to:

- Evaluate Tourist Satisfaction in the state and through Gap Analysis,
- Audit the state of health of Goa from a tourism standpoint and
- Define the main areas for intervention through the Grid Analysis.

7.3.1.2 For Objective 2 - literature relating to the host community or **resident's** perception of the impact of tourism, their attitude toward tourism and tourism development as well as the factors influencing their support for tourism development was reviewed. Given that the residents are considered to be one of the most important stakeholder groups in the development of any region as a tourist destination and their perceptions about tourism's impacts and benefits affects

their consequent support for the growth and sustainable development of the tourism industry, literature review emphasized the need and importance of a study of:

- Residents' perception of the impacts and benefits of tourism in the State.
- Influence of Residents' perceptions on consequent support for tourism planning and its growth and development in the state.

7.3.1.3 For Objective 3 - literature relating to **sustainable tourism** and sustainable tourism development, **stakeholders** of a tourism destination, their attitudes and perceptions about tourism, their role in tourism development, and their influence on tourism's sustainability and most importantly **multi-stakeholder** comparison of perceptions and attitudes relating to tourism was reviewed. Since very few studies on multi-stakeholder comparisons have been made, literature review emphasized the need and importance of such a study to:

- Assess multi stakeholder perceptions of the sustainability of tourism in the state in order to build on the existing body of knowledge.

7.3.1.4 For Objective 4 - literature relating to successful **models of tourism** in different destinations and with different focus, **models of sustainable tourism** in varied destinations at different stages of their life cycle, theoretical as well as conceptual models of tourism using different ideologies and methodologies and most importantly, tourism models using the widely acclaimed and widely applicable statistical technique **Structural Equation Modeling** and research relating stakeholders to the same, were reviewed. The review revealed that lack of awareness about sustainable tourism and ineffective stakeholder participation and involvement in

sustainable tourism were the major barriers to the successful implementation of sustainable tourism and emphasized the need and importance of such a study to:

- Use the analysis of stakeholder perceptions of sustainable tourism through the technique of Structural Equation Modeling, to develop a path design/model so as to offer destination planners, managers and organizers, a practical solution to the problems of tourism in the state of Goa.

7.3.1.5 Conclusions of Chapter 2

A thorough review of all pertinent literature revealed that every aspect being attempted to be studied in the current research work in terms of all the four objectives, needs to be studied viz. (1) Tourist perceptions about tourism's infrastructure, (2) Resident perceptions about Tourism's impacts, (3) Multi-Stakeholder perception about Tourism's sustainability, and (4) the possibility of Developing a Sustainable Model for tourism in the state. None of these issues / aspects have been studied so far in the state of Goa, indicating clearly, *the research gap*, which makes this present work unique. The result of this study fill the gap by:

- validating the findings of previous research studies done in different settings and different locations
- identifying new variables which influence resident perceptions
- adding valuable knowledge and new perspectives for the tourism business community, the Government, Non- Governmental Organizations and all interested stakeholder groups.

7.3.2 Findings of Chapter 3

Chapter 3 entitled **Tourists' Perception about Tourism Infrastructure** dealt with the first objective of the study i.e. *to assess the perception of Tourists' about the infrastructure and inputs currently available for tourism in the State of Goa and to identify existing gaps*. It was undertaken in order to analyze tourists' perception about the importance of and satisfaction towards the infrastructure, facilities, amenities and services offered by the tourist destination of Goa and dealt with following hypothesis H_1 : *There is no significant difference between Tourist perception about the Importance given to and Satisfaction with a) Tourist Assistance factors (F1) (b) Infrastructure Factors (F2) (c) Attraction/Destination Factors (F3) & (d) Entertainment factors (F4) which are available in the state for tourism, before and after the trip.*

In this context, tourists rated their perceptions of the importance of and satisfaction with tourism 34 variables relating to infrastructure, facilities, amenities and services in the state using a five point Likert Scale. **EFA** of the 34 infrastructural variables generated four factors. It was analyzed using statistical techniques and tools like Descriptive Statistics Reliability Analysis, Mean Analysis, IP Analysis, Gap Analysis and tested using the Paired Sample t-Test.

Following were the findings of Chapter 3 in brief:

- **Reliability** and internal consistency of the scale and factors showed that the Cronbach's Alpha of the overall scale was 0.921 (*Refer Chapter 3, Table 3.2*)
- **Mean analysis** for all 34 variables shows 'average' level for both Importance (3.95) & Satisfaction (3.49). While the mean for 'Importance' tends towards the higher end of

average, the mean for 'Satisfaction' tends toward the lower end of average. (*Refer Chapter 3, Table 3.2*)

- **Paired t Test** conducted in terms of tourist perceptions of facilities, services and infrastructure before and after the trip found that except for *five constructs* in two factors, where *no significant difference exists* in tourist perceptions before and after the trip, there is a *significant difference* in tourist perceptions for *twenty nine constructs* in the four factors before and after the trip. (*Refer Chapter 3, Table 3.2*)
- Importance-Performance Analysis (Original - 4 Quadrants) indicated that 10 variables fell in Quadrant I (Keep up the Good Work), 13 variables fell in Quadrant II (Concentrate here), 5 variables fell in Quadrant III (Low Priority) and 6 variables fell in Quadrant IV (Possible Overkill) (*Refer Chapter 3, Figure 3.1*) In the **Importance-Performance Analysis (Modified - 2 Quadrants)** using the diagonal approach having 2 regions, 5 attributes fall in Quadrant I- the region below the diagonal ('Keep up the good work'/ low priority) and 29 attributes fall in Quadrant II- the region above the diagonal ('Concentrate here'/ high priority), respectively. (*Refer Chapter 3, Figure 3.2*)
- **Gap Analysis** shows the existence of a gap between the expected/actual mean and the perceived mean: -0.67 for F1 (Tourist Assistance), -0.72 for F2 (Infrastructure), -0.34 for F3 (Attraction/Destination), +0.06 for F4 (Entertainment) For F1, F2 & F3, the satisfaction values are less than expectation - as indicated by the negative gap values while F4, the satisfaction values are more than expectation (generally) as indicated by the positive gap values (*Refer Chapter 3, Table 3.3*)

In terms of the research hypotheses H_1 generated and tested statistically:

Since there exist differences between tourist perceptions about the importance given to and their satisfaction with the factors before and after the trip, except for two constructs in **F3** - Attraction / Destination Factor and three constructs in **F4** - Entertainment Factor which are not significant, the remaining twenty nine constructs in the four factors are significant. Hence, **the hypothesis is rejected overall**. However, specifically for *a) Tourist Assistance factors (F1) - Rejected* since all are significant, *(b) Infrastructure Factors (F2) - Rejected* since all are significant *(c) Attraction/Destination Factors (F3) - Rejected for 8 out of 10 items* since they are significant and **Accepted** for **2 items** (Friendliness of Locals & Diversity of Cultural & Historical Attractions) since they are not significant & *(d) Entertainment factors (F4) - Rejected for 4 out of 7 items* since they are significant but **Accepted** for (Availability of Sport & Recreation Facilities, Possibility for Shopping, Wellness Offer) since they are not. (*Refer Chapter 3, Table 3.2*)

7.3.2.1 Conclusions of Chapter 3

Mean Values for both Importance and Satisfaction are average indicating that in general, while tourists are satisfied with the tourist offer as a whole, the level of satisfaction is not very high. (*Refer Chapter 3, Table 3.2*) In the original IPA, **13 variables/attributes** and in the modified IPA, **29 variables/attributes** fall in **Quadrant II (Concentrate Here i.e. high priority)** respectively. All 29 attributes (13 original + 16 new) appearing in Quadrant II are listed below with the 16 new attributes added after using the modified IPA being listed in bold. (*Refer Chapter 3, Figures 3.1 & 3.2*)

- Knowledge & quality of help at Tourist Office,

- Traffic management,
- Power Supply situation,
- Availability & cost of private transportation,
- Availability of public transportation,
- Roadside signages & their condition,
- Conditions of street lighting,
- Quality/condition of Roads (Internal/Highways),
- Garbage disposal,
- Sewerage and drainage system,
- Overall cleanliness of the destination,
- Availability, quality & hygiene of wayside Eateries,
- Public Conveniences/Utilities along roads.
- **Availability of Tourist guidance centers**
- **Availability of authorized tour operators,**
- **Parking facilities**
- **Rural Tourism,**
- **Accessibility of the destination,**
- **Assistance at Airport/Railway Station**
- **Condition of the Airport/Railway station,**
- **Natural beauty & climate,**
- **Friendliness of the local people,**
- **Diversity of cultural/historical attractions,**
- **Personal safety and security,**

- **Tariff levels of Accommodation (all kinds),**
- **Availability & quality of Accommodation,**
- **Opportunities for Rest & Relaxation,**
- **Availability, quality & tariff of local cuisine**
- **Conference offer**

In terms of the Gap Analysis, for factors F1, F2 & F3, the satisfaction values are less than expectation indicated by the negative gap values indicating dissatisfaction. For F4, the satisfaction values are more than expectation (generally) indicated by the positive gap values however, when considered with their position on the Grid, F4 variables all fall in Quadrant III (Low Priority) & Quadrant IV (Possible Overkill), which possibly indicate that the gap values though positive, are not very promising, as they occur for variables that tourists do not appear to value highly. (*Refer Chapter 3, Table 3.3*)

Thus,

- The lack of balance between perception of importance of infrastructure and facilities for tourism in the state and the actual satisfaction with the same, by tourists, is an indication for Government, Service Providers and those responsible for tourism in the state, to improve the tourist offer by identifying the main areas where intervention is both necessary and desirable according to the tourists' perceptions, particularly in view of sustaining the destination's competitiveness.
- This study supports the adoption of the IPA as a framework for evaluating tourist satisfaction and the framework used for the State of Goa could be used in other Mass tourist destinations, as a benchmarking tool.

7.3.3 Findings of Chapter 4

Chapter 4 entitled, an ‘**Residents’ Perception about Impacts of Tourism**’ dealt with the second objective of the study i.e. *to evaluate the perception of Residents about the impacts of tourism in the state of Goa*. It was undertaken to examine the perceptions of residents of the state of Goa by using the model developed by [Perdue et al. \(1990\)](#); later extended by [Mc Gehee, et al. \(2002\)](#). Based on Social Exchange Theory it tried to determine whether personal characteristics and personal benefits from tourism influence perception of tourism as well as support for tourism development, and what factors influence support for tourism development and management. It also dealt with the second, third and fourth hypotheses namely,

H₂: Personal Characteristics along with Personal Benefit (PB) from tourism affects residents perception of positive (PI) and negative (NI) impact of tourism

H₃: Extent of Personal Benefit (PB) derived from tourism influences residents’ perception of positive (PI) and negative (NI) impacts of tourism as well as Support for Additional Tourism (SAT);

H₄: Extent Of Personal Benefit (PB) derived from tourism, residents’ perception of positive (PI) and negative (NI) impacts of tourism & Support for Additional Tourism (SAT) influences Support for Tourism Planning (STP).

In this context, local residents rated their perceptions of the impacts of tourism in their destination using a five point Likert Scale having 35 variables. Techniques and tools like Descriptive Statistics, Mean analysis & Multiple Regression using OLS were used to analyze data.

Following were the findings of Chapter 4 in brief:

- **Reliability** and internal consistency of the 35 item Tourism Attitude Items and Composite Scales (N = 809) showed that the Cronbach's Alpha of the overall scale was 0.841 (*Refer Chapter 4, Table 4.2*)
- **Mean analysis** indicated that the grand mean value of the scale or the overall scale mean for the Tourism Attitude Items and Composite Scale was 3.64 indicating an average perception. For sub scales it ranged between 3.19 (average - tending towards the lower end of the average) to 4.17 (above average). (*Refer Chapter 4, Table 4.2*)

- **Regression Analysis** (*Refer Chapter 4, Table 4.3*)

Model 1 Findings: Education has a statistically significant positive relationship while Place of Residence has a statistically significant negative relationship with Negative Impacts (NI) of tourism. Model 1 explains only 1.2% of the variation between the dependent variable, Negative Impacts & Resident Characteristics which are the independent variables.

Model 2 Findings: Personal Benefit (PB) has a statistically significant positive relationship with Tourism's Positive Impacts (PI) Age, Education & Birth place enjoy a small but negatively significant relationship with Tourism's Positive Impacts. Model 2 explains 10.4% of the variation between the dependent variable - Positive Impacts (PI) and the Personal Benefit and Resident Characteristics which are Independent Variables.

Model 3 Findings: Support for Additional Tourism (SAT) shares a statistically significant relationship with PB, PI & NI. PB & PI are significant in a positive direction while NI is significant in a negative direction. Model 3 explains 46.6% of variation between the dependent variable SAT & the independent variables PB, PI & NI.

Model 4 Findings: There is a statistically significant positive relationship between PB, SAT, NI & Support for Tourism Planning (STP). This model explains 6.1% of the variation between the dependent variable STP & the independent variables PB, PI, NI & SAT.

In terms of the research hypotheses H_2 , H_3 , H_4 , generated and tested statistically:

H₂: Personal Characteristics along with Personal Benefit (PB) from tourism affects residents' perception of positive (PI) and negative (NI) impact of tourism: **For Negative Impacts (NI)** of tourism the **Null hypothesis accepted overall** as only Education & Place of residence are significant. For **Positive Impacts (PI)** of tourism the **Null hypothesis is rejected** for Personal Benefits, Age, Education & Birth Place which are significant but the **Null hypothesis is accepted** for Gender, Income, Years of Residence & Place of Residence which are not significant. (*Refer Chapter 4, Table 4.3*)

H₃: Extent of Personal Benefit (PB) derived from tourism influences residents perception of positive (PI) and negative (NI) impacts of tourism as well as Support for Additional Tourism (SAT): The **Null hypothesis is rejected** since there is a significant relationship between all three of the independent variables; PB, PI & NI and the dependent variable, Support for additional tourism (SAT). (*Refer Chapter 4, Table 4.3*)

H₄: Extent of Personal Benefit (PB) derived from tourism, residents perception of positive (PI), negative (NI) impacts of tourism & Support for Additional Tourism (SAT) influences Support for Tourism Planning (STP): The **Null hypothesis is rejected** since there is a significant

relationship between the majority of the independent variables - PB, NI & SAT and the dependent variable, Support for Tourism Planning, but PI is not significant. (*Refer Chapter 4, Table 4.3*)

7.3.3.1 Conclusions of Chapter 4

Personal Benefit (PB) does not have a statistically significant relationship with **Tourism's Negative Impacts (NI)** however, two **Personal Characteristics - Education** (positive) & **Place of residence** (negative) are statistically significant indicating that as education increases, perception of tourism's negative impacts also increases and that residents from tourist-centric areas have a lower perception of tourism's negative impacts & vice-versa. [(generally consistent with the findings of [Perdue et al. \(1990\)](#) & [Mc Gehee et al. \(2003\)](#)] **Personal benefit** has a statistically significant positive relationship with **Tourism's Positive Impacts (PI)** indicating that with increasing gains from tourism, likelihood of agreement with the positive impacts of tourism increases. **Age, Education & Birthplace** enjoy a small but negatively significant relationship with **Tourism's Positive Impacts** indicating that as they increase, perception of positive impacts of tourism decreases [**consistent with the findings of [Perdue et al. \(1990\)](#) but inconsistent with [Mc Gehee et al. \(2003\)](#)**]. (*Refer Chapter 4, Table 4.3*)

Personal Benefit, Tourism's Positive Impacts & Tourism's Negative Impacts are statistically significant. **PB & PI** were significant in a positive direction indicating that residents who perceived **PB** from tourism, tended to agree with **positive impacts** of tourism & were more likely to **Support Growth of Additional Tourism**, while **NI** is significant in a **negative** direction indicating that with increasing perception of **Negative Impacts, Support For**

Additional Tourism would be lowered. [Consistent with [Perdue et al. \(1990\)](#) & [Mc Gehee et al. \(2003\)](#)] (*Refer Chapter 4, Table 4.3*)

Personal Benefit (PB), Support for Additional Tourism (SAT) and Tourism's Negative Impacts (NI) have a statistically significant positive relationship with **Support for Tourism Planning (STP)** indicating that as Personal Benefit from tourism, perception of tourism's negative impacts and support for additional tourism increase, Support for tourism planning will increase. Those who received personal benefit from tourism were supportive of additional tourism and recognized the reality of negative impacts of tourism but also recognized the need for tourism planning. The positive relationship between NI & STP is consistent with [Perdue et al. \(1990\)](#) & [Mc Gehee et al. \(2003\)](#). However, the positive relationship between SAT & STP is inconsistent with [Perdue et al. \(1990\)](#) but consistent with [Mc Gehee et al. \(2003\)](#). However, in contrast to both [Perdue et al. \(1990\)](#) & [Mc Gehee et al. \(2003\)](#) PB shares a statistically significant positive relationship with STP. (*Refer Chapter 4, Table 4.3*) PI is not significant.

Thus,

- This study fully supports Social Exchange Theory (SET). Those who receive greater personal benefits from tourism were more likely to view its impacts positively and support additional tourism.
- Further, Personal Benefit is a significant predictor of support for tourism planning (inconsistent with [Perdue et al.\(1990\)](#) & [Mc Gehee et al.\(2003\)](#)) which aligns with SET validating the fact that residents who have a vested interest in tourism development would like to see it properly planned. Residents should be informed about tourism's positive and negative economic, social cultural and environmental implications & the

kinds of tourism development that exist in the community in order to make informed decisions about the types and levels of tourism that are most attractive to them and which they are willing to support.

7.3.4 Findings of Chapter 5

Chapter 5 entitled, a '**Multi-Stakeholders Perception towards Sustainable Tourism** investigates Objective 3, namely, *to study the perception of Stakeholders about tourism in Goa in terms of its sustainability*. It was undertaken in order to evaluate and compare the perceptions of multiple stakeholders of tourism in the state of Goa and is an attempt to build on the existing body of knowledge about stakeholder attitudes and perceptions towards tourism. It also dealt with the fifth hypothesis namely, ***H₅: There is no significant difference in the perception of Stakeholders; viz.; (1) Residents, (2) Tourists, (3) Entrepreneurs and (4) Government Officials with respect to: (F1) Understanding of Sustainability [US], (F2) Focus of Sustainable Tourism [FST], (F3) Sustainable Tourism Management [STM],(F4) Attitude towards Sustainable Tourism [AST], (F5) Participation in Sustainable Tourism Development [PST], (F6) Economic Focus of Sustainable Tourism [EFST], and(F7) Tourism Industry & Sustainability [TIS].*** In this regard, local residents who were above the age of 18 and included all stakeholder groups: Locals (engaged & not engaged in Tourism businesses), Service providers (Private & Public sector), Government officials employed in Tourism offices & other related offices were surveyed. The reliability of the 44 item Tourism sustainability issues scale & data was tested using Cronbach's Alpha, Mean Analysis, Exploratory Factor Analysis & One way ANOVA using Scheffe's Post Hoc Test were used to analyse the data.

Following were the findings of Chapter 5 in brief:

- **Reliability** and internal consistency of the 44 item Tourism Sustainability Issues Scale (N = 1570) showed that the Cronbach's Alpha of the overall scale was 0.924 (*Refer Chapter 5, Table 5.2*).
- **Mean Analysis** While the individual subscale means of the 44 item Tourism Sustainability Issues Scale vary from 4.18 to 3.65, the overall scale mean was 3.98 which though average, tended toward the higher end of average and was almost equal to the upper limit of average so as to be considered *above average*. (*Refer Chapter 5, Table 5.2*).
- **Exploratory Factor Analysis (EFA)** using Principal Component Analysis with Varimax Rotation generated 7 factor solution with Eigen values above 1, with minimum loss of information, having 44 variables in total and which explained 49.887% of the overall variance. (*Refer Chapter 5, Table 5.2*)
- **One Way ANOVA using Scheffe's Post Hoc Test** revealed that the findings of this study support the idea that differences in perception about the sustainability of tourism do exist between 4 different stakeholder groups. For each of the 6 factors viz. (F1) **Understanding of Sustainability (US)**, (F2) **Focus of Sustainable Tourism (FST)**, (F3) **Sustainable Tourism Management (STM)**, (F4) **Attitude towards Sustainable Tourism (AST)**, (F5) **Participation in Sustainable Tourism Development (PST)**, (F6) **Economic Focus of Sustainable Tourism (EFST)** where there was a statistically significant difference between groups, a Scheffe's Post Hoc test was conducted to determine which specific groups were different. For (F7) **Tourism Industry &**

Sustainability (TIS), none of the groups have **statistically significant differing perceptions of sustainable tourism. (Refer Chapter 5, Table 5.3).**

In terms of the research hypotheses H_5 , generated and tested statistically:

Since there is a significant difference in perception of stakeholders with respect to (F1) *Understanding of Sustainability [US]*, (F2) *Focus of Sustainable Tourism [FST]*, (F3) *Sustainable Tourism Management [STM]*, (F4) *Attitude towards Sustainable Tourism [AST]*, (F5) *Participation in Sustainable Tourism Development [PST]*, (F6) *Economic Focus of Sustainable Tourism [EFST]*, **the null hypothesis is Rejected.** But, since there is no significant difference in perception of stakeholders with respect to (F7) *Tourism Industry & Sustainability [TIS]*, **the null hypothesis is Accepted (Refer Chapter 5, Table 5.3)**

7.3.4.1 Conclusion of Chapter 5

The results of the study indicated that there were statistically significant differences in the perceptions about the sustainability of tourism between stakeholder groups studied where for **Five** of the seven factors namely *Understanding of Sustainability (US)*, *Focus of Sustainable Tourism (FST)*, *Sustainable Tourism Management (STM)*, *Attitude towards Sustainable Tourism (AST)*, *Economic Focus of Sustainable Tourism (EFST)*, **Government Officials & Entrepreneurs** have the highest/most positive perception about sustainability which is a possible outcome of their close involvement with tourism planning & management and the high level of personal benefit they derive from it. For **four** of the seven factors namely *US*, *FST*, *AST* & *EFST*, **Tourists** have the **lowest** or least positive perception about sustainability of tourism, which given the fact that they are only visitors to the state and have very little emotional or

economic connection with it is a logical outcome. However, for *Participation in Sustainable Tourism Development (PST)*, **Tourists** have the **highest** perception. The fact that any participation or contribution to sustainable tourism by tourists, would by definition, be short term since they are only visitors to the state, could possibly account for their willingness to participate and their high perception unlike other stakeholders, who by virtue of being residents would have to make a more long term commitment. Further, for *STM & PST*, **Residents** have the lowest/least positive perception which is understandable given that they are most emotionally attached to the destination and can view the effects of tourism development most closely, possibly derive the least personal benefit from tourism yet perhaps pay the highest price for it.

Thus,

This research suggests GO & E are more greatly involved in tourism planning & management than Residents or Tourists. Community planners and destination management organizations (DMOs) need to:

- understand the differing interests of all the stakeholder groups and
- include all stakeholder groups in discussions about tourism development and
- involve residents to a much greater extent if sustainable tourism development to have the greatest chance of success.

7.3.5 Findings of Chapter 6

Chapter 6 entitled, a '**Sustainable Tourism in Goa: A Multi-Stakeholder Perspective Using Structural Equation Modeling** and investigates **Objective 4** which is, *to suggest a model for Tourism in Goa that is sustainable, integrative and participative*. It has been undertaken in order

to assess multi-stakeholder perceptions about various aspects about the sustainability of tourism in Goa in an attempt to **predict the direction and consequently the strength of their support** for the same using Structural Equation Modeling It also deals with the sixth hypothesis namely, *H₆: There is no significant relationship between a) Understanding of Sustainability (US), b) Focus of Sustainable Tourism (FST), c) Sustainable Tourism Management (STM), d) Attitude towards Sustainable Tourism (AST), e) Participation in Sustainable Tourism Development (PSTD), f) Economic Focus of Sustainable Tourism (EFST), g) Tourism Industry and Sustainability (TIS) and Sustainable Tourism (ST), with respect to Stakeholder perception.*

Following were the findings of Chapter 6 in brief:

- **For the study and analysis of Objectives 3 & 4, the data, statistical techniques and analysis are common to a great extent** since they both dealt with the understanding of stakeholder perceptions about the sustainability of tourism in the state. Objective 3 & 4 both used Descriptive Statistics, Mean Analysis, Exploratory Factor Analysis. But while **Objective 3 used One Way ANOVA with Scheffe's Post Hoc Test, (Refer Section 7.3.4) Objective 4 used the same techniques and Structural Equation Modelling.**

- **Structural Equation Modeling (SEM)**

A SEM Model was used to examine the hypothesized relationships between the seven constructs (factors) in the model using Maximum Likelihood Estimates. Model fit was initially tested using the Overall Fit and Regression Paths to determine whether observed variables were generated by corresponding latent factors. The hypothesized model was then analyzed. The evaluation of Goodness of Fit indices indicate mediocre to acceptable levels of fit; viz.; **(Ref. Chapter 6, Section 6.2.5.2) Chi square/df (CMIN) = 4.801**

which is acceptable; Goodness of Fit Index (**GFI**) = 0.883; and Adjusted Goodness of Fit Index (**AGFI**) = 0.871; both of which are in the acceptable range; Root Mean Square Error of Approximation (**RMSEA**) = 0.049; which is a good fit, Root Mean Square residual (**RMR**) = 0.035 is a good fit; Normed- Fit Index (**NFI**) = 0.822; mediocre to acceptable;. Comparative Fit Index (**CFI**) = 0.853, mediocre.

In terms of the research hypotheses H_6 , generated and tested statistically:

Since there is a significant relationship of between (F1) *Understanding of Sustainability [US]*, (F2) *Focus of Sustainable Tourism [FST]*, (F3) *Sustainable Tourism Management [STM]*, (F4) *Attitude towards Sustainable Tourism [AST]*, ((F6) *Economic Focus of Sustainable Tourism [EFST]* & (F7) *Tourism Industry & Sustainability [TIS]* and Sustainable tourism with respect to Stakeholder perception **the null hypothesis is Rejected**. But, since there is no significant relationship between F5) *Participation in Sustainable Tourism Development [PST]* and Sustainable Tourism, with respect to Stakeholder perception **the null hypothesis is Accepted** (*Refer Chapter 6, Figure 6.2*)

7.3.5.1 Conclusion of Chapter 6

In terms of testing the model of stakeholder perceptions about sustainable tourism and their consequent support for sustainable tourism by examining the path relationship between factors related to sustainability and sustainable tourism. Six of the seven sub-hypotheses framed are **Rejected** at the $p < 0.05$ level of significance. *Focus of Sustainable Tourism & Sustainable Tourism Management* (0.84 each), along with *Attitude towards Sustainable Tourism* (0.80)

indicate a high positive association with *Sustainable Tourism. Understanding of Sustainability* (0.65) shows an above average positive association with *Sustainable Tourism. Tourism Industry & Sustainability* (0.57) and *Economic Focus of Sustainable Tourism* (0.53) show a positive, moderate association with Sustainable Tourism. (**Refer Chapter 6, Figure 6.2**) Only with respect to *Participation in Sustainable Tourism Development* (-0.02), it shows a low, negative relation to Sustainable Tourism. The null hypothesis stating that there is no significant relationship between Participation in Sustainable Tourism Development and Sustainable Tourism is **Accepted**. A possible explanation for this could be that even when stakeholders in a destination have an awareness, understanding and positive attitude toward sustainable tourism, when it comes to actual investment of their time, efforts and resources, commitment is lacking. *As the Goodness of Fit Indices do not support the proposed model completely, the measurement model is retained as a Path Diagram indicating relationships between Sustainability Issue factors and Sustainable Tourism.*

7.4 Suggestions for Further Research

7.4.1 Suggestions from Chapter 3 (Tourists' Perception)

- While the current study has used the IPA as a framework to determine tourist satisfaction in general with respect to the importance given to and satisfaction with infrastructure, services and facilities before and after their visit to the destination, it can be utilized in further research on tourist satisfaction in terms of different segments i.e. the differences in perceptions among tourists to the two districts of the state viz. North and South Goa, between Domestic & International tourists as well as differing perceptions among International tourists so as to make promotion segment specific and hence more effective.

- Since the main motivation for tourists visiting a destination is pleasure and relaxation, studies which do not involve physically disturbing tourists during their visit for the filling of questionnaires but rather, which allow them to fill and return the same on their return home via email/ prepaid mail questionnaires may be more appropriate and would perhaps result in better data collection. Even better would be the collection of '*real time*' data through tie-ups among tourism and other service providers both public and private sector, researchers, information technology companies etc. which would enable the collection of data from very large samples. If carried out effectively, the entire population data can be collected on real time basis without interfering with the leisure time of tourists and the movements of tourists at the destination can be even be tracked, their perceptions can be identified using the text / audio / video / photo messaging through social media platforms as such studies are already being carried out in developed countries.
- A similar study could be conducted after a specific period of time to validate the findings of this study and or determine new areas where efforts and investment are to focussed so as to bring about improvement in the tourist offer

7.4.2 Suggestions from Chapter 4 (Residents' Perception)

- The present study on evaluating Residents' perception of tourism impacts used the Tourism Impact Attitude Scale (TIAS) scale developed by [Lankford and Howard \(1994\)](#) which is one of the most widely recognized and used scales in measuring Tourism

Impacts. Other scales such as the Attitude towards Sustainable tourism by [Ap & Crompton, \(1998\)](#) could perhaps be used which could assess tourism impacts by measuring both belief and affect toward the impact attributes thus giving the study a broader perspective.

- Rather than studying residents as a homogenous group, the study could further have been refined by clustering residents into supporters, opposers and neutral groups and assessing whether this clustering affected their perceptions about tourism's impacts as well as the level of support for tourism development and tourism within each cluster.
- The variable Personal Benefit which is used in this study is an abstract concept having subjective meaning. Further, it has been defined in the study only two statements and hence may not have accurately measured the concept from the point of view of residents. The number of statements defining the concept as well as the type of statements included could be increased be so as to make it more measurable, i.e. more quantifiable and economic statements as well as more qualitative statements, which would indicate not only how residents perceive this variable but also the reasons for their perceptions.

7.4.3 Suggestions from Chapter 5 (Multi-stakeholder Perception)

- A structured questionnaire was developed based on previous similar research studies carried out by [Byrd et al., 2008](#); [Kruja, D. & Hasaj, A., 2010](#); [Quintano et al., 2011](#); [Ong & Smith, 2013](#) and used to collect data on stakeholder perceptions about sustainable tourism. The use of the Sustainable Tourism Attitude Scale (SUS-TAS) scale by [Choi and Sirkaya \(2009\)](#), which in addition to measuring perceptions of stakeholders towards

sustainable tourism would also measure sustainable action in tourism development, may add new dimensions to the research work.

- In addition to collecting information on stakeholder perceptions, if future research instruments/scales be designed or could incorporate items which could assist in gathering data on the specific manner/ avenues/aspects, in which stakeholders would like to get involved in the tourism planning process, researchers, planners, destination management organizations would be better able to reach out to and involve stakeholders in sustainable tourism with best results.

7.4.4 Suggestions from Chapter 6 (SEM Modeling)

- The Path Diagram which resulted provides a valid basis for the implementation of the *Multi - Stakeholder Involvement Model (MSIM) Framework* for sustainable tourism in the state but further research needs to be carried out in this context, to transform it into an acceptable model and to provide inputs for the understanding of **the non-significant relationship** between **Participation in Sustainable Tourism Development** and **Sustainable Tourism**.
- Further analysis between the demographic variables and stakeholder attitude toward sustainable tourism could do much to align the goals the Industry, Government, Entrepreneurs and Residents in this regard, to determine a mutually acceptable route to sustainable tourism in the state.

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A Study to Ascertain the Infrastructure Gaps in Tourism Sector in Goa at Selected Tourist locations, based on the Perceptions of Tourists & Tourist Attitude towards Sustainability of Tourism in the State

QUESTIONNAIRE

This study is being carried out as part of Research work for the Ph. D topic entitled “Managing Tourism Development in Goa through Sustainable Tourism”. It is being carried out to ascertain the infrastructure gaps in tourism sector of Goa. Your views will be very useful in improving the infrastructure and quality of services provided to the tourists as well as in improving the sustainability of tourism in Goa. So, please spare your valuable time to express your views which will be kept confidential.

SECTION 1: BACKGROUND PROFILE

1. Name of Respondent: _____
2. Tourist category: i. Indian ii. Foreigner
3. Education: School Leaving(SSLC)/Pre University(HSSC)/Graduate/Post-Graduate/Professional
4. Year of visit(s):

QNO.	QUESTIONS	CODING CATEGORIES
5.	Age	18-27 yrs 1
		28-37 yrs 2
		38-47 yrs 3
		48-57 yrs 4
		Above 58 yrs 5

QNO.	QUESTIONS	CODING CATEGORIES
6.	Gender	Male 1 Female 2
7.	Whether visiting the tourist destination for the first time?	Yes 1 No 2
8.	Country of residence (for foreign tourist) State of India (for Indian tourist)
9.	Marital Status	Married 1 Single 2
10.	Please specify which social class you belong to	Individual 1 Couple with no kids 2 Family with children 3
11.	Please specify the main reason for visit	Beach tourism 1 Adventure Tourism 2 Rest/Relaxation 3 Business 4 Culture 5 Religious 6 Entertainment(Night life, Casino, Pubs).... 7 Medical 8 Official 9 Others 10
12.	How did you come to know about this tourist site?	Through travel agent 1 Through feedback from others 2 Through Travel literature 3 Through Govt. Adv/ Promotion..... 4 Internet 5 Others (specify) 6
13.	Whether travel was organized by travel agent or on your own?	Travel agent arranged group 1 On my own 2

QNO.	QUESTIONS	CODING CATEGORIES
14.	Whether travelling alone, with friends or with family?	Alone 1 With friends 2 With family /relatives 3
15.	Whether staying in commercial place, rented place or with friends/relatives?	Commercial 1 Rented 2 Staying with friends/relatives 3 Others (specify) 4
16.	How many days do you propose to stay here?	Only one day 1 Less than a week 2 Two weeks or more 3 Uncertain/depends 4
17.	Please specify frequency of visit to destination	First time 1 Second time 2 Frequent Visitor 3
18.	Please specify type of services used	Pub/ Bar/Nightlife..... 1 Restaurant/Hotel 2 Transport 3 Culture/Entertainment 4 Medical/ Health 5 Adventure/Water sports 6 Others 7
19.	What was the mode of travel to reach this place?	Bus 1 Train 2 Plane 3 Own vehicle 4 Others (specify) 5

SECTION 2:

Q. No.	Facility	IMPORTANCE GIVEN TO THE TOURIST FACILITIES, SERVICES AND OTHER AMENITIES						SATISFACTION LEVEL WITH THE TOURIST FACILITIES, SERVICES AND OTHER AMENITIES					
		Kindly rate importance assigned to various services/tourist facilities & other amenities at a destination on a scale of 1 to 5; 1 for least important, 2 for somewhat important, 3 for not so important, 4 for very important and 5 for most important						Kindly rate the following services, tourist facilities and other amenities of the destination currently visited on the scale of 1 to 5 based on the satisfaction levels; 1 for Poor, 2 for Unsatisfactory, 3 for Average, 4 for Good and 5 for Excellent					
		Kindly Circle the Appropriate number or enter it in the column provided						Kindly Circle the Appropriate Column or enter it in the column provided					
		Least Important	Somewhat Important	Not so Important	Very Important	Most Important	Your Answer	Poor	Unsatisfactory	Average	Good	Excellent	Your Answer
		1	2	3	4	5		1	2	3	4	5	
1.	Personal safety and security.	1	2	3	4	5		1	2	3	4	5	
2.	Accessibility of the destination (Road/Rail/Air)	1	2	3	4	5		1	2	3	4	5	
3.	Condition of the Airport/Railway station	1	2	3	4	5		1	2	3	4	5	
4.	Quality/condition of Roads (Internal/ Highways)	1	2	3	4	5		1	2	3	4	5	
5.	Behavior of Staff at (Airport/Railway Station)	1	2	3	4	5		1	2	3	4	5	
6.	Parking facilities	1	2	3	4	5		1	2	3	4	5	
7.	Availability, quality & hygiene of wayside Eateries	1	2	3	4	5		1	2	3	4	5	
8.	Availability, quality & tariff of local cuisine	1	2	3	4	5		1	2	3	4	5	
9.	Overall cleanliness of the destination.	1	2	3	4	5		1	2	3	4	5	
10.	Natural beauty & climate	1	2	3	4	5		1	2	3	4	5	
11.	Availability&quality of Accommodation(all kinds)	1	2	3	4	5		1	2	3	4	5	
12.	Tariff levels of Accommodation (all kinds)	1	2	3	4	5		1	2	3	4	5	
13.	Diversity of cultural/historical attractions	1	2	3	4	5		1	2	3	4	5	
14.	Friendliness of the local people.	1	2	3	4	5		1	2	3	4	5	
15.	Public Conveniences/Utilities along roads	1	2	3	4	5		1	2	3	4	5	
16.	Sewerage and drainage system	1	2	3	4	5		1	2	3	4	5	
17.	Garbage disposal	1	2	3	4	5		1	2	3	4	5	

Q. No.	Facility	IMPORTANCE GIVEN TO THE TOURIST FACILITIES, SERVICES AND OTHER AMENITIES						SATISFACTION LEVEL WITH THE TOURIST FACILITIES, SERVICES AND OTHER AMENITIES					
		Kindly rate importance assigned to various services/tourist facilities & other amenities at a destination on a scale of 1 to 5; 1 for least important, 2 for somewhat important, 3 for not so important, 4 for very important and 5 for most important						Kindly rate the following services, tourist facilities and other amenities of the destination currently visited on the scale of 1 to 5 based on the satisfaction levels; 1 for Poor, 2 for Unsatisfactory, 3 for Average, 4 for Good and 5 for Excellent					
		Kindly Circle the Appropriate number or enter it in the column provided						Kindly Circle the Appropriate Column or enter it in the column provided					
		Least Important	Somewhat Important	Not so Important	Very Important	Most Important	Your Answer	Poor	Unsatisfactory	Average	Good	Excellent	Your Answer
1	2	3	4	5		1	2	3	4	5			
18.	Possibilities for shopping.	1	2	3	4	5		1	2	3	4	5	
19.	Night life and entertainment.	1	2	3	4	5		1	2	3	4	5	
20.	Opportunity for rest & relaxation	1	2	3	4	5		1	2	3	4	5	
21.	Availability of sport & recreational activities.	1	2	3	4	5		1	2	3	4	5	
22.	Rural Tourism	1	2	3	4	5		1	2	3	4	5	
23.	Wellness offer.	1	2	3	4	5		1	2	3	4	5	
24.	Casino and gambling offer.	1	2	3	4	5		1	2	3	4	5	
25.	Conference offer.	1	2	3	4	5		1	2	3	4	5	
26.	Roadside signages & their condition	1	2	3	4	5		1	2	3	4	5	
27.	Availability of Public transportation	1	2	3	4	5		1	2	3	4	5	
28.	Availability & cost of private transportation	1	2	3	4	5		1	2	3	4	5	
29.	Conditions of street lighting	1	2	3	4	5		1	2	3	4	5	
30.	Traffic management	1	2	3	4	5		1	2	3	4	5	
31.	Power Supply situation	1	2	3	4	5		1	2	3	4	5	
32.	Availability of authorized tour operators	1	2	3	4	5		1	2	3	4	5	
33.	Availability of Tourist offices/guidance centres	1	2	3	4	5		1	2	3	4	5	
34.	Knowledge & Quality of help at Tourist offices	1	2	3	4	5		1	2	3	4	5	

SECTION 3:

The following statements refer to your experiences & expenses at this tourist destination, your perception of its quality & image and your satisfaction with the destination. Please read each item carefully and **circle the appropriate number or enter it in the space provided to indicate how much you agree or disagree with each statement. SCALE: 1=Strongly Disagree (SD), 2=Disagree (D), 3=Neutral (N), 4=Agree (A), 5=Strongly Agree (SA)**

1. Expenses		SD	D	N	A	SA	Your Answer
a.	Making a booking at this tourist destination was easy.	1	2	3	4	5	
b.	The price of tourist plans for bed & breakfast in this tourist destination is reasonable.	1	2	3	4	5	
c.	The prices of additional offer at this tourist destination (i.e. prices of food and drink, souvenirs, handcrafted products, excursions, beauty and relaxation programs) are favorable.	1	2	3	4	5	
d.	My expenses at this destination were as planned.	1	2	3	4	5	

2. General Quality of Destination		SD	D	N	A	SA	Your Answer
a.	General quality of this tourist destination offer is very high.	1	2	3	4	5	

3. General Image of this Destination		SD	D	N	A	SA	Your Answer
a.	I think most people have a positive opinion about this tourist destination	1	2	3	4	5	
b.	The locals at this tourist destination are friendly towards the guests	1	2	3	4	5	
c.	This tourist destination has a unique image.	1	2	3	4	5	
d.	I think this tourist destination is popular.	1	2	3	4	5	
e.	The locals at this tourist destination always put guests first.	1	2	3	4	5	
f.	This tourist destination respects the natural environment.	1	2	3	4	5	

4. Recommendation		SD	D	N	A	SA	Your Answer
a.	I am pleased that I decided to visit this tourist destination.	1	2	3	4	5	
b.	The visit to this tourist destination exceeded my expectations.	1	2	3	4	5	
c.	I will speak highly of this tourist destination to my friends and colleagues.	1	2	3	4	5	
d.	I will recommend this destination to others	1	2	3	4	5	
e.	I will return to this tourist destination.	1	2	3	4	5	
f.	I feel at home in this tourist destination.	1	2	3	4	5	

SCALE: 1=Completely Dissatisfied (CD), 2=Dissatisfied (D), 3=Neutral (N), 4=Satisfied (S), 5=Completely Satisfied (CS)

5. Overall Satisfaction with destination		CD	D	N	S	CS	Your Answer
a.	What is your overall satisfaction with your visit to this tourist destination?	1	2	3	4	5	

SECTION 4: STATEMENTS ON SUSTAINABILITY

The following statements relate to sustainability of tourism in Goa and are rated on a scale from 1 to 5. Please **circle the appropriate number/enter it in the space provided** indicating how much you agree/disagree with each statement and which best describes your opinion on the statement about tourism in the State of Goa. **SCALE: 1=Strongly Disagree (SD), 2=Disagree (D), 3=Neutral (N), 4=Agree (A), 5=Strongly Agree (SA)**

A. Understanding of Sustainability		SD	D	N	A	SA	Your Answer
<i>Sustainability is about:</i>							
1.	Environmental care with consideration for social factors.	1	2	3	4	5	
2.	Environmental care involving a need for economic growth & viability	1	2	3	4	5	
3.	Environmental care involving a long-term view	1	2	3	4	5	
4.	Environmental care along with consideration for visitors	1	2	3	4	5	
5.	Economic growth and viability involving a long-term view	1	2	3	4	5	
6.	Resource and environmental management	1	2	3	4	5	
7.	Carrying capacity considerations & using codes of practice	1	2	3	4	5	
8.	Maintaining and preserving resources for future generations	1	2	3	4	5	

B. Tourism Industry and Sustainability		SD	D	N	A	SA	Your Answer
1.	Tourism needs greater Government control	1	2	3	4	5	
2.	Tourism Industry should focus on attracting more Foreign Tourists.	1	2	3	4	5	
3.	Tourism needs greater industry control.	1	2	3	4	5	
4.	Tourism is more sustainable than other industries.	1	2	3	4	5	
5.	Tourism in the most developed locations is unsustainable.	1	2	3	4	5	
6.	Tourism needs greater local resident control.	1	2	3	4	5	
7.	The number of tourists visiting Goa should be increased.	1	2	3	4	5	

C. Sustainable Tourism focus should be towards		SD	D	N	A	SA	Your Answer
1.	The protection of wildlife breeding colonies	1	2	3	4	5	
2.	The quality of the visitor experience	1	2	3	4	5	
3.	The protection of high scenic value	1	2	3	4	5	
4.	The reduction of damage to the physical environment	1	2	3	4	5	
5.	The protection of areas of high habitat value	1	2	3	4	5	
6.	The reduction of disturbance of the attraction	1	2	3	4	5	
7.	Organised regional plans for tourism.	1	2	3	4	5	
8.	Consultation between Government, Industry and Local Residents	1	2	3	4	5	
9.	Preservation and conservation of all resources	1	2	3	4	5	
10.	Attracting more high spending foreign tourists	1	2	3	4	5	
11.	Attracting more high spending domestic tourists	1	2	3	4	5	

D. Attitudes towards participation in Sustainable Tourism Development		SD	D	N	A	SA	Your Answer
<i>Whether a Tourist would:</i>							
1.	Help strengthen respect for Goa's natural areas and historic places	1	2	3	4	5	
2.	Help support the maintenance and improvement of Goa's environment and heritage	1	2	3	4	5	
3.	Help promote cultural appreciation and understanding	1	2	3	4	5	
4.	Help improve the quality of community life	1	2	3	4	5	
5.	Be willing to pay more to ensure better wages & working conditions for staff of tourism related organizations	1	2	3	4	5	

6.	Be willing to contribute to conservation and protection of resources	1	2	3	4	5	
7.	Be willing to participate in sustainable decision making	1	2	3	4	5	
8.	Be willing to participate in management of local resources	1	2	3	4	5	
9.	Be willing to contribute to ensure better benefits to community	1	2	3	4	5	
10.	Help to ensure implementation of code of ethics/ conduct to guarantee sustainable tourism (social, environmental etc.)	1	2	3	4	5	

E. General Attitudes to Tourism Sustainability issues		SD	D	N	A	SA	Your Answer
1.	Tourism is inherently sustainable	1	2	3	4	5	
2.	Tourism must be carefully managed in order for it to be sustainable	1	2	3	4	5	
3.	Long term sustainability of tourism is the priority	1	2	3	4	5	
4.	Sustainable tourism development should encourage the spread of tourists throughout the country.	1	2	3	4	5	
5.	Administration of sustainability legislation should be the responsibility of local and Regional Government	1	2	3	4	5	
6.	Education of tourism staff is important in the implementation of sustainable tourism practices	1	2	3	4	5	
7.	The tourism industry has the greatest role to play in implementing sustainable tourism development policy	1	2	3	4	5	
8..	Marketing is a useful tool for sustainable tourism development	1	2	3	4	5	

Do you have any other comments about sustainable tourism development and management in the State of Goa?

*Thank you for your valuable time, help and cooperation
in the completion of this questionnaire.
It is deeply appreciated and will be duly acknowledged.
The information provided will be extremely beneficial to this study
and in bringing about sustainability in tourism in Goa.*

