

**INFORMATION AND COMMUNICATION TECHNOLOGY:
ITS ROLE AND IMPACT ON TOURISM DEVELOPMENT IN
KERALA- A STUDY OF WAYANAD DISTRICT**

*Thesis submitted to the University of Calicut
For the award of the degree of*

Doctor of Philosophy in Economics

By

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DECLARATION

I, **Babitha V**, do hereby affirm that this written account titled **“INFORMATION AND COMMUNICATION TECHNOLOGY: ITS ROLE AND IMPACT ON TOURISM DEVELOPMENT IN KERALA- A STUDY OF WAYANAD DISTRICT”** is a bonafide record of research done by me under the Guidance of Dr. K.V.Ramachandran Professor in Economics, University of Calicut, Dr. John Matthai Centre, Aranattukara, Thrissur. I also declare that this thesis has not been submitted by me earlier for the award of any degree, diploma, fellowship or any other similar title.

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LIST OF ABBREVIATIONS

ABBREVIATIONS	DESCRIPTION
BRDC	Bekal Resorts Development Corporation
CAGR	Compound Annual Growth Rate
CCM	Customer Centric Marketing
CD-ROM	Compact Disc-Read only Optical Memory
CPPP	Community Public Private Partnership
CRM	Customer Relationship Management
CRS	Computer Reservation System
DMO	Destination Management/Marketing Organisation
DoT	Directorate of Tourism
DTPC	District Tourism Promotion Council
e-HRM	Electronic - Human Resource Management
e-R&D	Electronic - Reserch and Development
e-Tourism	Electronic- Tourism
e-WOM	Electronic - Word of Mouth
FCI	Food Craft Institute
FEE	Foreign Exchange Earnings
FIT	Free Independent Traveler
FTA	Foreign Tourist Arrival
GDP	Gross Domestic Product
GDS	Global Distribution System
GIS	Geographic Information System
GIT	Group Inclusive Tour
GPS	Global Positioning System
HTML	Hypertext Markup Language
ICT	Information and Communication Technology
IDS	Internet Distribution System
IIPA	Indian Institute of Public Administration
ILO	International Labour Organisation
ITDC	Indian Tourism Development Council

KHTC	Kerala Hydel Tourism Centre
KIHMS	Kerala Institute of Hospitality and Management Studies
KITTS	Kerala Institute of Travel and Tourism Studies
KSEB	Kerala State Electricity Board
KTDC	Kerala Tourism Development Corporation
KTM	Kerala Travel Mart
MICE	Meeting Incentive travel Conventions/Conference and Exhibition
NGO	Non Governmental Organisation
NTA	National Tourist Authority
NTO	National Tourism Organisation
NWFD	North Wayanad Forest Department
OECD	Organisation for Economic Cooperation and Development
PATA	Pacific Asia Travel Association
PPP	Public Private Partnership
QTVR	Quick Time Virtual Reality
SCEII	Socio Cultural and Economic Impact Index
SEO	Search Engine Optimization
SIHM	State Institute of Hospitality Management
SWFD	South Wayanad Forest Department
UNDP	United Nations Development Programme
UNESCO	United Nation Educational Science and Cultural Organisation
UNWTO	United Nation World Tourism Organisation
VOIP	Voice Over Internet Protocol
WAP	Wireless Application Protocol
WETO	Wayanad Environmental Tourism Organisation
WOM	Word of Mouth
WTO	Wayanad Tourism Organisation
WTTC	World Travel and Tourism Council

ABSTRACT

INFORMATION AND COMMUNICATION TECHNOLOGY: ITS ROLE AND IMPACT ON TOURISM DEVELOPMENT IN KERALA- A STUDY OF WAYANAD DISTRICT

Tourism is largest industry throughout the world. Tourism industry today constitutes an important segment of the Indian economy. It generates employment, income and foreign exchange earnings and also can remove the poverty of a nation. Ancient time tourism is a monopoly of upper class people. But now there is no barrier between rich and poor. Information and Communication Technology (ICT) have a major impact on tourism industry. It is observed that for smooth and increasing trend of tourism ICT is inevitable. Information and communication technology is lifeblood of tourism industry. Efficiency and effectiveness is the key point of ICT enabled tourism. It provides job opportunity and reduces unemployment and poverty. It creates income and overall development of the economy through the technological innovation.

The present study tries to focus on Information and communication technology, its role and impact of tourism development in Kerala and finally the local economic development. Information and communication technology can have reshaping the tourism industry and there has been rapid increase in the number of travelers in an economy.

Ministry of Tourism and Economic Review are the major data sources. The study also draws from the case study of Wayanad district from Kerala. For the increasing trend of tourism industry directly and indirectly influencing ICT, public and private partnership and involvement of local community. More foreign and domestic travelers come and stay in the remote area of Wayanad district. Thus, accommodation is inevitable to the tourism industry. The important accommodation unit in the study areas is hotel, resort and home stay. All these are under the private ownership of local community. The government officials in Wayanad district are very well to cooperate the tourist arrival and their safe and secure travel. ICT enabled tourism very actively influencing the private agencies such as tour operators and travel agents. Tourism industry is a competitive industry. ICT enabled tourism can done the innovative management methods to develop the remote area of Wayanad in a global level. Not only the ICT but also government and private sector participation and host communities involvement is very important. But in Kerala the active participation of Non-Governmental

Organisations (NGOs) also improves the ICT enabled tourism. In this context we have opened a new and existing avenue for the future research.

Key words: information and communication technology, tourism, private and public partnership, local community, sustainable development.

CHAPTER-1

INTRODUCTION

1.1: Introduction

Tourism is considered to be an economic bonanza. It is a multi-segment industry while gauging the positive economic effect of tourism, its contribution to the generation of national income, expansion of employment opportunities, increasing of taxes, revenue, and generation of foreign exchange and transformation of regiment economy. Tourism industry is a heterogeneous industry made of complex components. This intangible perishable service industry is getting the right business curve backed by information and communication technology now-a-day.

The first definition of tourism (Guyer Feuler.1905) as “a phenomenon unique to modern time which is dependent on the peoples increasing needs for a change and relaxing, the wish of recognizing the beauties of nature and art and belief that nature gives happiness to human beings and which helps the nation and communities approaching to each other thinks to the developments in commerce and industry and the communication and transport tools becoming excellent” (Karalkova 2016). India’s travel and tourism sector rank eighth in the world in terms of its total contribution of country’s Gross Domestic Product (World Travel and Tourism Council, 2017); the sum is equivalent to 6.7 per centage of India’s GDP. The 25.9 million jobs are created by the travel and tourism sector in India

Information and communication technology, the key components of every industry, plays an important role in tourism development. Information Technology (IT) enabled tourism is also termed as ‘e-tourism’. It reflects the digitalization of all processes and value chains in the tourism, travel, hospitality and catering industries (Buhalis and O’Connor, 2005). ICT is one of the most people friendly and environment friendly industries in modern times. Tourism industry is seeking more practical and satisfied chain solution from the innovation of ICT. Information and communication technology means the use of computer system and telecommunication equipment in information processing. ICT is a broad terminology referring to multiple communication technologies which range from simple and complex namely Cell Phone Application (Short Message Service- SMS), Digital Cameras, Internet, Wireless (Wireless Fidelity-Wi-Fi), Voice Over Internet Protocol (VOIP), Global Positioning System (GPS) , Geographic Information System (GIS), Convergence (data, voice, media), Digital radio. These technologies are creating a innovative global market place, which is more viable.

The role of social media in travel decision making and tour marketing has increased tremendously over the years. The world tourism industry has definitely been one of the first to make large-scale use of the innovative information technologies. Internet has redefined business system and the notion of the channel of tourism products, in that it gives access to technologies to large masses of potential consumers and tourism enterprises of all sizes. Today, tourist worldwide depends on social networking media and online sites for their travel decision.

IT enabled tourism has different aspect such as direct booking , easy payment for the end users, business to business trading for product providers, travel agents and resellers. ICT has become the key component of tourism. The best example of IT application in tourism is Automated Reservation System for Railways and Airlines. There exist IT solution for hotels, motels, hospitals, travel intermediaries, entertainment and tourism at par for streamlining business processes, improving customer relationship and ensuring efficient operations.

All those websites and portals launched by the government as well as private organizations offer a wide range of tourism products and services like airlines, hotels, restaurants, camp-site, tours activity centers, concerts, shopping and many more with a choice of assortment of services. Reservation or shopping of facilities for train, airlines, cruise, hotels, resorts, rental cars and adventures can be done on-line web based portals also provide static information and beautiful pictures with less updated knowledge and data transfers. With the application of e-tourism, the travelers would be able to make on-line reservation and booking and receive immediate confirmation, this would remove, a lot of obstacle faced by the tourists.

Today's world, it has become one of the largest and fastest growing industries employing a sizable portion of labour force. With rapid advancement in science and technology, tourism has acquired the status of an industry in all industrialized countries. Tourism has emerged as an industry next to information technology industry in the service sector. Information and communication technology played an outstanding role for the development of modern tourism. E-tourism is one of the most important sectors in eBusiness and eMarketing. ICT will also have a virtual tourism; action in the field of ICT for tourism is targeted at developing new components and distributed architecture for tourism information and communication systems, that supports users and businesses, by offering value added services and multimedia information on tourist destination. Eventually, this may also have a positive impact on the

physical flow of tourists to the destinations. The technical assistance and the use of ICT are needed to help tourism organization as a sustainable destination.

India rank 16 in the United Nations World Tourism Organization (UNWTO) report in 2017.. Information and Communication Technology (ICT) have a major impact on tourism industry. The internet penetration across the world increased to 54.4 per centage of the world population (internet worldstats.com, 2017) and India stand second position in world internet user's statistics. During the last decades of 20th century electronic-Tourism (e-Tourism) emerged in India. The innovation of e-tourism, the tourists are more interested to get information on destinations, facilities, availability, prices, geographical climate and present status of friendly relation (Shah Alam 2009).

In India, Kerala the first digitalized state which give as industrial importance to tourism in the year 1986. It also selected as the first super branded tourism centre in India. Kerala tourism department tag line "GOD'S OWN COUNTRY". Kerala tourism focuses on the conservation of ecology and reserving the pristine environment to reduce negative impact of tourism. Kerala one of the most admired tourist destination in the world. Growing at the rate of 13.31per cent, the tourism industry is the major contributor of the state. The Kerala State Government understanding the importance has sanctioned an amount of Rs.18 lakh for the development of the Kerala Tourism Website (www.keralatourism.org).

Tourism has vast potential in Wayanad. Wayanad is blessed with natural beauty and cultural heritage. ICT enabled tourism in Wayanad with new socio-institutional framework may provide more employment opportunities there by increases the revenue of the district through tourism. Also, Wayanad being a district with more tourist destinations and the people engaged in tourism related activities, the ICT enabled tourism have a major role to play in Wayanad.

1.2 Review of Literature

The literature on information and communication technology, and tourism development highlight a wide variety of issues. For greater clarity and better understanding studies have been classified into three sections. They are:

- A) Studies on Information and Communication Technology enabled tourism in general
- B) Studies on public and private partnership of tourism and hospitality industry.
- C) Studies on local economic development and tourism.

A) Studies on Information and Communication Technology Enabled Tourism in General

According to Netto (2004) the careful management of tourism is necessary in order to overcome maximum benefits with minimum negative impacts and to make it more environmentally and socially responsible. Many developing countries have responded positively to tourism as a source of foreign exchange and a generator of employment. The IT policy, 1998, has identified tourism as one of the important areas with the potential for IT application. Bezbaruah (1999) analyzed that information technology has changed man's lifestyle and has strengthened his confidence. An economic activity the importance of IT enabled tourism will become maximum probable annual expansion of the world's wealth.

Buhalis and O'Connor (2005) in their article, suggested that ICTs evolve constantly, providing new tools for tourism marketing and management. Innovative tourism enterprises will have the ability to divert resources and expertise to servicing consumers and provide value added transactions. ICTs raised opportunities and challenges are turned to the advantage of tourism organizations to enhance their innovation and competitiveness.

Wahab and Soonthodu (2018), argued that the development in the field of ICT has deeply influenced the ways in which tourism business perform their activities. The ICT is critical for strategic management of organizations as they allow expansion into new market, empowerment of employees, lowering of costs, enhancing distribution. The application of E-Tourism in the field of Flight Tracking System, Dynamic Packaging, Computer Reservation System, Global Distribution System, Extensible Markup Language, Customer Relationship Management, Audio Tours, GPS Tours, Biometric Passport, Virtual Tour, Mobile Technology, Social Networks, Space Tourism etc. ICT plays a critical role in acquiring, processing and storing information. It has deep impact on the development of economy and society.

Rangnathan (1997) pointed out that many Asian countries are focusing their attention on tourism to increase their foreign earnings. The application of IT in tourism becomes relevant. The advantage of using information technology could be better appreciated and understood if the basic computer applications that would give the tourist corporations a competitive advantages is analysed. Bethapudi (2013) stated that the government of India gave more importance to the usage of ICT among the stakeholders and clientele. The work was based on both primary and secondary data. The primary data collected from 112 managers of tourism,

travel and hospitality enterprises in India, during the month of October to November 2012. Data surveyed through a well structured questionnaire with the managing directors, directors, general managers, team leaders and senior managers. Secondary data collected from United Nation World Tourism Organisation (UNWTO) Report (2008), International Labour Organisation (ILO) Report (2010), Organisation for Economic Cooperation and Development (OECD) Report and globally reputed standard textbooks and journals. For promoting and strengthening tourism industry, the ICTs integration have powerful tool in our economy

Suresh (2000) analyzed that, competition is triggering innovative promotional strategies by government, tourism boards and other tourism stakeholders with respect to the global tourism industry. The keywords that dominate the modern tourism practices include expansion of the product ranges, cross industry partnerships and customized packages. Certain other measures that can be taken for repositioning of the industry include installation of touch screen kiosks in airports and hotels, and for promoting cyber cafes, email access and online reservations. New technologies to make the life of the tourist comfortable industry. For this technology, the tourist to plan his / her trip, make arrangements for flights and hotel bookings online. Airlines and the hotel chains benefit through direct interaction with customers, as commission to agents can be avoided (Suresh 2006)

Chaudhary (2010), in her work, "Training men to manage tourism", pointed out that new technologies are finding application in industry and online business models are increasingly being adopted with information and communication technologies at the forefront. It is changing the norm of manpower requirement and the demand for multiple skills set combining tourism, computer and soft skills is increasing. This is indeed a big challenge. Dhar (2000) conducted a detailed study on tourist information service.

The government has introduced tourist information service TOURNET in their domestic offices and certain selected countries. A computerized multi-lingual tourist information service which could be installed at different outlets like airports, hotels and trade counters apart from the tourist offices of Government of India. The service could give instant information on mode of transports, food, and accommodation, places of interest and cost of services in different languages to the tourists visiting the country. Roy (1970), in his study, "Bridging the information gap for attracting foreign tourists", argued that the importance of effective information network to ensure the steady flow of tourists to a destinations. He

comments on the inadequacy and defective nature of the existing information arrangements, which often results in dissatisfaction over the pleasure trip by the visitors.

Jagathy Raj (2005), analyzed that IT enabled tourism become most desirable human activity and new digital technology have had a profound impact on every aspect of life in the society, empowered new ways of working, new commercial service opportunities, and new ways of social interaction for the citizens. Sethi (1999) pointed out that, technology has already had a dynamic effect of tourism industry. Development of information technology positively affected the tourism industry and it is the dependent factor business survival in the tourism industry of the future. Mansell and Wehn (1998) stated that a whole system of ICTs is being diffused rapidly throughout the tourism industry and unlikely any developing country or economy in transition will escape its impact. These technologies are associated with frequently programmes, flexible holidays, ticketless travels, cyber offers, video brochures, websites; on-line travel agency services are more.

Shanker Ravi (1997), in his book, “Promotional strategies for tourism marketing”, stated that, Indian tourism promoters have to target their communication efforts to different selective countries, identify their requirements in terms of attracting they are interested in their infrastructure requirement and purchasing power. Singh (2004) pointed out that IT enabled services are not necessarily related to the production of software or IT in general, but uses IT to make the provision of services possible. He assesses the possible role of India’s IT industry as a driving force of higher economic growth in India.

Milne and et al (2004), argued that ICT plays in influencing the shape and nature of tourism. ICT can bright about a revolution in the ability of the industry to create and sustain an improved quality of life for communities, regions and nations. It has the potential to alleviate some of the traditional problem associated with tourism. Tourism and its development outcomes, as being part of ‘information ecology’ of people, practices, values and technologies. Sasikumaran (2005), point out that, possible component of e-government based intelligent information system for tourism managements are booking, reservation and payment systems, marketing, information and trading service, integrated tourism and travel information etc. Database system of tourist information identified by a unique key, which changes whenever an update of information is performed. In this way it is easy to know, comparing the keys, if the information about the item on the Compact Disc- Read only Optinal Memory (CD-ROM) is up to date. New computer-based technology from the

internet to virtual reality. Open new ways to market, to reserve space, and to experience a destination or attraction. Home computers, CD-ROMS, and the internet have altered traditional forms of tourists with information and changed the way travel arrangements are being made and confirmed (Harris and Katz 1999)

Hwang & et al (2006), discussed that the emergence of information and communication technologies (ICTs), higher level of wealth, more leisure time, and changes in values and lifestyles due to a new consciousness regarding social responsibilities, have led to a new breed of tourism consumers. In addition the new travelers are used to having many choices, expect speed, and use technologies to overcome the physical constrains of bodies and border. Word of mouth the most popular way of gaining access to first-hand knowledge about travel destinations and tourism experiences. The impact of ICTs is impossible to know how travel behavior will change in the future, but it is possible to prepare for future change by extracting knowledge from present experiences.

Farsari and Prastacos (2004), in their joint study, “GIS applications in the planning and management of tourism”, stated that a Geographical Information System (GIS) is a database and mapping computer technology that is used to store and analyze geographical data. Geographical data include information about the location, characteristics and relationships among places distributed over the earth’s surface. GIS technology can provide a basis for the development of systems to support decision- making for sustainable touism.

Jamal and Jamrozy (2006), explained that destinations face increasing challenges in an international market place where multiple stake- holders with diverse values are often divergent needs compete for scarce or unique resources. Traditionally, Destination Management/ Marketing Organizations (DMOs) tend to represent the tourism industries interests. Their mission is building and enhancing a favorable destination image to attract targeted tourists and increase visitor number. Sustainable tourism marketing objectives are not to design a product, price, place and promotion of a tourism destination or attraction, but to ensure quality of life and environments through tourism development.

Rok (2006) argued that, a global changes in the tourism industry began to 1990s and marketed the entry to new millennium. Media that build trust in the market by communicating attractive tourism offerings and disseminating statistics on the growth of all aspects of tourism. A tourism media partnership is a precondition for building the values that are key to world tourism development, mitigating or preventing negative impacts and

showing their commitment to the basic principles of peace, cooperation, friendship in the world, as well as to social, environmental and economic responsibility. These values are the fundamentals of the international tourism industry.

Milano and et al (2011), stated that the impact of modern ICTs and web 2.0 influence the big challenge to tourism organization in Italy. To understand the online social network and its popularity they used regression and time series analysis and SPSS version 17. The finding of the study reveals that online social network like Facebook and Twitter positively influence the Italian tourism development. Lack of proper management, poor technological progress, lack of resources etc is the main problem faced by tourism enterprises in Italy. Collaborative and cooperative attitude towards OSN (facebook and twitter) will overcome all type of weakness and difficulties faced by the tourism enterprises.

Treer (2010), argued that, comparing to the elder age group, younger age group reported greater benefits from the use of social media in their travel planning process. Both primary as well as secondary data used for the study. 84 survey respondent for the age group of 20-39 years to 40-59 years. The methodological aspect of the study conducted semi- structured interview used. The statistical tools like SPSS, simple averages, correlation, chi-square test etc used for the study. The digital technology and word of mouth (WOM) and e-WOM both positive and negative comments. Positive WOM should encourage the tourist destination positively and the negative comments could serve as a pulling factor of where the product needs improvement. Hungarian National Tourist Office (HNTO) wants to reach all age group to promote information and communication technology in tourism development.

Madasu (2013), stated that, Central, State government/ Union Territories and private sector promote tourism in the country. Ministry of tourism should take e-tourism initiatives for development of tourism. For the promotion of ICT enabled tourism, there is a better need for private and public partnership to establish in the country like India. Therefore web 2.0 technologies and social media like facebook, twitter, youtube etc for promoting tourism both national and local level.

Niininen and et al (2006), highlight that, Consumer Centric Marketing (CCM) is relatively a new trend in marketing that can be incorporated into the customer relationship marketing (CRM) literature. Future business opportunities made possible by the combined improvements in CCM and ICT. Tourism related CCM applications feature services available travelers before, during and after their trips. ICT is too allowing for positive and negative

word-of-mouth (WOM) communication at an extraordinary scale across geographical borders. The real holiday reports (<http://www.realtholidayreports.com>) displays feedback from ordinary tourists about the facilities in a destination. Customizing products will require flexible production and marketing processes adaptable to consumer requirements. Hence, the need for an opportunities arising from individual consumer focused marketing activities will prevail in tourism in the future.

Karimidizboni (2013) stated that acceleration and collision between technology and tourism in recent years, has brought essential changes in tourism industry. Information and communication technology is increasingly to compete with agencies, tourism location and industry, plays a critical role. Applicants are able through internet, do searching travel information about travel such as booking airline tickets, room reservation and other purchase directly by their own. ICT not only reduces the risk of receiving and uncertainty, but also increases the quality of travel. Chandrasekar (2006), argued that, the involvement of information technology in effectively communicating to the ultimate consumer gains considerable importance. The use of information technology in our country for tourism sector is seldom seen the marketing purposes. In India, middle class tourist forms a major component in the tourism circuit. If a person in one state wants to explore the tourist destinations to other state, he/ she should be given adequate facilities and able to know all the aspects through the internet. For the use of this infrastructure at the destination should be good.

Shanker (2008), point out that the revolution in ICTs has insightful implications for economic and social development. ICT tools have facilitated business transaction in the industry by networking with trading partners, distribution of product services and providing information to consumer across the globe. It provides new means for analyzing the information for the industry. Emphasis should be upon converting valuable information to knowledge system. There should be regular conversion from data system to reflective knowledge system for the advantage of future generations. Shringi (2012) stated that India is a booming IT hub and more people are coming to India on business trips. Early form of technology in the travel and tourism industry were systems which linked tour operators to travel agencies via terminals and allowed travel agents to make bookings through the system. For the use of ICT innovation, information can be accessed by customers, within 30 seconds and they can get a complete picture. The online travel industry is certainly marked for growth in the coming

years. India is all the set to become among the top three online travel markets in the world over the next decade.

Buczynski (2010), argued that Warsaw and Mazovia region has enormous potential in tourism development due to geographical location, natural and cultural assets, political, administrative, cultural functions. The characteristic of the tourism economy and observed indicates that ICT can be a major development factor. The major influence of the economy are better effectiveness of enterprises due to better promotion, access to knowledge and information, gaining new partners, growing number of customers, new markets , new investments, better image, stability, growing income, enterprise development, regional GDP growth, tax incomes. Reassuring ICT major factor for tourism development in Mazovia, where 98 % of enterprises has a computer. Mazovia is a leader in technologies and equipment. Ogbu and et al (2011) stated that, ICT has reshaped our everyday lives and the society in general. It has turned the world to a global village where an individual can access what is happening in the other part of the world as a glance. It was revealed that almost every tourism product can be sold online without the consumer necessarily visiting the place before making any choice since tourism product are not already manufactured goods. Booking of flights and hotel reservations can be done on-line through e-mail, telephone calls and other internet service thereby helping to reduce if not remove entirely the time wasting processes of the old system. Therefore, ICT adoption is necessary for proper inclusion in these benefits and for sustainable tourism.

Mihajlovic (2012) pointed out that, the occurrence of the phenomenon of tourism is the result of socio- economic conditions related to the development of technology and innovations. The first part of the paper gives an overview of the theoretical insights that complements the thesis on the role of technology in tourism, and it highlight that tech methods used in framework of transformational alteration in their internal and external environment. The second part of the paper based on the results of a survey that was conducted in the Croatian travel agencies; explore the role of technology in the business of travel agencies through the reviews of managers. Technological innovations can be a source of competitive advantage of technological progress in their business strategy, while agencies that systematically ignore new technologies and their benefits will necessarily lag behind competition.

Werthner and Klein (2006), in their article, stated that, over the past decades, the travel and tourism sector has emerged into one of the most important sectors for developing as well as

developed countries. Computer Reservation System (CRS) or Global Distribution System (GDS) have been the first international inter-organisational systems. The World Wide Web is strongly changing the production, distribution and consumption of tourists' products. It is the strongest driving force for changes within the tourism industry. ICT and tourism industries will also be among the most important industries in the next century. And both industries are closely interrelated and intertwined. Law and et al (2008) stated that the rapid changes of internet technology influence the hotel industry of China. The websites of hotels in Hongkong, Shanghai and Beijing were selected as samples for the study. This study reveals that hotels in China have set up an online presence and have achieved a certain level of success. The findings of the study are that the hotel industry of China and other developing countries positively influence the hotel websites. Future efforts can be made to develop more advanced models on evaluating the performance of websites. Kumaresh (2010), analyzed that ICT can help Goa's tourism effectively. The methodological aspects of the study based on both primary and secondary data. The primary data collected from the tourists by using structured schedules and the secondary data are collected from journals and websites. The theoretical framework of the study is forecasting the demand for customer. The findings of the study reveals that there are three important problem faced by tourism industry in Goa. The lack of communication and correlation amongst the stakeholders and various departments in tourism industry is first important problem and the second problem faced by this industry is lack of designing, managing and maintaining the websites. Transport management facility is another complicated problem faced by tourism industry in Goa. All this problems are overcome with the help of ICT.

Sunil Gupta (2007) analyzed that international tourism is booming, multiple travel destinations are emerging and online bookings are surging on the back of increasing internet penetration. The travel market is growing at 17 per cent a year while the number of online offering is growing slowly and steadily. The ledge for India for 2020 by the World Tourism Organization is 50 million. From the hotels to airlines, railways to travel agencies, virtually every segment of the travel business is seeing a surge in online bookings. Due to the internet all the information required to plan a holiday at their finger tips. Technical advancements will benefits to both travel suppliers and travelers in the form of more efficient data handling and processing, and lowering operating costs. Tourism the world over is heading to confront challenges, internal as well as external changes in the socio- demographic structure, technological changed concerning electronic information and communication systems,

changing trends in the consumer's behavior, shifts in the stance to sustainable development strategy and human resource development in the coming period (Kamra 1997).

Srinivasan and Anand (2004) argued that, tourism one of the larger income generating sectors should also take advantage of the modern technology. The technology is now unreservedly available and simply accessible. The tourists will be provided with an interface in which they actually get a geographic view of India as a whole. Using GIS technology one can select the place of interest by clicking on the map. Then they will get a map with the details on features and attractions of the place. The GIS is applied in tourism for the effective utilization of the modern technology in tourism. Thomas and Gracious (2007) pointed out that, tourism and travel industry is made up of many complex component parts. This industry is getting the right business curve backed by information technology. This sector had electronic commercial application from 1960's in the form of Computer Reservation System and Global Distribution System. There exist IT solutions for hotels, motels, hospitality, travel intermediaries, entertainment and tourism at par for streamline business processing, improving customer relationships and more efficient operations.

Anbalagan and et al (2005) stated that tourism has potential to bring about social and cultural development. The role of technology and communication has increased the speed of tourism industry to serve the people of different sectors to make a mark in transforming the society and economy. Malra (2012) stated that accessibility of information through web has been increasing in developing countries. Tourism means people on move, that is, mobile and advanced features of mobile ICT suit admirably in the delivering of relevant and timely information that cultural heritage tourists demand. Web and technology are shaping the new form of industry, either it is internet booking, social media, mobile technology and apps; everything is playing a tremendous role in determining the industry.

Haseena and Mohammed (2014) stated that information technologies play an important role in integrating tourism enterprises into global tourism market. The study based on secondary data only. It collected from official publication of tourism department, articles and journals and tourism statistics. The findings of the study is that the factors determining the growth of tourism in an economy are income, wealth, education, information and communication technology, infrastructure, changing lifestyles and consumer value and so on. All stakeholders, including the public partnership at large are involved in a positive consensus to develop the tourism sector. Varughese (2013) analyzed that Kerala tourism showing an

upward trend. Methodological aspects of the study based on both primary and secondary data. The primary data are collected from the tourists by using structured schedules. The secondary data are collected from the official publications of Tourist Department, District Tourism Promotion Council, magazines, newspapers and various websites. For the purpose of the study 300 tourists are selected from Thiruvananthapuram district by using convenience sampling method in the month of June 2012. The chi-square test is applied to show the association between socio- economic status of the tourists and their opinion and preferences. This paper analyzes the tourists' perception towards package tour. The study reveals that majority of the foreign tourist prefer to organize their travel with the help of package tour operators but domestic tourists prefer self organized tour. There significant association between nature of the tour and socio demographic factors like income and age of both the domestic and foreign tourists. Educational qualification and nature of tour are independent in the case of foreign tourists but dependent in the case of foreign tourists. The traveling pattern of domestic and foreign tourists is statistically similar.

Murugan Annamalai (2005), outlined sectoral mission to realize India as a developed nation by 2020. These consists of five core sectors including networking of rivers, availability of uninterrupted quality power supply, proving urban amenities in rural area(PURA), Information communication technology and tourism. He emphasized that these mission will provide large scale of employment opportunities to the youth through the creation various types of industries and enhancement of national infrastructure. Tourism industry in India is a huge potential industry and second largest net foreign exchange earner.

Waghmode and Jamsandekar (2013) stated that maximize the advantages of ICT enabled tourism and minimize its disadvantage. Then it becomes a profitable and favorable for everyone in the society. The study based on secondary data and it collected from United Nations World Tourism Organization. Lack of time, cost requirements, very limited ability to access the market directly; these are the problem faced by tourism before ICT. Role of ICT increase year by year. Tour operators, travel agencies, hotel enterprises, car rental companies, cruise companies etc., can benefit from the ICT enabled tourism.

The general study of ICT enabled tourism reviewed that technological improvement and promotion of tourism is a positive relationship. Today's busiest world the tourist to avoid stresses, consume cost and time.

B) Studies on Public and Private Partnership in Tourism Sectors Initiatives.

In tourism industry is including tourists and services providers. The tourists are again classified into domestic tourists and foreign tourists. The service providers are include government officials, travel agents and tour operators, tourists guide, accommodation units, Non Governmental Organisation, local community etc. To promote tourism, not only to improve innovative methods in this sector, but also to promote public and private sector participation. The active involvement of public and private participation will result a miracle changes in tourism industry.

Smith (2011) argued that public private participation can be powerful tool for development of tourism products, marketing and promotion. Both National and Subnational Tourism Agencies are involving to the private sector, as a result the sustainable tourism progress in an economy. Through the public private partnerships, private entities and NGOs contribute financial management expertise, technology and other resources, it can results the development of sustainable tourism industry.

Chaperon (2017) stated that since 1970, in many developed countries, governance arrangements for tourism have been revised in response to significant challenges faced by national economies. Destination Management Organisations (DMOs) that have conventionally been part of public sector structures have been shifted towards the sphere of the private sector and are at present operated in a joint way with Public-Private-Partnerships (PPPs). This paper takes a governance theory approach and examine tourism industry stakeholders response to a proposed Public-Private-Partnerships arrangement for the local destination management organization in Jersey. The period under the study is 2006 to 2012, a time when public sector governance arrangements tourism was experiences significant change in the UK context. Stakeholders accepted and approved the common benefits associated with PPPs, such as greater efficiencies and expertise. But they also identified in particular for Jersey's DMO because of the characteristics of the destinastion. These stakeholder responses to a new PPP model are better understood by examines the relationship between governance and the concept of 'Islandness'.

Innocent (2016), pointed out that behind successful transformation of any institutions or sector there is an effectual partnership, which emphasis prior commitments from stakeholders to address uncertainties to sustainable tourism. The tourism stakeholders commitments are resulted in the public private partnership, stakeholders oriented planning and the government

sponsored development. In Rovanda, the public-private partnership identified is considered for development of public services, through challenged with indistinguishable responsibilities of actors. The tourism stakeholders oriented planning favours the constant invitation of private stakeholders to always participate in the tourism development strategies. But constraints with capital shortage and institutional weakness. The government sponsored funds are visible, but lack of fund for that. However, more elaborated partnerships are needed to motive investors, stakeholder-oriented planning needs more capacity building, and state sponsored tourism developments need ear marked funds.

De Lacy and et al (2002), stated ythgat sustainable tourism requires honesty, responsibility and integrity in the creation and management of destination images by the public and private sectors, along with a realistic expectation that the product or destination demand generated by the motivation force of the imaging can actually be delivered. The nations have decided to use tourism as a key source of exportcurrencies for their local economies; the national destination marketing processes are usually planned as some form of public and private sector alliance, joint endeavor or partnership. Generally, there is more private sector engagement in the more developed countries than in the case of the less developed countries. Where tourism provided one of often limited ways to participate in the global economy. This reflect the level of the destination and its tourism infrastructure in a competitive market place. Kent (2005) pointed out out that the congterm success of a sustainable tourism program depends on the involvement of all concerned stakeholders. It requires the various tiers of government, tourism agencies, private sector organizations and communities to clearly define their roles and work towards partnerships that reinforce the benefits of tourism development.

Venkateswarlu and Jayalakshmi (2016) stated that the Indian tourism sector having more number of opportunities to enhance tourism destination. The government is involved the private entrepreneurs to establish latest ventures with the support of government. It is also benefits for increase revenue to government and to attract more number of tourism from abroad. In this article identify the different types of models in PPP and also evaluate the responsibilities of PPP projects. In their study also found that, what all schemes, incentives provided to tourism sector in India.PPP is helps to make designs, builds, plan and financial assistance from private ownership. The private sectors have the potential to create substantial new destinations for attracting new tourists from abroad. In PPP there more number of

incentives provide to private people for improve of tourism industry in India. Through these different types of models we easily preserve our heritage sites.

Vijayanand (2013) argued that the advantages of tourism are rarely equally spread among the key stakeholders. Stakeholders' participation in PPPs has wider implementation for the growth of tourism. Not only the tourists but also local society, travel agents, tour operators, ground operators, destination management organization and NGOs participation is inevitable in the tourism industry. Rather the sustainable growth of tourism is due to growing supportive approach of public and private sector. Both the private and public sector to take initiatives to the growth of tourism industry. PPP in Kerala has significant socio-economic benefits to the state. IT related project, Tourism and Hospitality projects are important among them. PPP are allocation of risks to the partner's best alone to manage them thus minimizing the cost while improving the performance. Public sector normally assumes social, environmental and political risks whereas a private sector bears financial, construction and commercial risks.

For the successful management of tourism industry in Indian Economy, the private and public partnership and infrastructure is effective (Kumar Prem and et al, 2015). The public sector must anticipate infrastructure needs from private developments, otherwise capacities will be exceeded and both private and public sector will suffer. The government should develop implementation mechanism to ensure public and private partnership cooperation. The government may seek to identify specific zones. Within the country where tourism related public and private investment is encouraged in order to reduce poverty.

Srikanth and Kumaraswamy (2016) stated that tourism industry being labour intensive has potential to solve the problem of unemployment and poverty. The PPPs could be described as a set of joint initiatives by the public and private sectors (profit and non-profit), in which each participants brings some capital to provide the basis for participation in planning, decision making and distribution of benefits. Their study discusses the service marketing through PPP in Karnadaka tourism. Its promotion made an attempt to market tourism by adapting the service marketing through PPP. In more narrow sence, PPP refers to tangible cooperation activities in which the public and private sectors combine their resources and knowledge in order to satisfy the domestic tourist as well as foreign tourists need of their milieu.

Menon and Edward (2014) stated that PPP enable the public sector to benefit from commercial dynamism, the ability to raise finance in an environment of budgetary restrictions, innovations and efficiencies, harnessed through the preface of private sector

investors who donate their own capital, skills and experience. Partnerships between the public and the private sector have recently come to prominence as a strategic tool for tourism development. The fragmented nature of tourism supply at destination, combined with the need for the provision of local tourism products that satisfy the visitors needs. Kerala Travel Mark (KTM) was successfully held in September, 2012 at Cochin. Public and private partnership can achieve very well in the KTM. With the government act as a facilitator-cum-catalyst and the trade fostering entrepreneurship in the larger interest of sustaining and building the tourism sector for the good of all.

Ezreth (2014) stated that the local communities play an important role in tourism development in Kerala. Most of the tourists spot in Kerala are located in remote areas, involvement of local communities in a meaningful manner is quite essential for the sustainability of tourism projects. Community-Public-Private-Partnership (CPPP) provide a unique opportunity to private entrepreneurs, government and local communities to collaborate themselves in achieving key policy objectives of tourism and the resultant benefits like job creation, generation of revenue and socio-economic development. Therefore, the main focus should be on designing of such partnerships in a manner that is attractive, fair and sustainable, satisfying the requirement of local communities in the industry.

C) Studies on Local Economic Development and Tourism.

G Harold (2003), Pro-poor tourism is not a specific tourism product; it is an approach to tourism development and management and ensure that local poor people are able to protected fiscal benefits from tourism in a fair and sustainable approach. Meyer (2015) stated that in developing countries tourism is seen as a tool to promote economic development, and alleviate poverty as an alternative to other traditional economic sectors such as industrialization. Tourism has a high multiplier impact and acts as an 'export' sector within the local economy due to the fact that it attracts spending from outside of the region.

Pedrana (2013), stated that tourism is an important economic activity. The local economic development is the role of tourism. In four axes with the local economic development will start the local destinations such as local firms, inward investment, infrastructure and labour skills. In the absent of more than one is lead to risk in the long term the sustainable development of the area. (Nurhssen 2016) studied that the role of the tourism sector to local economic development of Gondar city. The main benefits are to create the employment opportunity and generation of income for the host community. Tourism has social, economic,

cultural and economic impacts. To considering its economic impacts, it generating foreign exchange, to increase GDP and employment motives the investment and development, accelerates the expansion of infrastructural facilities to the locals, increase the demands for locally produced goods and services which in turn motivates domestic investors to invest in their capital in the economy. Generally, it has direct, indirect and induced impacts that through the multiplier effect accelerates the economic growth.

Biewenga (2009), poited out that tourism is a major economic sector the world over, in South Africa. Ecotourism is a particular concept of tourism, it benefits to the local community and nature. The conservation and preservation of ecology and natural resources and local products is the main aim of ecotourism. Responsible tourism is another important aspects, it gave not only to improve the economy but also to social and environmental development. In planning for tourism, suitable land use choices require to be made. The different property development models exist in the sector. These model varied outcomes for society, local economic development and environment.

Drăgulănescu and Druțu (2012) argued that rural tourism is a strategy for sustainable development of rural areas. The rural community has to involve many eco friendly activities to promote tourism. These activities have certain impacts such as social, cultural, economic and environmental. The expansion of tourism in rural resulted employment growth and local income, it contributes to the cost of providing economic and social infrastructure, encourage to development of other industrial sectors, to increase local residents amenities and facilities and conservation of natural resources. The ultimate aim is the rural economic development.

Foan and et al (2008) stated that the government of Honduras and Nicaragua, and those for most of the Central America, understand the economic benefits of tourism. Tourism can tempt investors and governments to exploit rather than protect the very natural resources that tourists travel and spend their resources to enjoy. A community based approach that connects communities to tourism activities is needed to protect and manage natural resources and better understanding of economic benefits. Tourism has some benefits and threats. The sustainable income which means that the tourism can provide employment directly to the residents. Sustainable tourism will generally not be economic benefits for the entire community, but will simply generate some job of the portion of community. Improved local services such as building health centers and school etc. Cultural empowerment and cultural exchange is another benefits of tourism for local community. The outsiders are imitate the

traditional culture and life style, language skills etc. the trends of tourism to the local community is negative environmental impact, economic instability, economic leakages, cultural changes etc.

Pillai and et al (2011) analysed that community based ecotourism programme gave sufficient important to the local community. The community empowerment is the hallmark of the initiative. Better education is positively influence by the local community. The rural tourism is highly associated with the lives of local community. The people in rural area are marginalized and poor. There are lots of opportunities for the female members in rural tourism. The women's are sometimes unable to tap the opportunities because of lack of education. Thus government and nongovernmental organizations take good initiatives to the womenfolk's participation in village tourism. In villages like Aranmula and Thrikaipetta, the women make their craftsmanship of tourism products like metal mirror and bamboo products. Many interventions in Kerala have to promote the village tourism for women. These are Self Help Groups (SHGs), Non Governmental Organizations (NGOs), Vana Samrakshana Samithi (VSS) etc. To take initiatives to Government and other NGos to promote rural tourism, training for women and women centric activities. It will lead to empowerment and enhanced socio economic development of the society. (Koshi and et al, 2014).The 'uravu' products in Wayanad district of Kerala is eco friendly in nature. It is a bamboo made products. This made a great stand in modern society. It gives the opportunity to artisans, marginalized, poor and members of backward society, especially the women. The eco friendly products to get more potential and the export of the product will lead to spread the employment generation and higher standard of living in the rural area. (Xavior, 2012). Preservation of heritage is a common task of all stake holders in tourism industry, specially the local community. The awareness of heritage lead to a positive attitude towards the local culture and eco system. The best heritage preservation project in Kerala is the Edakkal Cave in Wayanad destination. The heritage preservation is most important symbol for the stages of growth and civilization. (Shyju 2016). Kuruva Island is the insightful biodiversity hot spots in Western Ghats. The ecotourism activities of Kuruva Island are managed by Vana Samrakshana Samithi, Forest Departments initiatives in association with the District Tourism Promotion Council. The hundreds of peoples are visiting every day in this destination and money generated from tourism has to be the well being of local community. The local communities are working in the Vana Samrakshana Samithi, most of the people are tribal. Women employees are working in this region like guards, small scale entrepreneurs etc. the local people are arranging

accommodation, transports the home stay, hotels and resort facility is the entertainment activities of the local community. The NGOs also arranging the ecofriendly and cultural activities. Well trained education, natural and cultural interpretation is most important for ecotourism development and the environmental sustainability. (Binoy, 2017).

The existing studies have thus well-known for tourism with respect to Information and Communication Technology, the tourism initiatives of private and public sectors and local communities' development of tourism. There are some studies are discussing the ICT enabled tourism in the world level. However, very few have analysed the ICT enabled tourism in Kerala in detail. The literature also emphasised that the technological advancement in tourism to increase the tourist arrival and income, involvement in public and private sector is to promote tourism and finally the local communities' participation in tourism sector to develop employment opportunities, standard of living and over all development of the economy.

1.3 Research Gap

From the available information, it is understood that the ICT enabled tourism has its own importance in the today's knowledge based economy. The technological development has positively influenced by tourism industry. The literature on ICT enabled tourism spread over a variety of issues. It is accepted that the promotion of tourism industry, not only the ICT improvement in tourism but also to the participation of local community, public and private sector is inevitable. Therefore an attempt has been made to examine the information and communication technology enabled tourism with special attention to the local communities. To fill this gap, the present study purports to look at the ICT enabled tourism in remote area of Wayanad district. Some significant questions regarding the ICT enabled tourism in Wayanad district of Kerala are: What is ICT enabled tourism and its role in promoting tourism, how to take ICT initiatives to the government and private sector to promote tourism and local communities' involvement in tourism has positively influences the entire economy.

1.4 Statement of the Problem

Tourism in Kerala is really non-seasonal in nature and constantly growing industry. The tag line 'Gods Own Country' was adopted in its tourism promotion and become a global super brand. Among the tourist destinations in Kerala, Wayanad is truly a paradise of the earth because; it is a part of Western Ghats and a small hill station. And also Wayanad is considered as one of the responsible tourism implementing district in Kerala. After the

deceleration of agriculture the local community in Wayanad directly and indirectly depends upon tourism related activities. Now a day's tourism industry is going through the drastic technological changes. We can see that the use of ICT in all spheres of tourism. In this context, the study trying to answer these questions. What is the role of ICT in promoting tourism? What types of initiatives were taken by the government and the private sector to promote tourism? Does ICT helps in creating employment opportunities to the local community? Who are the participants providing tourism related activities and what extend they are utilizing the service of ICT? By solving these questions, an attempt is made to understand the status of ICT enabled tourism, its role and impact on tourism development in Wayanad district of Kerala.

1.5 Objectives

The key objectives of the present study are the following

- To investigate the role of information and communication technology in promoting tourism in Kerala
- To examine ICT initiatives of the government and the private sector to promote tourism in Wayanad
- To analyze the impact of ICT on tourism and local development in Wayanad district.

1.6 Hypothesis

The tourism industry drastically changes through the medium of ICT and it influences the way of life of the local communities. So the study hypothesizes that the technological advancement in tourism industry might have an impact on the socio cultural and economic aspects of local community.

1.7 Data Sources and Methodology

Both primary and secondary data used for the present study. The secondary data employed in the study was taken for the period from 2001 to 2017. The secondary data were collected from the Ministry of Tourism, Economic Census 2011, Economic Review of the State Planning Board (2008 to 2015), Tourism related journals, magazines and online resources. The primary data collection was done during the period of 2016 to 2017. The primary data was collected from the government officials, travel agents and tour operators, accommodation units, tourists and local community. Five separate set of interview schedule prepared. The first objective to investigate the role of information and communication

technology in promoting tourism has been satisfied by secondary data. Average Annual Growth Rate, Percentages and Trend Line Graph has been used this analysis. For the second objective of ICT initiatives of the government and private sector to promote tourism had been fulfilled by using primary data, per centage has been used to this analysis. To analyse the impact of ICT on tourism and local development, Per centages and the Index were used.

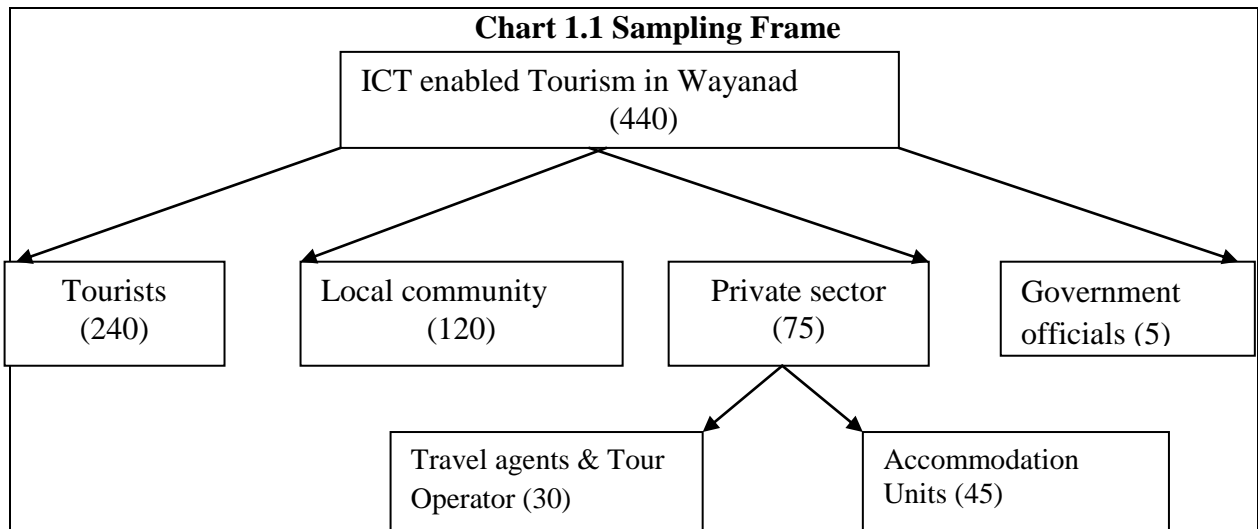
1.8 Sample Design

The Kerala Tourism Department implemented responsible tourism in 2008. The first implementing destinations are Kovalam, Thekkady, Kumarakam and Wayanad. Among the destination, Wayanad is a district which has more tourist destination. So the sample for the present study was done in Wayanad district. Some of the studies give an insight that, in Wayanad before tourism being major activities people depend more on agricultural activities. But the deceleration of agriculture resulted in farmer's suicide. So people in Wayanad directly and indirectly depend upon tourism related activities. Comparing to other responsible tourism destination, Wayanad is a remote area. Tourism marketing and promotion is inevitable through information and communication technologies in Wayanad. These are the important criteria to select for Wayanad district.

The study area was Wayanad district (One of the responsible tourism implementing district in Kerala). Simple random sampling has been used to opt for the sample. Under the District Tourism Promotion Council in Wayanad, there are 38 best tourist destinations, which constitute the universe of the study. Of the 38 tourist destination in Wayanad, top 6 destinations (www.wayanad.com) constitute the sample for the study. On the basis of type of tourism the selected destinations are Banasura Sagar Dam (Backwater tourist destination), Chembra Peak (Adventure tourist destination), Kuruva Island (Nature tourist destination), Pookode Lake (Recreational tourist destination), Muthanga Wildlife Sanctuary (Wildlife tourist destination), Edakkal Cave (Heritage tourist destination). These destinations have been selected on the basis of highest number of tourist arrivals in Wayanad district.

The respondents for the study consist of 240 tourist (both domestic (180) and foreign (60), 5 Government officials (Directorate of Tourism, District Tourism Promotion Council, Hydrel Tourism Centre, South Wayanad Forest Department and North Wayanad Forest Department), 75 private sector service providers such as 15 Travel agents and 15 Tour operators, 45 accommodation units (15 resort, 15 hotels, 15homestay), 120 local community were selected from the six dominant destination were selected. Therefore the total sample size of the study

is 440 were selected. Apart from statistical tools, the total sample size selected for feasibility of the study.



Source: Authors own classification

Note: Numerical numbers corresponding to each tourism related activities are representing the number of respondents surveyed.

1.9 Limitations of the study

One of the limitations of the proposed study was it only took one district Wayanad and generalized ICT and its role Kerala. The few studies thus can extend to some other districts too to analyse the penetration of ICT in tourism. Another limitation that has been faced was, during data collection the local people are reluctant to give information because of the ignorance of technological know-how. Because of the lack of infrastructure in the tourist spots, it took long time to reach the remote areas which is also considered as a limitation of the study.

1.10 Chapter Scheme

The study has been structured in six chapters.

Chapter 1: Introduction- The first chapter includes introduction, literature review, statement of the problem, objectives, hypothesis, data source and methodology, sample design of the study and chapter scheme.

Chapter 2: Information and Communication Technology Enabled Tourism: A Conceptual and Theoretical Background

Chapter 3: The Role of Information and Communication Technology in Promoting Tourism in Kerala

Chapter 4: Information and Communication Technology Initiatives of the Government and the Private Sector to Promote Tourism in Wayanad District

Chapter 5: The Impact of Information and Communication Technology on Tourism and Local Development in Wayanad District

Chapter 6: Summary and Findings

CHAPTER II
INFORMATION AND COMMUNICATION TECHNOLOGY
ENABLED TOURISM: A CONCEPTUAL AND
THEORETICAL BACKGROUND

2.1 Introduction

In this chapter, an attempt to present a conceptual and theoretical background of information and communication technology enabled tourism, which is e-tourism. It is more relevant in the present study. There are a lot of confusions regarding the definition of a concept related to tourism and e-tourism. The definition of United Nation World Tourism Organization (UNWTO) “Tourism comprises the activities of persons traveling to and staying in places outside their usual environment for not more than one consecutive year for leisure, business and other purposes.” E-tourism is the digitalization of all the processes and value chains in the tourism, travel, hospitality and catering industries that enable organizations to maximize their efficiency and effectiveness (Buhalis 2005). The present study only focuses on information and communication technology enabled tourism in Kerala. There are some definitions related to the concept of e-tourism. In this section, we review the various concept and definition given by existing studies.

The tourism system is certainly inclined by the innovative business environment created by the diffusion of ICTs. We are developing a tool, called e-Tourism, whose goal is to compute leisure and tourist plan for a user, taking into account his preference and the information of the context where the visit will take place. It was one of the earliest sectors of the economy to approve information and communication technologies. ICT acts as a major driver within the tourism industry. At the tactical level, E-Tourism includes e-commerce, Enterprise Resource Planning (ERP), eProcurement and other ICT functions. At the tactical level, E-Tourism revolutionizes every business processes, the complete value chain as well as the strategic relationships of tourism organizations with all their stakeholders. E-Tourism applies in ICT to get maximum efficiency and effectiveness.(Landu 2012)

Three main waves of technological development established ITs in tourism enterprises, namely Computer Reservation System (CRSs) in the 1970s, Global Distribution System (GDSs) in the 1980s and the Internet in the 1990s. The first stage of evolution of e-tourism is the Computer Reservation System (CRSs). This is emerged in 1970s. CRSs are probably the most widely used technological tool in the tourism industry. It is basically an electronic system used to promote sale and provide fast and accurate information about availability, price and booking of products and services. CRS consists of a database to manage inventory of tourism organization, and this database could be accessed by remote sales offices, partners and intermediaries to make reservation. It formulated a new marketing and distribution

system in travel and tourism industry. Here each individual have their own ICT technology have implemented. The examples related to CRS is that we are go to American Airlines we cannot to book for a British Airways Ticket. Because the American airways only to get American airlines ticket, so the example of CRS is American Airlines. The Zylo company came in the first stage of evolution of e-tourism. The rapid growth of demand and supply, as well as the deregulation of American air transportation demonstrated that the tourism inventory could only be managed by powerful computerized system. Airlines pioneered this tools, while hotel chains and tour operators followed by developing CRSs.

The second stage of evolution of e-tourism happens in 1980s. Since the mid 1980s Computer Reservation System (CRSs) has emerged into Global Distribution System (GDSs). CRS evolved into GDS as airlines expanded their geographical coverage as well as incorporated a wide range of service and products for the entire industry. GDSs integrated both horizontally and vertically. The horizontal integrated services are the airline system and the vertical integrated services such as accommodation, car rentals, bus and train booking. As several companies such as THISCO, WISCOM are emerged into interconnected, it enabled the purchase of majority of tourism products online now. As GDSs connect most of the tourism organization with its intermediaries around the world. Of course owners charged commissions and participation fees and transaction costs which were high for small operators to perform. Some of the examples of GDS software are Amadeus, Galileo, Abacus etc. For example the software Amadeus, which can connect any destination and any airlines, which can manage bus ticket or air ticket and hotels rooms etc. This is the difference between the first stage and second stage is that the first stage companies operated in ZYLOS where as in the second there are integrated. That means we go to any reservation office or we can book for reservation ticket. Additionally most of the travel related booking centres are using the GDSs.

The third stage and the latest stage started from 1990 and till now. That is Internet Distribution System (IDS) and Destination Management System (DMS). Since the last decade of the 20th century IDS & DMS were popular all over the world. IDS is also called as virtual travel agents or online travel agents. It uses the GDS systems internally, and leverage the internet to provide online services. This is the major difference from GDS and IDS. Virtual Travel Agents offer wide range of services and packages needed for tourism. Thus the main difference between the second and the third stage is the internet. Though the travel agencies and the online agencies are interconnected in the second stage. The consumer or the

tourist wants to ticket; they have to contact the travel agent, tour operator or person to take booking. Where as in the third stage we can directly do the booking internet. There is no need for the intermediaries on the latest stage. The consumer is enabled or empowered to this stage. The important examples of Internet Distribution Systems are yatra.com, trivago, booking.com, tripadvisor.in, makemytrip.com, Travelocity.co.in etc. The IDS consists of product and customer database. It allows customer to create personal experience and to provide s information and undertake some marketing activities through mass media advertising. IDS or DMS provide advisory service for consumers and the travel trade, design and distribute brochures, leaflets and guide and it provides information on locally available attractions and products. It helps to overcome seasonality problems by spreading and balancing tourism demand. The difference between IDS and DMS, is now DMS is only the customer focus and the customer is the part of their system and they do data base of the system, they do the data mining and provide law and other benefits to the customer. These are the history and evolution of tourism.

The role of E-tourism is to allowing local business access to global market and the customer can directly deliver their product information from the business owner. E-tourism provide new opportunities to export a wider range of goods and services and it can create digital market place to manage supply chains and automate transaction, increasingly efficiency and opening previously close markets to firms in developing country. E-tourism is the culture of business and there are now better intra-firm communications, cost saving procedures and reduction in the inventory cost leading to better management. The characteristic of E-tourism are easy access the tourism products to the world wide audience, systematic approach to selling products, automatic inventory control, controlled payment system, less risk of error and increase benefits of all stakeholders. (Yovcheva and et al, 2012)

The e-tourism concept includes all business functions such as e-commerce, e-marketing, e-finance, e-accounting, e-HRM, e-procurements, e-R&D, e-production as well as e-strategy, e-planning, e-management for all sectors of the tourism industry, include public sector organizations (Buhalis 2003). There are three distinctive discipline of the E-Tourism, namely Business Management, Information System and Tourism Management. Here the Business Management consists of management, marketing and finance and the Information System consists upon information and communication technology and telecommunication and finally the Tourism Management consists of transport, travel, hospitality, leisure and heritage. (Alghafri 2009)

Travel and tourism is the major service sector in India. It provides all kind of tourism such as medical, heritage, cultural, business and sports tourism. The main objective of the sector is to develop and promote tourism, maintain competitiveness of India as tourist destination and improve and expand existing tourism products to ensure employment.¹ Ministry of Tourism is one of the authentic agencies to promote tourism in India. Every state has their own tourism department. Kerala tourism department is a main government ministry under Kerala Government. Kerala tourism is ranked as one of the fastest growing tourism industry in the country and ministry has been often adjudged as key department that aggressively worked on to make Kerala tourism into top 100 super brands.

2.2 Recommendations Concerning Tourism Sector by Various Reports, Committees and Policies

2.2.1 Sir John Sargeant Committee (1945)

The first straight forward effort to promote tourism in India was made in 1945, when a committee was set up by the Government of India under the chairmanship of Sir John Sargeant. The main recommendations are setting up a separate representative organization of tourism with regional offices in metropolitan cities. To promote tourism take initiatives such as publicity both in India and abroad, to produce suitable literatures such as guide book, folders, posters etc, provision for training of tourist guide, to cooperate other departments responsible for providing facilities required by tourists and to liaison with travel agencies who provide travel services to tourists, liaison with hotels and catering institutions, to collect the tourist statistics, to co-ordinate with air and train services to make it comfortable in India, provision of a chain of first class hotels of international standatard and starting publicity bureau in London and New York and in the capitals of other countries form where large number of tourists might be coming.

2.2.2 L.K Jha Committee (1963)

The Government of India appointed an ad-hoc committee on tourism in March 1963 to investigate the reasons for decline in tourist arrivals in 1962. The suggestions of the committee are grant of landing permits on arrival to tourist coming without visa for more

than seventy two hours, opening of additional tourist offices abroad, provision of shopping and entertainment facilities, setting up three corporations to develop hotels, transport and entertainment facilities, need to build 5500 additional hotel rooms within the next five years, official approval of restaurants, shops and guides, to improve the facilities of airports and to provide adequate facilities by the Indian Airlines, introduction of permit room system in Delhi, imports of cars, training of immigration and customs staff, to increase tourist publicity, to integrated development of selected tourist centers and establishment of a standing committee of main departments dealing with tourism for reviewing inadequacies.

2.2.3 Reports on Cultural Tourism (1968)

The Directorate of Tourism obtained by the service of a tourism expert named Dr.F.R.Allchin, through UNESCO in 1968, in order to investigate the potentialities of cultural and monumental heritage of India for tourism development. The recommendation made by the committee were to provide standardized facilities at all significant monumental sites, all the monuments other than those controlled by the Archaeological survey of India should be scheduled and preserved, areas surrounding the monuments should be protected by creating National Parks around them. The tourism department should publish popular folders, tourist post cards, popular city guide book and regional hand books while the Astrological Survey of India may bring out more scholarly guide books on monuments. There should be close co-ordination between the Directorate of Tourism and Astrological Survey of India. Tours should be build around specific themes or aspects of India's culture based either upon a selection of monuments or upon some aspects of India's culture based either upon a selection of monuments or upon some aspects of art or craft or upon some aspect of natural history. To provide improved facilities at selected wildlife sanctuaries and 'photo-safari' should be encouraged. A number of projects for protection, preservation and conservation of monuments were suggested.

2.2.4 Estimate Committee of Parliament (1969)

The committee was of the opinion that the organizational setup of the department was not satisfactorily functioning. It declared that "an effective and efficient central organization has to be set up to create a strong tourism consciousness at all level of administration and to formulate well-thought out proposals and policies for the development of tourism in the country". (Gadad, 2015).The committee again recommend the government "to ensure that people of right caliber are selected to run the department of tourism, which has to perform

predominantly commercial functions as the efficiency of organizations depends largely on its staff and structural soundness”.(Badan and Bhatt, 2007).

2.2.5 Report of Indian Institute of Public Administration (1970)

The Directorate of Tourism authorized the Indian Institute of Public Administration (IIPA) to conduct a study on the type of organization and staffing pattern required in the department. The report of IIPA was submitted to the Department in July 1970. The chief points such as the present department set up with all its bureaucratic rules, procedures and financial constrains clearly does not permit initiative in undertaking the vibrant promotional actions and putting Indian tourism on the world map. The organizational structure should combine the flexibility of the commercial organization with the legal authority of Government for regulating the tourist industry and ensuring co-operation of other Central departments, State Governments and local administration. The report suggested two quite different models for a re-organized tourism organization, that is a public sector model and a model for re-organizations to perform more aggressively. What is required is a particular National Tourist Authority (NTA) primarily designed for a marketing and sales approach. From an advisory group called the Indian Tourism Council to advice on all matters concerning tourism. The government did not regard as the recommendations of the IIPA. Instead, a National Tourism Board was created under the chairmanship of the Minister of Tourism and Aviation to advise him on all matters.

2.2.6 United Nations Development Programme (UNDP) Study on Tourist Organization (1970)

The team was led by Dr.Timothy O’Driscoll, a former head of National Tourism Organisation (NTO) of Ireland to study the tourist set up of India. The task of taking detailed recommendation was assigned to the Indian Institute of Public Administration in 1972. The main recommendations were setting up a National Tourism Authority with a marketing and sales approach to sell the Indian Tourists product in the world market. Provide encouragement through vigorous incentives to trade and travel agencies, a master national plan on tourism is required and it must be based on an insight into the market structure, the volume of accommodation must be substantially increased, the existence of reasonable good facilitation for tourists (immigration, health, travel agency, customs, currency controls etc.)is a significant factor in creating impressions and can be positive and negative element in

determining later traffic, there is a urgent need for rendering training facilities to create skilled man-power required for the future.

2.2.7 Tourism Policy of 1982

Tourism policy of the ministry was presented for the first time in both Houses of the Parliament on November 3, 1982. The five objectives of the tourism policy statement such as nationally and internationally it becomes a unifying force, that fostering better understanding through travel, it helps to preserve, retain and enrich the countries world view and lifestyle, its cultural expression and heritage in all its manifestations. Tourism in India must present itself on its own terms, not as an echo or imitation of other countries culture and lifestyle. It brings socio-economic benefits to the community and the state in terms of employment, income and revenue generation for the state, foreign exchange earnings and general causes of human habitat improvement. Both through domestic and international tourism to understand the aspiration and viewpoints of others and thus to bring about a greater national integration and cohesion, it offers opportunity to the youth of the country not only for employment but also for taking up activities of nations building character like sports and adventures also for the moldings of the youth of the country, tourism is of inestimable value. The tourism policy statement stressed the need for co-ordination among various public and private sector undertakings. “International tourism will be mainly the responsibility of Central sector, the centre would play a co-ordinating role supplementing the state efforts wherever necessary. The combined effort will be directed towards achieving a comprehensive well rounded and integrated development enabling tourism to make a positive and effective contribution to the economic growth of the country”.

2.2.8 National Committee on Tourism (1986)

The committee comprised twelve eminent persons in the field of hotels, travel trade, commerce and arts besides the Secretary, Ministry of Tourism, a former secretary in that Ministry, representative of Indian Tourism Development Council (ITDC) and the advisor (Transport and Tourism) in the planning commission. The committee was headed by the chairman of the Trade Fair authority of India. Main recommendation of the committee were “ the state should concentrate on planning broad strategies of tourism development, provision of fiscal and monetary incentive to catalyse private sector investment and devising an effective regulatory and supervisory mechanism to protect the interest of the industry and the consumer. Tourism is a national creation that is not restricted by state or regional boundaries

or other barriers. This realization is necessary to avoid distortions in our perceptions and policies”. The development strategy for the tourism sector should be based on the principle of the tourism low-cost economy, higher level of productivity, improvement in efficiency of infrastructure and promoting competitions. In view of the scarcity of the capital, a selective approach should be adopted instead of “spread approach”. In determining the spread of funds over different tourism development projects, capital-labour ratio and capital – resource cost per dollar earned and per tourist served may be worked out. For a balanced development of tourism in India it is necessary to (a) develop selected tourist circuits and identified centers instead of spreading limited resources thinly over a large number of circuits (b) diversify tourist to India from traditional sight-seeing tours, (c) develop non – traditional areas such as trekking, winter sports, wildlife tourism, beach resort tourism etc. (d) restore and develop national heritage projects and (e) explore new tourist generating markets. A package of monetary, fiscal and other incentive should be offered to provide the desires stimulus for investment in the accommodation sector. Starting a Tourism Finance Corporation, promoting the setting up of supplementary accommodation and encouraging youth tourism are other welcome steps. The travel trade is eligible for incentives which are already available to the export industry. To introduce professionalism, create a national image building and launch marketing plan. Update and modernize tourism information services. To adopt a liberal policy to allow foreign airlines to operate in India and also Air Charter services. Revamp the existing organizational structure of the Directorate of Tourism (DoT) and create an apex body, namely National Tourism Board. To ensure quality of training and new tourism courses. To ensure eco-friendly tourism and preserve the environment from the possible damage.

2.2.9 National Action Plan (1992)

The targets fixed in the plan by 2000 AD were; foreign exchange earnings Rs. 10,000 crores, and employment to 28 million. In order to achieve these seven objectives were outlined. These are (1) socio-economic development of the areas, (2) increasing employment opportunities, (3) developing tourism facilities for budgetary category, (4) preservation of national heritage and environment, (5) development of international tourism and optimization of foreign exchange, (6) diversification of tourism product, and (7) increase India’s share in world tourism from the present 0.4 per cent level to 1 per cent within the next 5 years. However the action plan did not specify the infrastructural requirements and the investment needs of the sector to come upon the targets and the sources of funding the targets. The year

1999 was observed as “VISIT INDIA YEAR” plans were drawn on the basis of tourism policy of 1997. But lack of budgetary support was a major handicap as it came upto 0.056% of the plan outlay.

2.2.10 National Tourism Policy of 1997

Identification of domestic, inbound and outbound tourism besides seeking to pamper domestic tourism along with inbound tourism. Mainly focus on the significant of tourism in poverty alleviation and employment generation. Nevertheless, the policy acknowledges the information gap in the perception of the economic and social import of tourism. This policy emphasis diversification of the product in the form of going for new destinations to reinforce the main stream of cultural tourism. It further pinpoints the need for improving facilitation services. The main objective of tourism development is the preservation and protection of environment and natural resources, the policy also supports the sustainable development of tourism in the area, foreign relationship and venture in tourism industry mainly in view of the liberalization and globalization are expectant through a package of physical and financial incentives for the setting up of novel enterprises and their spreading. There is a need for introducing plan restrictions and educating the people to tone down the adverse impact of tourism, the policy also recommended adopting a new technology greatly in the promotion of tourism. The policy identified the distinct role of the Central and State governments, public and private sector enterprises in tourism development. The policy underlying the merit of local governments, NGOs and the local youth in the creation of awareness amongst people and facilities for tourists.

2.2.11 National Tourism Policy of 2002

The Government of India launched an international marketing campaign named as Incredible India to promote tourism in India to global audience. This campaign projected India as an attractive tourist destination by showcasing different aspects of Indian culture and history like yoga, spirituality etc. The movement was conducted globally and received admiration from tourism industry observers and travelers.

2.2.12 Atithi Devo Bhavah Campaign and Visit India (2009)

The government of India conducted a programme to complement the Incredible India Campaign. The main aim of the programme is to create awareness about the effect of tourism and sensitize people about our country’s rich heritage, cleanliness and warm

hospitality. The components of b Atithi Devo Bhavah are Samvedan sheelth or Sensitization, Prashikshan or Training induction, Preran or Motivation, Pramani karan or Certification, Pratipusthi or Feedback, Samanya Bodh or General awareness, Swamitwa or Ownership. Like Atithi Devo Bhavah Campaign, Visit India 2009 was to boost the inflow of visitors and tourists after the terror attack in Mumbai in 2008 as well as global economic crises. This programme is jointly announced by the Ministry of Tourism and World Travel and Tourism Council. This scheme was valid from April to December 2009 and had the support of the hospitality sector, tour operator, and travel and airlines companies.

2.2.13 National Tourism Policy of 2015

The vision of the policy is to develop India as a “Must Experience” and “Must Revisit” destination for global travelers. To encourage Indians to explore their own nation and realize the potential of tourism as a major contributor to the economic growth, employment generation and poverty allocation. The mission of the policy to enhance the share of tourist arrivals and revenue through sustained growth path. To enhance image of the brand “Incredible India” and to deliver world class service and get authentic local experience. To handhold state government, union territories and stakeholders in development and promotion of tourism. The important recommendation of the policy are increase the number of heritage sites at United Nation Educational Science and Cultural Organisation (UNESCO) list, to develop Special Economic Zones, to provide free Wi-Fi connectivity at tourist centers in India.

2.2.14 Kerala’s Tourism Vision 2025

The Kerala government has recently adopted the ‘Tourism Vision 2025’. To develop Kerala into an up-market tourist destination and to make use of tourism for socio-economic development in a sustainable manner, without harming the state’s environment, culture and heritage.(Ministry of Tourism). The targets of the visions are to increase earning from tourism at 10 per cent annually, to achieve an annual growth rate of 7 per cent in foreign tourist arrivals and 9 per cent in domestic tourist arrivals. To generate through employment for 10,000 persons every year. To add 200 hotels rooms in star categories every year. To innovate and promote at least one new tourism product or destinations every year. The tourism strategy of vision 2025 are to strengthen the tourism sector so to serve as the growth vehicle for the state’s socio-economic development, promote sustainable tourism focusing on conservation of heritage and culture, strengthen institutional mechanism for regulated

development of tourism, by enacting appropriate legislation, quality services in all sector of tourism, government to concentrate on basic infrastructure through coordinated effort of all line departments. The tourism infrastructure and products to be developed through private sector and private-public partnership, with government acting as a facilitator and catalyst, to promote the tourism products focusing on backwaters, ayurveda, performing arts, cuisine and eco-tourism. Create adequate quantity and quality of requisite human resources in the State. Investigate and develop new international and domestic markets for Kerala.

2.3 Theoretical Backgrounds

This chapter is also examining the theoretical background of the concept of ICT enabled tourism. There are some theories related to the concept of ICT and the tourism sector. The following are the some of the important theories.

2.3.1 Innovation Theory of Economic Development

This theory was developed by Joseph Alios Schumpeter in 1934. (Teneja and Myer, 2017)His theory of development has four components such as 1) circular flow, 2) development or innovation, 3) role of entrepreneur and 4) business cycle or crisis. Innovation can be defined as a change in the existing production system. The change is introduced by the entrepreneur with a view to make profits and reduce cost. According to Schumpeter, development as a “spontaneous and discontinuous change in the channels of flow, disturbance of equilibrium, which forever alters and displaces the equilibrium state previously existing”. Economic development implies changes in the economic system. When the changes (economic, social, political and technical) take place in the economy, circular flow is disturbing and the development processes starts. His theory of economic development presumes that change is the basic element of dynamic process.

The concept of economic development is synonymous with the spontaneous and discontinuous technological changes and these imply new resource combinations or innovations.(Teneja and Myer, 2017)

The innovations could be explained by following cases:

- 1) The introduction of a new goods, with which the consumers are unfamiliar
- 2) The introduction of a new methods of production
- 3) The opening up of new markets

- 4) The discovery of new sources of raw material
- 5) The setting up of a new type of industrial organization, like creation of monopoly, trust, cartel etc.

Classification of innovation in tourism such as technological and non-technological, product or process innovation, organizational or market innovation, ad hoc innovation, radical, incremental or architectural innovation. (Decelle, 2004). Schumpeter's theory highlights the role of an innovator as a prime mover of economic development. His analysis of entrepreneurial innovation is highly useful in understanding the development of capitalism. His theories is as much appreciated and admired as the theories of great economists, like Adam Smith, David Ricardo, Karl Marx, Marshall and Keynes. Yet, it suffer from the weakness that, in the past innovation activities was undertaken by in the innovators and entrepreneurs. In the modern time, the act of innovation is no more a monopoly of innovators and entrepreneurs. Now, the innovations are carried out on by large corporations and government also takes initiatives for organizing innovation to and so as to reduce the cost of production.(Teneja and Myer, 2017)

2.3.2 Linear Stages Theory and Rostow's Stages of Economic Growth

Walt Whitman Rostow, an American economic historian stated the linear stages theory of 1950s and 1960s. Historical practice of transforming economies from deprived agri-subsistence societies to modern industrial giants had important training for backward countries in Asia, Africa and Latin America. W.W.Rostow, who presented 'Stages of Growth' model of development. The method where developed industrial nations transformed themselves from backwardness to affluence can be described in terms of a series of stages:

- 1) Traditional society, 2) Pre-conditions for take-off, 3) Take-off, 4) Drive to maturity, 4) High mass consumption
- 1) Traditional society: - Rostow has defined traditional society as one whose structure is developed within limited production functions is based on pre-Newton science and technology. The structure of the traditional society was based on primitive technology and orthodox ideas of people. The new facilities of science and technology were not present. Pre-industrial revolution societies could be called as traditional societies.

The basic characteristics of the traditional societies are:-

- a) Agriculture was carried on with the primitive methods of production.
- b) Law of diminishing returns operated in agriculture.
- c) There was absence of modern science and technology.
- d) The structure of the society was based on inheritance.
- e) The political power was concentrated in the hands of big landlords.
- f) Mostly the state's expenditure was done for building memorials, expensive funerals, marriages and maintaining glory of the rulers.
- g) Increase or decrease in population was along the Malthusian lines.

These characteristics clearly depicted the economic, social, and political structure of the traditional society. The studies of these societies provide an opportunity to diagnose the problems of development.

2) Pre-conditions for take-off : - It is an era, when society prepares itself for sustained growth. According to Rostow, the precondition to take-off require radical changes in the three non-industrial sectors. Firstly, there should be expansion of social overhead capital. That is the development of transport, communication, roads etc. Secondly, radical changes should take place in agriculture, so as to raise its productivity. The raise in agricultural productivity is essential to sustain industrialization and to meet the requirements of growing population. If agriculture fails, the development process receives a setback and it might be difficult to create condition for take-off. Thirdly, there should be an extension of foreign trade. Foreign capital and technical know-how help sustained industrialization in the initial stages of development. Imports and exports help in widening the extent of market and thereby promoting industrialization.

3) Take-off:-The self-sustaining growth, according to Rostow, is take off stage. As an interval during which the rate of investment increases in such a way that real output per capita raises and this initial increase carries with itself radical changes in production technique and the disposition of income flows, which perpetuate the new scale of investment, and perpetuate thereby the rising trend in per capita output.

The concept of take-off have three conditions such as rate of investment, development of leading sectors, emergence of the new political, social and institutional framework. Increase in the rate of investment attaches with changes in income distribution. (Eg:-

income begins flows into the hands of capitalists who re-invest to increase rate of capital formation.) Capital formation further is promoted by fiscal measures of government, capital formations and capital markets. Entrepreneurs of one or two most important sectors re-plough their profits. Moreover, the extension of leading sectors helps to pay for imports and liability charges. The examples are Canadian grain, Swedish timber and Japanese silk. Take-off requires the emergence of new political, social and institutional framework. The new framework could exploit the impulses to modernize the economy. It could take the shape of new political revolution, social information, technical innovation and institutional transformation.

4) Drive to maturity:- Following take-off, comes another stage of growth called drive to maturity. Rostow defines it as “the period when a society has effectively applied the range of modern technology to the bulk of its resources.” During this period many technical changes take place. Rostow believes that an economy can attain technological maturity in sixty years after the beginning of take-off or forty years after achieving the take-off.

5) Age of High Mass Consumption: - From maturity the economy moves to the age of high mass consumption. Rostow has explained the stage of mass consumption in the technical sense. According to Rostow, “the balance of attention of the society, as it approached and went beyond maturity, shifted from supply to demand, from the problems of production to the problems of consumption and of the welfare in the widest sense”. (Pilbeam,1998). Rostow’s stages offers valuable insights into the development process. The importance of agriculture in the early stages of development cannot be over emphasized, together with the provision of infrastructure and political stability, if the preconditions for take-off into self-sustained growth are to be met. Finally, there is transition from the rural to the industrial society with growth based on the development of leading sectors and foreign trade, which peoples a society from take-off to the stage of maturity and eventually high mass consumption.

2.3.3 Human Capital Formation

Capital formation in the form of non-material good is also called the human capital formation. According to F.H.Harbison, human capital formation is the “process of increasing knowledge, skills and capacities of all people of the country.” In other words, human capital formation is the method of totaling to the stock of human capital in excess of

time. G.M.Meier defines human capital formation as, “the process of acquiring and increasing the number of person who have the skiff education and experience which are essential for the economic and political development of a country.” T.W.Schultz has mentioned five categories of activities that improve human capabilities. These are investment in education, investment in health, on-the-job-training, migration and expenditure on information.

India recognized the importance of human capital in economic growth long ago. The Seventh Five Year Plan says, ‘Human resource development as necessarily to be assigned a key role in any development strategy, particularly in a country with a large population.’ There is interdependence between human capital and economic growth. The human capital increase the productivity of physical capital as specialized and skilled workers can handle machines or techniques better than the unskilled workers. This increased productivity and hence production leads to economic growth. Innovative skills of human capital facilities and new methods of production increase the rate of economic growth in the form of increase in GDP. Human capital formation direct to a privileged employment rate. Increase in employment opportunity leads to increase the level of income and this helps in inequality of wealth. Both enhance in employment rate and reduce in income inequalities are pointers of economic development. The process of human capital formation brings in a positive outlook to the society which is different from conventional and traditional way of thoughts and therefore increases the rate of involvement in the employees causes augment in level of production.

India is a knowledge based economy. The Indian software industry has been showing a remarkable witness over the past decade. Entrepreneurs, bureaucrats and politicians are now advancing view (IT). There have been some instances of villagers using e-mail which are cited as example of such transformation. The importance of IT depends deeply on the accessible level of economic development about how India can transform itself into a knowledge based economy by using Information Technology. Human Capital refers to people and their capability to be economically vigorous. The education and training can help increase the value of human capital. In this regards ICT is envisaged to facilitate and promote the intervention in human capital development. (Raiti, 2006).

The tourism sector plays an important role in the economic development of a country. (Bardarova and et al 2013) Tourism sector are also important for local and regional

development of a country. The effects of tourism sector are not only economical, but it implement as social and environmental effects. The positive impact of tourism in the national economy is conditioned by employees. Therefore in order to direct the development of the tourism sector of the country, it is necessary to invest human capital.

2.3.4 Endogenous Growth Theory

The endogenous growth theory was the result of pioneering work of Robert Lucas (1988), Paul.M.Romar (1994), V.Ruttan (1998) and H.Pack (1994). Many endogenous growth theory can be expressed by the simple equation $Y = AK$. In this equation A represents any factor that affect technology, K include both physical and human capital and Y stands for output. This theory highlights of increasing returns of capital. It lays stresses on the human capital investment (investment in education, training, research, infrastructure and development etc.). There are assumed to be positive externalities associated with human capital formation. If productivity of capital, tastes (saving behavior) and technologies are the some across the countries, the new growth theory, shows, that with constant and increasing returns, there can be no presumption of the convergence of per capita incomes across the world. The theory explains technological change as an endogenous outcome of public and private investments in human capital and knowledge intensive industries. The theory suggest an active role for public policy in promoting direct and indirect investment in human capital formation, and encouraging foreign private investment in knowledge intensive industries such as computer software and telecommunication (Teneja and Myer, 2017).

The endogenous growth theory was developed by Paul Romer in 1994. In his model, includes the technical spillovers which are attached with industrialization. Therefore, this model not only represents endogenous growth but it is closely linked with the developing countries also. According to him, the processes of production are derived at the level of a firm or industry. Each firm individually operates under perfect competition. According to Romer, the level of knowledge in firm's stock of capital. Endogenous growth theory holds that investment in human capital; innovation and knowledge are significant contributors to economic growth. The theory also center of attention given on the positive externalities and spillover effects of a knowledge-based economy which will lead to economic development (Teneja and Myer, 2017).

2.3.5 Exogenous Growth Model

Robert.M.Solow was introduced the Exogenous Growth Model. The Solow neo-classical model is sometimes called an ‘exogenous’ growth model. Solow growth model is expanded on the Harrod-Domar formulation by adding a second factor, labour, and introducing a third independent variable technology to the growth equation. Technological progress become the residual factor explaining long-term growth and its level was assumed by Solow to be determined exogenously, that is, independent of all other factors. Because the rate of technical progress is given exogenously (Taneja and Myer, 2017).

2.3.6 Public Private Partnership

Public private partnership broadly refers to a long term contractual partnership between public and private sector agencies including co-operative institutions and other non-government organizations specifically targeted towards financing, designing, implementing and operating infrastructure facilities and services that are traditionally provided by the government or its entities. It is based on the rationalize that private sector can operate more efficiently as lower overheads, innovative technology, managerial effectiveness etc are more likely in private sector. Nevertheless, since a PPP project deals with provision of public goods and services government has a key and strategic role-government owns the asset, structures the project keeping the public interest in view. Regulate the standards of delivery and fixes the user charges. The other important feature of PPP is allocation of risk to the partners best able to manage them thus minimizing the cost while improving the performance. Public sector normally assumes social, environmental and political risks whereas the private sector bears financial, construction and commercial risks (Vijayanand, 2013)

The synergy between the private and public sector has been a major force in stimulating tourism competitiveness in a number of countries at national, state and local levels. The widespread progress of tourism is most excellent possible if created jointly by government, private sector and local community. The benefit of PPP model in the sphere of tourism development may be listed as follows:

- a. Acceleration of infrastructure position
- b. Access to new sources of capital

- c. Faster implementation
- d. Provisions of innovations and efficiencies
- e. Value for money
- f. Partnership building
- g. Enhanced public management
- h. Training and capacity building of personnel
- i. Genuine risk transfer
- j. Performance related rewards
- k. Promotion of private investment
- l. Professionalism in management and commercial dynamism
- m. Provision of support service and equipment
- n. Information dissemination and marketing
- o. Improved quality of service

In short, PPP enables greater integration of policies and practices related to tourism planning by the public and private sector. In the course of joint financing, tourism infrastructure can be developed in a speedy manner. It enables a professional progress for the development of tourism in the state.

The role of public sectors are to ensure the local community is fully involved and the benefits of tourism should ultimately reach them, formulate supportive policies, provisions of land for projects to be developed, financial supports in times of need, provision of statutory and project specific clearness within its control, grant of fiscal concessions to projects where necessary, monitor the project performance, introduce regulatory measures to ensure social, cultural and environmental sustainability, identify and establish clear objective as to the range of public and private sector development as considered appropriate.

The role of the private sectors are build and managed the required tourist facilities in places of tourist interest, undertake industry training and manpower development to achieve excellence in quality of services, participate in the preparation of investment guidelines, marketing strategies, database developments and pursue research, and to ensure preservation and protection of tourist attractions. The examples of PPP models are Kerala Travel Mart, Cochin International Airports etc.

2.3.7 Community- Public- Private Partnership

The sustainable growth of tourism sectors both private and public partnership is inevitable. Both the sector to create a positive image of our country as a destination of

this millennium. Through the PPP tourism sector to benefits like employment generation, revenue and income and socio-economic development. There for this model also benefit to the local communities.

The sustainability of PPP model in tourism is great extended depend upon the involvement of local communities. Hence a new evolved in this regard is CPPP model (Ezreth 2014). As most of the tourist destination in Kerala is located in remote areas, involvement of local community in a meaningful manner is quite essential for the sustainability of the tourism projects. The rural villagers, local community and the tourism industry are mutually depends on one another. CPPP provide a unique opportunity to private entrepreneurs, government and local communities to collaborate themselves in achieving key policy objectives of tourism and the resultant benefits like job creation, generation of revenue and socio-economic development.

Key principles of CPPP are tourist satisfaction, industry profitability, community acceptance, socio-economic development of the local communities and environmental protection.

The benefits of CPPP are as follows:

- Insertion of community as an important part of tourism planning,
- Identify, maintain and support community ownership of tourism
- Exploitation of the complete potentiality of tourism
- Inculcate community pride
- Preservation and protection of tourist attraction
- Develops a culture of respects for cultural differences and human dignity
- Equitable distribution of the benefits of tourism to the stakeholders
- Preserve the inimitable character and culture of local areas
- Enhance standard of life
- Vigorous working relationship among government, communities and the industry.
- Promotes cultural exchanges
- Bring about economic development at community level.

The central followers involved in CPPP are government, private entrepreneurs and local communities. The government of the state is the most important group in the community-public-private-partnership. The main role of the government in this context is to act as the environmental custodian and as agency to ensure the welfare

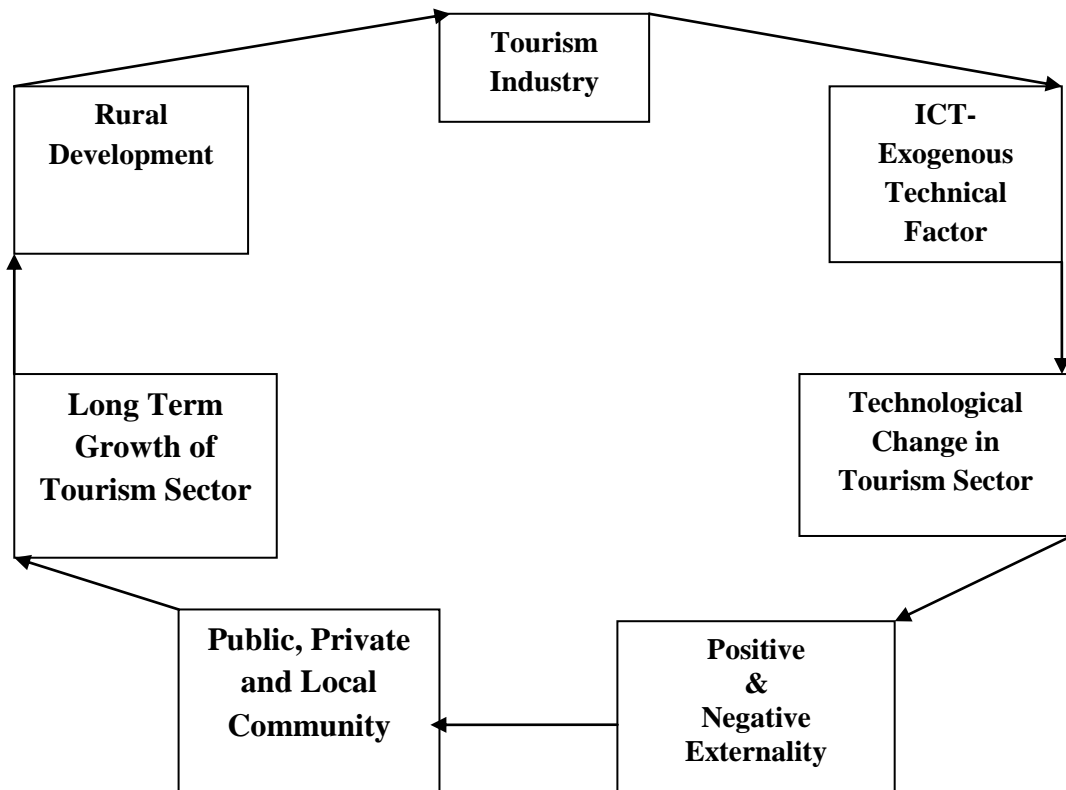
and economic development of the people. Hence, the essential duty of the government is to see that the local community along with the private entrepreneurs is fully concerned in the programme so that the benefits of tourism ultimately reach them. In CPPP, the private entrepreneurs should act different roles such as investors, developers, operators and principal risk taker in the projects. Entrepreneur is the provider of intellectual and capital investment required for the projects. The main role of local community is to provide an authentic cultural experience and to offer genuine hospitality. Through this genuineness, meaningful individual interactions and excellence service, the private entrepreneurs will find it easy to market their tourism products. They must take the genuine responsibility of preserving the biodiversity of their region and tourist attraction. Additionally, the local community should enlarge a sense of security to their guests, the tourists so that the tourists might feel at home here. The example of CPPP model in Kerala is Thenmala- Eco-Tourism.

The CPPP model can be considered as a best model for the promotion of tourism of the state. Kerala has a exciting possibility in utilizing the tribal and local people in fostering tourism promotion, which in term will develop a new development pattern of rural areas.

2.4 Analytical Background of the Concept of ICT Enabled Tourism

Tourism is a global economic activity. To improve this industry we need various innovation methods. Information and communication technology is an exogenous technical factor that provides technological changes in tourism sector. These technical changes of the tourism sector have both positive and negative externalities. The positive externalities of tourism industry such as job creation, development of infrastructure, increase the standard of living, poverty reduction and income generation. The negative externality is environmental degradation. All these externalities directly influenced by public, private and local people, which means the combination of Community-Public-Private-Partnership (CPPP). Their involvement leads to long term growth of tourism sector. It will lead to rural economic development. It can be making clear with the help of a chart.

Chart 2.1 Analytical Framework



In this chapter conclude that exogenous growth model is more suitable for this research work. Because, the technological progress is an exogenous factor for long term growth of tourism industry.

CHAPTER III
THE ROLE OF INFORMATION AND COMMUNICATION
TECHNOLOGY IN PROMOTING TOURISM IN KERALA

3.1 Introduction

In this chapter an attempt is made to trace the role of information and communication technology in promoting tourism in Kerala. The chapter has been divided into three sections. The first section describes the region, country, and state wise information and communication technology users and the role of ICT in promoting tourism in Kerala. The second part deals with foreign and domestic tourist arrival and earnings from tourism in Kerala and the last section determine the major findings of the analysis.

Tourism is one of the greatest growing industries of the world (Thipeswamy, 2016). The main benefits of tourism are generation of income and job creation. It is the most important sources of welfare for many regions and countries. The travel and tourism have most significant economic activity in the modern world. United Nation World Tourism Organization (UNWTO, 2008) defines, “tourism is a social, cultural and economic phenomenon which entails the movement of people to countries or places outside their usual environment for personal or business/professional purposes. These people are called visitors (which may be either tourists or excursionists; residents or non-residents) and tourism has to do with their activities, some of which imply tourism expenditure”.

Since tourism is a major industry in today’s world, many countries are competing to attract tourists through all means of communication, and such communication has become a major driver of touristic sectors all over the world. In order to attract prospective tourists, well-crafted communication strategies are needed, and since we are living in a digitalized world, it is necessary for the tourism industry to rely on Information and communication technology and especially the internet as tools of international communication (Oualid, 2014). ICT acting a key role in tourism, travel and hospitality industry. ICTs empower customers to identify, customize and purchase tourism products and support the globalization of the industry by providing tools for developing, managing and distributing offerings worldwide. ICTs provide a powerful tool that can bring advantages in promoting and strengthening the tourism industry’s strategy and operation (Bethapudi, 2013)

3.2 Tourism Industry- An Overview

3.2.1 International Tourists Arrival

Tourism is vast potential of the world. According to a report published by the World Tourism Organization in 2016, international tourist arrival reached a total of 1,235 million (Table 3.1).

In 2015, the international tourist arrival was 1,186 million, or an increase of 3.9 per cent as compared to 2014. By UNWTO region, Asia and the Pacific led growth in 2015 with a 9 per cent increase in international arrivals. Table 3.1 shows the regional share of international tourist arrivals for the period of 2008 to 2015

Table 3.1
Regional Share of International Tourist Arrivals for the Period of 2008 to 2015
(Arrivals in millions)

Region	2008	2009	2010	2011	2012	2013	2014	2015	2016*
World									
Arrivals	917.0	882.0	940.0	990.0	1039.0	1088	1134	1186	1235
% Annual change	2.6	-3.8	6.6	5.0	4.5	4.6	4.2	4.6	3.9
Africa									
Arrivals	44.4	46.0	49.4	49.9	51.6	54.6	55.2	53.5	57.8
% Annual change	2.8	3.7	7.3	0.3	4.9	4.2	1.1	-3.1	8.3
% Share in world	4.9	5.2	5.2	5.0	5.0	5.0	4.9	4.5	4.68
America									
Arrivals	147.8	140.6	149.8	157.1	162.5	167.6	181.9	192.6	199.9
% Annual change	2.7	-4.9	6.4	4.2	4.5	3.1	8.5	5.9	3.8
% Share in world	16.1	15.9	15.9	15.9	15.6	15.4	16.0	16.2	16.19
Asia and the Pacific									
Arrivals	184.1	180.9	203.8	218.1	233.6	249.9	264.4	279.2	308.7
% Annual change	1.5	-1.7	12.7	6.4	7.0	6.9	5.8	5.6	8.7
% Share in world	20.1	20.5	21.7	22.0	22.5	23.0	23.3	23.5	25.0
Europe									
Arrivals	485.2	461.5	476.6	509.4	540.9	567.1	580.2	607.6	615.2
% Annual change	0.9	-4.9	3.3	6.7	3.9	4.8	2.3	4.7	2.1
% Share in world	52.9	52.3	50.7	51.4	52.1	52.1	51.2	51.2	49.8
Middle East									
Arrivals	55.2	52.9	60.3	55.7	50.3	49.1	52.4	53.3	53.6
% Annual change	17.7	-4.3	14.1	-7.0	1.6	-3.0	6.7	1.7	-4.0
% Share in world	6.0	6.0	6.4	5.6	4.8	4.5	4.6	4.5	4.3
India									
Arrivals	5.28	5.17	5.78	6.31	6.58	6.97	7.68	8.03	14.57
% Annual change	4.0	-2.2	11.8	9.2	4.3	5.9	10.2	4.6	9.6
% Share in world	0.58	0.59	0.61	0.64	0.63	0.64	0.68	0.68	1.18

Source: World Tourism Organization (UNWTO), UNWTO World Tourism Barometer, June 2017

*: Provisional

The above table 3.1 gives the year-wise international tourism arrival by regions during the years 2008-2016. It is clear from the table that the tourist arrival reached from 917.0 million in 2008 to 1235 million in 2016. This is show that the tourism industry is growing faster than earlier. As compared to world tourist arrival, the lion share in the international tourist arrival has the European region. In 2016, which attract 615.2 million tourists and 49.8 per cent in international arrival of tourism in the world share. Followed by Asia and the Pacific with 308.7 million tourist with 8.7 per cent growth over 2015 and 25 per cent of in the international arrival of tourism in the world share. American region with 199.9 million tourists with growth of 3.8 per cent over 2015, Africa with 57.8 million tourists with a growth of 8.3 per cent over and Middle East with 53.6 million tourist with a negative growth of 4 per cent over 2015. The positive trend of tourist arrival during the year 2008 to 2016, even though since in 2009 there has a negative tourist arrival because of global economic crisis affected the tourism industry. The world tourist trends as same as followed by Indian tourism industry.

3.2.2 International Tourism Receipts

The world third largest export category is tourism. The world tourism organization report is that in 2016, expenditure by international visitors on accommodation, food and drink, entertainment, shopping and other goods and services in tourism destinations reached US\$ 1,220 billion. Tourism receipts pursued the in general trend in international tourist arrivals. The table 3.2 indicates the details about the world wide and regional wise international tourism receipts from various years.

Table 3.2
Regional Share of International Tourism Receipts

Region	2008	2009	2010	2011	2012	2013	2014	2015	2016
World									
Receipts	939	851.0	927.0	1030.0	1117	1199	1309	1260	1220
% Annual change	9.6	-9.4	8.7	11.1	7.2	7.3	9.2	-3.7	0.3
Africa									
Receipts	30.3	28.8	30.4	32.6	35.1	35.6	36.1	33.0	34.8
% Annual change	4.5	-4.9	7.0	7.0	7.3	5.9	9.0	-8.6	8.3
% Share in world	3.2	3.4	3.3	3.2	3.1	22.0	22.0	26.2	2.9
America									
Receipts	189	166.2	180.7	199.1	249.4	264.2	288.0	303.7	313.1
% Annual change	10.3	-12.1	8.7	10.2	26.0	5.9	9.0	5.5	2.7

change									
% Share in world	20.1	19.4	19.5	19.3	22.3	22.0	22.0	24.1	25.7
Asia and the Pacific									
Receipts	208.5	203.1	255.3	289.4	329.4	360.4	420.2	418.6	366.7
% Annual change	11.5	-2.6	25.0	13.4	10.3	9.4	16.6	-0.4	4.8
% Share in world	22.2	23.8	27.5	28.1	29.5	30.1	32.1	33.2	30.1
Europe									
Receipts	471.7	410.9	409.3	463.4	455.0	492.9	513.1	450.1	447.4
% Annual change	8.4	-12.9	-0.7	13.2	-2.5	8.3	4.1	-12.3	0.9
% Share in world	50.2	48.5	44.2	45.0	40.7	41.1	39.2	35.7	36.7
Middle East									
Receipts	39.9	42.0	51.7	45.9	47.7	45.8	51.6	54.4	57.6
% Annual change	15.3	5.3	22.5	-11.2	2.8	-4.0	12.7	5.4	-1.6
% Share in world	4.2	4.9	5.6	4.5	4.3	3.8	3.9	4.3	4.7
India									
Receipts	11.83	11.39	14.19	16.56	17.7	18.4	20.2	21.0	22.4
% Annual change	10.3	-3.7	24.6	16.7	6.9	4.0	9.8	4.1	14.0
% Share in world	1.26	1.34	1.54	1.61	1.58	1.53	1.54	1.67	1.8

Source: World Tourism Organization (UNWTO)

The above table 3.2 gives the year-wise receipts from international tourism by regions during the years 2008-2016. During the year 2016, Europe accounted for about 36.7 per cent of the world's total receipts from international tourism followed by Asia and the Pacific region 30.1 per cent, American region 25.7 per cent, Middle East region 4.7 per cent and African region about 2.9 per cent. The share of India in the world tourism receipt has remained between 1.26 per cent and 1.34 per cent during 2008-2009. However, it has been increasing steadily since 2012, which is 1.61 per cent. When compared to 2012, the share of India in world tourism receipts has shows a dismal trend up to 2014. After that the share has increased 1.67 per cent to 1.8 per cent during the year 2015 to 2016.

In 2016, the global pace France received more visitors than any other countries of the world that is 86.9 million visitors came to that country. Following France, the United States and Spain hold the number two spot for the world most visited countries that are 75.6 million.

Other most visited countries are China (59.3 million), Italy (52.4 million), United Kingdom (35.6 million), Germany (35.6 million), Mexico (35 million), Thailand (32.6 million), Malaysia (26.8 million) etc.

3.2.3 Region Wise Internet Usage and Population

Tourism industry could achieve more opportunities in the market from the make use of the internet (Gratzer and et al, 2004). Before examining the role of ICT in promoting tourism, let us examine region wise internet usage and population from internet world statistical report. The region wise internet usage and population is clearly shown in the Table 3.3

Table 3.3

Region Wise Internet Usage and Population

Region	Population (2018 Est)	Population (% Of World)	Internet Users (31 Dec 2017)	Internet Users Penetration (%)	Growth (2000-2018)
Africa	1287914329	16.9	453329534	10.9	9941
Asia	4207588157	55.1	2023630194	48.7	1670
Europe	827650849	10.8	704833752	17.0	570
Latin America	652047996	8.5	437001277	10.5	2318
Middle East	254438981	3.3	164037259	3.9	4893
North America	363844662	4.8	345660847	8.3	219
Australia	41273454	0.6	28439277	0.7	273
World Total	7634758428	100	4156932140	100	1052

Source: www.internetworldstats.com

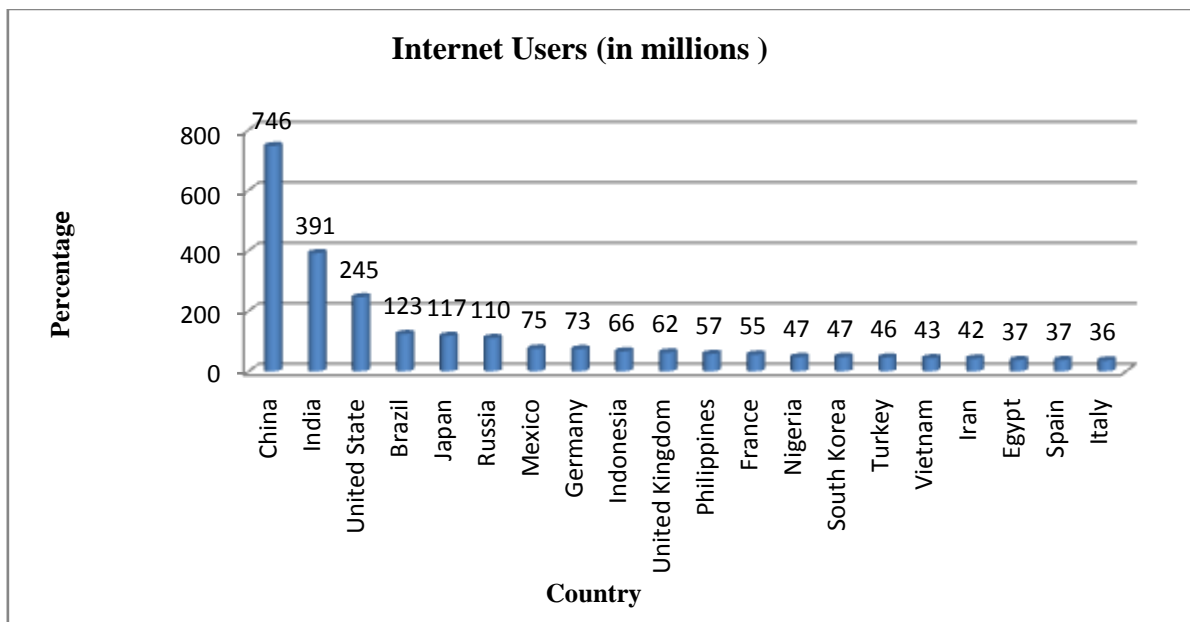
From the table 3.3, it is clear that, the region wise internet users and population. The estimated population on 2018 is that out of the total population (7634758428), 55.1 per cent (4207588157) are live in Asian region and rest of the world population is only 44.9 per cent (3,427,170,271). The internet user's per centage penetration as on 31 December 2017 has 48.7 per cent only in Asian region. Followed by Europe (17 per cent), Africa (10.9 %), Latin America (10.5 %), North America (8.3 %), Middle East (3.9 %) and Australia (0.7 %) respectively. As compared to 2000 to 2018, the growths of internet users are increasing trend in every region. So it is identify that Asian region has more number of internet users as compared to rest of the world.

3.2.4 Countries with the Highest Number of Internet Users

Over the last two decades, the number of global internet users has increased. This has a measure of economic performance and it would be possible for all countries. The internet has been accompanied in many cases. There is a significant development of information and communication technology and economic sectors. Tourism is one of the important economic sectors. The Figure 3.1 shows the countries with the highest number of internet users in world as on February 2018.

Figure 3.1

Top 20 Countries with Highest Number of Internet Users on February 2018



Source: www.worldatlas.com

The Figure 3.1 highlights that the top 20 countries with highest number of internet users. China has the highest number of internet users in the world, with over 746 million users and followed by India, that is 391million of internet users. The 20th rank for the position of the internet user has Italy. The internet users in Italy have 36 million. It is clear from the table 3.4 that the India has the world’s second highest number of internet users in the world. The worldatlas reported that the internet penetration has become a more general resource for the travel research and booking. The growth of internet users worldwide has been accompanied by greater use of the internet for travel research and booking.

3.2.5 Tourism in India

Tourism in India has growing rapidly and it is an important service for the countries development. In 2017, the World Travel and Tourism Council calculated that tourism generate 9.4 per cent of India's GDP and supported 41.622 million job opportunity and 8 per cent of total employment given to the economy. Ministry of tourism is the nodal agency for the formulation of national policies and programs and for the co-ordination of activities of various Central and State Government Agencies and Union Territories and the private sector for the improvement and encouragement of tourism in the country. Ministry of tourism provides publicity and events related to tourism. All matters pertaining to organizing events, information technology up gradation and to printing of posters, brochures, banners etc, release of advertisement that is print as well as electronic. Ministry of tourism brings out brochures, leaflets, maps, films, CDs etc on various topics as part of the marketing and publicity of tourism. These are the clear information about the destination.

Under the control of Ministry of Tourism, 14 offices overseas endeavors to position in tourism generating markets in India. The marketing objective of overseas offices is to increase the India's share of the global tourism market. The promotional efforts undertaken overseas included advertisement in print and electronic media, participation in fairs and exhibition, organizing seminar, workshop, road shows and India evenings, printing of brochures and collaterals, brochures support and joint advertisement with travel agents, tour operators, inviting media and travel trade to visit to the country under the hospitality program etc. An integrated marketing and promotional strategy and a synergized campaign in association with the Travel Trade, State Government and Indian Missions.

Incredible India was maintained by the government of India since 2002. It has an international tourism marketing campaign to promote tourism in India. The campaign was accomplished globally and received gratitude from tourism industry observers and travelers alike. The campaign also attracted criticism also. Some observers felt that it had failed to cover several aspects of India which would have been attractive to the average tourists. Local populations are important factor for tourism development. In 2008, the ministry of tourism launched a campaign targeted at local population to educate them regarding good behavior and manners when dealing with foreign tourists. The campaign which was titled "Atithidevo Bhava". The Sanskrit word means "Guests are like God". The aim of this campaign was creating awareness about the effects of tourism and sensitizing the local population about

preservation of India’s heritage, culture, cleanliness and hospitality. It also attempted to instill a sense of responsibility towards tourists and reinforce the confidence of foreign tourists towards India as a preferred holiday destination. In 2017, the brand ambassadors for the Incredible India Campaign are actor Amitabh Bachchan and actress Priyanka Chopra.

In recent years India has gained good potential growth in tourism industry. International understanding and cultural diversity is the key point of Indian tourism by travelers. The global tourism industry provides foreign exchange earnings and revenue to the country.

3.2.6 Foreign Exchange Earning in India

Foreign exchange earnings refers to the monetary gain made by selling goods and services or by exchanging currencies in the global market. Foreign exchange earnings are dominated in convertible currencies. Table 3.4 shows the data regarding the Foreign Exchange Earnings (FEEs) from tourism in India.

Table 3.4
Foreign Exchange Earnings from Tourism in India during 2008-2017

Year	FEE in Rs.terms		FEE in US\$ terms	
	Rs Crore	% change over previous year	US\$ Million	% change over previous year
2008	51294	-	11832	-
2009	53700	4.7	11136	-5.9
2010	64889	20.8	14193	27.5
2011	77591	19.6	16564	16.7
2012	94487	21.8	17737	7.1
2013	107671	14	18445	4
2014	123320	14.5	20236	9.7
2015	135193	9.6	21071	4.1
2016	154146	14	22923	8.8
2017	180379	17	27693	20.8

Source: India Tourism Statistics

The Table 3.4 indicate that the increasing trend of Foreign Exchange Earnings. Here the FEE in rupees terms and dollar terms. In 2008, the FEE in rupees term is 51294 crore, while it has increased above three fold in 2017. The rupees term of FEE have per centage changeover previous years also increasing trend. As the same trend is shown in the US dollar in term also. That shows in 2008, the FEE has 11832 million. It has increased above two fold increase in 2017. In 2009, the per centage change of FEE over previous year has negative sign. It is because of global economic crisis affected the tourism industry. Even though the

foreign exchange earning has an increasing trend and its changes positively affected by Indian tourism sector.

3.2.7 Foreign Tourist Arrival in India

Foreign tourist arrival in India continued to grow from year by year. Table 3.5 shows the data regarding the foreign tourist arrival in India

Table 3.5
Foreign Tourist Arrival in India during 2001-2017

Year	FTA in India (in million)	Per centage change over previous
2001	2.54	-4.2
2002	2.38	-6.0
2003	2.73	14.3
2004	3.46	26.8
2005	3.92	13.3
2006	4.45	13.5
2007	5.08	14.3
2008	5.28	4.0
2009	5.17	-2.2
2010	5.78	11.8
2011	6.31	9.2
2012	6.58	4.3
2013	6.97	5.9
2014	7.68	10.2
2015	8.03	4.5
2016	8.80	9.7
2017	10.18	15.6

Source: Bureau of Immigration, Government of India

From the Table 3.5, it is clear that the foreign tourist arrival in India during 2011 to 2017. In the year 2011, the foreign tourist arrival in India was 2.54 million. It has growing continuously. Then in 2017 the foreign tourist arrival was 10.18 million. In 2001, 2002 and 2009 the FTA in India was negative growth. While the other years, viz 2003 to 2007, 2010, 2014 and 2017 saw double-digit positive growth. 2008, 2011 to 2013, 2015 and 2016 saw single –digit positive growth. The decline of 4.2 and 6 in the years 2001 and 2002 was the 11th September events (Terrorist attack on world trade centre). That is why the year 2001 being a problem year for the tourism industry. This affected the next year 2002 also. In 2009 the FTA was slow down because of global economic crisis affected the foreign tourist arrival and the tourism service sector also.

3.2.8. Top 15 Source Countries for FTAs in India during 2015 and 2016

The below Table 3.6 clearly indicate that the per centage shares and ranks of top 15 source countries of India during 2015 and 2016.

Table 3.6
Top 15 Source Countries for FTAs in India during 2015 and 2016

Rank in 2015	Country	FTAs in India in 2015	% share in 2015	Rank in 2016	Country	FTAs in India in 2016	% share in 2016
1	United State	1213624	15.12	1	Bangladesh	1380409	15.68
2	Bangladesh	1133879	14.13	2	United State	1296939	14.73
3	United Kingdom	867601	10.81	3	United Kingdom	941883	10.70
4	Sri Lanka	299513	3.73	4	Canada	317239	3.60
5	Canada	281306	3.50	5	Malaysia	301961	3.43
6	Malaysia	272941	3.40	6	Sri Lanka	297418	3.38
7	Australia	263101	3.28	7	Australia	293625	3.33
8	Germany	248314	3.09	8	Germany	265928	3.02
9	France	230854	2.88	9	China	251313	2.85
10	Japan	207415	2.58	10	France	238707	2.71
11	China	206322	2.57	11	Russian Federation	227749	2.59
12	Russian Federation	172419	2.15	12	Japan	208847	2.37
13	Nepal	154720	1.93	13	Singapore	163688	1.86
4	Singapore	152238	1.90	4	Nepal	161097	1.83
15	Pakistan	124924	1.56	15	Afghanistan	123330	1.40
Total Top15 countries		5829171	72.62	Total Top 15 countries		6470133	73.49
Other countries		2197962	27.38	Other countries		2334278	26.51
Grand total		8027133	100	Grand total		8804411	100

Source: Bureau of Immigration, Government of India

From Table 3.6 it is clear that during the period of 2016's top 15 countries FTAs in India mostly same as the year 2015. With minor changes in the rankings of some countries. FTA in India from United State were the highest (15.12 per cent) during 2015, the second place is Bangladesh (14.13 per cent), followed by United Kingdom (10.81 per cent), Sri Lanka (3.73 per cent), Canada (3.50 per cent), Malaysia (3.40 per cent), Australia (3.28 per cent), Germany (3.09 per cent), France (2.88 per cent), Japan (2.58 per cent), China (2.57 per cent),

Russian Federation (2.15 per cent), Nepal (1.93 per cent), Singapore (1.90 per cent), Pakistan (1.56 per cent). During the year 2016 FTA in India from Bangladesh were highest (15.68 per cent), followed by United State (14.73 per cent), United Kingdom (10.70 per cent), Canada (3.60 per cent), Malaysia (3.43 per cent), Sri Lanka (3.38 per cent), Australia (3.33 per cent), Germany(3.02 per cent), China(2.85 per cent), France (2.71 per cent), Russian Federation (2.59 per cent), Japan(2.37 per cent), Singapore(1.86 per cent), Nepal (1.83 per cent), Afghanistan (1.40 per cent). The share of FTA s from top 15 countries during the year 2016 was 73.49 per cent as compared to 72.62 per cent in 2015.

3.2.9 Domestic and Foreign Tourist Visits in India

Ministry of tourism compiles the number of Domestic and foreign tourist visits to different State and Union Territories based on the information received by them.

The below Table 3.7 indicate the domestic and foreign visits to states and union territories during 2001-2016

Table 3.7
Domestic and Foreign Tourist Visits to States/UTs.1991-2016

Year	Tourist visit		Tourist visit	
	Domestic	Annual growth rate (per cent)	Foreign	Annual growth rate(per cent)
2001	236469599	7.4	5436261	-7.8
2002	269598028	14.0	5157518	-5.1
2003	309038335	14.6	6708479	30.1
2004	366267522	18.5	8360278	24.6
2005	392044495	7.0	9949671	19.0
2006	462439634	18.0	11747937	18.1
2007	526700493	13.9	13267612	12.9
2008	563034107	6.9	14380633	8.4
2009	668800482	18.8	14372300	-0.1
2010	747703380	11.8	17910178	24.6
2011	864532718	15.6	19497126	8.9
2012	1045047536	20.9	18263074	-6.3
2013	1142529465	9.3	19951026	9.2
2014	1282801629	12.92	22334031	13.12
2015	1431973794	11.6	23326163	4.4
2016	1613551505	12.68	24707732	5.92

Source: India Tourism Statistics

The Table 3.7 reveals that the statistics on domestic and foreign visits to various States and UTs during the years 1991 to 2016. During the period from 2001 to 2016, there have been a continues increase in domestic tourist visits and with the Compound Annual Growth Rate

(CAGR), that being 13.63 per centage. Like domestic tourist visit, the foreign tourist visits too have been increased over the years. Even though, there was a decline in the years 2001, 2002, 2009 and 2012. The reason for the decline of tourist arrival was the attack of terrorism and global economic crisis. The foreign tourist visits to all States/UTs during 2001 to 2015 witnessed a CAGR of 8.71 per cent. The year 2015 witnessed a growth of 11.63 per centages in domestic tourist visits over the year 2014. During the year 2016, the visits by foreign tourists registered growth of 5.92 per centages over 2015.

3.2.10 State and Union Territory Wise Domestic and Foreign Tourist Visits in 2015-2016

In the Table 3.8 shows the State/UT- wise domestic and foreign tourist visit in 2015 and 2016

Table 3.8
State and Union Territory Wise Domestic and Foreign Tourist Visits in 2015-2016

Sl. No	State/UT	2015				2016			
		Domestic	%Share	Foreign	%Share	Domestic	%Share	Foreign	%Share
1	Andaman & Nicobar Island	296684	0.02	14674	0.06	384552	0.02	15466	0.06
2	Andhra Pradesh	121591054	8.49	237854	1.02	153163354	9.49	341764	1.38
3	Arunachal Pradesh	352067	0.02	5705	0.02	385875	0.02	6598	0.03
4	Assam	5491845	0.38	24720	0.11	5160599	0.32	12685	0.05
5	Bihar	28029118	1.96	923737	3.96	28516127	1.77	1010531	4.09
6	Chandigarh	1073842	0.07	29538	0.13	1182504	0.07	31549	0.13
7	Chhattisgarh	18327841	1.28	6394	0.03	16534471	1.02	9220	0.04
8	Dadra & Nagar Haveli	527782	0.04	1797	0.008	589074	0.04	1891	0.008
9	Daman & Diu	790911	0.06	5858	0.03	826201	0.05	5669	0.02
10	Delhi*	25258051	1.76	2379169	10.20	28460832	1.76	2520083	10.20
11	Goa	4756422	0.33	541480	2.32	5650061	0.35	680683	2.75
12	Gujarat	36288463	2.53	284973	1.22	42252909	2.62	343752	1.39
13	Haryana	7395496	0.52	303118	1.30	7382995	0.46	331291	1.34
14	Himachal Pradesh	17125045	1.20	406108	1.74	17997750	1.12	452770	1.83
15	Jharkhand	33079530	2.31	167785	0.72	33389286	2.07	169442	0.69
16	Jammu Kashmir	9145016	0.64	58568	0.25	9414579	0.58	63207	0.26
17	Karnadaka	119863942	8.37	636502	2.73	129762600	8.04	461752	1.87
18	Kerala	12465571	0.87	977479	4.19	13172536	0.82	1038419	4.20
19	Lakshadweep	17241	0.001	1173	0.005	8716	0.0005	753	0.003
20	Madhya Pradesh	77975738	5.45	421365	1.81	150490339	9.33	363195	1.47
21	Maharashtra*	103403934	7.22	4408916	18.90	116515801	7.22	4670049	18.90
22	Manipur	146169	0.01	3260	0.01	150638	0.01	3064	0.01
23	Meghalaya	751165	0.05	8027	0.03	830887	0.05	8476	0.03

24	Mizoram	66605	0.004	798	0.003	67238	0.004	942	0.004
25	Nagaland	64616	0.005	2769	0.01	58178	0.003	3260	0.01
26	Odisha	11786117	0.82	66971	0.29	12842766	0.80	76361	0.31
27	Puducherry	1297192	0.09	106153	0.46	1398289	0.09	117437	0.48
28	Punjab	25796361	1.80	242367	1.04	38703326	2.40	659736	2.67
29	Rajasthan	35187573	2.46	1475311	6.32	41495115	2.57	1513729	6.13
30	Sikkim	705023	0.05	38479	0.16	747343	0.05	66012	0.27
31	Tamil Nadu	333459047	23.29	4684707	20.08	343812413	21.31	4721978	19.11
32	Telangana	94516316	6.60	126078	0.54	95160830	5.90	166570	0.67
33	Tripura	363172	0.02	34886	0.15	370618	0.02	36780	0.15
34	Uttar Pradesh	204888457	14.31	3104062	13.31	211707090	13.12	3156812	12.77
35	Uttarakhand	29496938	2.06	105882	0.45	30505363	1.90	117106	0.05
36	West Bengal	70193450	4.90	1489500	6.39	74460250	4.61	1528700	6.19
	Total	1431973794	100	23326163	100	1613551505	100	24707732	100

Source: State/Union Territory Tourism Department

*: Estimated using all India Growth rate.

The above Table 3.8 highlight that the number of domestic and foreign tourist visits to different States and Union Territories during the year 2015 and 2016. During the year 2016, Tamil Nadu state has the highest share in domestic tourist visit in India. That means 21.31 per centage share of total tourist visit in State and Union Territories and it is followed by Uttar Pradesh (13.12 per cent), Andhra Pradesh (9.49 per cent), Madhya Pradesh (9.33 per cent) and Karnataka (8.04 per cent). These are the top five states in domestic tourist visits in the country with their respective visit being 343.8 million, 211.7 million, 153.2 million, 150.5 million and 129.8 million. . In respect of the top five State and Union Territories has the foreign tourist visits in 2016 were Tamil Nadu (19.11 per cent), Maharashtra (18.9 per cent), Uttar Pradesh (12.77 per cent), Delhi (10.2 per cent) and West Bengal (6.19 per cent) with their respective tourist visits being 4.72 million, 4.67 million, 3.16 million, 2.52 million and 1.53 million. There five state and union territories accounted for about 67.18 per centages of the total foreign tourist visits to the States/UTs in the country. In 2016, most of the States/UTs have generally shown increase in the number of both domestic and foreign visit. In 2016n the position of rank in Kerala both domestic and foreign visit have 18 and 7 respectively. The per centage shares of both domestic and foreign tourist arrivals in 2016 were 0.82 and 4.20 per centage respectively. In analyzing the performance of other state in India, Kerala is the first state in India to declare tourism as an industry. Therefore in this context, there is a need to analyze the information and communication technology enabled tourism in Kerala.

3.2.11. Tourism in Kerala

Tourism is the backbone of the tourism industry. The tag line of Kerala tourism is “God’s own country.” Tourism and information technology sectors were the two major service sectors making maximum contribution to the state economy (Nandakumar,2016). Kerala is blessed with varied geographical features that have made it one of the most sought after destinations in Asia. Tourism is the hallmark of Kerala’s economic development and a principle contributor to the State’s economy. As now Kerala recognized internally as a tourist destination. Tourism enabled balanced and sustainable regional growth by generating income and creating employment opportunities especially in trade, transport and hospitality sectors. The sector earns foreign exchange to the state and promote traditional industries (Economic Review,2017). Now a day’s tourism contributes 10 per cent of the State GDP. The foreign exchange earnings for the year 2017 are Rs. 8392.11 crores and total revenue (including direct and indirect) from tourism during 2017 is Rs. 33383.68 crores.

In 2017, United Nations General Assembly announced as the International Year of Sustainable Tourism for Development. During the 12th Five Year Plan, for the achievement of tourism, an amount of Rs.1,101.4 crore was the budgeted. During this period expenditure incurred was Rs.1,046.37 crore. That means 95 per centage fund was used. In addition to this, funds were mobilized through supplementary demand for grants. Central financial assistance was also availed for destination development, fairs and events, and research oriented projects etc. The important scheme implemented the 12th Five Year Plan are as follows:

1. Upgradation and creation of infrastructural amenities. Improvements of major destinations were taken up through master plans. Department concentrated on providing basic facilities at destinations and ensuring safety and security of tourists.
2. In order to retain the market supremacy, Kerala Tourism launched number of new and innovative marketing campaigns in both international and domestic markets.
3. Kerala Tourism Promotion and Marketing Mechanism is another major implementation. The department of tourism has been a regular participant in national and international tourism trade and fairs.
4. Muziris Heritage and Spice Route project, the first phase of this project has been completed. This project covers networking of 100 museums, palaces, forts, temples,

churches, synagogues, other historical monuments through waterways. Also the spice route initiative of the Department in association with UNESCO and other partner countries is developing into a unique global tourism product centered on the state.

5. Kerala Responsible Tourism initiative for the development of community participation in tourism.

The government department/agencies coming under the tourism sector are Department of tourism, Kerala Tourism Development Corporation (KTDC), Kerala Tourism Infrastructure Ltd (KTIL), Bekal Resorts Development Corporation (BRDC), Eco Tourism Directorate, Kerala Institute of Tourism and Travel Studies (KITTS), Food Craft Institute (FCI), State Institute of Hospitality Management (SIHM) etc.

Below table 3.9 give details of annual plan outlay and expenditure in 12th Five-Year Plan.

Table 3.9
Annual Plan Outlay and Expenditure in 12th Five Year Plan
(in crore)

Sl.No	Department/Agency	12th Five Year Plan 2012-17		Annual Plan 2017-18	
		Outlay	Expenditure	Outlay	Expenditure (as on 30/9/2017)
1	Department of Tourism	992.85	962.59	316.51	97.81
2	Kerala Tourism Development Corporation(KTDC)	32.00	19.00	7.20	
3	Kerala Tourism Infrastructure Ltd((KTIL)	11.00	8.91	1.67	
4	Bekal Resorts Development Corporation(BRDC)	7.00	3.45	3.00	
5	Eco Tourism Directorate	17.05	15.44	3.85	
6	Kerala Institute of Tourism and Travel Studies(KITTS), Food Craft Institute (FCI), State Institute of Hospitality Management (SIHM)	41.50	36.98	10.50	.5
Total		1101.40	1046.37	342.73	98.31

Source: Annual Plan Document, Kerala State Planning Board

The major information and communication technology enabled tourism achievement of the schemes implemented during the 12th Five Year Plan are as follows

- Maya, the first ever WhatsApp campaign by a state
- Digital campaigns-Dream Deals, Social Media Optimization and Trip Advisor Campaign
- Website in 11 international and 10 Indian languages
- Responsive design of the website
- Developed virtual movies of important destinations and virtual video wall displaying best visuals of Kerala
- Live webcast of festivals and events of HD quality in the website
- Developed a geo-coded calendar of the 100 Theyam festivals in Malabar, A geo-coded monsoon calendar detailing the festivals and events held during monsoon season and an advanced online tour planner
- A new message board for travel industry with advanced features and simplified registration procedures
- Online accreditation facility for tour operators
- Audio visual guide on Kerala cuisine

Kerala tourism has received several awards and citations for tourism related activities. These awards are the undeviating result of the concerted efforts of both the public and private sector working together to take Kerala's tourism industry to a world class level.

3.2.12. The Role of ICT in Promoting Tourism in Kerala

Kerala tourism has been preserving its peak position in the use of IT and web presence. Kerala is the first digital state in India. Comparing to other state in India, for more than decade Kerala tourism has been the number one position in web traffic among tourism board websites. In provisions of web traffic, the site was among the top 10 tourism websites in the Asia Pacific and the Middle East. The site contract more than 3 million visits per annum. The value of the visits to website is very high. On average visitors watch more than 4 pages in a visit and spend more than 4 minute at the site.

The Kerala tourism website address is www.keralatourism.org. In 1998, Kerala tourism started a website. The website is available in 11 international languages and 10 Indian languages. The site offers 1500 images and 3000 videos. There are more than 100,000 pages. This website is the online encyclopedia on Kerala, with special focus on travel-oriented content. It has reduced the cost of services to negligible level. Kerala tourism is found in using digital marketing tools. It brought out an interactive CD-ROM (Compact Disc used as a

Read-Only optical Memory device) on destination Kerala playable on Windows and Mac as early as 1998 for destination promotion. It was translated into many languages such as French, German, Japanese and Hindi. Across the globe, more than 2 lakhs copies of the CD have been spread along with travel industry. It was a little encyclopedia on Kerala and was an exclusive experiment in destination promotion. This was designed and developed by Invis (India Vision) Multimedia (www.invismultimedia.com).

As early as in 1998 Kerala Tourism started using online videos. These videos of Kerala get very good viewership. Consequently Kerala Tourism started a brand channel on YouTube (youtube.com/keralatourism) and uploaded more than 3000 video clips. Now every year, it gets 3-4 million video views for the destination. In 2002, before Google Earth, Kerala tourism started developing GIS maps for travelers. The project added places of tourism importance infrastructure and tourism facilities as multiple layers to the map.

The first Wireless Application Protocol (WAP) site of Kerala tourism m.keralatourism.org was launched in 2006. This helped the users to access the site on mobile phone. Yet in 2013, Kerala tourism chooses reactive design with HTML5. Here the website identifies the equipment being used for web access and offers a design version accordingly. This helped the viewers to access the site through any device and get a design in tune with the format of the device being used. The different versions of the websites are mobile phone, iPad and Desktop PC etc.

An online Painting Competition for children is one of the main initiatives of Kerala tourism. This painting competition was the memory of Edmund Thomas Clint (1967-83) a child prodigy who created 25,000 pictures during his life which lasted only 2522 days. Children from any part of the world can participate and they have to do a painting of Kerala for which they can get reference from the website www.keralatourism.org. The entire can be submitted online and the competition attracted many people to the website. For promoting Ayurveda and Yoga the website produced film. Kerala tourism has made a Mobile App Idea contest. Participants were asked to submit innovative and creative ideas that promote tourism to Kerala. This was one of the most exclusive campaigns of the year. The competition fetched more than 340 ideas.

Comparing to a number of international search engines rate www.keralatourism.org as the earliest site for information on Kerala since 2003. In both Google and Yahoo searchers, www.keralatourism.org comes first in a search with the keyword 'Kerala'. The monthly e-newsletter of Kerala Tourism goes worldwide. It has become a periodic online representative of Kerala Tourism, enabling the travel fraternity to keep themselves updated on 'God's Own

Country'. This website disseminates useful information to travelers around the world through a two-way process and also keeps track of the varying interests of modern-day travelers, by regular user friendly interaction like emails, message board, tour planner, online audio-visual galleries, video quizzes, live webcasts, e-books and e-newsletters etc. the online campaign undertaken by Kerala Tourism focuses on the profile of various sections of travelers, especially to invite the attention of high net worth tourists and business travelers and the campaign focuses on both domestic as well as international travelers. The Kerala tourism website won several awards. During the years 2000-2001, 2002-2003, 2005-2006, 2008-2009, 2010-2011 and 2012-2013, Kerala tourism bagged the prestigious award of excellence instituted by the government of India for the most innovative use of technology and best tourism website portal award. The international recognition to tourism online initiative came in the form of the Pacific Asia Travel Association's (PATA) Gold Award for the best E-Newsletter during the years of 2005, 2013, 2014, 2016 and the best website award in 2010. The highlight of Kerala tourism websites are new responsive design, multiple language version, message board with advanced features, advanced online tour planner, online promotional movies of Kerala Tourism, online high-resolution photo gallery, web content for exploring destination etc. The IT sector increasing day by day. For linking tourism and information and communication technology services the economy to get fruitful positive result.

3.2.13. Trends in Domestic and Foreign Tourist Arrival in Kerala

Below table 3.10 shows both domestic and foreign tourist arrival in Kerala shows increasing trends. In the year 2017, the domestic as well as foreign tourist arrivals are 14673520 and 1091870 respectively. Comparing to the previous years the arrival increased 11.39 per cent and 5.15 per cent respectively. Almost the foreign and domestic tourist arrival in Kerala was increasing trend. The exception cases faced by foreign tourist in the year 2001 (-0.53%) and domestic tourist in 2005 (-0.43 per cent). The negative trend of tourist arrival because of terrorist attack in the world trade centre and due to the after effect of tsunami etc. Table 3.10 reveals the trend of foreign and domestic tourist arrival in Kerala during 2001-2017

Table 3.10
Foreign and Domestic Tourist Arrival in Kerala

Year	Foreign Tourist	% of increase	Domestic Tourist	% of increase
2001	208830	-0.53	5239692	4.52
2002	232564	11.37	5568256	6.27
2003	294621	26.68	5871228	5.44
2004	345546	17.28	5972182	1.72
2005	346499	0.28	5946423	-0.43
2006	428534	23.68	6271724	5.47
2007	515808	20.37	6642941	5.92
2008	598929	16.11	7591250	14.28
2009	557258	-6.96	7913537	4.25
2010	659265	18.31	8595075	8.61
2011	732985	11.18	9381455	9.15
2012	793696	8.28	10076854	7.41
2013	858143	8.12	10857811	7.75
2014	923366	7.60	11695411	7.71
2015	977479	5.86	12465571	6.59
2016	1038419	6.23	13172535	5.67
2017	1091870	5.15	14673520	11.39

Source: Kerala Tourism Statistics 2001 -2017
Department of Tourism, Government of Kerala

The above Table 3.10 very clearly indicates that there is a considerable rate of growth in both the domestic and foreign tourist arrivals in Kerala. The prominent use of technology in tourism sector and presence of social media is the main reason for this growth.

3.2.14. Earning from Tourism in Kerala

Tourism industry is considered as one of the alternative to economic growth of the state. Economically it creates employment opportunities, national income and foreign exchange earnings (Babitha and Ramachandran,2018). The latest tourism statistics of tourist earning for the year 2017 as shows that foreign exchange earnings for the year 2017 are Rs. 8392.11 crores showing an increase of 8.29 per cent over the figure of year 2016 as 7749.51 crores. Total revenue (including direct and indirect) from tourism during 2017 is Rs. 33383.68 crores, showing an increase of 12.56 per cent over previous year's figure Rs. 29658.56 crores.

Table 3.11
Earnings from Tourism in Kerala (in crores)

Year	Foreign Exchange Earnings (Rs.in crore)	% variation over previous years	Total revenue Generated From tourism (direct & indirect) (Rs.in crore)	% variation over previous years
2001	535.00	1.85	4500.00	9.58
2002	705.67	31.90	4931.00	20.42
2003	983.37	39.35	5938.00	12.83
2004	1266.77	28.82	6829.00	15.01
2005	1552.31	22.54	7738.00	13.31
2006	1988.40	28.09	9126.00	17.94
2007	2640.94	32.82	11433.00	25.28
2008	3066.52	16.11	13130.00	14.84
2009	2853.16	-6.96	13231.00	0.77
2010	3797.37	33.09	17348.00	31.12
2011	4221.99	11.18	19037.00	9.74
2012	4571.69	8.28	20430.00	7.32
2013	5560.77	21.63	22926.55	12.22
2014	6398.93	15.07	24885.44	8.54
2015	6949.88	8.61	26689.63	7.25
2016	7749.51	11.51	29658.56	11.12
2017	8392.11	8.29	33383.68	12.56

Source: Kerala Tourism Statistics 2001 -2017
Department of Tourism, Government of Kerala

In the above table 3.11 clearly highlight that the earning from tourism in Kerala. The foreign exchange earnings and total revenue generated from tourism have increasing trend. In 2009 global crisis negatively affected the foreign exchange earnings. Like every industry tourism also affected the global economic crisis. During 2001, the total revenue generated from tourism (both direct and indirect) and foreign exchange earnings were 4500 crore and 535 crore respectively. Which increased during 2017 as huge growth of 33383.68 crore and 8392.11 crore. It indicates that almost eightfold increase in foreign exchange earnings.

3.2.15. District wise Tourist Arrival in Kerala

Both foreign and domestic tourist arrival in Kerala has increasing trend. The district wise statistics of foreign tourist arrival in Kerala during the period of 2005 to 2014 shows in the below Table 3.12.

Table 3.12
District wise Foreign Tourist Arrival in Kerala

Sl. No	District	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Proportion to total
South Kerala												
1	TVM	119940	151578	193924	234797	176571	204049	224387	242739	268444	289612	31.36
2	KLM	6813	7918	8854	8728	8010	8211	9317	9976	11403	12467	1.35
3	PTA	349	346	547	349	599	829	964	1253	1255	1379	0.15
4	ALP	30274	36407	40463	49866	33493	41977	46019	50760	55364	60337	6.53
	Total	157376	196249	243788	293740	218673	255066	280687	304728	336466	363795	39.39
Central Kerala												
5	KTM	20017	26543	27358	27230	24623	32561	37573	40926	40932	44366	4.8
6	EKM	108773	44583	165125	193013	239364	277675	308674	330390	352314	372997	40.4
7	IDKI	39378	131767	46463	51025	38185	48295	55778	62387	68880	77905	8.44
8	THR	2421	4142	4645	3398	3452	4326	5011	5946	6459	7391	0.8
	Total	170589	207035	243591	274666	305624	362857	407036	439649	468585	502659	54.44
North Kerala												
9	PKD	801	809	615	785	1170	1270	1331	1557	1874	2093	0.23
10	MLP M	5115	7109	9766	10166	13499	16915	18394	19417	20569	21613	2.34
11	WYN D	942	2611	4093	5638	5362	6575	7567	9541	10844	11795	1.28
12	KKD	8420	11154	10020	9966	7513	9017	9892	10476	10489	11313	1.23
13	KNR	2090	2730	3067	3143	4186	5886	6038	6257	6972	7563	0.82
14	KSD	1166	837	868	825	1231	1679	2040	2071	2344	2535	0.27
	Total	18534	25250	28429	30523	32961	41342	45262	49319	53092	56912	6.17
	Grand Total	346499	428534	515808	598929	557258	659265	732985	793696	858143	923366	100

Source: Kerala Tourism Statistics 2006-2014

Department of Tourism, Government of Kerala

The above Table 3.12 indicates that district wise foreign tourist arrival in Kerala. In year by year, the foreign tourist arrival was an increasing trend. As the region wise classification of Kerala has South Kerala, Central Kerala and North Kerala. In South Kerala the proportion of foreign tourist arrival in 2014 has highest in Trivandrum (TVM). That means 31.36 per cent of the foreign tourists are arrived in this district. But in the same region, very less foreign tourist arrival has Pathanamthitta (PTA). That is 0.15 per centage. In the case of Central Kerala, foreign tourist arrival was high in Eranakulam (EKM), which is 40.4 per cent of the total proportion of the tourist. The foreign tourist arrival was less in Thrissur (THR). In 2014, only 0.8 per centage of the foreign tourist are arrived in THR. In the North Kerala, highest proportion of foreign tourist are arrived in Malappuram district (MLPM) and the lowest

proportion are in Kasarkode (KSD). That has 2.34 per centages and 0.27 per centages respectively. To comparing the foreign tourist arrival in Kerala, South and Central region have the highest position. In North Kerala, the tourism activities are very less.

The below Table 3.13 shows the district wise statistics of the domestic tourist arrival in Kerala during the period of 2005 to 2014

Table 3.13
District wise Domestic Tourist Arrival in Kerala

Sl. No	District	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Proportion to total
South Kerala												
1	TVM	837211	866712	948579	1102115	1074562	1160640	1288555	1408688	1556435	1707199	9.76
2	KLM	98227	122998	145524	180943	184867	196773	210808	220849	235593	257097	1.47
3	PTA	59328	57032	60988	59832	75660	82470	89115	96893	103276	112548	0.64
4	ALP	173626	179115	170731	234700	164223	183416	199670	211749	225061	246156	1.41
	Total	1168392	1225857	1325822	1577590	1499312	1623299	1788148	1938179	2120365	2323000	13.28
Central Kerala												
5	KTM	164909	196284	189411	230831	274828	301599	334747	354270	382197	413182	2.36
6	EKM	1025944	1080591	1109644	1509686	1818748	1987743	2169426	2351631	2545573	2724718	15.57
7	IDKI	473772	515182	505229	531970	429402	464123	506990	555122	586546	635621	3.63
8	THR	1327856	1398014	1546576	1671174	1733862	1874211	2062032	2213893	2366389	2545376	14.55
	Total	2992481	3190071	3350860	3943661	4256840	4627676	5073195	5474916	5880705	6318897	36.12
North Kerala												
9	PKD	266837	300674	315591	324399	332787	359961	383027	404017	438552	475361	2.72
10	MLPM	306431	303844	313200	323448	319635	347311	369773	388323	419884	449420	2.57
11	WYND	191184	225923	256190	295465	368459	408151	451184	480125	519306	564274	3.23
12	KKD	553363	550694	570832	595985	574896	612316	650676	686395	728041	769425	4.40
13	KNR	333855	351309	375255	395121	420922	455822	486769	517566	553899	584343	3.34
14	KSD	133880	123352	135191	135581	140686	160539	178683	187333	197059	210691	1.20
	Total	1785550	1855796	6642941	7591250	2157385	2344100	2520112	2663759	2856741	8852588	50.60
	Grand Total	5946423	6271724	11319623	13112501	7913537	8595075	9381455	10076854	10857811	17494485	100

Source: Kerala Tourism Statistics 2006-2014

Department of Tourism, Government of Kerala

In the above Table 3.13 clearly indicate that domestic tourist arrival in Kerala. In 2014 tourism statistics the highest domestic tourist arrivals are Ernakulam (EKM). Out of the total proportion 15.57 per cent tourist are arrived in EKM district. Thrissur (THR) is the second highest place in Kerala. This has 14.55 per cent. The next three positions are Trivandrum (TVM), Kozhikode (KKD), Idukki (IDKI) respectively. Their per centages of proportions are 9.76, 4.40 and 3.63. The last position (14th) of domestic tourist arrival in the district of Pathanamthitta (PTA). This has 0.64 per cent. Comparing to other district in Kerala, more number of eco-friendly tourist destinations has in Wayanad. But the 7th position in the domestic tourist arrival in this district. In 2014 tourism statistics both foreign and domestic tourist arrival in Wayanad district is less, this has 1.28 per cent and 3.23 per cent respectively. Large number of people in Wayanad directly and indirectly depends upon tourism related activity. That's why still it need more care and the gained benefit positively affected by the local people by improving the standard of living through the overall increment of the state.

3.2.16. Tourism in Wayanad: A Brief History

Wayanad is a green paradise. The name Wayanad has been derived from the expression Vayal Nadu, meaning the village of paddy field. In ancient time Wayanad was ruled by the Rajas of the Veda tribe. In later times, Wayanad comes under the rule of Pazhassi Rajahs of Kottayam royal dynasty. As Hyder Ali became the monarch of Mysore, he attacked Wayanad and fetches it under his way. In the period of Tipu, Wayanad was renovating to the Kottayam royal empire. But Tipu handled entire Malabar to the British after the Sreerangapatnam truce that he made with them. This was followed by violent encounters between the British and Kerala Varma Pazhassi Rajah of Kottayam. After the Rajah was driven to the wilds of Wayanad, he waged several battles with his Nair and Kurichia-Kuruma tribal soliders against the British troops and conquered the latter several times through guerilla type encounters. The British could search out only the dead body of the Rajah who killed himself somewhere in the inside forest. Thus Wayanad destroy into the hands of British, and with it began a novel turn in the history of this area. The Britishers were opened up the Plateau for cultivation of tea and other cash crops. Roads were laid across the unsafe hills of Wayanad from Calicut and Telicherry. These roads were extended to the city of Mysore and the Ooty through Gudalur. Road facilities provided opportunities for the people outside Wayanad to flow and settle in these jangle regions. (www.wayanad.com). Wayanad was part of Kannur district when the state of Kerala was formed in 1956. On November 1, 1980 North and South Wayanad together to form the present Wayanad district. In 2011, Wayanad had population of

817,420 of which male were 401,684 and female were 415,736. The Figure 3.2 shows the District Map of Wayanad .

Figure 3.2
District Map of Wayanad



Source: www.mapsofindia.com

3.2.17. Foreign and Domestic Tourist Arrival in Wayanad District

In the below table 3.14 shows that the tourist arrival in Wayanad district during the period of 2005-2017

Table 3.14**Tourist Arrival in Wayanad district**

Year	Foreign Tourist	% of Increase	Domestic Tourist	% of Increase
2005	942	-	191184	-
2006	2611	63.92	225923	15.38
2007	4093	36.21	256190	11.81
2008	5638	27.40	295465	13.29
2009	5362	-5.14	368459	19.81
2010	6575	18.44	408151	9.72
2011	7567	13.11	451184	9.53
2012	9541	20.69	480125	6.02
2013	10844	12.02	519306	7.54
2014	11795	8.06	564274	7.96
2015	12377	4.70	607335	7.09
2016	7067	-75.14	586146	-3.97
2017	8995	21.43	815624	28.38

Source: Kerala Tourism Statistics 2005-2017
Department of Tourism, Government of Kerala

In the above Table 3.14 shows that the domestic and foreign tourist arrival in Wayanad district. During the year 2005 to 2015 domestic tourist arrival was an increasing trend. But in 2016 a slight decline in the domestic tourist arrival and again increase in 2017. The domestic tourists used to come mainly from the IT hubs in Chennai and Bangalore. But the trend has changed with Wayanad attracting tourists from other metropolitan cities such as Delhi, Jaipur, Ahmedabad and Mumbai.(The Hindu Newspaper, 2012). The foreign tourist arrival also an increasing trend in the year 2005 to 2015. It may be because of far reaching advance of technology in tourism sector. Like domestic tourist arrival in 2016, there is a slight decline in foreign tourist's arrival in Wayanad district. But in 2009 the global economic crisis slight change in foreign tourist arrival. Like every industry, tourism also affects the global economic crisis.

3.2.18. Total Tourist Destination in Wayanad District

Under the District Tourism Promotion Council in Wayanad, there are 38 best tourist destinations. The Table 3.15 shows the details of all destinations in Wayanad district.

Table 3.15**Total Tourist Destination in Wayanad District**

Sl.No	Destination	Sl.No	Destination
1	Wayanad Adventure Camp (Karlada lake)	20	Ancient Jain Temple Ruins (Panamaram)
2	Priyadarshini Tea Environs	21	Korome Mosque
3	Kuruva Island	22	Thirunelly Temple
4	Edakkal Cave	23	Seethe Lava Kusha Temple
5	Kanthanpara Waterfalls	24	Pakshipathalam (Brahmagiri Hills)
6	Pookode Lake	25	Krishnagiri Stadium
7	Banasura Sagar Dam	26	Regional Agricultural Research Station
8	Karapuzha Dam	27	Phantom Rock
9	Wayanad Heritage Museum, Ambalavayal	28	Kaduvakuzhi & Chengeeri Hills (Tiger Valley)
10	Tholpetty Wildlife Sanctuary	29	Soochipara Waterfalls
11	Muthanga Wildlife Sanctuary	30	Meenmutty Waterfalls (Vaduvanchal)
12	Pazhassi Raja Tomb and Museum	31	Sunrise Valley
13	Pazhassi Park	32	Neelimala Viewpoint
14	Pazhassi Raja Memorial	33	Pallikunnu Church
15	Chembra Peak	34	Valliyoorkavu Temple
16	Jain Temple, Sultha Bathery	35	Town Square (Sulthan Bathery)
17	Banasura Meenmutty Waterfalls	36	Manichira Recreational Park
18	Chain Tree	37	En Uru (Lakkidi)
19	Varambetta Mosque	38	Nellarachal

Source: Wayanad District Tourism Promotion Council

Details of Selected Destinations in Wayanad District:

Under the District Tourism Promotion Council in Wayanad, there are 38 best tourist destinations, which constitute the universe of the study. Of the 38 tourist destination in Wayanad, top 6 destinations constitute the sample for the study. On the basis of type of tourism the selected destinations are Banasura Sagar Dam (Backwater tourist destination), Chembra Peak (Adventure tourist destination), Kuruva Island (Nature tourist destination), Pookode Lake (Recreational tourist destination), Muthanga Wildlife Sanctuary (Wildlife tourist destination), Edakkal Cave (Heritage tourist destination) . These destinations have

been selected on the basis of highest number of tourist arrivals in Wayanad district. The Kerala Tourism plan to promote the Malabar region, including Kozhikkode, Wayanad, Vekkal and Kannur. Amount Rs.325 crore allowed for the project of Malabar region.

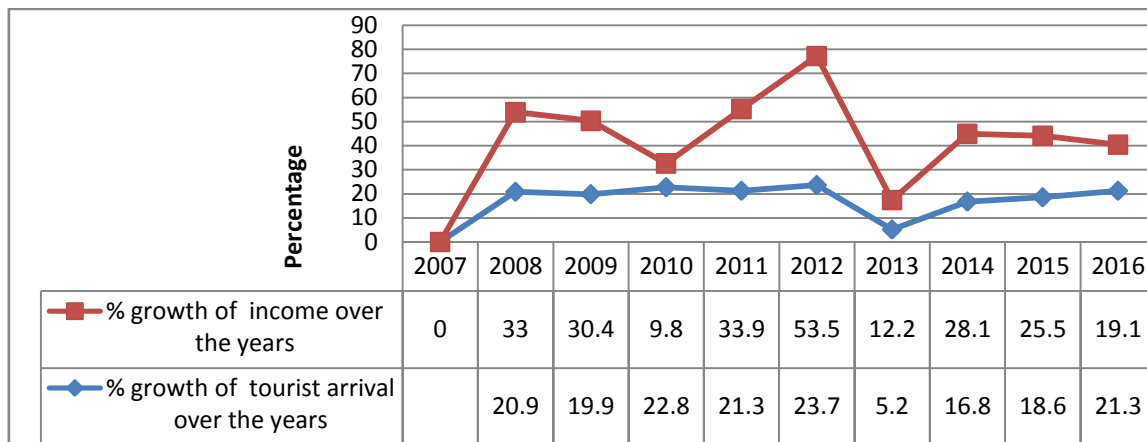
Here Banasura Sagar Dam is under the control of Hydel Tourism Centre (Kerala State Electricity Board have the full power to Hydel Tourism Projects). Chembra Peak and one part of Kuruva Island (Pakkam) destinations are controlled by South Wayanad Forest Department. Another part of Kuruva Island Palvelicham, Edakkal Cave and Pookode Lake are the control of District Tourism Promotion Council. The Muthanga Wildlife Sanctuary is the control of North Wayanad Forest Department.

Banasura Sagar Dam: Banasura Sagar Dam is situated remote area, Thariode-Padinjarathara- Wayanad. The dam across Karamanathodu river, a tributary of river Kabani, in Kalpetta. It is considered to be the largest earth dam in India and second largest in Asia. The third largest peak in the Western Ghat is Banasura hill. In 1979 the dam was constructed on behalf of Banasura Sagar project, to the support of Kakkayam Hydroelectric power project. The dam project has to meet the water demand for irrigation and drinking purposes. One of the beautiful sights here is set of islands in the dam's reservoir. During the monsoon season the dam was submerged the surrounding areas. The background of Banasura hills the island are visual treat for the tourists. Because of this peculiarity, more number of tourists attracted towards this destination.

Hydel tourism is the main focus of this destination. Kerala State Electricity Board takes serious efforts to the potential of the site such as small garden in the dam-top and speed boating facilities. Now, Kerala Hydel Tourism Centre launches a project to the development of the destination. The Tourism Department had sanctioned Rs.40 lakh to the District Tourism Promotion Council to buy four speed boats. To understand the tourist importance to the destination government is planning a Hydel Tourism Project also provide fund to its promotional activities. KSEB and KHTC actively co-operated to the development of hydel tourism. Many economic benefit activities are providing Hydel tourism department in this destination. These are speed boating, virtual reality show, kayaking, coracle, pedal boat, horse riding, fish massage, fish spa etc. All these are eco-friendly activities and very well to enjoying the travelers. The below Figure 3.3 shows the tourist arrival and income during the period of 2007 to 2016 in Banasura Sagar Dam destination.

Figure 3.3

Growth of Tourist Arrival and Income in Banasura Sagar Dam Destination



Source: Hydel Tourism Centre in Wayanad

The Figure 3.3 highlight that tourists visitors and income growth in Banasura Sagar Dam destination during the period of 2007 to 2016. There is a positive relationship between visitors and income in this destination.

Muthanga Wildlife Sanctuary: Ministry of tourism in Kerala provided the information about the destination of Muthanga wildlife sanctuary. The sanctuary was the control of North Wayanad Forest Department. It is rich in bio-diversity and is an integral part of the Nilgiri Biosphere Reserve. The sanctuary is located around 16 Km away from Sulthan Bathery. In 1973 it established as a Wildlife Sanctuary. It is the second largest wildlife sanctuary in Kerala and bio-geographically one of the richest zones of peninsular India. In 1992, the sanctuary is declared as a site of the project Elephant. The main objective of project elephant was to prevent the ruthless killing of the elephants for commercial reasons. The eco-tourism programmes consist of elephant camp visit, jeep safari, trekking, bird watching and tribal folklore etc. From June to October is the best time to visit Muthanga. Apart from tourism activities the sanctuary gave more important to give conservation and preservation of nature and environmental sustainability. The Table 3.16 shows the tourist arrival and income during the period of 2007 to 2017 in Muthanga Wildlife Sanctuary.

Table 3.16**Tourists Arrival and Income in Muthanga Wildlife Sanctuary.**

Muthanga Wildlife Sanctuary.				
Year	Tourist arrival	% growth of tourist over the years	Income	% growth of incomes over the years
2007	91449	-	982000	-
2008	126341	27.6	1869000	47.5
2009	150218	15.9	221300	-744.6
2010	124832	-20.3	154300	-43.4
2011	160446	22.2	427740	63.9
2012	151416	-5.9	369150	-15.9
2013	106936	-41.6	326960	-12.9
2014	121313	11.9	335210	2.5
2015	137428	11.7	386000	13.2
2016	145710	5.7	913100	57.7
2017	135553	-7.5	104900	-770.4

Source: North Wayanad Forest Department

The Table 3.16 indicates that the visitors and income in Muthanga Wildlife Sanctuary. In 2009 and 2017, the income growth rate was sharply declined, because of global economic crisis in 2009 and after effect of demonetization (8th November 2016) affected the tourism industry.

Chembra Peak: Wayanad Tourism Organization provides the information about Chembra Peak. The peak located around 8 Km south of Kalpetta, near to the town of Meppady, lays the highest peak in Wayanad. The peak is visible from almost all part of Wayanad. The trekking is the important activity of this peak. It will at least three hours to reach the top point of Chembra Peak. The never dried heart shaped lake is the topmost attraction to the destination. This lake is known as ‘hridhayathadakam’. It is situated 2100 meter above the sea level. The panoramic nature and flora and fauna is the attracting many number of tourists to this place. This destination is under the control of South Wayanad Forest Department. The forest office will open all the days. But overnight camping is not allowed at this destination as there is a

threat from lurking wild animals. The Table 3.17 shows the tourist arrival and income during the period of 2008 to 2017 in Chembra Peak.

Table 3.17

Tourists Arrival and Income in Chembra Peak

Chembra Peak				
Year	Tourist arrival	% growth of tourists arrival over the years	Income	% growth of incomes over the years
2008	5530	-	194720	-
2009	12658	56.3	533985	63.5
2010	13686	7.5	697940	23.5
2011	15547	11.9	738705	5.5
2012	24494	36.5	1435165	48.5
2013	26807	8.6	1688010	14.9
2014	41576	35.5	3205097	47.3
2015	63181	34.2	5742555	44.2
2016	96200	34.3	8623675	33.4
2017	36115	-166.4	2872104	-200.3

Source: South Wayanad Forest Department

The Table 3.17 indicates the visitors and income of tourists in Chembra Peak destination. In 2008 to 2016, the tourist's arrivals and the income increasing in positive trend. Even though the tourist arrival in Chembra Peak was threefold decrease in 2017 and per centage growth of changes over previous year's incomes was -200.3. The main reason of this sharp declining is that the unexpected demonetization in 2016.

Kuruva Island: The island is situated 15 Km from Mananthavady. The Kuruva Island is a protected river delta, comprising a cluster of islands over the middle of Kabani River in Wayanad. There are two entry gates in this place. That is Pakkam and Palvelicham. The Pakkam place was controlled by South Wayanad Forest Department and Palvelicham as under the control of DTPC. It spread over 950 acres of land, and is densely populated with rich flora and fauna. The island is surrounded by streams. The boat ride, trekking and rafting is the main activity of the destination. The Kuruva Island is an eco-tourism destination.

Partying and picnic are restricted this place. The maintained authority has only to allow enjoying the beauty without spoiling the pristine nature. Entry to this island is restricted during rainy seasons (from June to September) and it opened during the months from October to May. Apart from tourism promotion, this destination gave more important to the conservation of nature and environmental sustainability. The Table 3.18 shows the tourist arrival and income during the period of 2007 to 2016 in Kuruva Island.

Table 3.18

Tourists Arrival and Income in Kuruva Island

Kuruva Island				
Year	Tourist arrival	% growth of tourists arrival over the years	Income	% growth of incomes over the years
2007	169876	-	2085797	-
2008	242159	29.8	2985659	30.1
2009	316480	23.5	3810310	21.6
2010	261918	-20.8	6797197	43.9
2011	376398	30.4	6545695	-3.8
2012	501421	24.9	14462813	54.7
2013	339772	-47.6	11645705	-24.2
2014	511345	33.6	20686200	43.7
2015	559488	8.6	26284036	21.3
2016	605736	7.6	26554858	1.0

Source: South Wayanad Forest Department, District Tourism Promotion Council

The Table 3.18 highlights the tourist's arrival and income in Kuruva Island during the year of 2007 to 2016. In 2010, the growth of tourist arrival was -20.8 per cent. The reason for the negative decline is unexpected global economic crisis of 2009. The after effect of global economic crisis affected the tourism industry. In 2013 the government liquor policy affecting the growth of tourism. Therefore the tourist arrival (-47.6 per cent) and income (-24.2 per cent) have sharply declining.

Edakkal Cave: Wayanad Tourism Organisation provided the information about the destination of Edakkal Cave. It is located at 25 Km from Kalpetta. The cave showcases the

nature's skill and philosophy on architecture. These caves are 1200 meter above the sea level on Ambukutty Mala. The name 'Edakkal' literary means 'a stone in between'. The caves were discovered by Fred Fawcett, the Superintendent of Police of the Malabar district in 1890, during his hunting trip to Wayanad. He finds out the Edakkal rock-shelter, located on the western side of Edakkalmala. To his revelation, he acknowledged the place as surroundings of Neolithic people. This cave has drawn huge concentration of archeologists and historians worldwide. This place is the only known place in India with Stone Age carvings. The carvings belonging to Neolithic and Mesolithic age. The pictorial carvings shows the Tamil, Brahmi Script. The historical tourist place of Edakkal Cave was under the control of District Tourism Promotion Council. The Table 3.19 shows the tourist arrival and income during the period of 2007 to 2016 in Edakkal Cave.

Table 3.19
Tourist Arrival and Income in Edakkal Cave.

Edakkal Cave				
Year	Tourist arrival	% growth of tourists arrival over the years	Income	% growth of incomes over the years
2007	218972	-	2301162	-
2008	249987	12.4	2532539	9.1
2009	307158	18.6	1630985	-55.3
2010	150689	-103.8	1839635	11.3
2011	408862	63.1	4997505	63.2
2012	345191	-18.4	5434430	8.0
2013	323144	-6.8	6974500	22.1
2014	341721	5.4	7307590	4.6
2015	391302	12.7	7993312	8.6
2016	413841	5.4	8626500	7.3

Source: Wayanad District Tourism Promotion Council.

The Table 3.19 indicates the tourist arrival and income in Edakkal Cave during the year 2007 to 2016. We can see increasing trends of tourist arrival in 2007 to 2009, while in 2010, 2012 and 2013 the negative growth of tourist arrival in this destination. This is because of after the

effect of globalization in 2009 and ban of alcohol in 2012-2013. In 2014 to 2016, the growth of tourist arrival was in increasing trend.

Pookot Lake: The Pookode Lake located 3 Km south of Vythiri town, is the most frequented tourists spot in the entire Wayanad district of Kerala. Natural clean water lakes be located amidst evergreen forests and wooded hill. Surrounded by lush greenery all around, this idyllic lake, with its breathtaking scenic beauty and peaceful ambience, mesmerizes every visitors on tour to Pookote Lake. A fresh water aquarium filled with an excellent arrangement of fishes is a key attraction for travelers on their tour to Pookot Lake. The recreational tourist centre of this destination was the control of District Tourism Promotion Council. The main tourism activities of the destinations are boating, children’s park, handicrafts and spices emporium. In the below Table 3.20 explain the tourist arrival and income in Pookode Lake during the period of 2007 -2017

Table 3.20
Tourist Arrival and Income in Pookode Lake

Pookode Lake				
Year	Visitors	% growth of tourists arrival over the years	Income	% growth of incomes over the years
2007	382243	-	3145876	-
2008	406421	5.9	4226835	25.6
2009	413803	1.8	5799920	27.1
2010	456456	9.3	6729785	13.8
2011	523498	12.8	12289115	45.2
2012	593573	11.8	14015266	12.3
2013	583707	-1.7	14334028	2.2
2014	573943	-1.7	20660702	30.6
2015	606350	5.3	26007814	20.6
2016	824796	26.5	29167441	10.8
2017	880666	6.3	28278540	-3.1

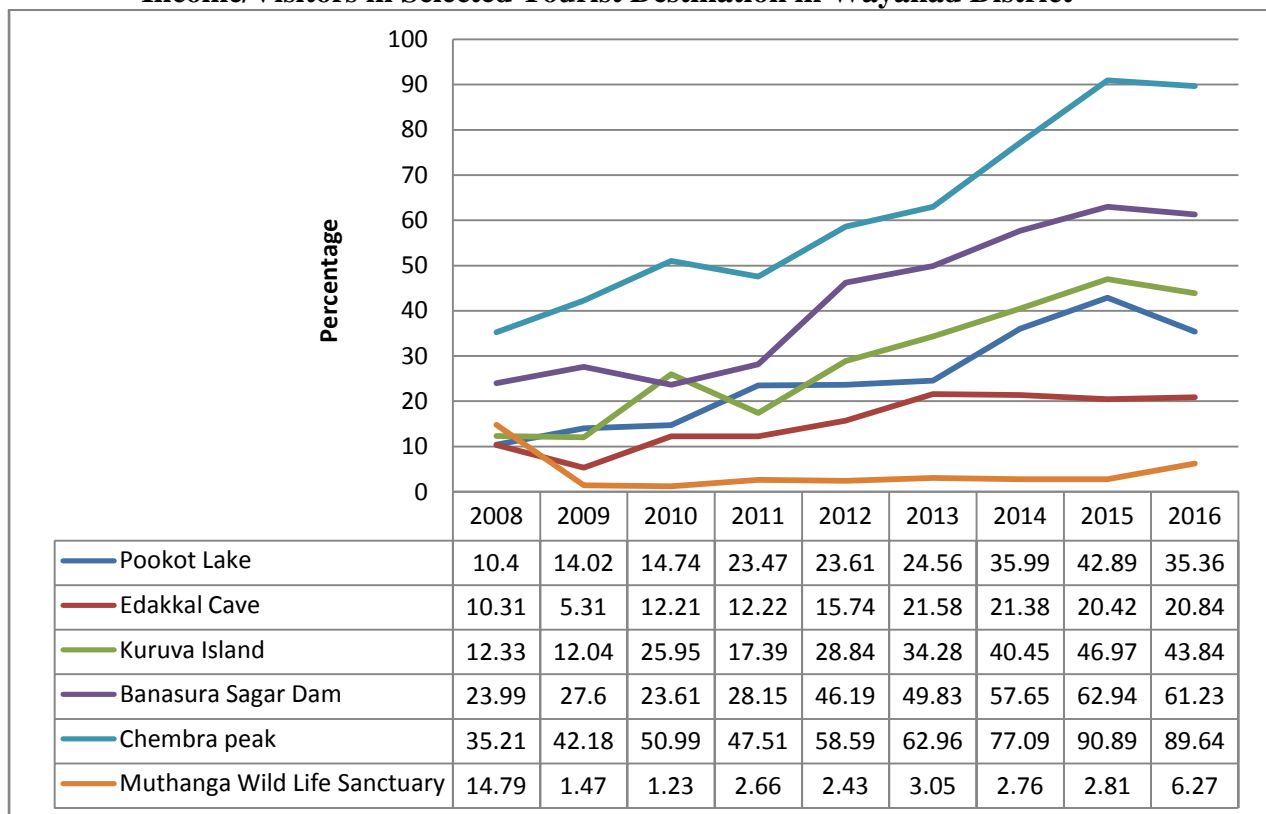
Source: Wayanad District Tourism Promotion Council.

The Table 3.20 highlights the tourist arrival and income in Pookode Lake during the period of 2007 and 2017. In 2007 to 2012 positive growth of tourist arrival can see in this destination. While in 2013 to 2014 the negative growth of tourist arrival because of the previous year’s

ban of alcohol policy of the Kerala government negatively affected the tourism industry. In 2007 to 2016 the positive growth of income over the year. While in 2017, the per centage growth of income is -3.1 per cent. This is because of unexpected demonetization in 2016.

The Figure 3.4 clearly indicates the selected six destinations income/visitors details during the year 2008 to 2016. Among the six destinations, income/visitors growth was highest in Chembra Peak.

Figure 3.4
Income/Visitors in Selected Tourist Destination in Wayanad District



Source: Wayanad District Tourism Promotion Council, Hydrel Tourism Centre in Wayanad, North Wayanad Forest Department, South Wayanad Forest Department

The Figure 3.4 clearly indicates the income/visitors growth during the year 2008 to 2016. Among the six selected destination, the most dominant destination is Chembra Peak. Whereas the Muthanga Wild Life Sanctuary have the lowest growth during the years. Muthanga Wild Life Sanctuary is under the control of forest department. Apart from tourism promotion, the main aim of the destination is to preservation and conservation of nature and protects the wild life animal. Here special care and protect to elephant. Therefore the forest department gave some restriction to the tourist arrivals and it can be seen in slit changes in income/visitors in this destinations.

3.3 The Role of Information and Communication Technology Promoting Tourism in Wayanad

In modern world tourism service promotion and marketing can take place on a variety of platform. Online mediums are email, social media, search engine marketing and mobile marketing etc. Both domestic and foreign tourists are coming in Wayanad. In this destination, majority of the tourists are domestic. They are enjoying the greenery and climate condition. Due to the development of IT industry in famous cities in southern India (Hyderabad, Chennai and Bangalore) most of the domestic tourists are visiting in this district. International tourism is a scarce case in Wayanad district. (Singh and Dhankhar,2014).

The Wayanad district government and Wayanad Tourism Organisation (WTO) to take special efforts to promote tourism. During the month of June and July, monsoon tourism is starting in this district. Lot of traditional activities is offered the tourist and the main aim is tourism marketing and is located in the dry region of India. Most of the tourist place in Wayanad is eco-friendly in nature. The Wayanad's Responsible Tourism and District Tourism Promotion Council are supporting the coordination of initiative to promote, implement and maintain the sustainable tourism practices. To the development and the promotion of sustainable tourism, not only the cooperation of government but also to participate local community, private sectors and NGOs initiative is inevitable.

The United Nation World Tourism Organisation (UNWTO) defines the Destination Management Organisation as an entity which integrates local authorities, enterprises and other organizations involved in the development of tourism and enabled to create partnership around a shared development vision. The ultimate objective of the DMO is the development and promotion of tourist region by coordinating and carrying out certain key activities such as finance, strategic planning, marketing, decision making and the development of regional tourism products. (Rapacz and et al 2008). DMO enterprises complete the package of marketing, booking, rating and feedback support, three tourism organizations within Wayanad can be regarded as a destination management organization, being the WTO, the WETO and the DTPC. The Wayanad Tourism Organisation has a tourism accommodation association; all of its members are accommodation enterprises. Their primary aim is to support development of the tourism industry and to provide a single body where knowledge is shared, collaboration is fostered Wayanad's tourism enterprises interests are voiced towards the public and the government. They also promote sustainable tourism practices among their members. By maintaining high entry levels, the less wealthy accommodation

owners remain excluded from their support. The WTO has grown into a powerful organization, continuously in debate with the government. The Wayanad Eco-Tourism Organisation (WETO) has been founded only recently by a small number of accommodation enterprises. Their aim are similar to the WTO's, except for the emphasis on Eco-Tourism. The DTPC can also be regarded as a destination management organization, for it promotes the destination and coordinates some of its tourism activity. (Hooft, 2010). The Wayanad DTPC was awarded the best performing DTPC in Kerala during the year of 2002 to 2005 by the Department of Tourism, Government of Kerala.

The important tourism related government sectors in Wayanad are The District Tourism Promotion Council (DTPC), Forest Department, and Directorate of Tourism etc. They act as to promote tourism in Wayanad. The tourist can obtain destination information about attraction, accommodation, activities, guides etc. The DTPC directly updates all information through website and social media. It can help all region tourists. Like the government tourism sectors the private sectors are actively participating in the promotion of the tourism sector all over the world. The tourism related private sectors are tour operators, travel agent, accommodation units (hotel, resort, homestay etc). These private sectors are using modern type of tourism promotional material such as website, social media and other technological methods. Comparing to the traditional type of tourism promotion, the modern method is time consuming and less spending. A tour operator typically sells tour and travel packages. Travel related information they give to the stakeholders. All the tour operators have the link to Wayanad tourism. Like tour operators, travel agent also actively participating in various tourism promotional activities. All the promotional activities are information and communication technology oriented. Another important private sector related to the tourism industry is accommodation units. All the accommodation enterprises are increasingly aware of their destination sustainability. So they give cheap and satisfactory services. Most of the accommodation units in Wayanad are linked with tourism services. The hotel, homestay and resort are upload their services in their website and social media like facebook, youtube, whatsapp, linkin etc. They give clear details about their property with photo, video and other technological services. These are very useful for all travelers (both domestic and foreign). Wayanad is a remote area. All the accommodation owners are local people of this district. Any development in an economy is positively affected by the local community. Comparing to other district in Kerala, most number of tribal people are living in Wayanad district. They are producing eco-friendly products like honey, bamboo rice and other bamboo related handicraft products. 'Uravu' is a non-profit trust established in 1996, registered under the

Indian Trust Act (Reg.No.122/96). Uravu is a non-governmental and business organization to implement program for employment and income generation in rural area. Majority of women artisans are working in this rural area. Most of them are marginalised and economically backward section. Variety of skilled programs and training are given the local community. Uravu will establish a niche market for bamboo products at both domestic and international market. Uravu Eco Link Ltd: the public limited company promoted by Uravu trust members, assists producers groups in marketing their products in various markets. (Rajitha Xavior,2014). The ICT services are the most level in remote area of Wayanad district. The regional, country and the state level ICT promotions reflection is the same as the remote district of Wayanad. Today social media like facebook, youtube, twitter are very well to promote tourism sectors all over the world. Year by year the technology was increasing our day to day life. Information and communication technology is an exogenous variable. To investing this exogenous variable in tourism sector, ultimately the technology can change. These changes positively affected tourism industry and long term growth in this sector and it resulted sustainable development in remote area of Wayanad district.

3.4 Conclusion

In this chapter, an attempted is made to explore the role of information and communication technology promoting tourism in Kerala. As comparing region wise, Asia region have most number of internet users and country wise comparison, it is seems that India have the second place. Kerala was the first state to declare digital state of India. It was found out that the tourist arrival and foreign exchange earning has continuously increasing in Kerala. The tourism sector has developed to become a pillar of the worldwide economy. The far reaching advantage in technology is the impact on global tourism as a whole. The terrorist attack in 2002, the natural calamity in 2004 and the global economic crisis in 2009 were slight changes appeared in foreign and domestic tourist arrival in Kerala. The Kerala state to declared lot of ICT enabled tourism services to the development and promotion of tourism industry. As comparing to region wise tourist arrival in Kerala, both domestic and foreign tourist arrival was highest in southern district. Wayanad exist in north part of Kerala region. The remote and hilly area of this district has less infrastructural facilities. In that reason the tourist arrival was less. Even though the ICT services are powerfully implementing to the promotion of tourism in Kerala. For linking tourism and information and communication technology, “The Gods Own Country” has to become a heaven to the earth and the same reflection can see the tourist destination in Wayanad district.

CHAPTER –IV
INFORMATION AND COMMUNICATION TECHNOLOGY
INITIATIVES OF THE GOVERNMENT AND THE PRIVATE
SECTOR TO PROMOTE TOURISM IN WAYANAD
DISTRICT

4.1 Introduction

In the previous chapter examined the role of information and communication technology in promoting tourism in Kerala based on secondary data. In that chapter highlighted both foreign and domestic tourist arrival and the role of ICT in promoting tourism in Kerala. Hence, in this chapter focused on the ICT initiatives of the public and private tourism service providers. The objective of this chapter is to examine the ICT initiative of the government (Tourism related government officials in Wayanad) and private sector (Tourism related private service providers such as accommodation units, travel agent and tour operators) to promote ICT enabled tourism in Wayanad district. In the last years, in our economic and social structure has undergone some important changes, especially because of the introduction of ICT. Tourism related products could enhance the globalization of the tourism industry in areas such as hotels, restaurants, travel agencies or tour operators. Hence, the use of ICT has the potential to turn market from local into global and in times of crisis firm can have better scenario to continue to exist and improve their position in the market, mainly, in tourism where the number of competitors increases on a daily basis. (Aramendia and Ollo-Lopez, (2013). Both the private and public sectors can improve the underdeveloped, heterogeneous and fragmented tourism industry through the use of ICT. (Government of Malawi, 2006). Tourism related 5 government officials in Wayanad district are Directorate of Tourism (DoT), District Tourism Promotion Council (DTPC), Kerala State Electricity Board (KSEB) and Forest Department (North & South) etc. Tourism related private service providers are accommodation units, travel agents and tour operators. The required data collected on accommodation units such as resorts, hotels and homestays. From each accommodation units collected the 15 samples (Total 45). 15 travel agents and 15 tour operators have been collected as primary data. So as to examine the ICT initiative of the government and private sectors to promote tourism, 80 samples collected out of the sample of 440. Apart from statistical tools, the data collected on the feasibility of the study.

This chapter includes three sections. The first sections examine the ICT initiative of the state to promote tourism. In the second section is focused on the public and private participation in tourism through ICT. The last section is devoted to analyse the ICT initiative of the government and private sector to promote tourism in the study area.

4.1.1 Profile of the Sample Area Selected For the Study

Table 4.1
Profile of the sample district

Profile	Wayanad district
Formation	1 st November 1980
Geographical position	North Latitude between 11 ^o 26'28" and 11 ^o 48'22" East Longitude between 75 ^o 46'38" and 76 ^o 26'11".
Area	2131 Sq.Km
Population (2011)	8,17,420
Male	4,01,684
Female	4,15,736
Rural	7,84,981
Urban	32,439
Density	384/Sq.Km
Literature	89.03%
Temperature in Celsius	Average Maximum: 29 ^o c Average Minimum :18 ^o c
Rainfall (in MM)	300
Agriculture Area (in Hectares)	2,12,966
Tourist destination(in Numbers)	38

Source: Census 2011, Economic Review 2016 (Kerala), Official Website of Wayanad district

4.1.2 Government and Private Sector Agencies to Promote Tourism in Kerala

There are lots of government and private agencies to promote tourism in Kerala. The government institutions are Department of Tourism, Kerala Tourism Development Corporation (KTDC), Bakel Resorts Development Corporation (BRDC), Tourist Resorts (Kerala) Ltd, District Tourism Promotion Councils (DTPCs), Kerala Institute of Travel and Tourism Management Studies (KITTS), Kerala Institute of Hospitality Management Studies (KIHMS), Thenmala Eco-Tourism Development Agency, and a host of government departments such as Forest, Irrigation, Museum, Zoo and Archaeology. (P.Muhammed Ajims., V.P.Jayathyraj, 2008). Apart from these government agencies, Panchayath, Krishi Bhavan, and Destination Management Council are promoting tourism in Kerala. The major private agencies related to tourism are tour operators, accommodation units (Hotel, Resort, Homestay, Ayurvedic Centre, Guest House, Rest House, Serviced Villa and Other) and travel agents etc.(Kerala Tourism Statistics, 2013)

4. 1.3. ICT Initiative of the Government Sector to Promote Tourism

Kerala Tourism Development Corporation (KTDC): KTDC was founded in 1st November 1966. It is one of the profitable business enterprises of the Kerala government. It legalizes

and controls the tourism activities in the Indian state of Kerala. The headquarters of KTDC is Thiruvananthapuram and its offices are located in all district of Kerala. To promote tourism, KTDC take lot of initiatives. Information and communication technology enabled tourism is famous initiatives among them.

The website www.keralatourism.org, is one of the popular travel website from India. It is the first travel website of a state in India to incorporate resourceful and user-friendly IT initiative for the benefit of worldwide travelers and it attaining high ranking in Google Search listing. The several IT initiative of Kerala tourism such as, online contests, online video quizzes, e-books, QR code, Theyyam calendar with geo code, virtual video wall, live webcast of events and festivals, virtual reality movies on destinations, audio-visual guide on traditional Kerala cuisine, video documentation of tourism projects, online accreditation, e-submission of forms, microsites, surveillance cameras at the houseboat station in Alappuzha, audio guide on safety measures, promotion through mobile application on Android platform, Kerala tourism e-news letter, video channel on youtube etc. (Kerala Tourism Statistics, 2013)

In 2014, Kerala tourism accomplishes a lot of online campaigns to drive extra traffic to the site. The online painting competition was done for children are the famous IT initiative. The competition attracted many people to the websites. Also done a Mobile App Idea contest. The interactive video quiz helped in bringing better page views and traffic to Kerala tourism website. To promote tourism destination e-book was published, it is a book length publication in digital form, consisting of text and images etc. Every person downloading the e-book will also be supplied a brochure of Kerala tourism free of cost. Kerala tourism has generated QR code to make easy for users and to assess information about Kerala Tourism. It has the two dimensional bar code that contain the data such as contact info, email add, geo location, URLs, phone numbers and other user text. The Theyyam calendar with Geo code provides various location and geographical area to this performance by videos and it will provide a general ides of the costumes, rhythm, music and dance of this rich art form. A virtual video wall displaying the best moving visuals of Kerala was set up in the website of Kerala Tourism and showcased on Kerala Tourism's brand channel on YouTube too. Kerala tourism has done live webcast of some of the events and festivals in order to expand the reach and impact of events. The Quick Time Virtual Reality features in the Kerala tourism website gives users a 360-degree visual experience of select destinations in the state. Users can choose a destination, have the benefit of a look around and practice the experience of really being present in the destination. The QTVR movies on destinations in Kerala tourism has

developed. The famous destinations in Kerala are Kovalam, Kumarakam, Munnar, Thekkady, Fort Kochi, Muzhuppilangadu Beach, Thalassery Fort, Darmadam Island, Kannur Fort, Pookott Lake, Thamarassery Churam, Kuruva Island, Arakkal Kettu, Kadalundi Bird Sanctuary and the Jewish Synagogue at Chennamangalam. In house boat also QTVR movies available. Now Kerala tourism created virtual tour. The images of the virtual tour help to travelers all around the world through the website www.keralatourism.org. (Kerala Tourism Statistics, 2013)

The website also provide audio visual guide on traditional Kerala cuisine, which contain the demonstration of preparation of vegetarian, non vegetarian, tribal dishes and Malabar cuisines. The travelers are easy to access everything within seconds. The video documentation of tourism projects has emerged as a new medium available on different display device like Desktop, Laptop and tablet PCs, mobile phones, internet Televisions etc. To search this, we have uploaded videos on a multiplicity of topics in the site. Kerala tourism has introduced online accreditation for tour operator, homestay and houseboats etc. the application form, uploaded document and certificate etc are available here. The e-submission of forms helps the travelers to the clear cut idea about the tourist arrivals, both domestic and foreign. The e-submission helps the Kerala tourism to have real-time data on tourists' arrivals and plan promotional strategies. (Kerala Tourism Statistics, 2013)

Microsites for Muziris Heritage Project and Responsible tourism initiatives are another important ICT initiative of Kerala tourism. The microsites helped Kerala tourism to make the event a successful one for inside and outside the state. Kerala tourism provides protected and safe holidays for tourists. As part of the safety initiatives Kerala tourism plans to install digital network surveillance system at beaches and backwater destinations. This initiatives helps to during the VIPs visit and also to avoid accidents in the beach and identification of people behind incidents. The IP Network Video solution has firstly installed by Kerala tourism at Alapuzha house boat station. This digital solution provides the uniqueness of one to many transmissions of the live images through wireless network. To these networks are very easy to handling all the customers. (Kerala Tourism Statistics, 2013)

Kerala tourism has initiated steps to produce audio guide on safety measures to travelers, in the backwater tour packages boating is a important component. The visitors have no idea about how to swim in deep water. To avoid the accidents in boat the Kerala tourism has to take initiated a educational materials for teaching safety measures to travelers and published a

audio guide in Hindi, English and Malayalam languages. The Kerala Tourism has developed a mobile application for Android phone with sufficient content support. Monthly e-Newsletter from Kerala tourism goes around the world as an abridged version in HTML format. The prime objective of the E-newsletter is to keep the travel and tour fraternity of the world in touch with the tourism specialties of Kerala and to make them aware of the latest developments in the destinations. Video sharing sites have turned into a smart feature for internet users. Now YouTube has been accepted as a cost-effective medium of communication. Now 3000 videos of Kerala tourism are available on www.youtube.com and www.keralatourism. These are the ICT initiatives of Kerala tourism. (Kerala Tourism Statistics, 2013)

Apart from Kerala tourism initiatives, the government officials such as District Tourism Promotion Council, Kerala State Electricity Board, Forest Department and private sectors such as travel agents, tour operators, accommodation units etc are directly or indirectly initiating the development of tourism through the medium of ICT in Wayanad district.

The Directorate of Tourism (DoT): DoT is the nodal agency of Ministry of Tourism. Every district in Kerala has its offices. The main role of this department is to promote tourism and environmental sustainability.

The District Tourism Promotion Council (DTPC): The District Tourism Promotion Councils have been set up in all the 14 districts of Kerala to present stable support and information to visitors. These officers are outfitted with contained data and helps to the travelers according to their trips. The DTPC has a central body with District Collector as Chairman and members from among officials, people's representatives and tourism experts nominated by the government. It has undertaken the duty of creating and marketing the local product through private and public participation, improvement of quality, standards and evolving procedure for certification of all tourism products, working through the local governments, conservation and preservation of heritage, creation of tourism awareness and preparation of host community, promotion of paying guest scheme, information dissemination and local basic infrastructure projects. Through ICT, DTPC in Wayanad give details about destination, activities, location, accommodation, guide, transportation, gallery etc with beautiful images. The social media like facebook, twitter and instagram using to the medium of publicity. DTPC provide all the information about the Wayanad destination up-to-date through social media. They are uploaded official videos, festivals and events, new

informative documentary, honors and awards details, tribal art and culture and all destinations important news with photo gallery. Although the DTPC has to take initiatives to advertisement in printed media, Television Show and Road show for all people to understand their activities. The ultimate aim of these activities is to promote tourism.

Kerala State Electricity Board: Kerala State Electricity Board (KSEB) tried to divert their attention to more ecological and sustainable Hydel Tourism. This not only creates income but also will help in ecological sustainability and environment. Thus in 1999 Kerala Hydel Tourism Centre (KHTC), a unit of Kerala State Electricity Board (KSEB) Ltd was registered. The main aim of the centre is to make easy the successful utilization of water based tourism potential in the natural surroundings of hydel projects areas of the state as well as save the ecology of the area. Kerala Hydel Tourism Centre (KHTC) has started its operation in Wayanad during late 2000, thereby bringing socio-economic benefits to the remote areas of the state. Banasura Sagar Dam in Wayanad as a major hydel tourism destination in the state. KHTC own and operates boats of various types around water bodies is possession of KSEB Ltd in and around Idukki, Wayanad, Kozhikode, Thrissur as part of promotion of tourism industry in the state. The main hydel tourism centres in Kerala are Kakkayam Dam, Edukki Dam, Perinjalkooth Dam, Eco Point, Shenkulam Dam, Anayirankal Dam, Kundala Dam, Sun Moon Valley, Mattupetty and Banasura Sagar Dam. The Kerala Hydel Tourism Centre is a helpful innovation from Kerala State Electricity Board. The social media like Facebook, Twitter, Instagram, Pinterest, Whatsapp etc are the main ICT initiatives of KSEB to promote Hydel Tourism in the centre.

Forest Department: Kerala has a forest area of 11309 sq.km, which covers almost 29 per cent of the total land area of the State. Wayanad is a part of Western Ghats. In 1973 Wayanad wildlife sanctuary was formed. This sanctuary was brought under project elephant in 1991-1992. This sanctuary occupies an area of 345 km² (133 sq mi). This sanctuary is disconnecting into two separate parts such as North Wayanad wildlife sanctuary and South Wayanad wildlife sanctuary. Eco-tourism is the main aim of every wildlife sanctuaries and national parks. Tourists to understand the ecological sustainability of a nation, DTPC and forest department jointly performing various initiatives through ICT. To uploading environmental protection film, videos and documentary etc.

4. 1.4. ICT Initiative of the Private Sector to Promote Tourism

The private sector tourism service providers are travel agents, tour operators and accommodation units etc.

Travel Agents: A travel agent arranges travel services from suppliers such as airlines, railways, bus, car rental firms, and sightseeing operators. Travel agent's packages and processes all the various attraction of the country and present them to the tourists. The travel agency business first started by Thomas Cook and American Express company on 9th June 1841. It is a private sector organization which acting as a decisive function in the complete process of developing and promoting tourism. The ultimate aim of all the private sector travel agency was profit motive. The main role of every travel agency is to promote inbound and outbound and domestic tourism, employment generation, earning of foreign currency, destination promotion development etc.

Travel agencies which provide travel information through online mode by own websites are known as online travel agency. Nowadays as more and more people utilize internet. So the need of travel agency has declined as the airline companies have started to sell products directly to the customers online. As a consequence several agencies have started their own website with detail of the travel information. These websites use a high end technology travel solution which helps them to deal with the latest updates and details of thousands of hotels, flights and car rental services. Lot of travel agencies is available today. There for the travelers to compare the price and other facilities with other companies. The top 10 online travel agency of India is Makemytrip.com, Yatra.com, Cleartrip.com, Ezeego l.com, Arzoo.com, Travelguru.com, Ixigo.com, Travelocity.co.in, Desiya.in.

Tour Operator: Tour operators usually come together tour and travel components to generate a package holiday. They advertise and produce brochures to produce their products, holidays and itineraries. A tour operator purchase accommodation, transport and leisure activities to unite as a package holiday. In general these packages will then be sold to the public by the travel agents; however, some operators will also deal with this part of process as well.

Travel agents hold the role of selling and administering packages from various tour operators to their personal clients based on what they are looking for and what packages suits each client best. While many tour operators focus on a select concentration of destination most

travel agents can specialize in a range of destinations and then they can help to narrow down a package for those specific destinations. The travel agents work directly with the tour operators to perfect request and provide the tour operators with the information and payment they needs. With the increase of internet use in everyone's lives independently booking tour packages directly with tour operators is now more available than it had been in the past. Therefore necessitate the use of an agent to be familiar with what operators were out there and accessible. Most tour operators these days do treaty directly with customers and put up for sale their own packages. Therefore removing the middle man. However lots of people still desire to use their local or family travel agent they have relied on for years. (Lehikoinen 2016).

Functions of Travel Agency and Tour Operator are provision of travel information, market research and development, reservations of tickets, hotels room, ground services, selling cruise package, preparation of itinerary, costing and designing package tour, conducting FIT (Free Independent Travelers), and GIT (Group Inclusive Tour) , promotion and publicity, reservation and cancellation, management of ground services, travel documentations, preparation of annual budget, corporate social responsibility, training and development, maintaining relationship with tourism ministry, membership of national and international travel organization, travel insurance, currency exchange, operation of MICE (Meeting, Incentive travel, Conventions/Conference and Exhibition), disaster preparedness, use of information technology (Swain and Batabyal 2016)

Accommodation Units: Another important sector of tourism industry is accommodation. The accommodation sector includes all hotels, motels and other profitable accommodation establishment such as backpackers, hostels, holiday accommodation parks, bed and breakfast, lodges, resorts, halls of residence and departments. Accommodation is one of the vital requirements for any tourism activity. Travelers and tourists require lodging for rest, while they are on a tour. Accommodation in the form of low budget lodge or hotels to world class luxury hotels is available at all major tourist's destinations. The accommodation provides the tourist a home away from home. All the private accommodations have a positive impact on regional economic development. (Pavlić and Portolan, 2012). As per the data from Ministry of Tourism, Government of India, reported that the accommodation units in Kerala as on December 2015 as follows in the Table 4.2

Table 4.2
Accommodation Units in Kerala

District	Ayurvedic centre	Grihasthali	Guest House	Home stay	Hotel	House Boat	Other	Resort	Rest House	Serviced Villa	Yathrinivas	Total
South Kerala												
TVM	24	0	5	37	139	0	329	174	8	3	1	720
KLM	14	0	1	8	68	13	83	8	8	0	0	203
PTA	18	0	1	10	33	0	37	0	6	2	0	107
ALP	4	0	1	104	42	634	213	29	5	4	0	1036
Central Kerala												
KTM	13	2	1	74	59	81	59	22	9	1	0	321
EKM	21	0	2	124	236	0	392	34	14	7	1	831
IDKI	1	0	4	151	63	0	185	111	4	38	1	558
THR	28	1	3	5	108	2	181	13	13	2	0	356
North Kerala												
PKD	4	0	2	4	61	0	104	3	18	0	0	196
MLPM	4	0	1	9	38	0	140	3	13	0	0	208
WYND	6	0	1	56	28	0	107	54	6	39	0	297
KKD	4	0	1	5	55	0	99	3	10	1	0	178
KNR	7	0	1	13	66	0	90	7	14	2	0	200
KSD	8	0	1	0	15	2	45	3	8	0	0	82
Total	156	3	25	600	1011	732	2064	464	136	99	3	5293

Source: Kerala Tourism Statistics, 2015

From the Table 4.2, indicate that the accommodation units in Kerala. The district of Kerala has been classified into three according to its geographical condition. In South Kerala more number of accommodation units are in Alappuzha district (1036) and Central Kerala - Eranakulam (831) and North Kerala - Wayanad (297). The online travel related site Trivago conducted a study in accommodation units in Kerala. From that study, Wayanad ranked 9th in worlds best accommodation service to tourists at lower cost. The district got 96.36 marks out of 100. The reports say that Wayanad has become a favorite destination for both foreign and domestic tourists. (Manoj, 2015)

297 accommodation units in Wayanad district. These are Ayurvedic centre, Guest House, Homestay, Hotel, Resort, Rest House, Serviced Villa, others including Lodge, Dormetries etc. Out of these accommodation units I have selected three accommodation units such as Hotel, Homestay and Resort to the present study. Because more number of domestic as well as foreign tourists prefer these types of accommodation in Wayanad district. The total sample size of the accommodation units is 45. Here to the three type's accommodation I have selected 15 for each.

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Table 4.3

Availability of Hotel Accommodation Facility in Kerala

Category of Hotel	As on 31.12.2015	
	Number of Hotels	Number of Rooms
Heritage Hotel/ Classic	1	128
Heritage Hotel/ Classic	9	17
2 Star	22	382
3 Star	204	4428
4 Star	78	2224
5 Star	12	1095
5 Star Delux	8	950
Total	334	9224

Source: Kerala Tourism Statistics, 2015

From the Table 4.3 clearly identified that out of the total number of hotels in Kerala, 204 hotels are the category of 3 star. The approval of hotels has certain procedures. The five year is the validity of the approval. In Wayanad number of registered and unregistered hotels is available. The present study have to collected the sample from registered 2, 3 and 4 star category hotels. All these hotels have lot of ICT initiative to promote tourism. Online booking through direct or third party site is the ICT initiative of every hotel industry.

The Homestay is a new initiative for accommodation in tourism industry. The popular form of hospitality and lodging is Homestay. Like Hotels, Homestay also classified into three, these are Diamond House, Gold House and Silver House. These categories are taken by the government according to the facility and amenities of the hospitality industry. The homestay will give employment and income of the local community as well as economic development of a nation. (Bhuiyan and et.al, 2011). The District Tourism Promotion Council classified the Homestay into three according to its facility and quality. The Class A category will be belongs to Diamond House, Class B category will be the Gold House and Class C category will be the Silver House. There is number of eligibility to participating this scheme. The eligibility criteria are as follows:

- a) Individual or families who own a residence of first-class quality in the State and can spare at least 1 room and upto maximum 6 rooms for visitors' accommodation.
- b) The classification will be given only in those cases where the owner or promoter of the unit along with his / her family is bodily residing in the same unit
- c) At least one of the family members should be able to speak in English.
- d) The houses in areas of tourism value will get priority.

The score sheet available for the Homestay facilities. Below Table 4.4 highlight the criteria for classification of Homestay in Kerala.

Table 4.4
Criteria for Classification of Homestay in Kerala

Criteria	Maximum Mark	Allocation of Marks
Location	12	Places of tourist attraction (8), Located at scenic place/farm/estate
Exterior & surroundings	10	Exterior environment (4), Approach (1), Landscaping (2), Exterior lighting (2) Parking (1)
Type of Building	8	Heritage building, Farm houses, Estate bungalows (8), new construction in traditional architecture (6), Normal RRC structure (4), Old tiled houses without much heritage value (4)
Guest Rooms	12	Furniture (6), Furnishings (2), Décor (2), Room facilities & amenities (2)
Public Areas	4	Furniture and Furnishings (2), Décor (2),
Food	6	Traditional cuisine (2), Choice of cuisine (2), Food quality (2)
Kitchen	6	Cleanliness (2), State of repair (2), Food storage (2)
Cleanliness	10	Overall impression
Hygiene	10	Overall impression
Safety & Security	4	Public area and room security (2), Signage (2)
Communications	2	Phone service (1), Internet access (1)
Eco-Friendly Practices	8	Waste management, recycling, no plastics (4), Water conservation, Harvesting (1), Pollution control-air, water, sound, light (2), Alternative energy usage (1)
Total	100	

Source: Kerala Homestays and Tourism Society

In the above Table 4.4 highlighted the mark score for classification of Homestay in Kerala. The accommodation units to get 75 and above, the category of Diamond House-Class A, The Gold House –Class B have the score of 60-74, Class C-Silver House have to the score of 50-59 and Not qualified less than 50. As per the statistics available with the Kerala Homestay and Tourism Association, the number of classified homestays in Wayand is just 56, while the

number of non-classified homestays runs to more than 210. The foreign and domestic tourists prefer both classified and non-classified homestay.

The emergence of resort is inevitable for the sustainable tourism industry. Lot of facilities and hospitality gave tourists to the resort services. When the hospitality is good the positive word of mouth about the accommodation increases by the tourists and it resulted maximum revenue and high return on investment to the resort owners. Like other accommodation units, the resorts also have the ICT initiative for its development. The online platforms like social media and web related media used to the development of the service.

Public, private and local community participation is very important to the development of Kerala tourism industry. In recent time, the technological involvement is seen in every industry. Tourism is one of the sectors to updating technological development in now a days. Through the platform of ICT, the tourists to very easily handling booking, ticketing and other accommodation facilities. The public and private sector has to encouraging through ICT to the development of tourism in Wayanad district. Their participation in tourism sector is benefited to the local community. The local people involvement will lead to economic development of a nation.

4. 1.5. ICT Initiative of the Government Sector to Promote Tourism in Wayanad District

Here we will have a detailed analysis of the ICT initiatives of the government sector. The data collected from tourism related government officials in Wayanad district. These are District Tourism Promotion Council (DTPC), Directorate of Tourism(DoT), Kerala Hydel Tourism Centre (KHTC) in Wayanad, North Wayanad Forest Department (NWFD) and South Wayanad Forest Department (SWFD). The location of government tourism sectors are show in the Table 4.5

Table 4.5
Location of the government tourism sectors

Government tourism sector	Location		Total
	Rural	Semi urban	
DoT	0 (0.0)	1(25.0)	1(20.0)
DTPC	0(0.0)	1(25.0)	1(20.0)
NWFD	0(0.0)	1(25.0)	1(20.0)
KHTC	1(100.0)	0(0.0)	1(20.0)
SWFD	0(0.0)	1(25.0)	1(20.0)
Total	1(100.0)	4(100.0)	5(100.0)

Source: Field Survey

Figures in parenthesis are per centage

The Hydel tourism centre (cent per cent) only located in rural area of Wayanad district and other government officials are located in semi urban area. Hydel Tourism Centre under the control of Kerala State Electricity Board (KSEB). As part of tourism promotion and effective utilization of water body maintained and operated by KSEB Ltd in remote area. The rural area of Idukki, Wayanad, Kozhikode and Thrissur as part of promotion of tourism industry in the State. (KSEB, 2015). DoT, DTPC, NWFD are located in semi urban area of Kalpetta and SWFD is located in semi urban area of Sulthan Bathery.

The rural and semi urban areas tourism related government officials ICT details for the promotion of tourism is given in the below Table 4.6

Table 4.6
Basic Information of ICT

Updation of website	Government officials					
	DoT	DTPC	NWFD	KHTC	SWFD	Total
Daily	0(0.0)	1(100.0)	1(100.0)	0(0.0)	1(100.0)	3(60.0)
Once a month	1(100.0)	0(0.0)	0(0.0)	1(100.0)	0(0.0)	2(40.0)
Total	1(100.0)	1(100.0)	1(100.0)	1(100.0)	1(100.0)	5(100.0)
24 hour call centre	DoT	DTPC	NWFD	KHTC	SWFD	Total
Yes	0(0.0)	1(100.0)	0(0.0)	0(0.0)	0(0.0)	1(20.0)
No	1(100.0)	0(0.0)	1(100.0)	1(100.0)	1(100.0)	4(80.0)
Total	1(100.0)	1(100.0)	1(100.0)	1(100.0)	1(100.0)	5(100.0)
Online reservation	DoT	DTPC	NWFD	KHTC	SWFD	Total
Yes	0(0.0)	1(100.0)	0(0.0)	0(0.0)	0(0.0)	1(20.0)
No	1(100.0)	0(0.0)	1(100.0)	1(100.0)	1(100.0)	4(80.0)
Total	1(100.0)	1(100.0)	1(100.0)	1(100.0)	1(100.0)	5(100.0)
Type of package	DoT	DTPC	NWFD	KHTC	SWFD	Total
Tailor Made	0(0.0)	0(0.0)	0(0.0)	1(100.0)	0(0.0)	1(20.0)
Package Tour & Tailor Made	1(100.0)	1(100.0)	1(100.0)	0(0.0)	1(100.0)	4(80.0)
Total	1(100.0)	1(100.0)	1(100.0)	1(100.0)	1(100.0)	5(100.0)

Source: Field Survey

Figures in parenthesis are per centage

All the officials have their own website and DTPC and Forest Departments will update their website daily. That means 60 per cent of the government officials are update their website daily and 40 per cent of the officials are ready to update their web once a month. These

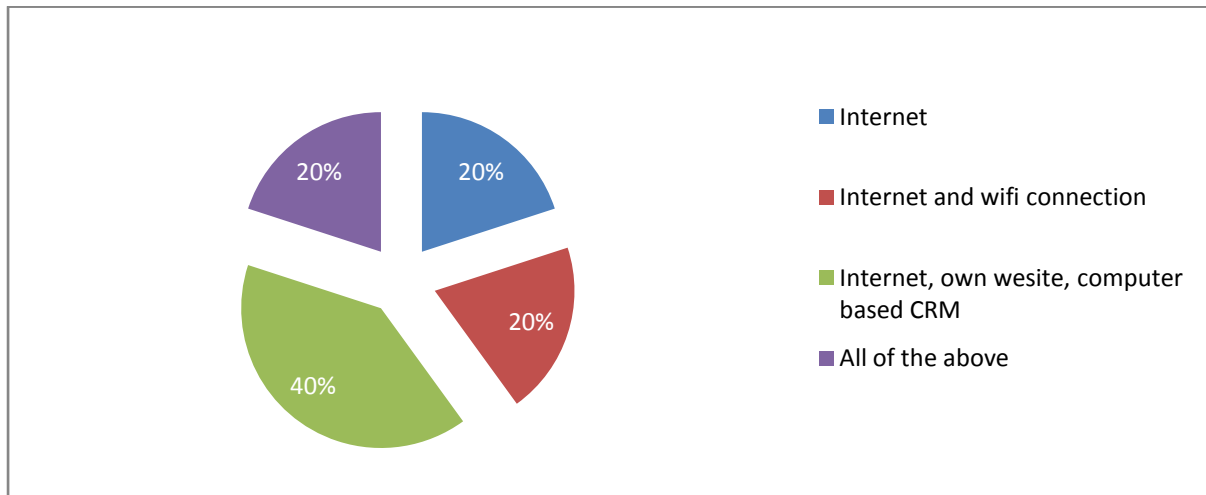
officials are DoT and KHTC. The main aim of all the government officials is to promote tourism. Apart from tourism promotion, the Hydel Tourism Centre and Forest Departments will give more importance to conservation and preservation of nature and environmental sustainability. Lot of tourism spots and accommodation facilities in Wayanad are under the control of DTPC and NWFD. Therefore daily update the web is more important. The Search Engine Optimization like Google, Yahoo and Bing are using all the public officials. Even though DTPC only have 24 hour call centre facility and online booking facility available. Online reservation and booking facility as the important ICT initiatives to promoting tourism in this destination. Here Kerala Hydel Tourism Centre (KHTC) in Wayanad is under the control of Kerala State Electricity Board (KSEB). The main objective of the centre is to assist the successful utilization of water based tourism potential in the natural environments of hydel projects areas of the state as well as protect the ecology of the area. KHTC and Forest Departments have not available any online booking and reservation facility.

Another important tourism promotion technique is medium of publicity. The examples of medium publicity are participation in fairs, brochures, direct contact through foreign agencies, websites, advertisement etc. In 1990, the Kerala tourism department provides more fund for the development of tourism. They give more importance to the field such as marketing and promotion, planning and development and support to other agencies etc. (Tourism, Government of Kerala, 2016). Wayanad is a remote area. Lot of tourism destinations are here. These destinations facilities and amenities clearly understand the whole world through the medium of publicity. The Hydel Tourism Department and North and South Wayanad Forest Departments main medium of publicity is websites and brochures. Whereas, District Tourism Promotion Council and Directorate of Tourism have their medium of publicity such as participations in fairs, brochures, websites and advertisement. Tailor made and package tours are available in all government tourism sectors in Wayanad. Majority of the government officials are offering both type of packages.

To the importance of tourism, Wayanad is declared as special tourism zone. The government gives incentives for the development of tourism industry. The Kerala Finance Minister Thomas Isaac declared around Rs.300 crore to the Hydel Tourism Projects connecting major tourism destinations in Kozhikode and Wayanad district. The project would link in Banasura Sagar Dam in Wayanad and Kakkayam and Peruvannamuzhi in Kozhikode (The Hindu, 2016).

The Figure 4.1 shows the technologies adopted for the promotion of tourism in the public sector tourism centers in Wayanad.

Figure 4.1
Technologies Adopted For Tourism Promotion



Source: field Survey

The technology adopted the government tourism centers to the promotion of tourism are internet, wi-fi connection, own website, online reservation, computer based customer relationship management etc. To conducted the field study DTTC to have the technologies such as internet, own website, computer based customer relationship management, wi-fi connections etc. The KHTC have only the internet connection technology, The DoT have internet and wi-fi connection and the North and South Forest department have the technologies like internet, own website and computer based customer relationship management. Apart from these technologies, all the government officials are using social media for their tourism promotion. But the DTTC only have very actively involving the social medias like facebook, twitter, instagram etc. The DTTCs tourism services have connected the forest, irrigation and archeological departments. Therefore any news about this department, the DTTC will update it in the Social Medias.

All the government officials to get enquiries through the medium of ICT. The average number of enquiry from each department has above 50. Comparing to foreign travelers, the domestic travelers have to get more enquiries. There is increasing trend of inquiry from all the government officials in Wayanad destination. The easy management of tourism promotion is the main advantage of ICT. Even though the IT failure occurred in every field.

When the IT failure happens into the centre, it will resolve within one or two days. The main complaints facing the ICT on the government centre are lack of special training for the worker and the remote area of Wayanad district have inadequate network coverages. The main suggestion for improving the usage of ICTs are to provide special training for ICT to the workers, to provide broadband connection to improve network coverage, the government intervention to create and sustain ICT environment and subsidy for internet connection etc.

All the government officials, the DTPCs information and communication technology initiative to promote tourism is outstanding and other tourism related departments are trying their best to conservation and preservation of eco friendly tourism in the destinations.

4. 1.6. ICT Initiative of the Private Sector to Promote Tourism in Wayanad District

To understand the ICT initiatives of the private sector to promote tourism, the data collected from accommodation units, travel agents and tour operators in Wayanad. In this section focused on ICT initiative of accommodation units to promote tourism in Wayanad.

4.1.7 ICT Initiatives of Accommodation Units in Wayanad District

In this chapter mentioned the accommodation units in Wayanad district. (Table 4.2). For this study we selected only Hotels, Homestay and Resorts. Because, comparing to other accommodation units a recreational travelers are more prefer to these type of accommodation. The below Table 4.7 shows the category of selected accommodation units in Wayanad district.

Table 4.7
Category of Accommodation Units

Category	Homestay	Resort	Hotel	Total
Nil	4(26.7)	0(0.0)	0(0.0)	4(8.9)
Silver	4(26.7)	0(0.0)	0(0.0)	4(8.9)
Gold	6(40.0)	0(0.0)	0(0.0)	6(13.3)
Diamond	1(6.7)	0(0.0)	0(0.0)	1(2.2)
2 Star	0(0.0)	0(0.0)	4(26.7)	4(8.9)
3 Star	0(0.0)	9(60.0)	10(66.7)	19(42.2)
4 Star	0(0.0)	1(6.7)	1(6.7)	2(4.4)
5 Star	0(0.0)	2(13.3)	0(0.0)	2(4.4)
Other	0(0.0)	3(20.0)	0(0.0)	3(6.7)
Total	15(100.0)	15(100.0)	15(100.0)	45(100.0)

Source: Field Survey

Figures in parenthesis are per centage

From the Table 4.7 indicated the category wise accommodation units in Wayanad district. Accommodation units are the essential element of tourists to visit a place. Ministry of Tourism has classified the Homestay into silver, gold and diamond. Out of the selected 15 Homestay, 40 per cent as the Homestay include the category of gold, 6.7 per cent are diamond, 26.7 per cent are the category of silver and 26.7 per cent are not included into any category. Majority of the Homestays facilities and amenities are the same. When their property gets any type of categorization, the owners are ready to pay luxury charges. It may be the reason of 26.7 per cent of the accommodation units are not categorized their property. The resorts are classified into the Ministry of Tourism like 'star' categories like 3-star, 4-star and 5-star and hotels projects into 5-star Deluxe, 5- star with or without alcohol service, 4- star with or without alcohol service, 3-star, 2-star and 1-star (Ministry of Tourism, Government of India,2018). Out of the 15 resorts 60 per cent have the 3 star categories, 6.7 per cent is 4-star, 13.3 per cent have the 5-star and 20 per cent have the category of luxurious, traditional and economical type. The Government of India, Ministry of Tourism has certain terms and conditions to approve the accommodation units in this category. Other accommodation units are Hotels. It categorized into 2-star, 3-star and 4-star. The 66.7 per cent of the hotels are 3-star categories, 26.7 have 2-star and 6.7 per cent has the 4-star categories. Majority of the travelers especially the foreign tourists select their accommodation units through online did not prefer the classified accommodation units. They selected certain criteria like cleanliness, homely behavior, affordable price and its quality of service and scene etc.

For considering room facility of Homestay in the sample selected accommodation units only have Deluxe Room, Hall and Suits are available. Whereas Hotels and Resorts have suits, halls, dormitories, deluxe room, cottage, Jacuzzi villa and celebrity pool villa are available. The below Table 4.8 shows the employment details of accommodation units in Wayanad.

Table 4.8
Details of Employment in Accommodation Units

Total Employees	Accommodation Units			Total
	Homestay	Resort	Hotel	
1-25	15(100.0)	0(0.0)	0(0.0)	15(33.3)
26-50	0(0.0)	9(60.0)	10(66.7)	19(42.2)
50 and above	0(0.0)	6(40.0)	5(33.3)	11(24.4)
Total	15(100.0)	15(100.0)	15(100.0)	45(100.0)

Source: Field Survey

Figures in parenthesis are per centage

From the Table 4.8 clearly indicate the employment detail of accommodation units in Wayanad district. The private accommodations have positively influencing the local economic development.(Portolan, 2012). To conducting the study of 15 Homestay in Wayanad, majority of the owners are women. The total employees in Homestay are below 10. Because the family members are arranging all tourism activities. They are handling the position of managers, supervisors and all in all for the tourists. The Homestay programs are the successful tool for sustainable tourism development. (Achten Emma, 2013). The Hotels and Resorts have more than 50 employees and majority of the local people are the same district. Homestay have the facility of internet, TV connection, entertainment game and kitchen facilities are available. Restaurant, bar and pub, coffee shop, swimming pool, ayurvedic treatment, conference hall, travel desk, book shop, internet and TV connection, entertainment game and campfire facilities are available for all resorts and hotels in the sample selected district. The main activities arrange the accommodation units' owners for the tourists are boating, day-tour, farm visit, adventure tour, evening cultural programmes, wild life tour, sightseeing, fishing and hiking etc. All these activities providing the accommodation units, the tourists have the relaxation mood and remove the mental stress and strains. The ultimate aims of these activities are entertainment and jolly behavior of the tourists.

Table 4.9 shows the availability of transportation facilities in the accommodation units.

Table 4.9
Transportation Facility of Accommodation Units

Response of Accommodation Units Owners	Transportation Facility			Total
	Homestay	Resort	Hotel	
Yes	11(73.3)	14(93.3)	13(86.7)	38(84.4)
No	4(26.7)	1(6.7)	2(13.3)	7(15.6)
Total	15(100.0)	15(100.0)	15(100.0)	45(100.0)

Source: Field Survey

Figures in parenthesis are per centage

From the Table 4.9 highlighted the transportation facilities of accommodation units. The transportations are the inevitable part of tourism industry. The transportations link the tourists to various tourists' attraction. There is a positive relationship between transportation and development of tourism. Wayanad is a hilly area. Every tourists spot in these districts are located in remote area and highly distensible. Out of the 45 accommodation units in the study area, 84.4 per cent have arranging their own transportation facilities for the tourists.

Sometimes, the owners are arranging the transportation; the tourists are paid extra charge for this.

The focusing point of Wayanad accommodation units are eco-friendly in nature. The eco-friendly practices such as use of local materials, arrangement of waste disposals, organic farming etc is available in all the accommodation units.

4. 1.8. ICT Initiative of the Accommodation Units to Promote Tourism in Wayanad District

Accommodation units are inevitable for the development of tourism industry. It is the relationship between the guest and host community. In the planning stage of trip a traveler has need a clear idea about destination and accommodation facility in the particular area. On that time with the help of ICT to collect relevant information about the destination. In India there exist an informative organization, Federation of Hotel and Restaurant Associations of India (FHRAI) to give details of information. It holds information regarding different type of hotels, tariffs, room facilities, address, and phone number and other amenities etc. The promotional brochures of the tourism departments provide the information about availability of accommodations in a particular destination. Similarly the tourists have to got the information in advertisement in newspapers and magazines.(Tourism services and operations-1). These information provided by magazine are sometimes not up-to-date. To get up-to-date information about the accommodation and destinations we were used the web related Medias. The details of ICT initiative of the accommodation units in Wayanad destination is given below the Table 4.10

Table 4.10
ICT Initiative of the Accommodation Units

Updating Of Website	Type of Accommodation			
	Homestay	Resort	Hotel	Total
Daily	0(0.0)	7(46.7)	7(46.7)	14 (31.1)
Weekly	7(46.7)	3(20.0)	4(26.7)	14 (31.1)
Biweekly	0(0.0)	3(20.0)	0(0.0)	3(6.7)
Once A Month	8(53.3)	2(13.3)	4(26.7)	14(31.1)
Total	15(100.0)	15(100.0)	15(100.0)	45(100.0)
Search Engine Optimization	Homestay	Resort	Hotel	Total
Yes	15(100.0)	10(66.7)	7(46.7)	32(71.1)
No	0(0.0)	5(33.3)	8(53.3)	13(28.9)
Total	15(100.0)	15(100.0)	15(100.0)	45(100.0)
Online Booking Through Payment Gateway	Homestay	Resort	Hotel	Total

Yes	5(33.3)	12(80.0)	15(100.0)	32(71.1)
No	10(66.7)	3(20.0)	0(0.0)	13(28.9)
Total	15(100.0)	15(100.0)	15(100.0)	45(100.0)
Mobile Application	Homestay	Resort	Hotel	Total
Yes	13(86.7)	13(86.7)	11(73.3)	37(82.2)
No	2(13.3)	2(13.3)	4(26.7)	8(17.8)
Total	15(100.0)	15(100.0)	15(100.0)	45(100.0)
Payment Gateway	Homestay	Resort	Hotel	Total
Yes	5(33.3)	12(80.0)	15(100.0)	32(71.1)
No	10(66.7)	3(20.0)	0(0.0)	13(28.9)
Total	15(100.0)	15(100.0)	15(100.0)	45(100.0)
Computer Based Customer Relationship Management (CRM)	Homestay	Resort	Hotel	Total
Yes	9(60.0)	15(100.0)	15(100.0)	39(86.7)
No	6(40.0)	0(0.0)	0(0.0)	6(13.3)
Total	15(100.0)	15(100.0)	15(100.0)	45(100.0)

Source: Field Survey

Figures in parenthesis are per centage

The Table 4.11 designated the ICT initiatives of the accommodation units to promote tourism in the study area. Going to the details we can see that all the accommodation units have their own website to promoting and marketing their services. To take in the case of Homestay, 53.3 per cent are once a month and 46.7 per cent are weekly updating their website. 46.7 per cent of Hotels and Resorts are daily updating their websites. Daily update the website is necessary, because there is a positive interaction between the customers and visitors. The 'live' performance of the website lead to positive interaction of the travelers and it also lead to tourism promotion. Whereas website without update viewed by search engine as a 'dead' entity. It leads to the tourism services in negative way. Majority of the accommodation units (71.1 per cent) are gone for Search Engine Optimizations like Google, Bing, Yahoo etc. Their services related information are to the website, 24 hour call centre facilities, internet and wi-fi facilities in all room and cottages and majority of the accommodation units, especially all Hotels, 80 per cent of Resorts and 33.3 per cent of Homestay have provision for making an online booking of services through payment gateway. Majority (82.2 per cent) of the accommodation units have mobile application for promoting tourism. To promote tourism in the destinations 60 per cent of the Homestays and all Resorts and Hotels has provide computer based Customer Relationship Management. All the accommodation units are directly link with Wayanad District Tourism Promotion Council.

The social networking services of the accommodation units in Wayanad destination in the below Table 4.11

Table 4.11
Social Networking Services of the Accommodation Units

Social Media Use For Tour Marketing	Type of Accommodation			
	Homestay	Resort	Hotel	Total
Facebook	0(0.0)	2(13.3)	4(26.7)	6(13.3)
Multiple response	0(0.0)	7(46.7)	7(46.7)	14(31.1)
All	15(100.0)	6(40.0)	4(26.7)	25(55.6)
Total	15(100.0)	15(100.0)	15(100.0)	45(100.0)
Regular Enquiry Via Social Media	Homestay	Resort	Hotel	Total
Yes	13(86.7)	15(100.0)	15(100.0)	43(95.6)
No	2(13.3)	0(0.0)	0(0.0)	2(4.4)
Total	15(100.0)	15(100.0)	15(100.0)	45(100.0)
Enquiries Per Month From Social Media Will Get Converted To Bookings	Homestay	Resort	Hotel	Total
Less Than 10	9(60.0)	7(46.7)	11(73.3)	27(60.0)
10-30	6(40.0)	3(20.0)	0(0.0)	9(20.0)
30-50	0(0.0)	2(13.3)	4(26.7)	6(13.3)
More Than 50	0(0.0)	3(20.0)	0(0.0)	3(6.7)
Total	15(100.0)	15(100.0)	15(100.0)	45(100.0)
Provide Advertisement In Daily Deal Site	Homestay	Resort	Hotel	Total
Yes	15(100.0)	10(66.7)	12(80.0)	37(82.2)
No	0(0.0)	5(33.3)	3(20.0)	8(17.8)
Total	15(100.0)	15(100.0)	15(100.0)	45(100.0)
Regular Enquiry From Daily Deal Site	Homestay	Resort	Hotel	Total
Yes	3(20.0)	7(46.7)	11(73.3)	21(46.7)
No	12(80.0)	8(53.3)	4(26.7)	24(53.3)
Total	15(100.0)	15(100.0)	15(100.0)	45(100.0)
Enquiries Per Month From Online Ads Will Get Converted To Booking	Homestay	Resort	Hotel	Total
Less Than 10	0(0.0)	0(0.0)	0(0.0)	0(0.0)
10-30	15(100.0)	10(66.7)	11(73.3)	36(80.0)
30-50	0(0.0)	0(0.0)	0(0.0)	0(0.0)
More Than 50	0(0.0)	5(33.3)	4(26.7)	9(20.0)
Total	15(100.0)	15(100.0)	15(100.0)	45(100.0)

Source: Field Survey

Figures in parenthesis are per centage

From the Table 4.12 indicates that the accommodation units in Wayanad using social networking services for promote tourism marketing. The social media has taken huge role in tourism marketing, mainly in decision-making, creation of marketing campaign and communication with customers. Majority (55.6 per cent) of the accommodation units in Wayanad destination use the tour marketing the platform of social media like Facebook,

Whatsapp, Youtube, LinkedIn, Twitter and Instagram. The tourism depends to a high extend on the verbal message, opinions, recommendations and comments on social platforms such as Facebook, LinkedIn and Twitter enable customers to share suggestions and tips. (Hamed, H. M. 2017). The majority (95.6 per cent) of the accommodation units in the destinations to get regular enquiry via social networking site. The tourists from the neighboring States of Karnadaka and Tamil Nadu are staying more in the destinations.

Social media are one of the dominant online networking apparatus has been integrated into a component of social and economic life of real world. (Zeng, 2013). 82.2 per cent of the accommodations units provide advertisement for the promotion of tourism in the daily deal sites. Especially, the Google ads are used for this. 46.7 per cent of the accommodation units only to get regular enquiry. 80 per cent of the accommodation units have 10-30 enquiry per month from online ads will get converted to booking. The accommodation units in Wayanad using their online travel related social media such as TripAdvisor, Holiday.iq, Trivago, Makemytrip.com, Yatra.com, Travelguru, Booking.com, Nivalink.com etc. Trivago is the world's largest hotel booking search engine. This travel website released the report that Wayanad has bagged the ninth spot in the world in offering the best accommodation service to tourists at lower cost. (Manoj, 2015). One of the best ICT initiatives of tourism promotional activities is social media platform. It help to take decision making and tourism destination marketing through Fcaebook, YouTube, Google, Flickr, Twitter, Instagram, Smartphone and Android application. The travelers are sharing their information through social media during the pre-travel stage. It has enhanced the knowledge sharing related to tourist destinations and products, facilities and amenities. The social media users who share their experience, which largely influenced by other travelers and it will lead to promote tourism. The ICT initiative are less expensive and offering many opportunities to the travelers.(Mukherjee and Nagabhushanam, 2016). The cultural heritage, natural beauty and climate conditions are the attraction of the tourists to visit the remote area like Wayanad destination. Sometimes accommodation units are utilizing their property for conducting social and cultural events for local people, especially the Tribal community.

The opinions on information and communication technology enabled tourism in the destination about the owners of accommodation units are excellent. The suggestion is to promote the tourism industry in the study area is to improve technical infrastructure and legal framework for online advertisement or official endorsement for online marketing, maintenance and updating tourism websites properly. All tourism sectors may have to

connect electronic linkages. The effectively utilization of ICT initiatives in all accommodation units in the remote area of Wayanad to a number one destinations in the world.

4.1.9 ICT Initiatives of Travel Agents and Tour Operators to Promote Tourism in Wayanad District

The private sector organization to promote tourism is travel agency. The travel agent who is the retailer of the tourism product and the tour operator is the manufacture of the tourism products. He plans, organizes and sells tours. The tour operator makes all the necessary arrangements like accommodation, transports, sightseeing, insurance, entertainment and other matters of this package in the inclusive price. In India the Department of Tourism recommends the release of foreign exchange to the travel agent to enable them to open their branch offices abroad to promote tourism. The travel agency gave information are provides relating to destination, climate, mode of travel, prices, time table, visa, currency and health, to those people who wish to travel inside or outside the country. He often adjusts his travel services to the need of the clients. (shodhganga.inflibnet.ac.in)

The travel agents and tour operators promote their destinations through various packages and they are linked with service providers at the forward and backward points. The growth of information technology is important in the business of travel agency and tour operations. Most of the modern travel agencies are adopted with the extensive use of technology. The modern devices such as telephone, fax, electronic mail, photocopiers and computers are indispensable communication apparatus for travel information. The proper using of the communication technology has to reduce time and cost. (Narasimmaraj, 2014)

4.1.10 The Basic Tourism Related Services of Tour Operators And Travel Agents

Both inbound and outbound tourism operations are provide the private sector service providers. Given Table 4.12 shows, the facilities of travel agents and tour operators in the study area.

Table 4.12**Services of the Travel Agents and Tour Operators in Tourism Promotion**

Type of Tour Operation	Travel Agent	Tour Operator	Total
Inbound	5(33.3)	4(26.7)	9(30.0)
Outbound	0(0.0)	0(0.0)	0(0.0)
Both	10(66.7)	11(73.3)	21(70.0)
Total	15(100.0)	15(100.0)	30(100.0)
Services	Travel Agent	Tour Operator	Total
Tour Packages	0(0.0)	2(13.3)	2(6.7)
All	2(13.3)	6(40.0)	8(26.7)
Multiple Response	13(86.7)	7(46.7)	20(66.7)
Total	15(100.0)	15(100.0)	30(100.0)
Updating Of Website	Travel Agent	Tour Operator	Total
Daily	4(26.7)	8(53.3)	12(40.0)
Weekly	1(6.7)	2(13.3)	3(10.0)
Monthly	3(20.0)	2(13.3)	5(16.7)
More Than A Month	7(46.7)	3(20.0)	10(33.3)
Total	15(100.0)	15(100.0)	30(100.0)
Search Engine Optimization	Travel Agent	Tour Operator	Total
Yes	8(53.3)	12(80.0)	20(66.7)
No	7(46.7)	3(20.0)	10(33.3)
Total	15(100.0)	15(100.0)	30(100.0)
Services Of Search Engine Optimization	Travel Agent	Tour Operator	Total
No Response	7(46.7)	3(20.0)	10(33.3)
Google	5(33.3)	8(53.3)	13(43.3)
All	2(13.3)	4(26.7)	6(20.0)
Google And Yahoo	1(6.7)	0(0.0)	1(3.3)
Total	15(100.0)	15(100.0)	30(100.0)
Payment Gateway	Travel Agent	Tour Operator	Total
Yes	7(46.7)	13(86.7)	20(66.7)
No	8(53.3)	2(13.3)	10(33.3)
Total	15(100.0)	15(100.0)	30(100.0)
24 Hour Call Helpline	Travel Agent	Tour Operator	Total
Yes	11(73.3)	13(86.7)	24(80.0)
No	4(26.7)	2(13.3)	6(20.0)
Total	15(100.0)	15(100.0)	30(100.0)

Source: Field Survey

Figures in parenthesis are per centage

From the Table 4.13 indicates the basic services provided by the tour operators and travel agents. Majority (70 per cent) of the tour operation is both inbound and outbound tourism. The tourists prefer the countries are Malesia, Germany, Thailand etc. Travel agents and tour operator provide the services are tour packages, ticketing, vehicle rental, hotel reservation and event management. Both private sectors have their own websites. The 46.7 per cent of travel agents are updating their websites more than once a month whereas 53.3 per cent of the tour operators are daily updating their websites. The Search Engine Optimization is the inevitable part of travel industry for promoting tourism. Majority of the travel agents and tour operators have gone for Search Engine Optimization for their websites. Google, Bing, Yahoo etc are using their service to promote tourism in the industry. They are provided all information in their websites. 46.7 per cent travel agents have the provision of online booking of their services through payment gateway. Whereas 53.3 per cent of the travel agents have not the provisions. Out of the 15 tour operators, 86.7 per cent have the provisions of online booking of services through payment gateway. Majority (80 per cent) of the travel agents and tour operators have the 24 hour call centre facility is available.

The famous tour marketing systems in the agency are Global Distribution System, Front Office System, Agency Management System, Customer Relationship Management System, Supply Chain Management System, Corporate Travel Planning System, Tour Package Planning System, Internal Computer Reservation System and Recommender System.

The Global Distribution System is a computerized network system owned by a company that enables transactions between travel industry service providers, mainly airlines, hotels, car rental companies and travel agencies. There is direct relation to customers is the main use of Front Office System. It includes Customer Relationship Management, Sales force Automation and Customer supports etc. The main aim of all these systems is tourism promotion through ICT. The Table 4.13 highlighting the ICT initiatives of travel agency.

Table 4.13

ICT Initiatives of Travel Agents and Tour Operators to Promote Tourism

Social Networking Services	Travel Agent	Tour Operator	Total
Facebook	9(60.0)	10(66.7)	19(63.3)
Multiple Response (Twitter, Youtube, Instagram, LinkedIn, Whatsapp)	6(40.0)	5(33.3)	11(36.7)
Total	15(100.0)	15(100.0)	30(100.0)

Regular Enquiry from Social Networking Sites	Travel Agent	Tour Operator	Total
Yes	4(26.7)	9(60.0)	13(43.3)
No	11(73.3)	6(40.0)	17(56.7)
Total	15(100.0)	15(100.0)	30(100.0)
Enquiries Per Month From Social Media will Get Converted to Booking	Travel Agent	Tour Operator	Total
Less Than 10	8(53.3)	6(40.0)	14(46.7)
10-30	4(26.7)	3(20.0)	7(23.3)
30-50	3(20.0)	5(33.3)	8(26.7)
More Than 50	0(0.0)	1(6.7)	1(3.3)
Total	15(100.0)	15(100.0)	30(100.0)
Reviews in Trip Advisor	Travel Agent	Tour Operator	Total
Yes	13(86.7)	10(66.7)	23(76.7)
No	2(13.3)	5(33.3)	7(23.3)
Total	15(100.0)	15(100.0)	30(100.0)
Advertisement in Daily Deal Site	Travel Agent	Tour Operator	Total
Yes	5(33.3)	7(46.7)	12(40.0)
No	10(66.7)	8(53.3)	18(60.0)
Total	15(100.0)	15(100.0)	30(100.0)
Advertisement Posted on Deal Sites Free of Cost	Travel Agent	Tour Operator	Total
Yes	0(0.0)	1(6.7)	1(3.3)
No	2(13.3)	5(33.3)	7(23.3)
Not Applicable	13(86.7)	9(60.0)	22(73.3)
Total	15(100.0)	15(100.0)	30(100.0)
Regular Enquiry from Daily Deal Site	Travel Agent	Tour Operator	Total
Yes	5(33.3)	9(60.0)	14(46.7)
No	10(66.7)	6(40.0)	16(53.3)
Total	15(100.0)	15(100.0)	30(100.0)
Enquiries Per Month From Online Ads will Get Converted to Booking	Travel Agent	Tour Operator	Total
Less Than 10	2(13.3)	1(6.7)	3(10.0)
10-30	9(60.0)	5(33.3)	14(46.7)
30-50	3(20.0)	7(46.7)	10(33.3)
More Than 50	1(6.7)	2(13.3)	3(10.0)
Total	15(100.0)	15(100.0)	30(100.0)
Mobile Application	Travel Agent	Tour Operator	Total
Yes	11(73.3)	9(60.0)	20(66.7)
No	4(26.7)	6(40.0)	10(33.3)
Total	15(100.0)	15(100.0)	30(100.0)

Source: Field Survey

Figures in parenthesis are per centage

Most of the travel agents and tour operators are using Facebook (63.3 per cent) for their tourism promotion. Because it makes sure to easy share content and photos to the travelers. Twitter and Instagram are the other social media platform in the tourism promotion in travel industry. 60 per cent of the tour operators have to get regular enquiry from social media sites. 46.7 per cent of enquiries per month from social media will get converted to booking. Comparing to international travelers, the domestic travelers are to get more enquiries from social media via booking. In summer season more number of the travelers is demanding their service. The traqvel agents and tour operators are using the travel related website like makemytrip.com, cleartrip.com, travelguru, trip advisor etc. 76.7 per cent are provide reviews in Trip Advisor. The daily deal site enquiries are poor in the case of travel agents and tour operators. The agencies enquiries per month 30-40 is online ads will get converted to booking. The easy way of tourism promotion is the application of tourism related apps in mobile phone. Through mobile apps 66.7 per cent of the travel agents and tour operators are made online booking.

The travel agents make the travel less stressful. Travel agents have access to special discount codes and promotions through suppliers. They often provide personalize attention, insurance for medical emergency and trip cancellations. Travel agents are specialist and understanding the customers taste and spend more time with the customers. The customers are less knowledge about online booking, the good option is the travel agents to making the decision of travel planning. Email, newsletter, skype, slack etc are the mode of communication with customers. Most of the customers are using Email for their mode of communication. Every travel agents to get profits. That's why they are always working in this field. The normal profit to get their service. The overall performance of travel agents are satisfactory. Looking totally, the travel agents works and dealing with customers are good. But sometime they get the complaints about accommodation, food and transport etc.

The ICT related limitations to the services of travel agents and tour operators. They are lack of IT education and training, low cell phone signal in certain area and lack of transparency etc. it may lead negative effects on the relationship between customers and administration.

4.1.11. Conclusion

Kerala is the first state in India to announce tourism as an industry. The tourism policy credentials of the central and state governments claims that Kerala tourism model is one of the most liberalized tourism models with the private sector leading tourism development. The

governments act as a facilitator by providing the basic infrastructure conducive for tourism and allow the private sector to play the leading role in tourism promotion and development. From the above discussion clearly depicts that the public private participation are necessary for the development of tourism industry. The innovation and digitalization of tourism will leads to creation of new employment opportunities, increase investment, skills and sustainability in this sector. Both public and private sector working together in tourism industry through ICT, it may be an economic bonanza at global level.

CHAPTER - V
THE IMPACT OF INFORMATION AND
COMMUNICATION TECHNOLOGY ON TOURISM
AND LOCAL DEVELOPMENT IN WAYANAD
DISTRICT

5.1 Introduction

In the previous chapter an attempt has been made to build the ICT initiatives of the government and the private sector to promote tourism in Wayanad. This chapter analyses the impact of ICT enabled activities of the domestic, foreign tourists and socio- cultural and economic conditions of the local community in Wayanad district. To accelerate the analysis on tourism and local development in Wayanad district, it becomes necessary to conduct primary survey of the tourist and local community.

There are 38 important tourist destinations in Wayanad. Out of these destinations 6 dominant destinations were selected. These are Edakkal Cave, Pookod Lake, Kuruva Island, Chembra Peak, Banasura Sagar Dam, Muthanga Wildlife Sanctuary. Here Edakkal Cave, Pookode Lake and one part of Kuruva Island (Palvelicham) are the control of District Tourism Promotion Council (DTPC) in Wayanad. Another part of Kuruva Island (Pakkam) and Chembra Peak are under the control of South Wayanad Forest Department (SWFD). Banasura Sagar Dam is under the control of Hydrel Tourism Centre in Wayanad. Muthanga Wildlife Sanctuary is controlled by North Wayanad Forest Department (NWFD). For the study, 240 samples have been selected of whom 180 are domestic and 60 are foreign tourists for the sample units. In each destination, 30 domestic and 10 foreign tourists are selected. Apart from tourists, the data has been collected from the local community. From each 6 destinations 20 samples each have been collected. Therefore, the total sample for the local community is 120. To investigate the impact of ICT on tourism and local development in Wayanad district 360 samples were selected in total.

The chapter is compartmentalized into three sections. The first segment has been devoted to examine the socio-economic and ICT oriented opinion of domestic and foreign tourist in the area of study. The second section discusses the socio- cultural and economic impacts of ICT enabled tourism on local community. The third section concludes with the major findings of the analysis.

5.1.1 Socio-Economic and ICT Oriented Opinion of Tourists in the Sample Units

In the tourism industry, globally, information and communication technology act becomes a strong driver (Hooft, 2010). As the socio-economic and ICT oriented opinions of tourists give a definitive background and nature of the sample units. Both domestic and foreign tourists in selected 6 destinations in Wayanad district are chosen as the sample units. Their gender, age,

educational qualification, marital status, occupation, income and nationality are taken as the socio-economic variable. Apart from socio-economic characteristics, ICT enabled tourism oriented opinion such as purpose of visit, number of people accompanied, the number of days to stay, source of information, their use of social media and its reason, reservation methods, the use of third party sites, actual experience of web media, web media to post the reviews are taken the supporting variables for analyzing the impact of ICT on tourism in Wayanad district.

5.1.2 Socio-Economic Status of the Tourists in Wayanad Destination

Wayanad district is the famous hill station in Kerala. The beautiful climatic condition, culture and heritage attract tourists to this destination. The sample was selected in the key tourist places in Wayanad district. They are Pookode Lake, Edakkal Cave, Kuruva Island, Chembra Peak, Muthanga Wildlife Sanctuary and Banasura Sagar Dam. The below Table 5.1 clearly explains the socio-economic status of the tourists in Wayanad district.

Table 5.1

Socio-Economic Status of the Tourists in Wayanad Destination

Gender	Frequency	Per centage
Male	136	56.7
Female	104	43.3
Age	Frequency	Per centage
15-29	143	59.6
30-44	79	32.9
45-59	17	7.1
60 and above	1	.4
Educational Qualification	Frequency	Per centage
School Level	21	8.8
Graduate	130	54.2
Post Graduate	41	17.1
Professional Education	40	16.7
Technical Education	8	3.3
Marital Status	Frequency	Per centage
Single	138	57.5
Married	101	42.1
Separated	1	.4
Occupation	Frequency	Per centage
Salaried	33	13.8
Business	45	18.8
Professional	50	20.8
Agriculture	17	7.1

Student	83	34.6
Retired	1	.4
House Wife	5	2.1
Other	6	2.5
Monthly Income	Frequency	Per centage
Below 10000	104	43.3
10001-25000	23	9.6
25001-50000	50	20.8
50001-100000	13	5.4
100001 and above	50	20.8

Source: Field Survey

The above Table indicates the socio-economic status of tourists in Wayanad. We discuss the variables such as gender, age, educational qualification, marital status, occupation and income. These variables positively affected the development of the economy such as inflows of foreign currency, generation of employment, infrastructure and regional development. These development influences the economic multiplier effects. Out of the 240 tourists in Wayanad destinations, 56.7 per cent are male and 43.3 per cent are female. Gender is a core identity, even though it did not appear as a main determinant of the travel and tourism (Jönsson and Devonish (2008)).

The energy levels and physical conditions of tourists are very important for travelling, especially the hilly areas. When considering the whole age wise data, the youth participation is very high (15-29) in the sample destinations. Out of the total sample size, 59.6 per cent are in the age group of 15-29. In Wayanad, 32.9 per cent are in the age group of 30-44 and 7.1 percent are included in the age group of 45-59 and 0.4 per cent are included in the age group of 60 and above. Considering the variables like gender, we can see that majority of the tourists are youth in Wayanad destinations. They are IT students in the state of Karnataka. Out of the total population, 32.9 per cent are under the category of 30-44 and 0.4 per cent of the tourist are under the group of 61 and above in the sampling destinations. Therefore the above analysis shows an important characteristic of a person's active participation and involvement in travel and tourism is their age is an inevitable.

Educational qualification is inevitable for the high quality and sustainable tourism development. Education is one of the important tools for good decision making for the tourists. Hence to analyze the educational qualification of tourists, we categorise them as

school level, graduate, post graduate, professional and technical education. Among the total, a majority (54.2 per cent) of the tourists have the educational qualification of graduate in Wayanad destinations. 8.8 per cent tourists have completed in the educational qualification of school level, whereas, 17.1 per cent of tourists have completed post graduate level. The percentage of professional and technical education qualification is 16.7 and 3.3 respectively. Only the educated persons to develop new technology, innovative product and services (Perman Luka and etal, 2014). It is clearly understood that educational qualification is the main determinant of travel and tourism industry.

Marital status of the tourists are classified into single, married and separated. Out of 240 tourists 57.5 per cent are single, 42.1 per cent of tourists are married and 0.4 per cent of the tourists are separated. Hill tourism is one of the important striking points in Wayanad destination. In this destination, more number of students and families keep visiting. Occupation is an important determinant of tourists' arrivals around the world. Therefore among a total of, 34.6 per cent of the populations are students. Most of the students come from Karnataka and Tamil Nadu State. Whereas out of the population, 20.8 per cent are professional, 18.8 per cent are the category of business and 13.8 per cent are salaried. The remaining tourists come under the category of agriculture, retired, house wife and others (coolie workers, drivers).

Income of the persons are positively affected the tourism and travel. The Table 5.1 clearly indicates that student categories are more and the student populations are depending upon their parent's income. Therefore, 43.3 per cent are in the category of below Rs.10000 monthly income. The tourists have the monthly income 25001-50000, 100001 and above are 20.8 per cent.

5.1.3 ICT Oriented Opinion of Tourists to Visit Wayanad Destination

Information and communication technology have made a lot of changes in the field of tourism industry (Zelenka, 2009). Compared to other district in Kerala, tourist's arrival is only 5.23 per cent (Kerala Tourism Statistics, 2017) in Wayanad district. This district is a hill station and a remote area. There is a positive link in ICT and tourism. ICTs have been transforming tourism globally. It provides a dominant apparatus that can bring advantages in promoting and growing the tourism industry of the remote area of Wayanad destination (Bethapudi, 2015). The below Table 5.2 indicates the nationality and purpose of the visit.

Table 5.2
Purpose of the Visit and Nationality

Nationality	Leisure	Study	Business	Multiple Response	Total
Indian	108 (60.0)	1 (0.6)	0 (0.0)	71 (39.4)	180 (100.0)
Foreigner	24 (40.0)	0 (0.0)	2 (3.3)	34 (56.7)	60 (100.0)
Total	132 (55.0)	1 (0.4)	2 (0.8)	105 (43.8)	240 (100.0)

Source: Field Survey

Figures in parenthesis are per centage

Table 5.2 shows the purpose of the visit of tourist in Wayanad destination. Out of the 240 tourists, 55 per cent are come for the leisure activities and 43.8 per cent are come for multiple purpose like leisure, business and study etc. 60 per cent of the Indian tourists are come in the purpose of leisure activity. Whereas the majority of the foreign tourists are (56.7 per cent) visit for multiple purposes such as leisure and business. The foreign tourist's occupation as business oriented. Job oriented strain and stress are usually affected these people. Therefore they visit many destinations in Wayanad for their mind relaxation. Majority of domestic tourists are planned to stay in one day, whereas the foreign tourists are planned to stay in one week. The total number of people accompanied both Indian and foreign tourists for their visit is 10 and above.

Planning is most important element of tourism. Majority of the tourists are collecting the details of the destination before planning and confirming the trip. The Table 5.3 indicate that the tourists nationality and sources of information about the destination.

Table 5.3**Nationality and Sources of Information about the Destination**

Nationality	Sources of Information						Total
	No Response	Friends and Relatives	Visual Media	Social Media	All The Above	Multiple Response	
Indian	24 (13.3)	83 (46.1)	0 (0.0)	3 (1.7)	4 (2.2)	66 (36.7)	180 (100.0)
Foreigner	1 (1.7)	14 (23.3)	1 (1.7)	1 (1.7)	0 (0.0)	43 (71.7)	60 (100.0)
Total	25 (10.4)	97 (40.4)	1 (0.4)	4 (1.7)	4 (1.7)	109 (45.4)	240 (100.0)

Source: Field Survey

Figures in parenthesis are per centage

Among the total respondent, 40.4 per cent of the tourists collect information from friends and relatives. These friends and relatives already visited the destination and recommended the place to others. 45.4 per cent of the Indian tourists have multiple responses such as friends and relatives, visual media, social media, web sites, printed media, advertisement and social media. Comparing to domestic tourists (36.7 per cent) in Wayanad destination, foreigners (71.7 per cent) are using the information and communication technology enabled tourism services. The foreigners who stay for than one or two days in this destination and they want tourism related all information such as tour packages, food and accommodation, infrastructural facilities etc before planning and confirmation of the trips. Most of the domestic tourists visit for one day and therefore rarely use ICT related information about the destinations.

Age is an important determinant of tourism and travel industry. In the study, an attempt has been made if there is any relationship between age and sources of information about the destinations. The below Table 5.4 shows the age and sources of information.

Table 5.4
Age and Sources of Information about the Destination

Age	Sources of Information						Total
	No response	Friends and relatives	Visual Media	Social Media	All the above	Multiple Response	
15-29	12 (8.4)	43 (30.1)	0 (0.0)	3 (2.1)	0 (0.0)	85 (59.4)	143 (100.0)
30-44	7 (8.9)	29 (36.7)	1 (1.3)	1 (1.3)	4 (5.1)	37 (46.8)	79 (100.0)
45-59	1 (5.9)	7 (41.2)	0 (0.0)	0 (0.0)	0 (0.0)	9 (52.9)	17 (100.0)
60 and above	0 (0.0)	1 (100.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (100.0)
Total	20 (8.3)	80 (33.3)	1 (0.4)	4 (1.7)	4 (1.7)	131 (54.6)	240 (100.0)

Source: Field Survey

Figures in parenthesis are per centage

Among the total respondents, 54.6 per cent get sources of information about the destination from visual media, social media and friends and relatives. Out of the 240 respondents 143 are in the age group of 15-29. These age groups are known as youth tourists (Confederation, W. T. 2015). 59.4 per cent also have multiple response. Comparing to other age groups, technology has become a part of the younger generation. Social media and other travel related websites has conveyed the behavior of the youth tourists and the users can search, assess, produce, purchase and consume tourism related products and services.(Bizirgianni and Dionysopoulou, 2013). The technologies like social media and visual media are the exogenous technical factors and these factors have given technical changes in tourism sector. It ultimately leads to long term growth of sector.

Table 5.5
Educational Qualification and Sources of Information about the Destination

Educational Qualification	Sources of information						Total
	No response	Friends and relatives	Visual Media	Social Media	All the above	Multiple Response	
school level	2 (9.5)	11 (52.4)	0 (0.0)	0 (0.0)	0 (0.0)	8 (38.1)	21 (100.0)
Graduate	7 (5.4)	44 (33.8)	0 (0.0)	4 (3.1)	1 (0.8)	74 (56.9)	130 (100.0)
Post Graduate	6 (14.6)	11 (26.8)	1 (2.4)	0 (0.0)	2 (4.9)	21 (51.2)	41 (100.0)
Professional Education	4 (10.0)	10 (25.0)	0 (0.0)	0 (0.0)	0 (0.0)	26 (65.0)	40 (100.0)
Technical Education	1 (12.5)	4 (50.0)	0 (0.0)	0 (0.0)	1 (12.5)	2 (25.0)	8 (100.0)
Total	20 (8.3)	80 (33.3)	1 (0.4)	4 (1.7)	4 (1.7)	131 (54.6)	240 (100.0)

Source: Field Survey

Figures in parenthesis are per centage

The above Table 5.5 indicates that the educational qualification and sources of information about the destinations. Education is an important determinant of sources of information about the destinations. Among the total tourist's, 130 are qualified graduations. Most of the graduate tourist's (56.9 per cent) are using the source like web sites, advertisement and other IT related social media. Friends and relatives are the main source of information about the selection of spot. Not only to give the academic qualification, but also to give basic IT literacy increases the web and social media related information about the destination.

Today, a lot of travel research is available. Google search, Kerala tourism websites, travel agents and tour operators, accommodation units, trip advisor reviews etc are famous among them. Among these travel research, most of the tourists' respondents are using google search and Kerala tourism websites for their travel. For searching the destination through websites most of the travelers concentrate on attraction, accommodation, transport, tour packages etc. The tourist's opinion is that the web sites and social media are helpful in trip planning.

5.1.4 Details on Use of Social Media

In the new era of tourism economy the use of information and communication technologies have a powerful role. To search information about the destination, decision making, interaction with the consumers with social media channels and promoting tourism etc are the main role social media in tourism (Zeng, 2013).

Social media is an important tool for tourism. It provides all type of marketing activities and new competitive products and services. The electronic Word Of Mouth (eWOM) is essential for marketers to know the new stage for communication and prop up the customer relationship in the best way. The eWOM can explain problems and uncertainty during the travel and it can learn what tourists think and say about their experiences(Zivkovic and etal, 2014).

This section highlights the tourist's use of social media sites for Wayanad trip planning and reason for using social media, making of reservation and third party websites. Majority of the tourists have the opinion that the information obtained from the website and social media helpful in trip planning.

Table 5.6
Nationality and Use of Social Media Site for Trip Planning In Wayanad Destination

Social Media	Nationality		
	Domestic	Foreign	Total
No Response	14(7.8)	5(8.3)	19(7.9)
Facebook	66(36.7)	8(13.3)	74(30.8)
Twitter	0(0.0)	3(5.0)	3(1.3)
Youtube	5(2.8)	3(5.0)	8(3.3)
Instagram	3(1.7)	1(1.7)	4(1.7)
Trip Advisor	3(1.7)	0(0.0)	3(1.3)
Tripoto	2(1.1)	0(0.0)	2(0.8)
Multiple Response	87(48.3)	40(66.7)	127(52.9)
Total	180(100.0)	60(100.0)	240(100.0)

Source: Field Survey

Figures in parenthesis are per centage

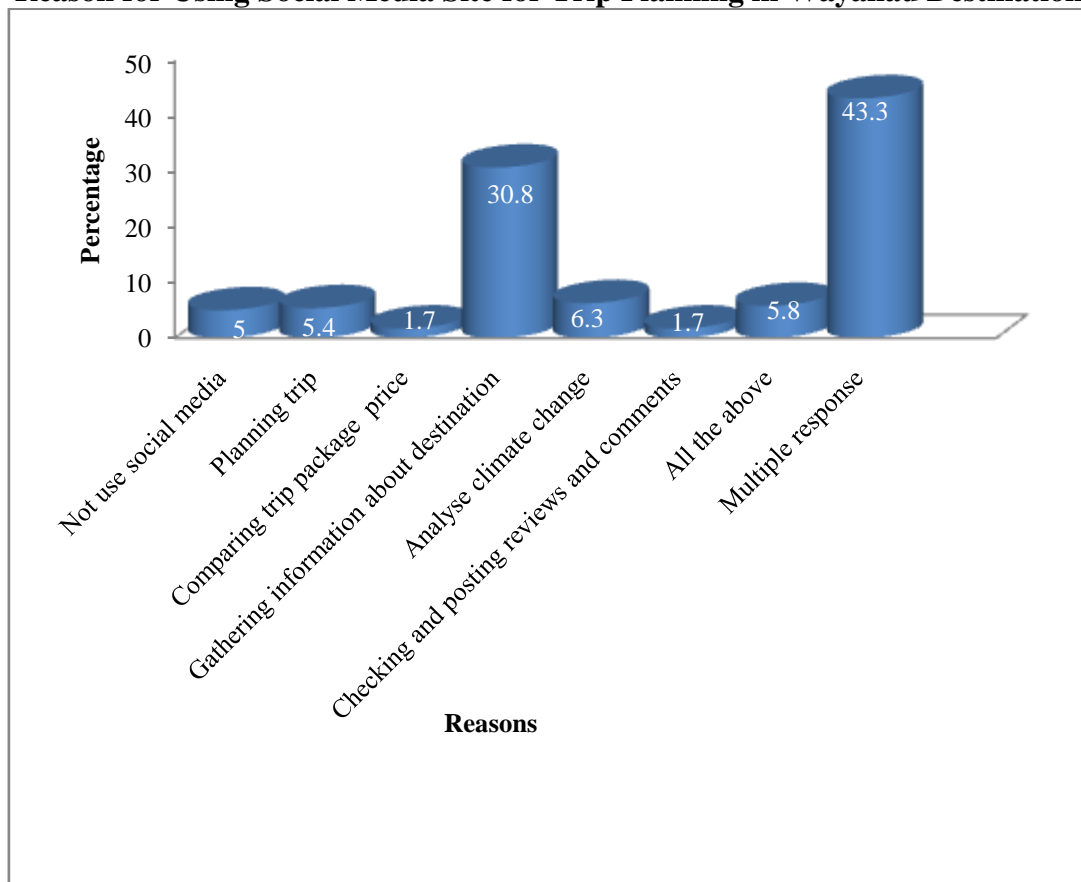
From the Table 5.6 indicates that the nationality and the use of social media site for trip planning in Wayanad district of Kerala. The response of both tourists the leading social

media site is facebook. 30.8 per cent of the tourists are using facebook for their the trip planning in Wayanad destination. In the multiple response of the social media site including Facebook, Whatsapp, Instagram, Youtube, Linkin, Twitter, Trip Advisor etc. considering the multiple response of the travelers, the tourists are gave preference to facebook, whatsapp and instagram. Facebook is the most powerful tool for the tourism marketing and promotion. It was founded in 2004; the main tool of marketing platform is facebook pages. These pages update all information about the customers and allow the customers to lists the events, maps, location, videos and photos galleries etc. (Khan and et al 2017). The internet diffusion has become a more general resource for travel research and booking. The intensification in internet users worldwide has been accompanied by greater use of the internet for travel research and booking, clear in even larger increases in Trip Advisor usage. The Trip Advisor founded in 2000, the number of internet users has expanded rapidly from under 400,000 users to 3 billion. The period from 2009 to 2014, the number of internet users has more than doubled from 1.7 billion to 3.0 billion.(Oxford Economics, 2016). Even though to determine the Wayanad destinations, tourist's respondents do not reflect worldwide data. In the above Table 5.5 shows that only 1.3 per cent of the total population using Trip Advisor site for trip planning. In multiple responses, the foreigners are only selecting the Trip Advisor. Another important social media site is Tripoto and it was founded in 2013. But comparing to tourists of Wayanad destinations less people are using this site for their trip planning. Majority of the tourists opined that face book is frequently used social media site to deal trip planning easy and transparent manner. Therefore they do not select another option for trip planning.

5.1.5 Reason for Selecting Social Media in Trip Planning

Social media is a dominant tool to communicate, share and express personal opinions and they have increasingly become substitute to traditional media in the process of trip planning and decisions, allowing almost genuine time information update. The trip planning process is divided into three stages such as pre-trip period, during the trip and post-trip period. The pre-trip period again divided into two, which is before selecting the destination and after selecting the destination. Before selecting the destination, the user seeks information about the ideas of going on trip. After selecting a destination, the users seek information about somewhere to stay and relaxation options (de Souza and et al 2017). The tourists have lot of reasons for using social media sites for travel search. These reasons are planning trip, comparing trip package prices, gathering information about the destinations, to analyze climate conditions, checking and posting reviews and comments.

Figure 5.1
Reason for Using Social Media Site for Trip Planning in Wayanad Destination

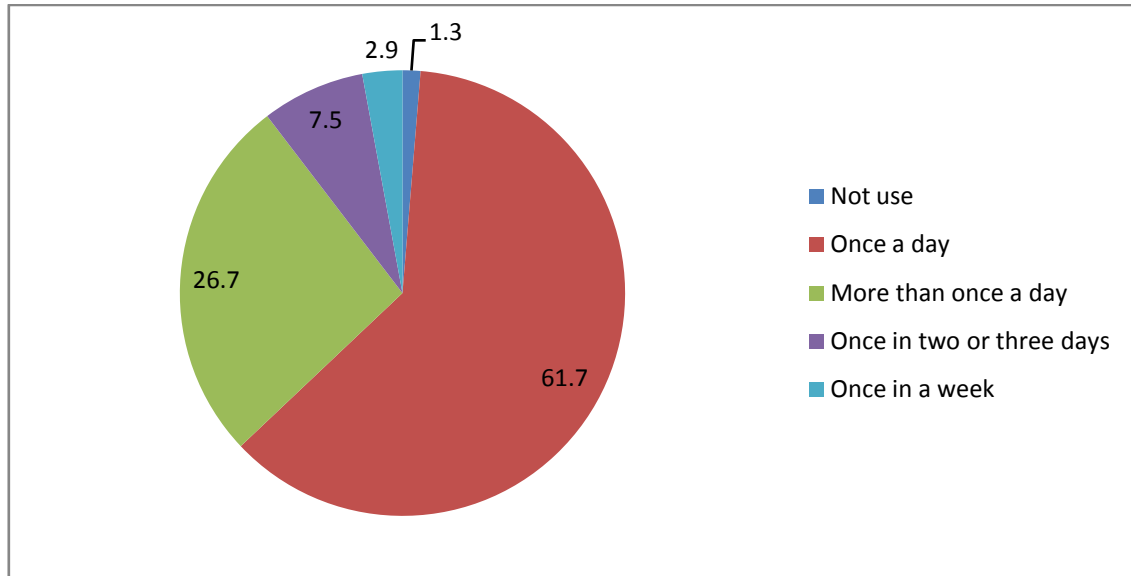


Source : Field Survey

Among the total, only 5 per cent participants do not use social media for trip planning in Wayanad destination. They are collecting the information about the destination through friends and relatives. While, 43.3 per cent of the tourists are using social media has to multiple reasons such as planning trip and gathering information about the destinations, to analyse climate change and checking and posting reviews and comments etc. 30.8 per cent of the tourists use social media for gathering all information about the destinations. Now social media has to give the tourists to two-way communication and to reduce uncertainty and risk. Any tourism site through social media gathers each and every information such as tour package prices, climate condition, video clips and photos. These are to create the travellers a homely atmosphere and increase the quality of travel. Social media has given the people to a direct platform and the people can post their positive and negative opinion about the destination. To read all the comments and post, the customers can get a clear idea about the destination. These feedback and response through social media helps the travellers for the future trip planning processes

The tourists are using the social media sites for their trip planning processes. The Figure 5.2 shows the tourists use of social media.

Figure 5.2
Use of Social Media for Tourists



Source: Field Survey

The figure 5.2 indicates that among the total respondents, only 1.3 per cent of the tourists (both foreign and domestic) are not use the social media. While almost 61.7 per cent of the tourists accessed the social media once in a day. The tourists feel that the diffusion of mobile phone is increases and it positively affected the social media.

Table 5.7
Nationality and Use of Social Media Sites

Use Of Social Media	Nationality		
	Indian	Foreigner	Total
Not use	2(1.1)	1(1.7)	3(1.3)
Once a day	115(63.9)	33(55.0)	148(61.7)
More than once a day	46(25.6)	18(30.0)	64(26.7)
Once in two or three days	11(6.1)	7(11.7)	18(7.5)
Once in a week	6(3.3)	1(1.7)	7(2.9)
Total	180 (100.0)	60(100.0)	240(100.0)

Source: Field Survey

Figures in parenthesis are per centage

The Table 5.7 highlighted the nationality and use of social media. To considering the Indian and foreign tourists, majority of them (63.9 per cent and 55 per cent respectively) use the social media once a day. It is not only for the trip planning but also for their communication facilities. Therefore, the use of social media deeply influences both travelers.

Table 5.8
Age and Use of Social Media Sites

Use Of Social Media	Age				
	15-29	30-44	45-59	60 and above	Total
Not use	2 (1.4)	1 (1.3)	0 (0.0)	0 (0.0)	3 (1.3)
Once a day	87 (60.8)	47 (59.5)	13 (76.5)	1 (100.0)	148 (61.7)
More than once a day	39 (27.3)	21 (26.6)	4 (23.5)	0 (0.0)	64 (26.7)
Once in two or three days	11 (7.7)	7 (8.9)	0 (0.0)	0 (0.0)	18 (7.5)
Once in a week	4 (2.8)	3 (3.8)	0 (0.0)	0 (0.0)	7 (2.9)
Total	143 (100.0)	79 (100.0)	17 (100.0)	1 (100.0)	240 (100.0)

Source: Field Survey

Figures in parenthesis are per centage

The Table 5.8 indicates that age of the tourists and use of social media site. Here the age of tourists has categories into 15-29, 30-44, 45-59, 60 and above. Here we consider all the age group at which 61.7 per cent of the tourists have using the social media once a day. As we already seen in Table 5.4 the majority of the respondent are included under the age group of 15-29, they are youth tourists (59.6 per cent). Most of them are students. “Youth and student travel is one of the fastest growing and most dynamic segments of global tourism with young travelers attracting more attention from destinations looking to diversify their market”(Mukherjee and et al 2015).

Table 5.9
Educational Qualification and Use Of Social Media Sites

Use of Social Media	Educational Qualification					Total
	School Level	Graduate	Post Graduate	Professional Education	Technical Education	
Not use	0 (0.0)	0 (0.0)	2 (4.9)	0 (0.0)	1 (12.5)	3 (1.3)
Once a day	13 (61.9)	77 (59.2)	23 (56.1)	30 (75.0)	5 (62.5)	148 (61.7)
More than once a day	5 (23.8)	37 (28.5)	13 (31.7)	7 (17.5)	2 (25.0)	64 (26.7)
Once in two or three days	2 (9.5)	15 (11.5)	1 (2.4)	0 (0.0)	0 (0.0)	18 (7.5)
Once in a week	1 (4.8)	1 (0.8)	2 (4.9)	3 (7.5)	0 (0.0)	7 (2.9)
Total	21 (100.0)	130 (100.0)	41 (100.0)	40 (100.0)	8 (100.0)	240 (100.0)

Source: Field Survey

Figures in parenthesis are per centage

Table 5.9 points out the educational qualification and the use of social media site. Educational qualifications of the tourists are classified into school level, graduate, post graduate, professional and technical education. Education is a powerful tool for determining the social media sites. Out of the total population 54.2 per cent of the populations are completed graduate level educational qualification. Among this group 59.2 per cent are use the social media once a day. It understands that education is the main determinant for using social media in travel related sites.

Most of tourists are directly confirm their trip reservations. The directly reserve through phone, e-mail, website etc. Many third party sites are used tourists for making reservations. They are Expedia, booking.com, lastminute.com, yatra.com, makemytrip.com, cleartrip.com, via, goibibo. Most of the travelers are purchase ready-made package from the third party sites.

5.1.6 Actual experience of information generated through web media

Before planning trip the travelers gathered information about about the destination through any web media. On that time every tourists are searching tour packages, sightseeing, food, accommodation, infrastructural facilities and best climate condition etc. After selecting destinations they have curiosity over sightseeings, food, accommodation and transportation to

name a few. Therefore the actual feelings or experience may be positive or negative. The following Table 5.10 highlighted tourists actual experience of information already gathered through the web media.

Table 5.10
Actual Experience of Tourists

Actual experience	Tourists Response					
	No response	Poor	Average	Good	Excellent	Total
Sightseeing	2 (0.8)	0 (0.0)	6 (2.5)	117 (48.8)	115 (47.9)	240 (100.0)
Food	2 (0.8)	8 (3.3)	37 (15.4)	137 (57.1)	56 (23.3)	240 (100.0)
Accommodation	2 (0.8)	2 (0.8)	39 (16.3)	133 (55.4)	64 (26.7)	240 (100.0)
Transportation	2 (0.8)	3 (1.3)	51 (21.3)	127 (52.9)	57 (23.8)	240 (100.0)
Climate	2 (0.8)	0 (0.0)	2 (0.8)	80 (33.3)	156 (65.0)	240 (100.0)

Source: Field Survey

Figures in parenthesis are per centage

The above Table 5.10 shows the actual experience of the tourists had compared to information already gathered through web media. Of all the experience 0.8 per cent tourists are not responding, because their trip planning processes do not using web media. As the experience of sightseeing 48.8 per cent travelers felt that the response is good and 47.9 per cent travelers opined excellent, among the total 2.5 per cent opinion is average and 0.8 per cent of tourists do not respond. Among the sample destinations pictures and sightseeing are uploaded in the government as well as private Web Medias. Both foreign and domestic tourists comments, their opinions about the website is that they are satisfied is we can understand that they are satisfied with the sightseeing experience. Majority of the tourist's opined that climate experience is excellent (65 per cent).

The calm and cooling climate of the destination gave the tourists to the relaxation mind and it positively influences them. As compare to food, accommodation and transport, majority of the tourists said that their experience is good. More over a few of the tourists experienced as poor and average. When considering the food, foreigners' tastes are entirely different. Considering the transportation facilities only the road transport is available in Wayanad destination and it negatively affected the tourists. Therefore some tourist's opinion about the transport condition is poor and average. A lot of government as well as private

accommodation facilities available in Wayanad destination. Some tourists opinion is that as searching on web media entirely different the amenities and facilities of accommodations and they gave extra charges. Even though as the tourists looking at the overall experience through web media feel that the actual experience of all facilities is good and excellent. Therefore, social media look forward to sudden response from travel brand and to support reliability and encourages word of mouth marketing.

5.1.7 Social Media and Post of Reviews after the Trip

Now a days social media is an inevitable part of the travel experiences. Popularity of smart phone is a platform to increase travel decision on social media. After the trip the tourists are interesting to post their travel related details in social media. The below table 5.11 shows that all the foreign tourists are ready to make reviews and update after their trips through social media. 94.6 per cent of the tourist's opinion is that after return home, they have to post reviews and comments. The feedback is vital because it helps others.

Table 5.11
Nationality and Update the Social Media after Trip

Response Of Tourists	Nationality		Total
	Indian	Foreigner	
No response	9 (5.0)	0 (0.0)	9 (3.8)
Yes	167 (92.8)	60 (100.0)	227 (94.6)
No	4 (2.2)	0 (0.0)	4 (1.7)
Total	180 (100.0)	60 (100.0)	240 (100.0)

Source: Field Survey

Figures in parenthesis are per centage

Information and communication technology had made tremendous changes in tourism industry. The every stages of travel decision making process the social media had to influence the tourist. After the trip both domestic and foreign tourists makes to post their reviews and comments. The below Table 5.12 indicates after the trip, tourists may post the reviews and comments through the platform of social media.

Table 5.12
Nationality and Post the Reviews and Comments after Trip

Social Media	Nationality		Total
	Indian	Foreigner	
No response	13 (7.2)	0 (0.0)	13 (5.4)
Facebook	140 (77.8)	34 (56.7)	174 (72.5)
Youtube	5 (2.8)	5 (8.3)	10 (4.2)
Twitter	3 (1.7)	1 (1.7)	4 (1.7)
Instagram	2 (1.1)	1 (1.7)	3 (1.3)
Trip Advisor	4 (2.2)	0 (0.0)	4 (1.7)
Multiple response	13 (7.2)	19 (31.7)	32 (13.3)
Total	180 (100.0)	60 (100.0)	240 (100.0)

Source: Field Survey

Figures in parenthesis are per centage

Among the total 5.4 per cent do not post their reviews and comments after their trips. 94.6 per cent of the tourists are ready to post their reviews and comments in the platform of facebook. Because before the trip booking in Wayanad destination they are read the online reviews posted in facebook. That review will definitely be helpful to the tourists. In that reason the most of tourists are ready to post their reviews and comments in facebook. Youtube, Twitter, Instagram, Trip Advisor etc are the famous platform of social media of the travelers. 13.3 per cent of the tourists are ready to post their reviews through different social media sites. The tourists may post the pictures and videos to the destination, it will help others. The majority of tourists may be ready to acknowledge the service providers after the trip and this acknowledgement will help to other travelers. Both domestic and foreign tourists opinion is that as compared to traditional travel agencies the purchase from tourism websites is excellent.

5.2 Socio-Cultural and Economic Impact of Tourism and Development of Local Community in Wayanad Destination

In the first section we analyse the ICT enabled tourism oriented opinion of the tourists and have concluded that most of the travelers prefer to the social media for gathered information about the destination. In this section we focused on the visit of tourist in Wayanad

destinations and how it influences the development of local community. Here we discuss only the socio-cultural and economic impact of ICT enabled tourism and development of local community in Wayanad destination.

Wayanad is a green paradise. The district is famous for its rich tribal heritage, agricultural richness, and abundant green virgin forests, natural sources of water and hill ranges. Wayanad is the least populous of Kerala's district and it is relatively backward and development has not substantially better the lives of the tribes who consist of a significant section of the population. Wayanad is situated in an important picturesque mountainous plateau in the Western Ghats. The immense stretches of mist-capped mountains, green meadows of valleys, white water springs, blue water lakes and wild forests express the splendid natural beauty of Wayanad. The Wayanad region has high cultural diversity of rituals, customs and lifestyle. (Muthulingam and et al., 2013).

Tourism has political, environmental, social, cultural and economic influences on the local communities. The political factors such as community participation, democratization: development in response to the community needs. The environmental factors that influence the local community are the conservation and preservation of natural resources and environmental responsibility. The economic components such as income from local production diversified local economy and self reliance. The social factors influencing local community are to increase social justice, enjoyable quality of life, active community organization and people centred development. The cultural factors that influence the local community such as preservation of culture, formal and informal education etc. (Aref 2010).

The present study focused socio-cultural and economic impact of tourism and development of local community. On the economic side, tourism reduces poverty and unemployment through the creation of job opportunities, increase the level of standard of living and income generated to the host community. The rich cultural heritage and panoramic beauty of nature is a focussing point in Wayanad destination. To analyse the socio-cultural and economic impact of tourism and development of local community in Wayanad destination, a sample was selected from local communities in six dominant tourist destinations in Wayanad district. The selected destinations are Banasura Sagar Dam, Pookode Lake, Chembra Peak, Kuruva Island, Muthanga Wildlife Sanctuary and Edakkal Cave. From each destination 20 samples were selected, therefore, the total sample size of the host community is 120. The following Table 5.13 shows the socio-economic status of the local community in Wayanad destination.

Table 5.13**Socio-Economic Status of the Local Community in Wayanad Destination (N=120)**

Gender	Frequency	Per centage
Male	75.0	63.0
Female	45.0	37.0
Age	Frequency	Per centage
15-29	21.0	18.0
30-44	38.0	32.0
45-59	58.0	48.0
60 and above	3.0	2.0
Educational Qualification	Frequency	Per centage
School level	61.0	50.8
Graduate	27.0	22.5
Post Graduate	19.0	15.8
Professional Education	2.0	1.7
Technical Education	11.0	9.2
Marital Status	Frequency	Per centage
Single	15.0	12.5
Married	104.0	86.7
Widower	1.0	0.8
Occupation	Frequency	Per centage
Salaried	18.0	15.0
Business	40.0	33.3
Professional	2.0	1.7
Agriculture Labour	26.0	21.7
Industrial Labour	6.0	5.0
Retired	2.0	1.7
Self Employed	20.0	16.6
Others	6.0	5.0
Income	Frequency	Per centage
Below 10000	50.0	41.7
10001-25000	27.0	22.5
25001-50000	42.0	35.0
50001-100000	1.0	0.8

Source: Field Survey

From the gender wise classification, Table 5.13 shows that among the total majority of the members are male and not female. Most of the local communities are under the age group of 45-59 and these members are handling the business oriented occupation in Wayanad destination. The type of business are more in trade, manufacturing and accommodation related business. Others are included in drivers and coolie workers. Majority of them are married and the income category of below 10000.

To analyzing the personal details of the local community, variables like gender, age, education, marital status, occupation, income and residential status have been used.

5.2.1 Gender and Destination –Wise Classification of Local Community

The gender difference is usually persuades of the local community in tourism sector. Below Table 5.14 highlighted the gender wise classification of local community in selected destination in Wayanad.

Table 5.14
Gender Wise Classification of Local Community

Gender	Destination						Total
	Banasura Sagar Dam	Chembra Peak	Muthanga Wildlife Sanctuary	Pookode Lake	Kuruva Island	Edakkal Cave	
Male	14 (70.0)	13 (65.0)	10 (50.0)	14 (70.0)	12 (60.0)	12 (60.0)	75 (62.5)
Female	6 (30.0)	7 (35.0)	10 (50.0)	6 (30.0)	8 (40.0)	8 (40.0)	45 (37.5)
Total	20 (100.0)	20 (100.0)	20 (100.0)	20 (100.0)	20 (100.0)	20 (100.0)	120 (100.0)

Source: Field Survey

Figures in parenthesis are per centage

The Table 5.13 indicates that 62.5 per cent of the selected local community is male and the remaining 37.5 per cent are female. We can see that there is no variation exists to analyse the gender wise classification of the local community in the destinations.

5.2.2 Age and Destination Wise Classification of Local Community

Age is an important factor for changing these variables. Below Table 5.15 shows the age and destination wise classification of local community in Wayanad.

Table 5.15
Age Wise Classification of Local Community

Age	Destination						Total
	Banasura sagar Dam	Chembra Peak	Muthanga Wildlife Sanctuary	Pookode Lake	Kuruva Island	Edakkal Cave	
15-29	3 (15.0)	3 (15.0)	5 (25.0)	1 (5.0)	3 (15.0)	6 (30.0)	21 (17.5)
30-44	6 (30.0)	10 (50.0)	6 (30.0)	8 (40.0)	4 (20.0)	4 (20.0)	38 (31.7)
45-59	10 (50.0)	7 (35.0)	8 (40.0)	11 (55.0)	13 (65.0)	9 (45.0)	58 (48.3)
60 and above	1 (5.0)	0 (0.0)	1 (5.0)	0 (0.0)	0 (0.0)	1 (5.0)	3 (2.5)
Total	20 (100.0)	20 (100.0)	20 (100.0)	20 (100.0)	20 (100.0)	20 (100.0)	120 (100.0)

Source: Field Survey

Figures in parenthesis are per centage

From the Table 5.15 clearly indicates regarding the age of the local community, majority (48.3 per cent) belongs to the age group of 45-59. Additionally, 31.7 per cent are included in the age group of 30-40 and 17.5 per cent are under the age group of 15-29 and 2.5 per cent are only belongs to the age group of 60 and above. We can see that in Table 5.14 except Chembra Peak, the majority of the local communities in every destination are in the age of 45-59.

5.2.3 Education and Destination Wise Classification of Local Community

Educational condition is to one of the factors which persuade the general attitude of the local community towards the tourism related activities. Below Table 5.16 highlighted the education and destination wise classification of local community.

Table 5.16
Education Wise Classification of Local Community

Education	Destination						
	Banasura Sagar Dam	Chembra Peak	Muthanga Wildlife Sanctuary	Pookode Lake	Kuruva Island	Edakkal Cave	Total
School level	8 (40.0)	11 (55.0)	13 (65.0)	9 (45.0)	11 (55.0)	9 (45.0)	61 (50.8)
Graduate	7 (35.0)	4 (20.0)	4 (20.0)	6 (30.0)	1 (5.0)	5 (25.0)	27 (22.5)
Post Graduate	2 (10.0)	5 (25.0)	1 (5.0)	2 (10.0)	6 (30.0)	3 (15.0)	19 (15.8)
Professional Education	1 (5.0)	0 (0.0)	1 (5.0)	0 (0.0)	0 (0.0)	0 (0.0)	2 (1.7)
Technical Education	2 (10.0)	0 (0.0)	1 (5.0)	3 (15.0)	2 (10.0)	3 (15.0)	11 (9.2)
Total	20 (100.0)	20 (100.0)	20 (100.0)	20 (100.0)	20 (100.0)	20 (100.0)	120 (100.0)

Source: Field Survey

Figures in parenthesis are per centage

In this table educational qualification of the local community exposes that majority of them have school level education (50.8 per cent). Followed by graduation (22.5 per cent), post graduate (15.8 per cent), technical education (9.2 per cent). Only 1.7 per cent of the population has professional education. Educated people reside in the Banasura Sagar Dam and Muthanga Wildlife Sanctuary only.

5.2.3 Occupation and Destination Wise Classification of Local Community

Another important factor that influence the tourism related activity is occupation. The Table 5.17 highlighted the local community's destination wise classification and occupation.

Table 5.17**Occupation Wise Classification of Local Community**

Occupation	Destination						
	Banasura Sagar Dam	Chembra Peak	Muthanga Wildlife Sanctuary	Pookode Lake	Kuruva Island	Edakkal Cave	Total
Salaried	3 (15.0)	5 (25.0)	2 (10.0)	2 (10.0)	5 (25.0)	1 (5.0)	18 (15.0)
Business	10 (50.0)	3 (15.0)	2 (10.0)	5 (25.0)	8 (40.0)	12 (60.0)	40 (33.3)
Professional	1 (5.0)	1 (5.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	2 (1.7)
Agriculture Labour	3 (15.0)	6 (30.0)	9 (45.0)	3 (15.0)	2 (10.0)	3 (15.0)	26 (21.7)
Industrial Labour	0 (0.0)	2 (10.0)	2 (10.0)	2 (10.0)	0 (0.0)	0 (0.0)	6 (5.0)
Retired	1 (5.0)	0 (0.0)	1 (5.0)	0 (0.0)	0 (0.0)	0 (0.0)	2 (1.7)
Self Employed	2 (10.0)	3 (15.0)	4 (20.0)	5 (25.0)	4 (20.0)	2 (10.0)	20 (16.7)
Others	0 (0.0)	0 (0.0)	0 (0.0)	3 (15.0)	1 (5.0)	2 (10.0)	6 (5.0)
Total	20 (100.0)	20 (100.0)	20 (100.0)	20 (100.0)	20 (100.0)	20 (100.0)	120 (100.0)

Source: Field Survey

Figures in parenthesis are per centage

The Table 5.17 indicates the occupation wise classification of the local community. Here majority (33.3 per cent) of the respondents are into business oriented occupation. The trade, manufacturing and accommodation oriented business are the profession of most of the local community in the selected destinations. Among the total 21.7 per cent of the local community are earning their livelihood from agricultural oriented occupational activities. Followed by 16.7 per cent of the local communities who are self employed workers and 15.0 per cent of the populations are salaried persons. Retied and professional workers are 1.7 per cent. Industrial Labour and other categories (5.0 per cent) including drivers and coolie workers.

5.2.4 Marital Status and Destination Wise Classification of Local Community

Marital status of the local community have been classified into single, married and widower. The below Table 5.18 clearly explained the marital status of the local community.

Table 5.18
Marital Status Wise Classification of Local Community

Destination	Marital Status			Total
	Single	Married	Widower	
Banasura Sagar Dam	1(5.0)	19(95.0)	0(0.0)	20(100.0)
Chembra Peak	3(15.0)	17(85.0)	0(0.0)	20(100.0)
Muthanga Wildlife Sanctuary	4(20.0)	16(80.0)	0(0.0)	20(100.0)
Pookode Lake	3(15.0)	17(85.0)	0(0.0)	20(100.0)
Kuruva Island	2(10.0)	18(90.0)	0(0.0)	20(100.0)
Edakkal Cave	2(10.0)	17(85.0)	1(5.0)	20(100.0)
Total	15(12.5)	104(86.7)	1(0.8)	120(100.0)

Source: Field Survey

Figures in parenthesis are per centage

From the Table 5.18, majority of the local community are married (86.7 per cent). Followed by 12.5 per cent are single and only 0.8 per cent of the population are widowers. For each category, the married communities are more and only one respondent of local community in Edakkal Cave is a widower.

5.2.5 Income and Destination Wise Classification of Local Community

The income of a person influences their attitude towards the tourism oriented activities. The Table 5.19 highlighted the income and destination wise classification of local community.

Table 5.19**Income Wise Classification of Local Community**

Income	Destination						
	Banasura Sagar Dam	Chembra Peak	Muthanga Wildlife Sanctuary	Pookode Lake	Kuruva Island	Edakkal Cave	Total
Below 10000	5 (25.0)	9 (45.0)	13 (65.0)	9 (45.0)	7 (35.0)	9 (45.0)	52 (43.3)
10001-25000	7 (35.0)	2 (10.0)	2 (10.0)	4 (20.0)	5 (25.0)	5 (25.0)	25 (20.8)
25001-50000	8 (40.0)	8 (40.0)	5 (25.0)	7 (35.0)	8 (40.0)	6 (40.0)	42 (35.0)
50001-100000	0 (0.0)	1 (5.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (0.8)
Total	20 (100.0)	20 (100.0)	20 (100.0)	20 (100.0)	20 (100.0)	20 (100.0)	120 (100.0)

Source: Field Survey

Figures in parenthesis are per centage

From the table, we can easily analyze that the majority (43.3 per cent) of the local community have the monthly income which is below 10000. Only 0.8 per cent of the respondents have the income level above 50001-100000 categories.

5.2.6 Residential Status and Destination Wise Classification of Local Community

The residential status of the local community must influence the tourism development in Wayanad destinations. Compared to the migrated community, the native who are born and brought up this destination have more idea about the tourism related activities of the destination. The Table 5.20 clearly points out that the residential status and destination wise classification of local community.

Table 5.20
Residential Wise Classification of Local Community

Category of Resident	Destination						Total
	Banasur a Sagar Dam	Chembr a Peak	Muthanga Wildlife Sanctuary	Pookode Lake	Kuruva Island	Edakkal Cave	
Born	14 (70.0)	18 (90.0)	18 (90.0)	14 (70.0)	19 (95.0)	16 (80.0)	99 (82.5)
Migrated	6 (30.0)	2 (10.0)	2 (10.0)	6 (30.0)	1 (5.0)	4 (20.0)	21 (17.5)
Total	20 (100.0)	20 (100.0)	20 (100.0)	20 (100.0)	20 (100.0)	20 (100.0)	120 (100.0)

Source: Field Survey

Figures in parenthesis are per centage

From the Table 5.20 we can analyse that 82.5 per cent of the local community are born in the same locality and 17.5 per cent of the local community have migrated to the destination. Almost every destination analysis exposes the same pattern

5.2.7 Local Community and Relationship with Tourism

In the Table 5.21 shows the local community and their relationship with tourism industry.

Table 5.21
Relationship of Local Community With Tourism

Relationship	Frequency	Per centage
Employed in tourism	40	33.3
Family member employed in tourism	14	11.7
Tourism entrepreneur	31	25.8
No relation	35	29.2

Source: Field Survey

The Table 5.21 clearly analyzes the relationship of local community with tourism sector. 70.8 per cent of the local communities are directly or indirectly depend upon tourism related activities. Whereas 29.2 per cent of the local community has no relation to the tourism related activities. For the development of tourism there is an active participation of tourism related activities of local community is the need of the hour.

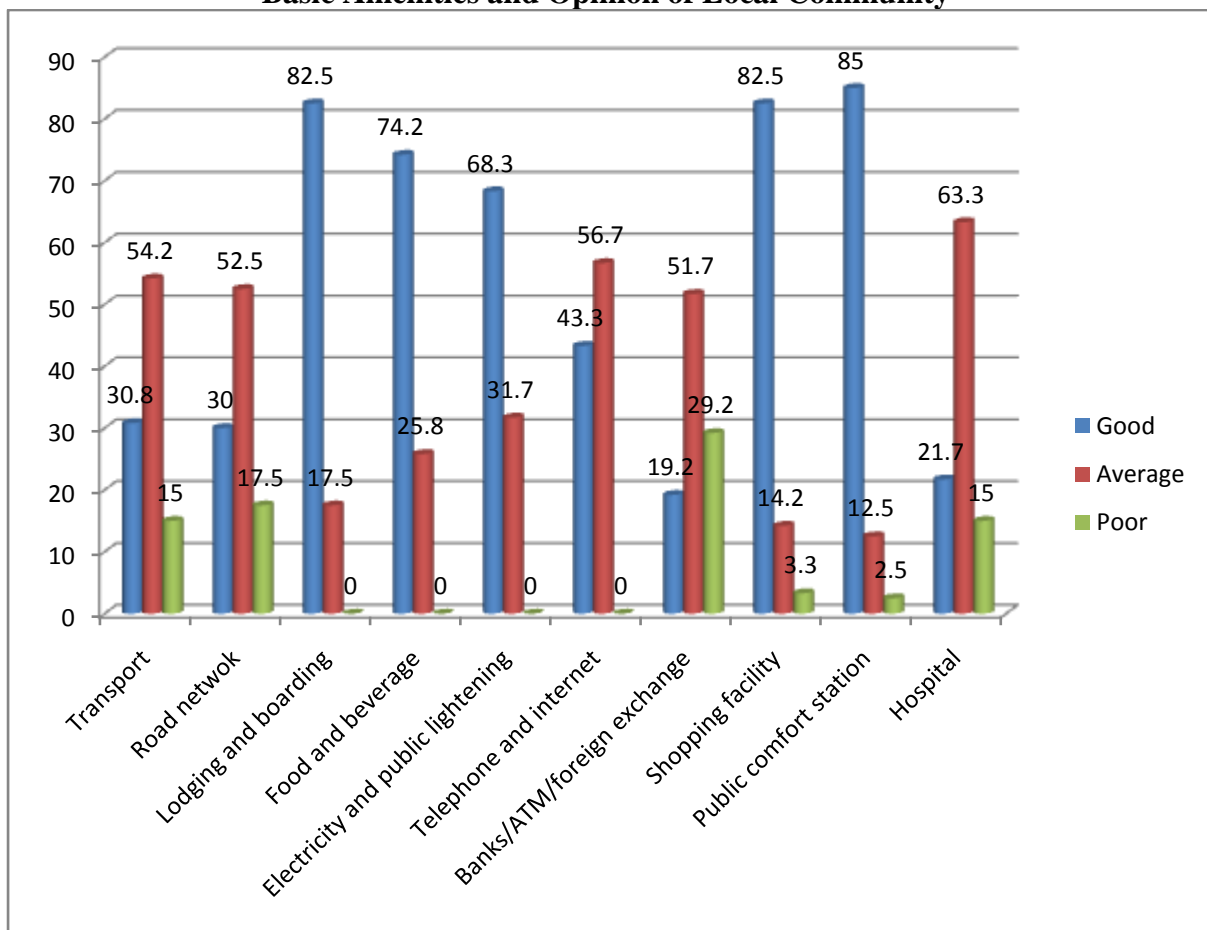
5.3 Amenities in the Selected Tourist's Destinations in Wayanad

Amenities means, basic facilities that are provided in a tourist destination. There are two types of amenities; natural and manmade. The natural amenities are beaches, sea bathing,

possibilities of fishing, and opportunities of trekking etc whereas the manmade amenities include various types of entertainment, facilities which provide special needs. On involving these amenities the local community definitely gets the development.

To analyse the opinion of local community to develop the amenities in the destination, the variables like transportation, road network, lodging and boarding, pure drinking water, food and beverages, electricity and public lighting, telephone and internet, banks/ATM/foreign exchange centre, shopping, public comfort station, recreation and well equipped hospitals have been used. The Figure 5.3 shows the basic amenities of selected destinations and opinion of local community to develop tourism.

Figure 5.3
Basic Amenities and Opinion of Local Community



Source: Field Survey

The Figure 5.3 highlighted the basic amenities and the opinion of local community in all the selected destinations. The details of all the facilities and amenities of the six select destinations are given below.

5.3.1 Transportation Facilities and Opinion of Local Community to Develop Tourism

Transportation has been the fundamental component of tourism development. When there is better transportation system, the tourism will expand more. Only road transportation facility is available in Wayanad. The nearest airport as well as railway station is at Kozhikode, which is 98 Km from Wayanad. The buses, jeeps and auto ricksha etc are the local transport facilities in Wayanad. The Table 5.22 explains the opinion of local community on the availability of transport system.

Table 5.22
Opinion of the Local Community on the Availability of the Transport System

Transport	Destinations						Total
	Banasura Sagar Dam	Chembra Peak	Muthanga Wildlife Sanctuary	Pookode Lake	Kuruva Island	Edakkal Cave	
Good	10 (50.0)	10 (50.0)	0 (0.0)	5 (25.0)	5 (25.0)	7 (35.0)	37 (30.8)
Average	9 (45.0)	10 (50.0)	15 (75.0)	11 (55.0)	11 (55.0)	9 (45.0)	65 (54.2)
Poor	1 (5.0)	0 (0.0)	5 (25.0)	4 (20.0)	4 (20.0)	4 (20.0)	18 (15.0)
Total	20 (100.0)	20 (100.0)	20 (100.0)	20 (100.0)	20 (100.0)	20 (100.0)	120 (100.0)

Source: Field Survey

Figures in parenthesis are per centage

The Table 5.22 reveals that most of the host community (54.2 per cent) opinion is that the transport system in Wayanad destination is mediocre. The six destinations are situated in remote area. Only road transport facility available here. As comparing to destination wise detail majority of the local community opinion is good as the destination of Banasura Sagar Dam and Chembra Peak. To understand the importance of transportation facilities, District Tourism Promotion Council arranging the vehicle for the tourists. The private transportation facility such as jeep, auto and bus service has been arranged by the local community to every tourists place.

5.3.2 Road Network and Opinion of Local Community to Develop Tourism

The district capital of Wayanad is Kalpetta town. NH766 connects Kalpetta with Kozhikode and Mysore. The State Highways connect Kalpetta with Ooty in Tamil Nadu and Madikeri in

Karnataka. The smooth network of roads helps tourists as well as the local community to evaluate the destination easily.

Table 5.23
Opinion of the Local Community on the Availability of Road Network System

Road Network	Destinations						Total
	Banasura Sagar Dam	Chembra Peak	Muthanga Wildlife Sanctuary	Pookode Lake	Kuruva Island	Edakkal Cave	
Good	9 (45.0)	8 (40.0)	3 (15.0)	5 (25.0)	4 (20.0)	7 (35.0)	36 (30.0)
Average	10 (50.0)	12 (60.0)	11 (55.0)	12 (60.0)	10 (50.0)	8 (40.0)	63 (52.5)
Poor	1 (5.0)	0 (0.0)	6 (30.0)	3 (15.1)	6 (30.0)	5 (25.0)	21 (17.5)
Total	20 (100.0)	20 (100.0)	20 (100.0)	20 (100.0)	20 (100.0)	20 (100.0)	120 (100.0)

Source: Field Survey

Figures in parenthesis are per centage

The Table 5.23 reveals that 52.5 per cent of local communities have argued that the road networkings in the hilly area of destinations are average. Out of the 120 local community 30.0 per cent opined is that the road networking is good and remaining 17.5 per cent opinion that the road networking is poor.

5.3.3 Lodging and Boarding and Opinion of Local Community to Develop Tourism

The lodging and boarding are the tangible facility of tourism (V.S.Joy, 2012). The accommodation facility is good, it influences the tourist's arrival. Trivago the online hotel aggregator by conducting a study to comparing 9,00,000 hotels from 250 websites worldwide, the company released a list of 100 destinations worldwide keeping account of two parameters-consumer rating and average hotel price (The News Minute, 2015). Out of the 120 local community majority of the people are the owners of homestay and resort. The opinion of local community about the lodging and boarding as follows in the Table 5.24

Table 5.24**Opinion of the Local Community on the Availability of Lodging and Boarding Facility**

Lodging and boarding	Destinations						
	Banasura Sagar Dam	Chembra Peak	Muthanga Wildlife Sanctuary	Pookode Lake	Kuruva Island	Edakkal Cave	Total
Good	20 (100.0)	18 (90.0)	15 (75.0)	14 (70.0)	14 (70.0)	18 (90.0)	99 (82.5)
Average	0 (0.0)	2 (10.0)	5 (25.0)	6 (30.0)	6 (30.0)	2 (10.0)	21 (17.5)
Total	20 (100.0)	20 (100.0)	20 (100.0)	20 (100.0)	20 (100.0)	20 (100.0)	120 (100.0)

Source: Field Survey

Figures in parenthesis are per centage

The Table 5.24 highlights that the opinion on the accommodation facilities in particular locality. 82.5 per cent of the local community pointed out that the lodging and boarding facility is good and remaining 17.5 per cent opinion is that the tangible facility is an average. Here we can analyse the interesting fact that the facility of Banasura Sagar Dam has 100 per cent good as the opinion of local community.

5.3.4 Drinking Water, Food and Beverage Facilities and Opinion of Local Community to Develop Tourism Sector

Water is an elixir of life. For the development the development of tourism infrastructure the pure drinking water has its own importance. The Kudumbasree Mission in Wayanad has launched 'Sajalam', a project to conserve drinking water source in the district. It aims to clean and maintain all the public waterbodies. (Manoj, 2016). All the destinations local community opinion is the drinking water facility is good. Another important tourism related service is food and beverage facility. A restaurant is an institute within food and beverage zone which prepares and serves foods and drinks to shoppers in return for cash, both paid before the meal, after meal with a walking tab. (Mishra and et al, 2017)

Table 5.25**Opinion of the Local Community on the Availability of Food and Beverage Facility**

Food And Beverage	Destinations						
	Banasura Sagar Dam	Chembra Peak	Muthanga Wildlife Sanctuary	Pookode Lake	Kuruva Island	Edakkal Cave	Total
Good	15 (75.0)	16 (80.0)	17 (85.0)	14 (70.0)	12 (60.0)	15 (75.0)	89 (74.2)
Average	5 (25.0)	4 (20.0)	3 (15.0)	6 (30.0)	8 (40.0)	5 (25.0)	31 (25.8)
Total	20 (100.0)	20 (100.0)	20 (100.0)	20 (100.0)	20 (100.0)	20 (100.0)	120 (100.0)

Source: Field Survey

Figures in parenthesis are per centage

From the Table 5.25 one can see that majority of the local community (74.2 per cent) in all destinations have good opinion about the food and beverages facilities available in restaurant. The remaining 25.8 per cent of the people only have the opinion of the food and beverage as average.

5.3.5 Electricity and Public Lightening, Telephone and Internet, Banks/ATM/Foreign Exchange and Opinion of Local Community to Develop Tourism

The tangible amenity such as electricity and public lightening, telephone, internet, banks, ATM and foreign exchange are inevitable for the development of a community. The destination wise details of these facilities are explained in the Table 5.26

Table 5.26
Opinion of the Local Community on The Availability of Infrastructure Facilities

Electricity and Public Lightening	Destinations						
	Banasura Sagar Dam	Chembra Peak	Muthanga Wildlife Sanctuary	Pookode Lake	Kuruva Island	Edakkal Cave	Total
Good	13 (65.0)	14 (70.0)	14 (70.0)	12 (60.0)	12 (60.0)	17 (85.0)	82 (68.3)
Average	7 (35.0)	6 (30.0)	6 (30.0)	8 (40.0)	8 (40.0)	3 (15.0)	38 (31.7)
Total	20 (100.0)	20 (100.0)	20 (100.0)	20 (100.0)	20 (100.0)	20 (100.0)	120 (100.0)
Telephone and Internet							
Good	11 (55.0)	13 (65.0)	3 (15.0)	9 (45.0)	8 (40.0)	8 (40.0)	52 (43.3)
Average	9 (45.0)	7 (35.0)	17 (85.0)	11 (55.0)	12 (60.0)	12 (60.0)	68 (56.7)
Total	20 (100.0)	20 (100.0)	20 (100.0)	20 (100.0)	20 (100.0)	20 (100.0)	120 (100.0)
Banks/ATM/Foreign Exchange							
Good	10 (50.0)	0 (0.0)	0 (0.0)	4 (20.0)	5 (25.0)	4 (20.0)	23 (19.2)
Average	9 (45.0)	15 (75.0)	6 (30.0)	15 (75.0)	10 (50.0)	7 (35.0)	62 (51.7)
Poor	1 (5.0)	5 (25.0)	14 (70.0)	1 (5.0)	5 (25.0)	9 (45.0)	35 (29.2)
Total	20 (100.0)	20 (100.0)	20 (100.0)	20 (100.0)	20 (100.0)	20 (100.0)	120 (100.0)

Source: Field Survey

Figures in parenthesis are per centage

Table 5.26 shows the tangible facilities of tourism and the opinion of local people about these facilities. Here, we considering electricity and lightening, 68.3 per cent of the local community's opinion is good. The remaining 31.7 per centage of the community rated it as

average. As looking into all destinations we can see the same pattern. The local community opines that the telephone and internet facility as rated average and it is 56.7 per cent and remaining 43.3 per cent as good. Majority of the local community opined that the telephone and internet facility are average at most of the destinations. All the destinations are situated in a hilly and remote area. To overcome the difficulty of telephone and internet facility, the local people feel that it is best to apply broad band connections to these remote areas. Today we are living in a global world. Bank, ATM and foreign exchange facilities are most important in domestic as well as foreign tourists. These facilities are available in all tourists locations automatically the local economic development will come.

The majority of the local community opinion is average as about the Bank, ATM and other foreign exchange facilities. When we compare the whole destination, majority of the local people opinion is good (50 per cent) as in the destination of Banasura Sagar Dam. Whereas Chembra Peak, Pookode Lake and Kuruva Island local community as rated as average and Edakkal Cave and Muthanga Wildlife Sanctuary destinations have the poor condition of these facilities.

5.3.6 The Facilities of Shopping, Recreation, Public Comfort Stations, Hospital and the Opinion of Local Community to Develop Tourism

Shopping is one of the most popular activities of tourism (Kinley and et al 2002). In every tourist destinations, the nearby places shopping facilities are available. Spices are the major items sold here. The important products in every shopping center are handicraft and handloom. The crafts are mainly done with coconut shell, ivory, canes, wood and metals. In Wayanad, shop for spices, different flavours of tea and coffee, bamboo article, native craft, honey, herbal plant. (keralatourism.org). Wayanad shopping festivals and flower shows are attracting lots of tourists and it provide employment opportunities to the local community. In every destinations in Wayanad have recreational facilities are available. The lush green surrounding and scenic views, this destination touches the heart with the travelers. Trekking, camping, wildlife safari, mountain biking, kayaking, zipline, rock climbing, sightseeing etc are the recreational activities of the destination (wayanadtourism.org). Public comfort stations availability is most important for every destination. There are lots of comfort stations under the control of government authority. The hilly area of Wayanad, climate condition is calm and cool. The tourists are staying more than one day they have facing some difficulties related to health. Therefore, well equipped hospital is most important for the tourism. Lot of

government and private hospitals are situated in every tourist's destinations near places. The below Table 5.27 analyse the facilities of shopping, public comfort stations, hospital and the opinion of local community to develop tourism.

Table 5.27

Opinion of the Local Community on the Infrastructure Facility (Shopping, Public Comfort Stations and Hospital)

Shopping Facility	Destinations						
	Banasura Sagar Dam	Chembra Peak	Muthanga Wildlife Sanctuary	Pookode Lake	Kuruva Island	Edakkal Cave	Total
Good	17 (85.0)	19 (95.0)	19 (95.0)	15 (75.0)	15 (75.0)	14 (70.0)	99 (82.5)
Average	3 (15.0)	1 (5.0)	1 (5.0)	5 (25.0)	3 (15.0)	4 (20.0)	17 (14.2)
Poor	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	2 (10.0)	2 (10.0)	4 (3.3)
Total	20 (100.0)	20 (100.0)	20 (100.0)	20 (100.0)	20 (100.0)	20 (100.0)	120 (100.0)
Public comfort station							
Good	15 (75.0)	20 (100.0)	17 (85.0)	16 (80.0)	16 (80.0)	18 (90.0)	102 (85.0)
Average	5 (25.0)	0 (0.0)	3 (15.0)	3 (15.0)	3 (15.0)	1 (5.0)	15 (12.5)
Poor	0 (0.0)	0 (0.0)	0 (0.0)	1 (5.0)	1 (5.0)	1 (5.0)	3 (2.5)
Total	20 (100.0)	20 (100.0)	20 (100.0)	20 (100.0)	20 (100.0)	20 (100.0)	120 (100.0)
Hospital							
Good	10 (50)	4 (20)	1 (5)	2 (10.0)	4 (20.0)	5 (25.0)	26 (21.7)
Average	9 (45)	9(45)	17 (85)	15 (75.0)	12 (60.0)	14 (70.0)	76 (63.3)
Poor	1 (5)	7 (35)	2 (10)	3 (15.0)	4 (20.0)	1 (5.0)	18 (15.0)
Total	20 (100.0)	20 (100.0)	20 (100.0)	20 (100.0)	20 (100.0)	20 (100.0)	120 (100.0)

Source: Field Survey

Figures in parenthesis are per centage

From the Table 5.27 analyse the shopping facility, public comfort station and well equipped hospital are available in every destinations in Wayanad district. 82.5 per cent of shopping facilities are good. To looking into the six destinations we can see the same reflection. The public comfort stations are almost good in every station. In most of the destinations in

Wayanad the sanitation facilities are done by government authority. The private individual (local community) also handles the public comfort station to the nearest tourists spot. Well equipped hospital is an important facility in every tourism destination. Comparing to other districts in Kerala Wayanad is mostly tribal populated. Majority of the tribal people are physically unhealthy and they faces lot of health problems. The opinion of local community is that the hospital facility is average (63.3 per cent). Therefore well equipped hospital facilities are needed for the local community and tourists for every destination. Majority of the local community feel that they access to these amenities is properly maintained.

5.4 The Socio-Cultural and Economic Impact of ICT Enabled Tourism and Local Economic Development

The social and cultural impacts of ICT enabled tourism are the ways in which tourism is contributing to changes in value systems, individual behavior, family relationships, collective lifestyles, moral conduct; create expressions, traditional ceremonies and community organization. In other words they are the effects on the people of host communities of their direct and indirect associations with tourists (Pizam, 2014). The economic impact can be quantified in terms of monetary benefits and overall economic development of the society. The environmental impact refers to the impact on the nature and nearby areas. Every tourism will positively or negatively affects the local community.

5.4.1 Socio-Cultural Impact of ICT on Tourism and Local Development

The positive socio-cultural impact such as, to increase tourism massive money is invested to conserve the traditional art, craft and culture, to develop infrastructure, to offer better local facilities which in turn creates cultural exchange and better education, better leisure facilities, arranging numerous social interaction and events, thus a better life style for the local people. The local community interacts with the tourists; mix with people from diverse background which create a sophisticated culture in the region. The negative impact due to the heavy traffic in the region is to more vandalism in the tourist destinations, the infrastructure may not be able to manage the increasing rush, thus leading to congestion, underprivileged sanitation which may further lead to diseases both to the tourists as well as local people. The interference of outsiders in the area may disturb the local culture and create unrest among the people. The local people may copy the life styles of tourists through the demonstration effect and the result could be loss of native customs and tradition. Some people may enter the criminal activities to fetch easy money from tourists that lead to increased crime and anti-

social activities such as sex abuses and prostitution and loss of moral and social values and degradation of local languages and culture.

Table 5.28
The Socio-Cultural Impact of ICT on Tourism and the Opinion of the Local Community

Sl. No	Statement	Opinion Of Local Community		
		Agree	No opinion	Disagree
1	Supports revival of traditional art, craft and culture	96 (80.0)	17 (14.2)	7 (5.8)
2	Ensure restoration of historic building	102 (85.0)	12 (10.0)	6 (5.0)
3	Promotes cultural advancement of the community due to increased interaction with tourists	92 (76.7)	21 (17.5)	7 (5.8)
4	Preserve the cultural identity of the station	87 (72.5)	24 (20.0)	9 (7.5)
5	Provides cultural exchange and education	96 (80.0)	20 (16.7)	4 (3.3)
6	Promotes social interaction	74 (61.7)	31 (25.8)	15 (12.5)
7	Increases the number of crime in the area	33 (27.5)	53 (44.2)	34 (28.3)
8	Communities, cultural and traditional ways of life	92 (76.7)	21 (17.5)	7 (5.8)
9	Results in more vandalism in the area	67 (55.8)	47 (39.2)	6 (5.0)
10	Increased tourists arrivals results in friction between local residents and tourists	85 (70.8)	17 (14.2)	18 (15.0)
11	Increased tourists arrivals negatively affect the community's way of life	24 (20.0)	60 (50.0)	36 (30.0)
12	Results in displacement of community	40 (33.3)	20 (16.7)	60 (50.0)
13	Causes changes in the art, craft and festivals in the region	11 (9.2)	28 (23.3)	81 (67.5)
14	Leads to demonstration effect in the life style of the region	42 (35.0)	29 (24.2)	49 (40.8)
15	Community are being exploited by tourism	73 (60.8)	38 (31.7)	9 (7.5)
16	Leads to drugs use and alcoholism	40 (33.3)	56 (45.7)	24 (20.0)
17	Leads to sex abuse and prostitution	5 (4.2)	46 (38.3)	69 (57.5)
18	Spread the intensity of disease	25 (20.8)	73 (60.8)	22 (18.3)
19	Degradation of local language	28 (23.3)	31 (25.8)	61 (50.8)

Source: Field Survey

Figures in parenthesis are per centage

The Table 5.28 reveals that the local communities involvement in socio-cultural activities in the tourism destination. Here 80 per cent of the local community are supporting traditional art, craft and culture. Majority of the tribes in Kerala are live in Wayanad destination. The tribal have a rich legacy of arts, crafts and culture which attracting more number of tourists to this destinations. Their art are inspired by natural themes and they have separate musical instruments made by bamboo and wood. Lot of bamboo made modern products are available in these destinations. The Kurichiya community have a great tradition of aggressive arts and their skill in archery is well known. The famous art of the tribes are Vattakali, Koodiyatam using thudi and kuzhal by Paniyas, Gadhika by Adiyas, Kolkali by Kurumas and Nellukuthu pattu by Kurichiyas. (Kerala tourism site). Both the foreign as well as domestic tourists attracting to the traditional art, craft and culture.

The above Table 5.28 shows that the local communities opinion about the social and cultural impact of tourism. Most of the local communities (85 per cent) have responded that the tourism in this destination must ensure the restoration of historic buildings. The remaining 10 per cent of the local community have no opinion about the historic building restoration and only 5 per cent of the local communities disagree to this comment. 76.7 per cent of the local community opinion is that tourism promotes cultural advancement of the community due to increased interaction with tourists in all the destinations. There is a positive socio-cultural impact on ICT enabled tourism that preserves the cultural identity of the station, provide cultural exchange and education and promote social interaction etc, these positive impacts are agreed by local community in Wayanad destination. The negative impact of socio-cultural tourism causes changes in the art, craft and festivals in the region, leads to drugs use and alcoholism, sex abuse and prostitution, spread the intensity of disease and degradation of local language etc.

Among the total population, these are agreed by least of the community. Therefore, in Wayanad destination we can see that positive socio cultural impact on tourism. This impact will lead to the local economic development in the remote area of Wayanad destination.

5.4.2 Economic Impact of Tourism and Local Development

The economic impact of tourism development benefited to the local community. The direct benefit of tourism is to create the job opportunities to the people. The local communities income increase and it create higher standard of living to the people. The higher standard of living leads to creation of new business and new investment opportunities. The additional business will generate revenue for local communities and overall development of the economy. (Bakri and et al 2014). The tourism development not only affects the economy, but

also to improve the infrastructure development of the society. The negative impact of tourism to the local community as well as tourists is the unexpectable natural calamity, economic crisis, terrorism and political disruption. (Miller, 2018)

Table 5.29
The Economic Impact of ICT on Tourism and the Opinion of the Local Community

Sl.No	Statement	Opinion of Local Community		
		Agree	No Opinion	Disagree
1	Provides worthwhile job opportunities	114 (95.0)	3 (2.5)	3 (2.5)
2	Motivates business units to expand	110 (91.7)	4 (3.3)	6 (5.0)
3	Helps to increase the income of the community	116 (96.7)	2 (1.7)	2 (1.7)
4	Helps to improve the educational facilities in the region	108 (90.0)	4 (3.3)	8 (6.7)
5	Helps to increase the standard of living	116 (96.7)	3 (2.5)	1 (0.8)
6	Helps to increase the infrastructure	117 (97.5)	3 (2.5)	-
7	Helps to increase the investment in the area	107 (89.2)	9 (6.7)	4 (3.3)
8	Increased shopping opportunities	120 (100.0)	-	-
9	Spreads development to nearby areas	120 (100.0)	-	-
10	Increases foreign exchange earnings	116 (96.7)	3 (2.5)	1 (0.8)
11	Results an increase in the cost of living	120 (100.0)	-	-
12	Prevents the creation of other productive industry in the area.	113 (94.2)	6 (5.0)	1 (0.8)
13	Results increase in the price of land, house and commodity necessary for daily life	120 (100.0)	-	-
14	Leads to shortage of consumables.	115 (95.8)	5 (4.2)	-

Source: Field Survey

Figures in parenthesis are per centage

From the Table 5.29 highlighted the statement related to economic effects of tourism and the local communities' opinion. The majority of the local community opinions about all the statement as agreeing to it. Therefore it is observed that the economic impact of tourism positively affected the local community. The most favoured opinion with regards to increased shopping opportunities, spreads development in nearby area, results an increase in the cost of

living and results increases in the price of land, house and community necessary for daily life etc.

As mentioned above, for calculating Index we use 33 variables related to socio-cultural and economic impact of ICT on tourism and the opinion of local community. The value of the index is ranges from 0 to 1 and any movement from 0 to 1 denoted the socio-cultural and economic impact of the local community. The value of 0 considered no socio-cultural and economic impact of local community and range 1 considered the high socio-cultural and economic impact of the local community. While considering the normality of the distribution, the values are classified into 0 to .33 is low socio-cultural and economic impact, 0.33 to 0.66 is considered medium socio-cultural and economic impact and 0.66 to 1 is denoted into high socio-cultural and economic impact.

The equation for calculating socio-cultural and economic impact index is that

$$SCEII (Xi) = (Xij- Xi) / (Xi^{**}-Xi^*)$$

SCEII (Xi) = Socio Cultural and Economic Impact Index of Xi

Xij = Actual Value

Xi = Minimum Value

Xi** = Probable Maximum Value

Xi* = Probable Minimum Value

The Table 5.30 shows the socio-cultural and economic impact of local community

Table 5.30

The Socio-Cultural and Economic Impact of Local Community

Impact	Frequency	Per cent
Low Socio-Cultural and Economic Impact	13	10.8
Medium Socio-Cultural and Economic Impact	78	65
High Socio-Cultural and Economic Impact	29	24.2
Total	120	100.0

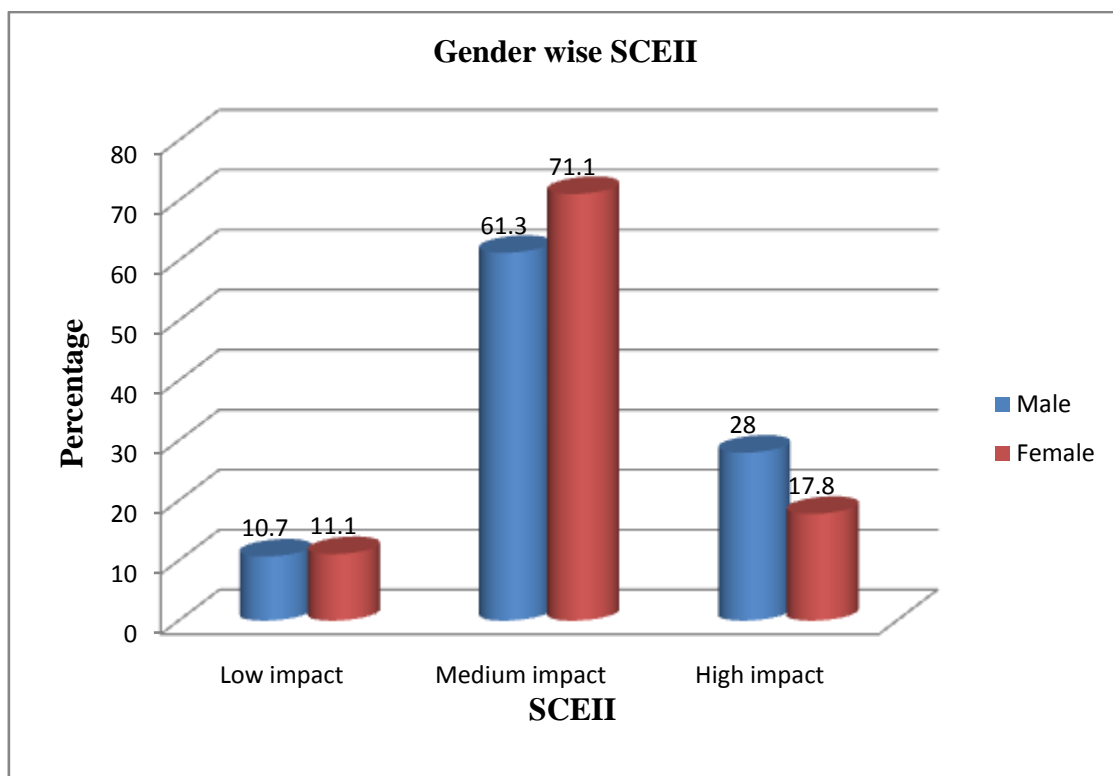
Source: Compiled from primary data

The above Table 5.30 elicits Socio-Cultural and Economic Impact Index (SCEII) of local community in selected tourist’s destinations in Wayanad district. Considering the above indicators 65 per cent of the local community are Medium Socio-Cultural and Economic Impact. It means that ICT enabled tourism have mediumly affected the local communities. 10.8 per cent and 24.2 per cent of the local community have low and high Socio-Cultural and Economic Impact respectively. Through the calculation of Socio-Cultural and Economic

Impact Index (SCEII) it is found that the technological advancement in tourism industry has an impact on socio-cultural and economic lives of the local community and this validates the research hypothesis. Therefore the technological advancement influences the socio-cultural and economic lives of local people to a medium level.

Like tourists, public and private service providers in tourism sector, the local communities in Wayand destination also have taken more technological initiatives to promote tourism. It might be helps to attain high socio cultural and economic development to the local community in Wayanad destinations.

Figure 5.4



Source: Field Survey

The Figure 5.3 shows the gender wise SCEII of local community in Wayanad district. Among the total, of 65 per cent included in the Medium Level of socio cultural and economic impact category. When considering the total population males (62.5 per cent) are higher than the females (37.5 per cent). But the interesting result is that the Medium Level of socio cultural and economic impact index is higher in female (71.1 per cent) than male (61.3 per cent). Because when considering the occupation wise classification, majority of the females are engaged in self employed activities like home made pickle making, handicraft making, hotels attached their house etc. hence, it may helps to generate income and socio-cultural interaction.

Table 5.31
Destination wise SCEII

Name of the destination	SCEII			Total
	Low impact	Medium impact	High impact	
Banasura Sagar Dam	4 (20.0)	11 (55.0)	5 (25.0)	20 (100.0)
Chembra Peak	4 (20.0)	16 (80.0)	0 (0.0)	20 (100.0)
Muthanga Wildlife Sanctuary	1 (5.0)	13 (65.0)	6 (30.0)	20 (100.0)
Pookode Lake	1 (5.0)	15 (75.0)	4 (20.0)	20 (100.0)
Kuruva Island	0 (0.0)	8 (40.0)	12 (60.0)	20 (100.0)
Edakkal Cave	3 (15.0)	15 (75.0)	2 (10.0)	20 (100.0)
Total	13 (10.8)	78 (65.0)	29 (24.2)	120 (100.0)

Source: Field Survey

Figures in parenthesis are per centage

The Table 5.31 indicates the Socio Cultural and Economic Impact Index of selected six destinations in Wayanad district. To considering these destinations, Kuruva Island only has High Socio Cultural and Economic Impact (60 per cent) to the local community. The above Table 5.17 shows that 40 per cent of the local communities are engaged in business activities in Kuruva Island. Majority of the people are doing trade and manufacturing in this area. ‘Uravu’ and ‘Gandhigram’ are the famous entrepreneurial units in Wayanad. Their handicraft and herbal products trade the local communities in Kuruva Island. The medium of ICT is one of the promoting activities of these entrepreneurs and they will get global market in these products. It shows that the exogenous factor like ICT invested in tourism related activities, it highly influenced the socio cultural and economic impact of the local community in Kuruva Island.

5.4.4 Conclusion

The socio-economic conditions of tourists and their ICT oriented opinion, local communities’ development through ICT enabled tourism are discussed in this chapter. As compared to traditional travel agencies, both domestic and foreign tourists are purchased ICT enabled tourism for their travel decision processes. The involvement of local people is inevitable for the development of tourism industry. To considering the local communities socio cultural and economic impact we are used the Index. The ICT enabled tourism moderately influence Medium Level Socio Cultural and Economic Impact of local community.

CHAPTER VI
SUMMARY, FINDINGS AND CONCLUSION

6.1 Introduction

The study focuses on Information and communication technology, its role and impact of tourism development in Kerala. Information and communication technology can reshaping the tourism industry and there has been rapid increase in the number of travelers in an economy. India's travel and tourism sector rank eighth in the world in terms of its total contribution of country's GDP (WTTC, 2017); the sum is equivalent to 6.7 per cent of India's GDP. The 25.9 million jobs are created by travel and tourism sectors together in India. IT enabled tourism is also termed as 'e-tourism'. ICT is one of the most people friendly and environment friendly industries in modern times. Tourism industry is seeking more practical and satisfied chain solution from the innovation of ICT. The increasing trend of tourism industry directly and indirectly influences ICT, public and private partnership and involvement of local community.

The study is used to both primary and secondary data. The secondary data was collected from the Ministry in 2008 to 2015, Economic Census 2011, Economic Review of the State Planning Board (2008 to 2015), Tourism related journals, magazines and online resources. The primary data was collected from the government officials, travel agents and tour operators, accommodation units, tourists and local community. Five separate set of interview schedule prepared. The study of Tourism area was Wayanad district (One of the responsible tourism implementing district in Kerala). Simple random sampling has been used to select the sample. The respondents for the study consist of 240 tourist (both domestic (180) and foreign (60), 5 Government officials (Directorate of Tourism, District Tourism Promotion Council, Hydrel Tourism Centre, South Wayanad Forest Department and North Wayanad Forest Department), 75 private sector service providers such as 15 Travel agents and 15 Tour operators, 45 accommodation units (15 resort, 15 hotels, 15homestay), 120 local community were selected from the six dominant destination were selected. Therefore the total sample size of the study is 440 were selected. Apart from statistical tools, the total sample size selected for feasibility of the study.

The study is organized into six chapters including introduction and conclusion. It starts with ICT contribution of tourism promotion. Then the government and private sector participation in tourism industry and ICT initiatives of these two sectors to promote tourism in the study area. Finally, the impact of ICT enabled tourism and local economic development. The technical changes of the tourism sector have both positive and negative externalities. The positive externalities of tourism industry such as job creation, development of infrastructure,

increase the standard of living, poverty reduction and income generation. The negative externality is environmental degradation. All these externalities directly influenced by public, private and local people. That is CPPP, which means the combination of Community-Public-Private-Partnership. It gives distinctive opportunities to private entrepreneurs, government and local community to work together them in achieving the key policy objectives of tourism. (Aregawi 2015). Thus CPPP is attractive, sustainable and satisfactory for the local people and tourism industry.

6.2 Summary and Findings

This section unravels the major findings and conclusion emerged from this study on the basis of objectives.

6.2.1 To Investigate the Role of Information and Communication Technology in Promoting Tourism in Kerala.

The first objective is to investigate the role of information and communication technology promoting tourism in Kerala. It was found out that the tourist arrival and foreign exchange earning has increased in Kerala. As comparing region wise, Asia region has most number of internet users and country wise comparison, it is seems that India have the second place. In India, it continuously increases in Kerala. The terrorist attack in 2002, the natural calamity in 2004 and the global economic crisis in 2009 were slight changes appeared in foreign and domestic tourist in Kerala. Kerala was the first state to declare digital state of India. The Kerala state to declared lot of ICT enabled tourism services to the development and promotion of tourism industry. To the ICT enabled tourism promotion of Kerala has to get lot of award and honors. The tourist arrival, receipt, foreign exchange earning etc measured with the help of Average Annual Growth Rate used. As compared to region wise tourist arrival in Kerala, southern district have both domestic and foreign tourist arrival was highest. Wayanad is a northern part of Kerala region. Comparing to other district in Kerala, more number of tourist destinations are in Wayanad district. After the deceleration of agriculture, more number of people is directly and indirectly depends upon tourism services. Wayanad is a remote area. Comparing to other district in Kerala, in this district has less infrastructure facilities. Among the six selected destination, the most dominant destination is Chembra Peak. It is clearly indicates the income/visitors growth during the year 2008 to 2016. Modern type of technologies are using to the promotion and development of tourism in Kerala. For linking tourism and information and communication technology Kerala has to become a heaven to the earth and the same reflection can see the tourist destination in Wayanad district.

6.2.2 To Examine ICT Initiatives of the Government and the Private Sector to Promote Tourism in Wayanad

The ICT initiatives of the government and the private sector to promote tourism are included in the fourth chapter. Tourism related government officials in Wayanad district are Directorate of Tourism (DoT), District Tourism Promotion Council (DTPC), Kerala State Electricity Board (KSEB) and Forest Department (North & South) etc. Tourism related private service providers are accommodation units, travel agents and tour operators. All the officials have their own website and DTPC and Forest Departments will update their website daily. That means 60 per cent of the government officials are update their website daily and 40 per cent of the officials are ready to update their web once a month. These officials are DoT and KHTC. The main aim of all the government officials is to promote tourism. Apart from tourism promotion, the Hydel Tourism Centre and Forest Departments will gave more important to conservation and preservation of nature and environmental sustainability. Lot of tourism spots and accommodation facilities in Wayanad are the under of DTPC and NWFD. Therefore daily update the web is more important. The Search Engine Optimization like Google, Yahoo and Bing are using all the public officials. Even though DTPC only have 24 hour call centre facility and online booking facility available.

Online reservation and booking facility as the important ICT initiatives to promoting tourism in this destination. Kerala Hydel Tourism Centre (KHTC) in Wayanad is under the control of Kerala State Electricity Board (KSEB). The main objective of the centre is to assist the successful utilization of water based tourism potential in the natural environments of hydel projects areas of the state as well as protect the ecology of the area. KHTC and Forest Departments have not available any online booking and reservation facility. The Hydel Tourism Department and North and South Wayanad Forest Departments main medium of publicity is websites and brochures. Whereas, District Tourism Promotion Council and Directorate of Tourism have their medium of publicity such as participations in fairs, brochures, websites and advertisement. Tailor made and package tours are available in all government tourism sectors in Wayanad. Majority of the government officials are offering both type of packages. All the government officials, the DTPCs information and communication technology initiative to promote tourism is outstanding and other tourism related departments are trying their best to conservation and preservation of eco friendly tourism in the destinations.

Accommodation units are the essential element of tourists to visit a place. Ministry of Tourism has classified the Homestay into silver, gold and diamond. Out of the selected 15 Homestay, 40 per cent as the Homestay include the category of gold, 6.7 per cent are diamond, 26.7 per cent are the category of silver and 26.7 per cent are not included into any category. Majority of the Homestays facilities and amenities are the same. When their property gets any type of categorization, the owners are ready to pay luxury charges. It may be the reason of 26.7 per cent of the accommodation units are not categorized their property. The resorts are classified into the Ministry of Tourism like 'star' categories like 3-star, 4-star and 5-star and hotels projects into 5-star Deluxe, 5-star with or without alcohol service, 4-star with or without alcohol service, 3-star, 2-star and 1-star (Ministry of Tourism, Government of India, 2018). Out of the 15 resorts 60 per cent have the 3 star categories, 6.7 per cent is 4-star, 13.3 per cent have the 5-star and 20 per cent have the category of luxurious, traditional and economical type. The Government of India, Ministry of Tourism has certain terms and conditions to approve the accommodation units in this category. Other accommodation units are Hotels. It categorized into 2-star, 3-star and 4-star. The 66.7 per cent of the hotels are 3-star categories, 26.7 have 2-star and 6.7 per cent has the 4-star categories. Majority of the travelers especially the foreign tourists select their accommodation units through online did not prefer the classified accommodation units. They selected certain criteria like cleanliness, homely behavior, affordable price and its quality of service and scene.

The social media has taken huge role in tourism marketing, mainly in decision-making, creation of marketing campaign and communication with customers. Majority (55.6 per cent) of the accommodation units in Wayanad destination use the tour marketing the platform of social media like Facebook, Whatsapp, Youtube, Twitter and Instagram. The tourism depends to a high extend on the verbal message, opinions, recommendations and comments on social platforms such as Facebook, LinkedIn and Twitter enable customers to share suggestions and tips. (Karim, 2017). The majority of the accommodation units in the destinations to got regular enquiry via social networking site. The tourists from the neighboring States of Karnadaka and Tamil Nadu are staying more in the destinations. 82.2 per cent of the accommodations units are provide advertisement for the promotion of tourism in the daily deal sites. Especially, the Google ads are used for this. 46.7 per cent of the accommodation units only to get regular enquiry. 80 per cent of the enquiry per month from online ads will get converted to booking. The accommodation units in Wayanad using their

online travel related social media such as TripAdvisor, Holiday.iq, Trivago, Makemytrip.com, Yatra.com, Travelguru, Booking.com, Nivalink.com etc. Trivago is the world's largest hotel booking search engine. This travel website released the report that Wayanad has bagged the ninth spot in the world in offering the best accommodation service to tourists at lower cost. One of the best ICT initiatives of tourism promotional activities is social media platform. It help to take decision making and tourism destination marketing through Fcaebook, YouTube, Google, Flickr, Twitter, Instagram, Smartphone and Android application. The travelers are sharing their information through social media during the pre-travel stage. It has enhanced the knowledge sharing related to tourist destinations and products, facilities and amenities. The social media users who share their experience, are largely influenced by other travelers and it will lead to promote tourism. The ICT initiatives are less expensive and offering many opportunities to the travelers. (Mukherjee Anwasha and Nagabhushanam Manasa, 2016). The cultural heritage, natural beauty and climate conditions are the attraction of the tourists to visit the remote area like Wayanad destination. Sometimes accommodation units are utilize their property for conducting social and cultural events for local people, especially the Tribal community. The opinions on information and communication technology enabled tourism in the destination about the owners of accommodation units is excellent. The suggestion is to promote the tourism industry in the study area is to improve technical infrastructure and legal framework for online advertisement or official endorsement for online marketing, maintenance and updating tourism websites properly. All tourism sectors may have to connect electronic linkages. The effectively utilization of ICT initiatives in all accommodation units, the remote area of Wayanad to a number one destinations in the world.

Most of the travel agents and tour operators are using Facebook (63.3 per cent) for their tourism promotion. Because it makes sure to easy share content and photos to the travelers. Twitter and Instagram are the other social media platform in the tourism promotion in travel industry. 60 per cent of the tour operators have to get regular enquiry from social media sites. 46.7 per cent of enquiries per month from social media will get converted to booking. Comparing to international travelers, the domestic travelers are to get more enquiries from social media via booking. In summer season more number of the travelers are demanding their service. The travel agents and tour operators are using the travel related website like makemytrip.com, cleartrip.com, travelguru, trip advisor etc. 76.7 per cent are provide reviews in Trip Advisor. The daily deal site enquiries are poor in the case of travel agents and tour

operators. The agencies enquiries per month 30-40 is online ads will get converted to booking. The easy way of tourism promotion is the application of tourism related apps in mobile phone. Through mobile apps 66.7 per cent of the travel agents and tour operators are made online booking. Kerala is the first state in India to announce tourism as an industry. The tourism policy credentials of the central and state governments claims that Kerala tourism model is one of the most liberalized tourism models with the private sector leading tourism development. The government to act as a facilitator by providing the basic infrastructure conducive for tourism and allow the private sector to play the leading role in tourism promotion and development. From the above discussion, it clearly depicts that the public private participation are necessary for the development of tourism industry. The innovation and digitalization of tourism will leads to creation of new employment opportunities, increase investment, skills and sustainability in this sector. Both public and private sector working together in tourism industry through ICT, it may be an economic bonanza at global level.

6.2.3 To Analyze the Impact of ICT on Tourism and Local Development in Wayanad District

In the fifth chapter analyses the impact of ICT enabled activities of the domestic and foreign tourist and socio- cultural and economic conditions of the local community in Wayanad district. 75 per cent of Indian and 25 per cent of the foreigner tourists sample was selected for the study. Out of the 240 tourists in Wayanad destinations, 56.7 per cent are male and 43.3 per cent are female. When considering the whole age wise data, the youth participation is very high (15-29) in the sample destinations. Out of the total sample size, 59.6 per cent are the age group of 15-29. In Wayanad, 32.9 per cent are the age group of 30-44 and 7.1 per cent are included in the age group of 45-59 and 0.4 per cent is included in the age group of 60 and above.

The educational qualification is inevitable for the high quality and sustainable tourism development. Education is one of the important tools for good decision making and empowerment of tourists. Hence to analyze the educational qualification of tourists, we categorise them as school level, graduate, post graduate, professional and technical education. Among the total, majority (54.2 per cent) of the tourists have the educational qualification of graduate in Wayanad destinations. 8.8 per cent tourists are included in the educational qualification of school level, whereas, 17.1 per cent of tourists are included in post graduate level. The per centage of professional and technical education qualification is 16.7 and 3.3 respectively. Only the educated persons to develop new technology, innovative product and

services (Perman Luka and etal, 2014). It is clearly understand that educational qualification is a main determinant of travel and tourism industry.

Marital status of the tourists are classified into single, married and separated. Out of 240 tourists 57.5 per cent are single, 42.1 per cent of tourists are married and 0.4 per cent of the tourists are separated. Hill tourism is one of the important striking points in Wayanad destination. In this destination more number of students and families keep visiting. Occupation is an important determinant of tourist arrivals all over the world. Out of 240 tourists, 34.6 per cent of the populations are Industrial labour. Most of the students are coming from Karnadaka and Tamil Nadu State. Whereas out of the population, 20.8 per cent are professional, 18.8 per cent are the occupation of business and 13.8 per cent are salaried. The remaining tourist's populations, the occupation of tourists are agriculture, retired, self employed and others (coolie workers, drivers).

Income of the persons are positively affected in the tourism and travel. The student categories are more and the student populations are depending upon their parent's income. 43.3 per cent are in the category of below Rs.10000 monthly incomes. The tourists have the monthly income 25001-50000, 100001 and above are 20.8 per cent. These are the main socio-economic status of tourists in Wayanad destination.

Comparing to domestic tourists (36.7 per cent) in Wayanad destination, foreigners (71.7 per cent) are using the information and communication technology enabled tourism services. It is because of the technological skill are more for the foreign tourists. Among the total respondents, 58.7 per cent of the youth are using technological sources of information about the destination. 30.8 per cent of the tourists are using the trip planning in Wayanad destination through facebook. Facebook is the most powerful tool for the tourism marketing and promotion. Among all 240 respondents, only 5 per cent participant not using social media for trip planning in Wayanad destination. They collected the information about the destination through friends and relatives. While, 43.3 per cent of the tourists are using social media for multiple reasons such as planning trip and gathering information about the destinations, to analyse climate change and checking and posting reviews and comments etc. Gathering all information about the destination is the main reason of 30.8 per cent of tourists planning in the Wayanad destination.

Out of the total population 54.2 per cent of the populations are graduate level educational qualification. Of these graduate people 59.2 per cent are use the social media once a day. It

understands that education is the main determinant for using social media in travel related sites. As compared to traditional travel agencies, both domestic and foreign tourists are purchased website related tourism or ICT enabled tourism for their travel decision processes. Therefore today's fast growing digital economy, the travel decision making through ICT is inevitable for every individuals travel decision processes.

Information and communication technology had made tremendous changes in tourism industry. The every stages of travel decision making process the social media had to influence the tourist. After the trip both domestic and foreign tourists had to post their reviews and comments. Out of the 240 respondents 5.4 per cent are not post their reviews and comments after their trips. 94.6 per cent of the tourist's majority of them may be ready to post their reviews and comments in the platform of facebook. Because before the trip booking in Wayanad destination they are read the facebook online reviews. That review will definitely helpful to the tourists. In that reason the most of tourists are ready to post their reviews and comments in facebook. Youtube, Twitter, Instagram, Trip Advisor etc are the famous platform of social media of the travelers. 13.3 per cent of the tourists will be ready for the multiple respondents of these Social Medias. The tourists post the pictures and videos to the destination, it will help others. The majority of tourists are ready to acknowledge the service providers after the trip and this acknowledgement will help to other travelers. Both domestic and foreign tourist's opinion is that as compared to traditional travel agencies the purchase from tourism websites is excellent.

To considering the local community, majority (33.3 per cent) of the respondents are into business as their primary occupation. The trade, manufacturing and accommodation oriented business are doing most of the local community in the selected destinations. Followed by 21.7 per cent of the local community who are earning their livelihood from agricultural oriented occupational activities. 16.7 per cent of the local community is doing business by working at home and 15.0 per cent of the population are salaried persons. Retied and professional workers are 1.7 per cent. Industrial labour and other categories (5.0 per cent) including drivers and coolie workers. The local food, art, craft, culture and festivals are wonderful experience of the tourists and these are the pride for host community. The tourists are directly buying the finished local products from the local community. The tourists are exchange their ideas from the rural community, it result to increasing literacy and modern attitude to the local people. All the destinations local community directly and indirectly

involves tourism related activities and it has positively influenced the socio- cultural and economic development of the society.

80 per cent of the local community are supporting traditional art, craft and culture. Most of the local community (85 per cent) are responded that the tourism in this destination have to ensure the restoration of historic buildings. The remaining 10 per cent of the local community have no opinion about the historic building restoration and only 5 per cent of the local community are disagree to this comments.76.7 per cent of the local community opinion is that tourism promote cultural advancement of the community due to increased interaction with tourists in all the destinations. There is a positive impact of socio-cultural tourism is that preserves the cultural identity of the station, provide cultural exchange and education and promote social interaction etc, these positive impacts are agreed by local community in Wayanad destination.

The negative impact of socio-cultural tourism causes changes in the art, craft and festivals in the region, leads to drugs use and alcoholism, sex abuse and prostitution, spread the intensity of disease and degradation of local language etc.Out of the total population, these are agreed by least of the community. Therefore, in Wayanad destination we can see a positive impact of socio cultural tourism. This impact will lead to the local economic development in the remote area of Wayanad destination.

For calculating Index we are using 33 variables related to socio-cultuaral and economic impact of ICT on tourism and the opinion of local community. The value of the index is ranges from 0 to 1 and any movement from 0 to 1 denoted the socio-cultural and economic impact of the local community. The value of 0 considered no socio-cultural and economic impact of local community and range 1 considered the high socio-cultural and economic impact of the local community. While considering the normality of the distribution, the values are classified into 0 to .33 is low socio-cultural and economic impact, 0.33 to 0.66 is considered medium socio-cultural and economic impact and 0.66 to 1 is denoted into high socio-cultural and economic impact.

65 per cent of the local community face Medium Socio-Cultural and Economic Impact. It means that ICT enabled tourism have mediumly affected the local communities. 10.8 per cent and 24.2 per cent of the local community have low and high Socio-Cultural and Economic Impact respectively.Like tourists, public and private service providers in tourism sector, the local communities in Wayand destination also has take more technological initiatives to

promote tourism. It may be helps to attain high socio cultural and economic development to the local community in Wayanad destinations.

When considering the total population males (62.5 per cent) are higher than the females (37.5 per cent). But the interesting result is that the Medium Level of socio cultural and economic impact index is higher in female (71.1 per cent) than male (61.3 per cent). Because when considering the occupation wise classification, majority of the females are engaged in self employed activities like home made pickle making, handicraft making, hotels attached their house etc. hence, it may helps to generate income and socio-cultural interaction. Kuruva Island only has High Socio Cultural and Economic Impact (60 per cent) to the local community. The 40 per cent of the local communities are engaged in business activities in Kuruva Island. Majority of the people are doing trade and manufacturing in this area. 'Uravu' and 'Gandhigram' are the famous entrepreneurial units in Wayanad. Their handicraft and herbal products are trading the local communities in Kuruva Island. The medium of ICT is one of the promoting activities of these entrepreneurs and they will get global market in these products. It shows that the exogenous factor like ICT invested in tourism related activities, it highly influenced the socio cultural and economic impact of the local community in Kuruva Island.

6.3 Conclusion

Tourism is an important economic activity. It contributes employment, income and foreign exchange earnings. The technological innovation has positive influence on tourism industry. Information and communication technology has reshaped our life style and society. It has turned the world to a global village where an individual can assess what is happening in the other part of the world as a glance. To understand the importance of ICT in tourism industry the government and private sectors must take more initiatives to the promotion of tourism and the hospitality industry. In the modern era of globalisation tourism has the most attractive areas of business not only for profit, but also its social role and purpose has been increased. That is why in delivery of tourist product to the exogenous outcome ICT takes special place in modern creativity. The investment in exogenous outcome to create a technical change in tourism products. The ICT innovation in social media like Facebook, Twitter, Instagram, Youtube etc and online travel related sites such as TripAdvisor, Trivago, Makemytrip.com, Cleartrip.com, Booking.com are creates changes lot of technical in tourism industry. Through the medium of ICT the customers can assess their information within seconds. The private sector tourism providers such as travel agent, tour operator and accommodation units etc are

effectively use their human capital through the exogenous outcome of ICT. The technical changes of the tourism sector have positive and negative externalities. The positive externalities are job creation, development of infrastructure, increase in standard of living, poverty reduction and income generation. The negative externalities are environmental degradation. All these externalities trickle down to the local communities. It creates Community Public Private Partnership (CPPP) in tourism industry. These groups are working together through the medium of ICT and there should be a long term growth and substantial increase in the tourism products. The tourism products improvement in remote areas, directly and indirectly influencing the host communities. It will lead to sustainable rural economic development.

6.4 Policy Implications

The hilly area of Wayanad district has lot of tourism destinations. Majority of the local people especially the tribes are directly and indirectly depend upon tourism related activities. Even though, while comparing to tourist arrival in other district of Kerala, Wayanad has back position. The remote area of Wayanad has enough potential for tourism development through ICT. Thus, an effective government mechanism is necessary to the development of ICT enabled tourism in the remote area of Wayanad district and it will help improve the local communities standard of living and it may turned the world to a global village.

6.5 Further Scope of the Study

The government, Non Governmental Organisation and Private sectors are working together for the development of ICT enabled tourism in Wayanad destination. The present study only focusses on the select government and private sector tourism related agencies. The Vana Samrakshana Samithi which is the famous NGO working for the development of tourism in Wayanad. So the present study has helped to examine the active participation of NGOs to improve the ICT penabled tourism in Wayanad. The ICT enabled tourism to the local community has social, cultural, economic, environmental and political impact. The socio-cultural and economic impact is highlights in the present study. Therefore, this is a dire need to examine the environmental and political impact of tourism to the local community.

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- <https://www.india.gov.in>
- <https://www.indianyouth.net>
- <https://www.keralatourism.org>
- <https://www.tourism.gov.in>
- <https://www.travelhot.in>
- <https://www.worldatlas.com>

APPENDIX

SCHEDULE USED FOR FIELD SURVEY

INFORMATION AND COMMUNICATION TECHNOLOGY: ITS ROLE AND IMPACT ON TOURISM DEVELOPMENT IN KERALA- A STUDY OF WAYANAD DISTRICT

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(Interview Schedule for Officials)

1. Sample Particulars

1.1 Sl. No. :

1.2 Place of contact :

1.3 Date of contact :

2. General Information

2.1 Name of the institution :

2.2 Year of establishment :

2.3 Institute website : [http: //www/](http://www/):

2.4 Location of the institution :

2.5 Whether it is located at :

1. Rural 2. Urban 3. Semi Urban

3. Information and communication technology

3.1 Do you have availability of website?

1. Yes 2.No

3.2 How often do you update your website?

1. Daily 2. Weekly 3. Two weekly 4. Once a month

3.3 Do you have search engine optimization?

1. Yes 2.No

3.4 Do you have a 24 hour call centre facility?

1. Yes 2.No

3.5 Do you have online reservation/ booking facility?

1. Yes 2. No

3.6 Which is the medium of publicity?

- 1. Participation in fairs
- 2. Brochures
- 3. Direct contact through foreign agencies
- 4. Agents in other countries
- 5. Websites
- 6. Advertisement
- 7. Others (specify)

3.7 What type of package is offered to the tourists?

- 1. Package Tours
- 2. Tailor Made
- 3. Both

3.8 Do you receive any incentives from the government?

1. Yes 2. No

3.8 a) If yes, please specify :

3.9 What type of promotion material (prepared by the government) do you have?

- 1. Brochures
- 2. Slides
- 3. Videos
- 4. Others (specify)

3.10 What are the technologies adopted for the centre?

- 1. Internet/ Online reservation
- 2. Own website
-

3. Computer based customer relation management

4. Wi-fi connection to rooms

5. Internet cafe

6. Others (specify)

3.11 Do you have social networking sites?

1. Blog 2. Face book 3. Twitter

4. You tube 5. Flicker 6. Others (specify)

3.12 Do you have your own phone app?

1. Yes 2. No

3.13 Do you have Internet Explorer browsing software?

1. Yes 2. No

3.14 Do you have Chrome browsing software?

1. Yes 2. No

3.15 Do you have Mozilla Firefox browsing software?

1. Yes 2. No

3.16 Do you have Safari browsing software?

1. Yes 2. No

3.17 Whether your centre have separate website?

1. Yes 2. No

3.18 Please mention the average number of enquiries per month?

1. Less than 30 2. 30-50 3. Above 50

3.19 Any seasonality in enquiry through ICT?

1. Yes 2. No

3.20 How much enquiry in peak season?

1. Less than 30 2. 30-50 3. Above 50

3.21 How much enquiry in off season?

1. Less than 30 2. 30-50 3. Above 50

3.22 Location from where you get more enquiries?

1. International 2. Domestic

3.23 If international, specify the country :

3.24 If domestic, specify the State :

3.25 Trend of queries over the last five years

1. Increasing 2. Decreasing

3.26 How much is the bandwidth of network in your centre?

1. 512 Kbps 2. 1Mbps 3. 4Mbps 4. 25Mbps 5. Others

3.27 Did you get follow up of contacts?

1. Yes 2. No

3.28 Any IT failures in your centre?

1. Yes 2.No

3.29 How quickly IT failures are resolved?

1. Within a day 2. 1-2 days
3. Less than 1 week 4. Greater than 1 week

3.30 Any type of customer complaints in your centre?

1. Yes 2. No

3.31 What are the complaints facing ICT on your centre?

- 1.Lack of special ICT training for the workers
2. Inadequate network coverages
3. Lack of contineous power supply
4. Lack of information about the tourism market

3.32 Any other suggestions for improving the usage of ICTs.

- 1.To provide special training for ICT to the workers
2. Facilties to boost cell phone signal
3. To provide broadband connection to improve network coverage
4. Government intervention to create and sustain ICT environment
5. Subsidies for internet service

(Interview Schedule for Tour Operators and Travel Agents)

1. How long have you been in the tourism industry?

1. Less than one year

2. 1 – 3 years

3. 3– 5 years

4. More than 5 years

2. Please specify the type of tour operation:

1. Inbound

2. Outbound

3. Both

3. Please specify the service being done by your company:

1. Tour packages

2. Ticketing

3. Vehicle rental

4. Hotel reservations

5. Event management

6. All the above

4. Do you have a website?

1. Yes

2. No

5. How often do you update your website?

1. Daily

2. Weekly

3. Biweekly

4. Monthly

5. More than a month

6. Have you gone for Search Engine Optimization for your website?

1. Yes

2. No

7. If yes, please specify your service?

1. Google

2. Bing

3. Yahoo

4. Ask

5. Others

8. Do you provide all information regarding your services in your websites?

1. Yes

2. No

9. Do you have provision for making an online booking of your services through payment gateway?

1. Yes

2. No

10. Do you have a 24 hour call helpline?

1. Yes

2. No

11. What are the systems which you use in your agency for tour marketing?

1. Global distribution system

2. Front office system

3. Agency management system

4. Customer relationship management system

- 5. Supply chain management system
- 6. Corporate travel planning system
- 7. Tour package planning system
- 8. Internal computer reservation system
- 9. Recommender system

12. Which of the following social networking service do you use for tour marketing?
- 1. Face book
 - 2. Twitter
 - 3. You tube
 - 4. Flicker
 - 5. Others (specify)

13. Do you get regular enquiry from social networking sites?
- 1. Yes
 - 2. No

14. How many enquiries per month from social media will get converted to bookings?
- 1. Less than 10
 - 2. 10 – 30
 - 3. 30-50
 - 4. More than 50

15. In which country did you get more enquiries from social media via booking?
- 1. International
 - 2. Domestic

16. If international, specify the country:

17. If domestic, specify the state:

18. In which season travelers are demanding your service the most?
- 1. Summer
 - 2. Monsoon
 - 3. Winter

19. Which of the following travel related social media is used by you?
- 1. Trip Advisor
 - 2. Wagn
 - 3. Trip It
 - 4. Others (specify)

20. Do you provide reviews in Trip Advisor?
- 1. Yes
 - 2. No

21. Do you provide advertisements in daily deal sites?
- 1. Yes
 - 2. No

22. Is the advertisement posted on these deal sites free of cost?
- 1. Yes
 - 2. No
 - 3. Not Applicable

23. Which of the following deals sites are used by you for promotion of your services?

1. Google ads 2. quickr.com 3. olx.in
4. Snapdeals.com 5.dealsandyou.com 6.All the above

24. Do you get regular enquiry from daily deals sites?

1. Yes 2. No

25. How many enquiries per month from online ads will get converted to bookings?

1. Less than 2.10- 30
3. 30 – 50 4.Greater than 50

26. Do you have your own mobile application?

1. Yes 2. No

27. What is the mode of your communication with customers?

1. Face to face 2. Telephone 3. Email
4. Messages 5. Others

28. What is your monthly cost of operation?

1. Less than 10000 2.10000-50000 3. Greater than 50000

29. Do you get any profit from your service?

1. Yes 2. No

30. How profitable is your service?

1. Normal profit 2. Super normal profit 3. Loss

31. Does your service get any cooperation from Wayanad District Tourism Promotion Council?

1. Yes 2. No

32. What about the trend of your service over the last five years?

1. Increasing 2. Decreasing

33. Do you receive any customer complaints?

1. Yes 2.No

34. If yes, what is the nature of customer complaints?

1. Communication 2. Transportation 3. Accommodation
4. Guide 5. Others

35. Any other limitations of ICT on your service?

1. Lack of IT education and training for employees
2. Low cell phone signals in certain areas.
3. Lack of transparency leading to effect the relationship between customers and administration.
4. Low broadband network coverage
5. Others (specify)

(Interview Schedule for Accommodation Units)

1. Name and location :

2. Year of establishment :

3. Present ownership

1. Single 2. Partnership 3. Public Ltd
4. Private Ltd 5. Others (specify)

4. Total number of Rooms

1. 1-10 2. 11-20 3. 21-30 4. 31 and above
a. Suites: 1. 1-5 2. 6-10 3. 11-15 4. 16 and above
b. Halls: 1. 1-5 2. 6-10 3. 11-15 4. 16 and above
c. Dormitories: 1. 1-5 2. 6-10 3. 11-15 4. 16 and above
d. Deluxe room: 1. 1-5 2. 6-10 3. 11-15 4. 16 and above
e. Cottage: 1. 1-5 2. 6-10 3. 11-15 4. 16 and above
f. Jacuzzi villa: 1. 1-5 2. 6-10 3. 11-15 4. 16 and above
g. Celebrity pool villa: 1. 1-5 2. 6-10 3. 11-15 4. 16 and above

5. Employment details?

a. Total number of male employees`

1. 1-25 2. 26-50 3. 51-75 4. 76-100 5. 100 and above

b. Total number of female employees

1. 1-25 2. 26-50 3. 51-75 4. 76-100 5. 100 and above

c. Total number of trained male employees

1. 1-25 2. 26-50 3. 51-75 4. 76-100 5. 100 and above

d. Total number of trained female employees

1. 1-25 2. 26-50 3. 51-75 4. 76-100 5. 100 and above

e. Total number of managerial level male employees

1. 1-10 2. 11-20 3. 21 and above

f. Total number of managerial level female employees

1. 1-10 2. 11-20 3. 21 and above

g. Total number of supervisory level male employees

1. 1-10 2. 11-20 3. 21 and above

h. Total number of supervisory level female employees

1. 1-10 2. 11-20 3. 21 and above

6. Among the present employees, how many are from:

1. Panchayath 2. Municipality 3. Other District

4. outside the State 5. Foreigner

7. Kindly tick the facilities available in your property

1. Restaurant 2. Bar/ pub 3. Coffee shop
4. Swimming pool 5. Ayurvedic treatment 6. Conference hall
7. Travel desk 8. Book shop 9. Internet
10. TV connection 11. Entertainment game 12. Campfire

8. Kindly tick the activities that you arrange for tourists?

1. Boating 2. Day – tour 3. Farm visit

4. Adventure tour 5. Evening cultural programmes

6. Wild life tour 7.Sightseeing 8.Fishing

9. Hiking 10. Fitness center

9. What types of tourists frequently use your property?

1. International (%) 2. Domestic (%)

9.1 If international, specify the country :

9.2 If domestic, specify the State :

10. Do you have your own transportation facilities?

1. Yes 2.No

11. In which season tourists use your property most?

1. Summer 2. Monsoon 3. Winter

12. Which of the following eco-friendly practices do you have in your property?

- 1. Use of local materials
- 2. Arrangement for waste-disposal
- 3. Energy conservation policy
- 4. Rain water harvesting
- 5. Organic farming
- 6. Use of eco-friendly materials instead of plastic
- 7. Others (specify)

13. Do you have a website?

1. Yes 2. No

14. How often do you update your website?

- 1. Weekly 2. Biweekly
- 3. Monthly 4. More than a month

15. Have you gone for Search Engine Optimization for your website?

1. Yes 2. No

16. Do you provide all information regarding your services in your website?

1. Yes 2. No

17. Do you have provision for making an online booking of your services through payment gateway?

1. Yes 2. No

18. Do you have a 24 hour call helpline?

1. Yes 2. No

19. Which of the following social networking services do you use for tour marketing?

1. Face book 2. Twitter 3. YouTube
4. Whatsapp 5. Instagram 6. Linkin

20. Do you get regular enquiry via social networking sites?

1. Yes 2. No

21. If yes, how many percent enquire?

1. Internationally 2. Domestically

22. How many enquiries per month from social media will get converted to bookings?

1. Less than 10 2. 10-30
3. 30-50 4. More than 50

23. Which of the following travel related social media is used by you?

1. Trip Advisor 2. Makemytrip.com 3. Travelguru 4. Holiday.iq
5. Budgethomestay 6. Booking.com 7. trivago 8. goibibo
9. agoda 10. oyoroom.com 11. nivalink.com 12. yatra.com
13. Other (Magazines)

24. Do you provide advertisement in daily deal sites?

1. Yes 2. No

25. Which of the following deals sites are used by you for promotion of your services?

1. Google ads 2. quickr.com 3. olx.in
4. Snapdeals.com 5. dealsandyou.com 6. All the above

26. Do you get regular enquiry from daily deals sites?

1. Yes 2. No

27. How many enquiries per month from online ads will get converted to booking?

1. Less than 10 2. 10-30
3. 30-50 4. More than 50

28. Do you have your own mobile applications?

1. Yes 2. No

29. Do you have internet/wi-fi facilities in your room/cottages?

1. Yes 2. No

30. Do you have payment gateway in your accommodation unit?

1. Yes 2. No

31. Do you have computer based Customer Relationship Management (CRM)?

1. Yes 2. No

32. Does your property link with Wayanad District Tourism Promotion Council?

1. Yes 2. No

33. How do you utilize the property during lean periods?

1. Rent for other activities 2. Conduct cultural events
3. Social events for local people 4. Others (specify)

34. Any type of customer complaints in your property?

1. Room facility 2. Food 3. Water supply
4. Transportation 5. Sanitation 6. Others (specify)

35. What is the opinion on information and communication technology enabled tourism in your destination?

1. Excellent 2. Good 3. Average 4. Poor

36. What is your suggestion to improve information and communication technology enabled tourism in your destination?

1. To improve technical infrastructure
2. Legal framework for online advertisement or official endorsement for online marketing
3. Maintenance and updating of tourism websites
4. Establish electronic linkages between all tourism related sectors.
5. Others (specify)

(Interview Schedule for Tourists)

1. Tourist Profile

1.1 Name :

1.2 Gender

1. Male 2. Female

1.3 Age

1. 16-35 2. 35-50 3. 50 and above

1.4 Educational Qualification

1. School level
2. Graduate
3. Post graduate
4. Professional education
5. Technical education

1.5 Marital Status

1. Single 2. Married 3. Divorce
4. Separated 5. Widower 6. Other

1.6 Occupation

1. Salaried 2. Business 3. Professional
4. Agriculture 5. Student 6. Retired

7. House wife

8.Others

1.7 Monthly income

1. Below 10000

2. 10001-25000

3. 25001-50000

4. 50001-100000

5.100001 and above

1.8 Nationality

1. Indian

2. Foreigner

1.8 a) If Indian, specify the State :

b) If foreigner, specify the Country :

2. Tour Particulars

2.1 What is the purpose of your present visit?

1. Leisure

2. Study

3.Business

4. Health

5.Pilgrimage

6. Other

2.2 How many days have you planned to stay in Wayanad?

1. One day

2. 2-5 days

3. One week

4. More than one week

2.3 Number of people accompanying you?

1. None

2. Less than 5

3. 6-10

4. 11 and above

2.4 Did you collect the details of the destination before planning and confirming your trip?

1. Yes

2. No

2.5 If yes, what are the sources of information through which you came to know your tourism spot?

1. Friends and relatives

2.Print media

3.Websites

4. Visual media

5.Advertisement

6.Social media

7. On your own

8. Other (specify)

2.6 If you use website/ social media, please answer:

a) Please mention which of the following were used for your travel research

- | | | | |
|----------------------------------|--------------------------|---------------------------------|--------------------------|
| 1. Google search | <input type="checkbox"/> | 2. Kerala tourism website | <input type="checkbox"/> |
| 3. Travel agents/ Tour operators | <input type="checkbox"/> | 4. Accommodation units | <input type="checkbox"/> |
| 5. Trip advisor reviews | <input type="checkbox"/> | 6. Destination related websites | <input type="checkbox"/> |
| 7. Other web related data | <input type="checkbox"/> | 8. Others (specify) | <input type="checkbox"/> |

2.7 Which of the following did you cover in your search?

- | | | | | | |
|------------------|--------------------------|------------------|--------------------------|--------------------|--------------------------|
| 1. Attraction | <input type="checkbox"/> | 2. Accommodation | <input type="checkbox"/> | 3. Transport | <input type="checkbox"/> |
| 4. Tour packages | <input type="checkbox"/> | 5. All | <input type="checkbox"/> | 6. Other (specify) | <input type="checkbox"/> |

2.8 Did the information obtained from the website/ social media found helpful in trip planning?

1. Yes 2. No

2.9 Which of the following social media sites were used for your travel related sites?

- | | | | | | |
|----------------------|--------------------------|--------------|--------------------------|-----------------|--------------------------|
| 1. Facebook | <input type="checkbox"/> | 2. Twitter | <input type="checkbox"/> | 3. Youtube | <input type="checkbox"/> |
| 4. Linkin | <input type="checkbox"/> | 5. Instagram | <input type="checkbox"/> | 6. Pinterest | <input type="checkbox"/> |
| 7. Whatsapp | <input type="checkbox"/> | 8. Blogs | <input type="checkbox"/> | 9. Trip Advisor | <input type="checkbox"/> |
| 10. Others (specify) | <input type="checkbox"/> | | | | |

2.10 What are the main reasons for using social media sites for your travel search?

- | | |
|---|--------------------------|
| 1. For planning trip | <input type="checkbox"/> |
| 2. For comparing trip package price | <input type="checkbox"/> |
| 3. Gathering information about destinations | <input type="checkbox"/> |
| 4. To analyze climate change | <input type="checkbox"/> |
| 5. Checking and posting reviews/ comments | <input type="checkbox"/> |
| 6. Others (specify) | <input type="checkbox"/> |

2.11 How often do you use the social media sites?

- | | | | |
|------------------------------|--------------------------|-------------------------|--------------------------|
| 1. Once a day | <input type="checkbox"/> | 2. More than once a day | <input type="checkbox"/> |
| 3. Once in two or three days | <input type="checkbox"/> | 4. Once in a week | <input type="checkbox"/> |
| 5. Monthly | <input type="checkbox"/> | 6. In three months | <input type="checkbox"/> |

2.12 How did you confirm your trip reservation?

1. Through intermediaries 2. Direct 3. Others

2.13 If direct, how did you make your reservation?

- | | | | |
|-----------------------------------|--------------------------|-------------------------------------|--------------------------|
| 1. Phone | <input type="checkbox"/> | 2. Through e-mail | <input type="checkbox"/> |
| 3. Through reservation in website | <input type="checkbox"/> | 4. Online payment (Payment gateway) | <input type="checkbox"/> |
| 5. Through third party website | <input type="checkbox"/> | 6. Others (specify) | <input type="checkbox"/> |

2.21 How was the purchase from tourism websites when compare to traditional travel agencies?

1. Poor 2.Average 3.Good 4.Excellent

(Interview Schedule for Host Community)

1. Sampling Details

1.1 Sl.No

1.2 Name of the station

1. Pookode Lake 2. Edakkal Cave 3. Kuruva Island
4. Chembra Peak 5. Muthanga Wildlife Sanctuary
6. Banasura Sagar Dam

2. Personal Profile

2.1 Name :

2.2 Gender

1. Male 2. Female

2.3 Age

1. 16-35 2. 35-50 3. 50 and above

2.4 Education

1. School level
2. Graduate
3. Post graduate
4. Professional education
5. Technical education

2.5 Occupation

1. Salaried 2. Business 3. Professional
4. Agriculture 5. Student 6. Retired

7. House wife

8. Others

2.6 Monthly income

1. Below 10000

2. 10001-25000

3. 25001-50000

4. 50001-100000

5. 100001 and above

2.7 Specify the category in which you belong:

1. Born and brought up in this locality

2. Migrated to this destination

2.8 Specify your relationship with relationship

1. Employed in tourism

2. Family member employed in tourism

3. Tourism entrepreneur

4. No relation 5. Other

3. Amenities in the destination

3.1 Please state the your opinion on the following facilities available at your station

Facility at the destination		*G	*A	*P
3.1.1	Transport facilities			
3.1.2	Road network			
3.1.3	Lodging & Boarding			
3.1.4	Pure drinking water			
3.1.5	Food & Beverages			
3.1.6	Electricity & Public lighting			
3.1.7	Telephone & Internet facility			
3.1.8	Banks/ATMs/Foreign exchange centre			
3.1.9	Shopping facilities			
3.1.10	Public comfort stations			
3.1.11	Recreation			
3.1.12	Well equipped hospitals			

*G-Good, *A-Average, *P-Poor

3.2 Are you accessible to these amenities?

1. Yes

2. No

3.3 Are the authorities maintaining these facilities properly?

1. Yes

2. No

4. Socio-cultural and Economic impact of ICT on tourism.

(A-Agree, No- No Opinion, DA-Disagree)

4.1 State your opinion on the following with regards to the socio-cultural impact of ICT on tourism		A	No	DA
4.1.1	Supports revival of traditional art, craft and culture			
4.1.2	Ensure restoration of historic building			
4.1.3	Promotes cultural advancement of the community due to increased interaction with tourists			
4.1.4	Preserver the cultural identity of the station			
4.1.5	Provides cultural exchange and education			
4.1.6	Promotes social interaction			
4.1.7	Increases the number of crime in the area			
4.1.8	Communities, cultural and traditional ways of life			
4.1.9	Results in more vandalism in the area			
4.1.10	Increased tourists arrivals results in friction between local residents and tourists			
4.1.11	Increased tourists arrivals negatively affect the community's way of life			
4.1.12	Results in displacement of community			
4.1.13	Causes changes in the art, craft and festivals in the region			
4.1.14	Leads to demonstration effect in the life style of the region			
4.1.15	Community are being exploited by tourism			
4.1.16	Leads to drugs use and alcoholism			
4.1.17	Leads to sex abuse and prostitution			
4.1.18	Spread the intensity of disease			
4.1.19	Degradation of local language			

4.2 State your opinion on the following with regards to the economic impact of ICT on tourism		A	No	DA
4.2.1	Provides worthwhile job opportunities			
4.2.2	Motivates business units to expand			
4.2.3	Helps to increase the income of the community			

4.2.4	Helps to improve the educational facilities in the region			
4.2.5	Helps to increase the standard of living			
4.2.6	Helps to increase the infrastructure			
4.2.7	Helps to increase the investment in the area			
4.2.8	Increased shopping opportunities			
4.2.9	Spreads development to nearby areas			
4.2.10	Increases foreign exchange earnings			
4.2.11	Results an increase in the cost of living			
4.2.12	Prevents the creation of other productive industry in the area.			
4.2.13	Results increase in the price of land, house and commodity necessary for daily life			
4.2.14	Leads to shortage of consumables.			