CHAPTER III

RESEARCH METHODOLOGY

3.1 Introduction

This chapter defines the study’s research problems and explains the framework of the research. Research propositions and hypotheses are discussed at great length. A description of the survey instrument and a discussion regarding the development of survey questions is given. Data collection and methods of statistical analysis are discussed. The final section addresses the issues of reliability and validity of measurement scales.

Research is a scientific and systematic search for pertinent information. The main aim of research is to find out the truth which is hidden and which has not been discovered as yet. Here in this study researcher want to know how the tourism impacts and services and sustainable Tourism in Wayanad. Tourists take into account the various factors in terms of facilities, local attractions etc, before choosing their destination as Wayanad. Local attractions, accessibility, facilities are some of the factors that generate tourist flow to Wayanad. There are many foreign studies which analyze the foreign tourist destinations in order to form a policy for decision making of tourist destination in the country. Here the researcher have found out the attractiveness of a Sustainable tourism destination on the basis of facility available in the resort and homestays operating in Wayanad. For the better study the researcher had taken into account the total ideas, impressions and beliefs a tourist has on the tourism destination. Many factors measuring customer satisfaction has been analyzed for the improvement of tourism service quality. There are many factors also taken into consideration by the researcher while preparing the questionnaire for gathering information required for the study.

The researcher used various Procedures and statistical techniques for analysing the gathered information. The various statistical methods used for processing and analyzing the collected data are percentage analysis, non-parametric tests, Chi-Square, and correlation techniques.

The researcher used structured questionnaires to collect the required data from resorts, homestays, tourists and from the local community.
3.2 Pilot Survey
The pilot survey formed the platform for the research work. The study was conducted in various tourism spots and nearby resorts and homestays in Wayanad District. The tourists were asked to list down the positive and negative tourism impacts and tourism services and scope of sustainable and responsible tourism in Wayanad District. Through, the pilot survey, a list of 250 samples of Homestays, Tourists, local community and 150 samples of resorts were used for the pilot study. Furthermore, the resort managers and homestay owners were also asked to identify the problems for practicing the sustainable tourism and also rate the various factors related with the problems faced by the tourists. Based on the findings of this pilot survey, the questionnaires were designed.

3.3 Research Gap
The proposed study seeks to assess the economic, social, cultural, and environmental impacts of tourism on the socially backward and environmentally sensitive Wayanad district of Kerala. Tourism is widely conceived to be a service which results in considerable degree of sharing between the host community and the visitors. The natural environment as well as the cultural heritage of this community becomes the selling products of tourism. The interaction between the hosts and visitors leave its marks on the environment, people and culture and socio economical balance of the host community.

This study attempts to evaluate the tourism horoscope of Wayanad from the perspective of sustainability of responsible tourism. Wayanad is unique given its altitude, climate, geography and the environmental features such as wildlife, flora and fauna. Wayanad is classified as cloud forests (one fourth of the area), and the rest with ecologically fragile land due to its tropical and the nature coupled with intensive agriculture. Socio-cultural environment of this district is also unique as the tribal community constitutes one fourth of its total population and the high degree of agricultural orientation of the people. It is into this peculiar socio cultural framework that tourism enters as an entirely exogenous variable. The tourism industry is promoted by professionals and hospitality entrepreneurs. The tourism industry decisively produces certain social, political, economic, cultural and environmental impacts. The effects of tourism are on the domestic economy, wellbeing of the indigenous people and on the fragile environment, which requires diagnostic attention.
In Wayanad, the dominant players in the tourism industry are the resort owners and the home stay providers. The resorts are established by professionals with sizable capital and experience. Since the local communities are not professionals and are not owners of capital, the benefit from the industry doesn’t go to them, lack of proper education and skill formation in respect to Hospitality Industry makes their cause worse. Thus, tourism as a service product comes outside the delivery capabilities of the local people.

Earlier studies relating to the practicability of sustainable tourism and hospitality initiatives were virtually nil in the Indian scenario, though the topic has got vital practical significance as discussed above. Thus, the proposed research work seeks to fill up this gap by making a critical analysis of the tourism impacts and services connecting through the resorts and homestays in Wayanad District, which is having immense tourism potential.

### 3.4 Research Design

The study is descriptive in nature and hence designed as an empirical one based on the survey method. Several issues relating to the main aspects of the study had been discussed in detail with experts, researchers and other eminent personalities in the field of tourism, resort top level authorities and homestay owners to get an insight into the subject prior to the collection of data. The methodology followed in this study is both descriptive and analytical and to identify the impacts of tourism and services correlated with resorts and homestays in the district of Wayanad, Statistical Package for Social Sciences (SPSS) was used for statistical analysis.

A descriptive method of study followed to understand the tourism impacts and services in Wayanad district. Both primary and secondary data have been collected to study the tourism impact and services correlated with resorts and homestays in Wayanad district.

### 3.5 Methods of Data Collection

The data from the quantitative questionnaire was analysed using SPSS. Prior to the analysis each questionnaire was carefully edited and coded. The values of the Likert scale were coded with 1 being ‘strongly disagree’; 2 ‘disagree’; 3 ‘Neither agree nor disagree’; 4 ‘agree’ and 5 being ‘strongly agree’ in the section about the respondents’ attitudes towards Sustainable Tourism Practices.
3.6 Collection of Data
The data were collected by distributing questionnaire to the selected respondents with the samples selected for the study. Multiple choice questions, open-end questions, rankings by the respondents and a five point ranking scale developed by the researcher especially for this study in conformity with statistical methods and principles were used wherever necessary. The respondents were encouraged to fill the questionnaires freely and frankly to express their opinions and suggestions about tourism development and on various tourism impacts and services. The researcher collected all the responses personally from the respondents this ensured the secrecy of the responses and the privacy of the identity of the respondents. The researcher explained the questions to the uneducated local community members so as to ensure that the data collected is accurate in all respects.

3.6.1 Source of Data
Both primary and secondary sources of data are collected for the study.

Primary Data
Primary data has been collected by distributing the structured questionnaire to the tourists, local community, and to the top level authorities of the resorts and to the homestay owners. The researcher personally contacted most of the respondents and questionnaire supported interviews were conducted wherever necessary. As far as local community was concerned the questionnaire was explained to those who had difficulty in understanding the questionnaire of the study and the necessary data was collected and recorded by the researcher. The entire area of Wayanad district was selected for the study. The respondents were selected by using random sampling method and also on convenience basis. The details of the respondents are furnished while presenting the data and discussions.

Secondary Data
A detailed survey of literature has been undertaken in order to be familiarised with the various aspects of tourism development and impacts of tourism. Tourism is an area in which most of the financial and business experts and government agencies are actively interested. They normally conduct studies and publish articles about the tourism trends and impacts of tourism in our economy. To evolve an appropriate methodology for the study and to formulate a conceptual framework for the study, the secondary data were immensely helpful. For these purposes, various secondary sources like books and
periodicals, research articles, seminar reports, newspapers, study reports of expert committees, departmental publications, plan documents, unpublished dissertations, etc were surveyed. The literature was very carefully selected from the various sources and also from the web. A careful survey of literature helped the researcher to collect and synthesize prior studies and to discover the important variables relevant to the problem.

The secondary data have been mostly extracted from the official publications of United Nations World Tourism Organisation (UNWTO), World Travel and Tourism Council (WTTC), Government of India (GOI) Ministry of Tourism and Department of Tourism, Government of Kerala (GOK), District Tourism Promotion Council, (DTPC) Wayanad, and Wayanad Tourism Organization (WTO).

To make clear data presentation, the points under discussion of the particular data has been presented. To avoid bias in interpretation of data, statistical analysis has been resorted to, the details of which are furnished along with presentation and discussion of data. Most of the data were presented in tables, bar charts, pie diagrams, multi-dimensional scaling, etc., were also used to illustrate the data.

### 3.7 Population

The population is the tourism destinations in Wayanad northern state of Kerala. The sampling is selected on random basis, as most prominent destinations are chosen based on their superiority as per official records of tourism department of the Kerala state.

- Lakkidi – the gateway of Wayanad (Highest rainfall area in the state of Kerala)
- Pookode Lake – Tourist Boating Spot
- Kalpetta, Mananthavady and Sulthan Bathery (Urban Areas)
- Vythiri
- Banasura Sagar Dam,
- Karappuzha Dam
- Soochippara and Meenmutty and Kanthanpara Waterfalls,
- Chembra peak,
- Kuruva Island,
- Edakkal Caves,
3.8 Sample Area
The sample area of the study is Wayanad District giving more emphasis to the areas having more resorts and homestays in Wayanad district. Wayanad is having the highest number of resorts and homestays in Kerala. Most of the tourists visiting Wayanad prefer either Resorts or Homestays to hotels and so is the most ideal location for the selected topic.

3.9 Sample Size and Techniques
This research study is descriptive in nature. To conduct the survey simple random sampling was done. The sample sizes are taken considering the following factors. Resorts sample is taken from one star resorts-54 Nos, two star resorts – 66 Nos, three star resorts – 27 Nos, four star resorts – 2 Nos and five star resort – 1 Number, totalling to 150 resorts as the sample size. Homestays sample size were taken from 212 licensed by various Panchayath’s and 38 Homestays approved by District Tourism Promotion Council, therefore a total of 250 samples were used for Homestays data collection. For reliability and authenticity of tourists sample size, the researcher used 227 domestic tourists’ samples and 23 foreign tourists totalling to 250 samples from over 400 questionnaires given to various resorts and homestays and selected properly filled 250 questionnaires. The local community samples of 250 are taken from 10 different tourism destinations mentioned in the population, 25 numbers each from these tourism spots on random sampling.

Table No.3.1: Sample size

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Resorts</td>
<td>150 Samples</td>
</tr>
<tr>
<td>Homestay</td>
<td>250 Samples</td>
</tr>
<tr>
<td>Tourist</td>
<td>250 Samples</td>
</tr>
<tr>
<td>Local Community</td>
<td>250 Samples</td>
</tr>
</tbody>
</table>

3.10 Sampling Technique
Sampling techniques used for the study are random and convenient sampling techniques.

The researcher used random sampling method; random sampling was used as this is simple and effective method of collecting data. As there are numerous homestays and resorts in Wayanad, this method is most effective as the researcher is concerned, the
random sampling method and all the resorts selected according to the classifications were visited by the researcher to collect the required data for the study.

As far as the local community was concerned the method of deliberate convenient sampling method was adopted for the effective collection of data as the subjects belonged to different classes and other methods were not that effective.

3.11 Scaling Techniques used in the Study

The researcher has used various scaling techniques creating a continuum upon which measured objects are located. Usage of this scaling technique yields the highest level of information feasible in a given situation which allows great variety in statistical analysis.

This provides more accurate measurement than a single-item scale. In many situations, it is desirable to use more than one scaling technique to obtain additional measures using mathematically derived scales. A nominal scale is a figurative labelling scheme in which the numbers serve only as labels or tags for identifying and classifying objects.

For example, the numbers assigned to the respondents in a study constitute a nominal scale, thus a female respondent may be assigned a number 1 and a male respondent assigned number 2. An ordinal scale is a ranking scale in which numbers are assigned to objects to indicate the relative extent to which the objects possess some characteristics. An ordinal scale allows determining whether an object has more or less of a characteristic than some other object, but not how much more or less. Thus, an ordinal scale indicates relative position, not the magnitude of the differences between the objects.

In an interval scale, numerically equal distances on the scale represent equal values in the characteristics being measured. An interval scale contains all the information of an ordinal scale, but it also allows you to compare the differences between objects. The difference between any two scale values is identical to the difference between any other two adjacent values of an interval scale.

A ratio scale possesses all the properties of the nominal, ordinal and interval scales, and in addition an absolute zero point. Thus, ratio scales can identify or classify objects, rank the objects, and compare intervals or differences. It is also meaningful to compute ratios of scale values. Not only is the difference between 2 and 5 the same as the difference between 14 and 17, but also 14 is seven times as large as 2 in an absolute sense. Common examples of ratio scales include height, weight, age etc.
Likert scale is a measurement scale with five response categories ranging from ‘strongly disagree’ to ‘strongly agree’ that requires respondents to indicate a degree of agreement or disagreement with each of a series of statements related to the stimulus objects.

Table No.3.2: Scaling Techniques used in Resorts

<table>
<thead>
<tr>
<th>Scaling Techniques</th>
<th>Variables</th>
<th>Statistical Techniques Used</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ordinal</td>
<td>Average Room Stay.</td>
<td>Cross tabulation chi square test</td>
</tr>
<tr>
<td>Interval</td>
<td>Economic Condition, Spending capacity, Communication measures to conserve energy, Barriers of Sustainable Tourism Practices</td>
<td>Correlation</td>
</tr>
<tr>
<td>Ratio</td>
<td>Occupancy Rate, Average Revenue, Renewable Source, Automated Sources, Energy Saving Devices like CFL/LED, Average monetary investment in energy, Sustainable Practices.</td>
<td>Variations</td>
</tr>
</tbody>
</table>

Table No.3.3: Scaling Techniques used in Homestay

<table>
<thead>
<tr>
<th>Scaling Techniques</th>
<th>Variables</th>
<th>Statistical Techniques Used</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominal</td>
<td>Employees in your homestay, Marketing your homestay, Nature of booking, Repeated Customer, Major supporters of your business, Domestic Tourist, Foreign Tourist, Types of Tourist, Mingling with the guest, Further training, Tourist inconvenience, Employ sustainable tourism practice, Promoting local product, preservation of resources, hire staff, sources of your supplies, Plant indigenous shrubs and trees,</td>
<td>Percentage Analysis</td>
</tr>
<tr>
<td>Scaling Techniques</td>
<td>Variables</td>
<td>Statistical Techniques Used</td>
</tr>
<tr>
<td>-------------------</td>
<td>---------------------------------------------------------------------------</td>
<td>------------------------------</td>
</tr>
<tr>
<td>Nominal</td>
<td>Tourist comes from, Travel pattern, current status, information about tourism destination, Booking your accommodation, Aim of visiting Wayanad</td>
<td>Percentage Analysis</td>
</tr>
<tr>
<td>Ordinal</td>
<td>Level of education, Rating tourism providers</td>
<td>Cross tabulation chi square test</td>
</tr>
<tr>
<td>Interval</td>
<td>Attractions of tourist, preferences, tourist expectation, Return to Wayanad</td>
<td>Correlation</td>
</tr>
<tr>
<td>Ratio</td>
<td>Visited Wayanad, Age group, Period of their stay, Average expenditure</td>
<td>Variations</td>
</tr>
</tbody>
</table>

Table No.3.4: **Scaling Techniques used in Tourist**
Table No.3.5: Scaling Techniques used in Local Community

<table>
<thead>
<tr>
<th>Scaling Techniques</th>
<th>Variables</th>
<th>Statistical Techniques Used</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominal</td>
<td>Level of education, kind of job. Funds for the local community, better transportation, losses due to tourism</td>
<td>Percentage Analysis</td>
</tr>
<tr>
<td>Ordinal</td>
<td>Annual income, job availability, opinion regarding tourism</td>
<td>Cross tabulation chi square test</td>
</tr>
<tr>
<td>Interval</td>
<td>Influence of tourism on household, agricultural life, wildlife, Satisfaction level of the local community, Attitude of the host, loss of traditional life style, Tourism to the local community</td>
<td>Correlation</td>
</tr>
<tr>
<td>Ratio</td>
<td>Effect of income, Contribution of tourism</td>
<td>Variations</td>
</tr>
</tbody>
</table>

3.12 Sampling Design

A Convenience sampling and random sampling method has been used for selecting the respondents from the universe. The universe of the study covers all the owners or the employees of resorts and homestays connected with tourism development in Kerala. At the first stage of sampling, tourism developed areas or destinations were selected as a convenience sample for this study. Wayanad is selected as survey location for the study as there were adequate resorts and homestays.

3.13 Hypothesis

H₀: There is no association between travel pattern of the tourist and with whom they travel to Wayanad

H₁: Travel pattern of the tourist and with whom they travel to Wayanad are associated

H₀: Length of stay is equally distributed for each type of accommodation

H₁: Length of stay is differently distributed for distinct type of accommodation

H₀: Average expenditure per day is equally distributed for any kind of accommodation
$H_1$: Average expenditure per day is not equally distributed for distinct type of accommodation

$H_0$: There is no significant correlation between the factors that rate the tourism providers and the ranking of the tourism providers.

$H_1$: There is a significant correlation between the factors that rate the tourism providers and the ranking of the tourism providers.

$H_0$: There is no significant correlation between the tourist demand and the tourism destinations

$H_1$: There is a significant correlation between the tourist demand and the tourism destinations

$H_0$: There is no significant correlation between expectation and experience regarding the accommodation

$H_1$: There is significant correlation between expectation and experience regarding the accommodation

$H_0$: There is no significant correlation between the tourist expectation and the tourism infrastructure services

$H_1$: There is a significant correlation between the tourist expectation and the tourism infrastructure services

$H_0$: There is no association between the changes caused in the life of the local community and their professional area

$H_1$: Changes caused in the life of the local community and their professional areas are associated.

$H_0$: There is no significant correlation between the various factors that shows the tourism impact

$H_1$: There is a significant correlation between the various factors that shows the tourism impact

3.14 Analysis of the Data

The collected primary data have been statistically processed, classified and tabulated by using appropriate methods. Since the sample size is large, tables, diagrams and statistical results have been derived with the help of the computer software called SPSS (Statistical
Packages for Social Sciences). The statistical tools used are percentages, means, standard deviation, correlation, and correlation coefficients.

To get some insights into the tourism impacts and services and tourism developments in different tourist destinations, the researcher has developed a summated rating scale (Likert type scale) known as economic impact assessment scale. In order to test the soundness of the measurement, appropriate statistical tools have been employed. Internal consistency method on 100 samples was employed to test the reliability of economic impact assessment scale which is calculated with the help of SPSS.

### 3.15 Scope of the Study

Though the whole of Kerala is blessed with unmatched natural diversity that provides immense scope for tourism, there are certain areas or destinations, which are already developed as far as tourism is concerned. Development of tourism in these areas has a wide variety of tourism impacts on the economy of that locality and on the overall economy of the state. Naturally the development of certain areas would help unfamiliar areas or destinations to develop their own tourism potential. The Tourism impact and services of the development of tourism is directly felt by those people who are directly or indirectly involved in tourism industry.

Therefore, the universe of the present study is limited to those areas where tourism is developed and to those persons who are directly or indirectly connected with tourism business. This study is exploratory in nature and the first of its kind in Kerala. Therefore the study has been conducted to explore the positive and negative impacts of tourism in the tourism-developed areas of Wayanad District.

The focus of this study is predominantly to trace the tourism impacts and services and to suggest strategies for the sustainable development of Wayanad tourism. It is also worthwhile to note that the major focus of the study is to look at the tourism impacts and services provided to the tourists who have visited this district. To collect various types of data from different subjects and from different locations effective questionnaire was used.
3.16 Methods of Study

3.16.1 Theoretical Framework for the Study

Sustainable tourism has been suggested as one way of maximizing the positive and minimizing the negative impacts of tourism in Wayanad. The host community and the hospitality industry and the tourist’s contribution to responsible and sustainable tourism in Wayanad is overlooked in the literature and seen as part of the problem rather than as part of the solution. The tourists were frequently observed, Tourism and hospitality industry representatives were interviewed, and interactions with the host community were initiated as part of the study. The local community were closely observed and the data were collected by taking various samples from different types of demographics of the community. This research work concentrated more on the actions of the host community, hospitality industry, tourists, seeking to understand what the influences are or constrains of sustainable tourism. This study aims to provide environmental, cultural, social and economic benefits for the host community by bringing Wayanad as the most sustainable tourism destination with no negative impacts.

Figure No. 3.1: Theoretical Framework

The collected data are analyzed using different statistical techniques such as:

1. **Percentage Analysis**
   - Majority of the questions have used percentage analysis to analysis the data which is collected.

2. **Chi–square Test**
   - Cross tabulation for travel pattern of the tourist and with whom the tourist travelled to Wayanad. It is calculated by using the P values.
Cross tabulation for how the tourist stayed in Wayanad and what kind of accommodation they got there and what factors influenced them to stay in Wayanad and also to find out where they have stayed during their visit.

Cross tabulation of the change caused in the life of the local community who belong to any professional area.

It also used to test whether there is any significant relationship between marketing techniques and the repeated customers.

3. Correlation

Correlation is used to test whether there is any significant relationship between the tourism providers and the various factors such as Communication, Knowledge and Information, Cooperation, Facilities, Helpfulness, Friendliness and Courtesy provided by tourism providers.

It also used to test whether there is any relation between the tourist demands and tourism destinations.

The test also shows the relationship between the tourist expectations and their experience regarding the accommodation.

The significant correlation between the various factors of tourism impacts such as community, household, wildlife & agriculture.

3.17 Summary

Chapter three explicate that how the researcher has prepared the research design and the methodology used for the study. This chapter also reveals about the pilot survey conducted in various resorts, and homestays, and with the tourists and the local community. The research design shows the method of data collection used for the study and also the sampling techniques used. The researcher selected a population and the data was collected from the concerned representative sample unit. The sample areas selected for the study are various tourist destinations in the district of Wayanad. The samples selected for the study are 150 selected resorts, 250 selected Homestays and 250 tourists and 250 local community members from different locations of the study area.
The sampling techniques are simple random sampling and convenient sampling technique has been used for the study. The statistical method used for analyzing the data collected by using different tools such as Percentage Analysis, Chi Square, Correlation Analysis have been used. Hence it is necessary to have an appropriate research methodology based on various research tools and this has to be analysed and interpreted in a meaningful manner. For this purpose it is required to analyse the data which is already collected by the researcher and an interpretation is prepared and the same is presented in the fourth chapter.