CHAPTER 3
RESEARCH
design
CHAPTER 3

RESEARCH DESIGN

ABOUT THE CHAPTER:

This chapter tries to explain the complete of the research process. It explains the research need, objectives, scope, limitations, methodology, and sources of primary and secondary data. This chapter also discusses the various statistical techniques used to analyze the primary and secondary data. This chapter gives a direction to the research process. The present study presents sustainable rural tourism and its impacts in Himachal Pradesh, taking case study of two districts namely Kullu and Kangra districts. In this chapter the need of study, scope of the study, objectives, hypothesis, research methodology, significance of the study, limitation of the study have been presented systematically.

3.1 STATEMENT OF THE PROBLEM

After the detailed review of literature on rural tourism, related issues and finding out the research gap the present study tries to investigate the scenario of sustainable rural tourism in Himachal Pradesh. This present study also tries to investigate the community perception about sustainable rural tourism, community participation and capacity building for rural tourism development. The study also tries to study the tourists perception about rural tourism in Himachal Pradesh in general tourism impacts in Himachal Pradesh and in particular the case studies of two districts of Himachal Pradesh namely – Kullu and Kangra Districts. The study also investigates the tourist’s satisfaction from the destination products and services in the selected three districts. The study also focuses upon the most important stakeholder that is local community and its perception about rural tourism impacts. So the statement of the problem selected is

“Sustainable Rural Tourism in Himachal Pradesh: A Study of Kullu and Kangra Districts”.

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Figure 3.1

GENERAL OUTLINE OF THE STUDY

Conceptual Framework

Research

Coordination Scheme
Selection of Study Area

Sampling Method
- Purposive Sampling
- Stratified Sampling
- Simple Random Sampling

Data Collection and Sources

Primary Data
- Reconnaissance Survey
- Interview
- Field Observation
- Questionnaire Survey
- Focus Group Discussion for

Secondary Data
- Official Documents
- Reports
- Books
- Development Plan
- Statistical Report
- Official Websites

Data Entry and Processing

Data Interpretation and Findings

Analysis and

Recommendations
3.2 NEED AND SIGNIFICANCE OF THE STUDY

1. Rural tourism has to be sustainable if it has to be act as a catalyst in the rural growth and development. Rural tourism is not likely to succeed if urban tourism infrastructure is transplanted into a rural setting. Large resorts in rural mountain scenery look spectacular but they do not necessarily guarantee a thriving tourism industry and their contribution to the local economy is highly debatable. Moreover, they put unnecessary burden on the fragile local resources.

2. Rural tourism can assist and ameliorate economic, social and identity restructuring processes through its ability to raise incomes, stabilize populations, sustain cultures, redistribute economic roles within the rural household, and promote positive, ecologically friendly images. Rural tourism projects need to be integrated into the local economy, and the use of local capital and local produce must be encouraged. Similarly the objectives of promoting rural tourism cannot achieve if it is controlled by people based in large urban centers without the active participation of the local rural population.

3. Rural tourism should help diversify the economic base, rather than simply replace one dominant rural activity for another and it should strive to give the visitor an authentic taste of rural culture which is a key component of rural tourism.

4. It cannot be said with certainty whether tourism will pull rural areas out of decline, but what is certain is the fact that tourism in rural Himachal is on the rise and this trend is likely to increase in the coming years. A planned sustainable approach is the need of the hour.

5. If we want rural areas to be sustainable, they must have the appropriate financial sources and revenues. That, however, requires employment opportunities not only in the agriculture sector. These opportunities must be relevant to the specific features of the region or municipality, as described in the article. Sustainable development is based on the idea of “Think globally and act locally”. The surveys present deficiencies which indicate that the real use of the documents is much more limited. Individual activities are predominantly dependent on the personal will of politicians. That means focus on development-based activities, cooperation, and maximal use of local resources, including local community.

6. Strategic documents of rural micro-regions should have a wide reach; should be used as tools for discussion about the main problems and solutions, should reflect strategies of local
entrepreneurs. It is the only way to realize the strategies of individual entrepreneurs, as well as entrepreneurs in rural tourism. Even though it may be true that rural tourism is not as economically attractive as most of other sectors, in the end it contributes to the protection of demographic structure of rural areas and supports the specific cultural heritage and environment. The question whether it is only financial resources needed and the income gathered from job availability comes up. Next and equally important sources are social capital, social network. These relate to cooperation and relation among people.

7. Rural tourism is a rapidly growing industry in Himachal Pradesh and its impact are extremely varied. On one hand, it playing an important and certainly positive role in the socio-economic and political development in state and on the other hand offering new employment opportunities.

8. It is also contributing to a broader cultural understanding by creating awareness, respecting the diversity of cultures and ways of life. At the same time, complaints from tourist destinations concerning massive negative impacts upon environment, culture and residents' ways of life have given rise to a demand for a more sustainable development in tourism.

9. Rural tourism has been seen as a positive agent of change for many destinations in Himachal Pradesh because of its potential for job creation, income generation, and enhanced community infrastructure. However, while tourism development is usually justified on the basis of these positive benefits, it is often challenged on the grounds of socio-cultural and environmental devastation. Thus the residents perceptions of, and attitudes towards, the interaction of tourism with community life must be continually assessed to ensure that action is taken in good time, so that, through such action, the residents may become willing partners in the development process.

10. Community perception about sustainable rural tourism development and its impacts can help planners and developers to identify real concerns and issues in order for appropriate policies and action to take place, optimizing the benefits and minimizing the problems. The reason for measuring attitudes of residents and other stakeholders of tourism development
was the premise that their perceptions can be a useful input in tourism development and the planning process.

11. Tourist’s perspective about destinations products and services is necessary as tourist’s perceptions, images and motivations toward a destination is essential to comprehend and predict tourism demand and its impact on the tourism location. In fact, this understanding of destination image and visitors’ perceptions is critical to a destination and provides the basis for more effective and efficient future strategic planning of the destination.

3.3 SCOPE OF THE STUDY

The research has been conducted in some selected villages of Kullu and Kangra Districts. These districts are rich in cultural resources as well as the influx of tourists is very high. Local people as well as tourists (domestic and foreign) has been selected for the study, based on convenient sampling. The study has been focused upon the rural tourism impacts as well as the tourist’s perception about rural tourism.

Figure 3.2

AREA OF STUDY

![Map of Kullu and Kangra Districts of H.P]
3.4 OBJECTIVES OF THE STUDY

The present study focuses upon the various aspects of sustainability of rural tourism, its impacts, community opinion and acceptance, tourist perception and satisfaction and role of rural tourism in selected villages of Kullu and Kangra districts of Himachal Pradesh. Accordingly, the main objectives of the study are:

1. To study community perception about rural tourism and its impacts selected rural villages of Kangra and Kullu districts.
2. To study the role of community participation and capacity building for sustainable rural tourism development.
3. To analyse tourists expectation and satisfaction about rural tourism in selected districts of Himachal Pradesh
4. To conclude and suggests thereof for the sustainable rural tourism promotion.

3.5 RESEARCH METHODOLOGY

Research methodology is a plan according to which observations are made and data is collected. It provides the empirical and logical basis for drawing conclusion and gaining knowledge. The application of correct method and adoption of the scientific form of mind are the essential requirements of a scientific study. Keeping the said assumption in view, methodology of data collection and analysis of data framed.

Sources of Data

The objectives as stated previously have been accomplished by making use of primary data to a large extent along with some secondary data. The present study has been for the most part a primary probe based on the sample survey of local community, tourists and other stakeholders with the help of questionnaire/schedule. The details of each of these have been as follows:

A. Secondary data

B. Primary Data
Secondary Data

To find out the tourism potential, basic infrastructure required, statistics, figures, schemes and policy documents, secondary data was obtained from the following sources:

- Annual plans and economics review of Himachal.
- Five year plan of the govt. of India and of the State.
- Annual reports and accounts of Himachal Pradesh Financial Corporation.
- Annual reports of state Tourism Department.
- State Tourism Policy
- Incentive policy of H.P. Govt. and Govt. of India for Tourism sector.
- Eco-Tourism policy of the state.
- Role of hotel industry and travel agency in the state.
- Policy of the state government to encourage private sector for investment in the state.
- Journals (International journal of Management and Tourism, Tourism Management Annuals of Tourism Research, Tourism recreation and research), Magazines (Outlook Traveller, Desh, Discover India, Safari India), Newsletters (Travel talk, Travel trends, Tourism Express) and Travel guides, Newspapers and various Websites.

Primary data

Primary data has been used to study the perception of local community, tourists and other stakeholders towards tourism impacts and other issues of sustainable community development and benefits. The data has been collected with the help of questionnaire, filled in by various tourism stakeholders. Pilot study has been conducted to observe the need to make the changes in the questionnaire/schedule. Informal discussions have been carried out with various tourism stakeholders to comprehend closely about their inner feelings and problems. Personal observations made during the course of the study have been included in the primary data. The details of these are as follows

1. Questionnaire

The most important primary data has been collected with the assistance of questionnaire to be filled up by local community, tourists and other stakeholders. Data has been collected to study the local community perception about tourism impacts, stakeholders’ opinion about sustainable tourism impacts and tourists’ perception and satisfaction about destinations various products and services. The primary data for the study was collected from local people, hoteliers,
travel agents and tourists of Lahaul-Spiti, Kullu and Una districts. Three different schedules were designed for local community, tourists and tourism intermediaries.

Three sets of questionnaires were prepared so as to get comprehensive information.

1. Questionnaire for local people as per Annexure – 1.
2. Questionnaire for tourists visiting the selected destinations as per Annexure-2

2. Pilot Survey

The tourist destinations of Lahul-Spiti, Kullu and Una districts have been selected for conducting the preliminary survey. Pilot study has been undertaken so as to pre test the questionnaire/schedule and to refine it for the use in the final study. This helped in making certain changes in the questionnaire /schedule so as to make it easier for the respondents to provide their responses. The study also gave an indication as to the kind of responses that would be forthcoming with a few deletion and addition in the final questionnaire/schedule.

Table 3.1

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Respondents</th>
<th>Lahul-Spiti</th>
<th>Kullu</th>
<th>Una</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Local Community</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>30</td>
</tr>
<tr>
<td>2.</td>
<td>Tourists</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>30</td>
</tr>
</tbody>
</table>

3. Informal Discussions:

With the intention of being acquainted with the ground reality in a better way, personal visits to the destinations have been made. Interviews with the local people and other stakeholders have been made. To obtain first hand information and to comprehend closely the inner feelings and problems, informal discussions have been made with various stakeholders. This helped in cross examining the responses given by respondents in the questionnaire/schedule and getting hold of some additional and relevant information related to the present study.

4. Personal Observations:

Certain information’s cannot be obtained through questionnaire/schedule and personal interviews. The same has been obtained by means of direct personal observations made during
the course of visits to the destinations. Sometimes the respondents do not disclose the answer to many questions honestly. In such cases observations from a close angle to the ground realities help to solve problems logically and scientifically.

Questionnaire

The study will be carried in two districts namely Kullu and Kangra districts of Himachal Pradesh. In setting sample sizes for each settlement, both the number of inhabitants and the number of tourists are taken into consideration. The demographic profile of the resident sample represents the population of the Region and tourist sample represents the tourist population of the region. Five-point scale (1 = strongly disagree; 2 = disagree; 3 = neutral; 4 = agree; 5 = strongly agree) will be used for respondents from local community to rate various impact items. While for the tourists the schedule represents the combination of five point rating scale as well as multiple choices. Also interview survey technique will be used. The sample population for the interviews will include accommodation providers and local authorities' representatives. There will be two sets of questionnaires one will gather information about the tourist opinion and attitude about rural tourism, culture, custom, cuisine, art and craft and other rural product, the second part is designed to local community opinion about the rural tourism in the locality.

Data for the study will be collected through two surveys:

1. Tourist survey
2. Local community survey and Focus Group Discussion
3. Stakeholders Interview Survey

The survey instrument (Schedule) was include questions on various impacts of rural tourism and opinions of tourists on selected villages and their various aspects.

The Interview Survey

The technique of personal interviewing is undertaken in order to reach the objectives since it is the most versatile and productive method of communication and enabled For the purpose of this project semi-structured face to face interviews will be contacted involving: local Panchayat bodies, tourism department, and other major and minor stakeholders.

Hypothesis

1. Hypothesis Ho: The variables are uncorrelated in the population of local community.
2. **Hypothesis Ho**: The residents living in Kangra and Kullu have a negative attitude towards rural tourism.

3. **Hypothesis Ho**: Opinions of the respondents are equally distributed

### 3.6 SAMPLING DESIGN

Sample is a finite part of a statistical population whose properties are studied to gain information about the whole. When dealing with people, it can be defined as a set of respondents selected from a larger population for the purpose of a survey. Method of data collection largely depends upon the nature of research work. Before collection of the data one has to work over the sample technique and its accessories. Qualitative approaches to research, which the researcher has opted demand different types of sampling techniques from those commonly used in quantitative study. Method of data collection largely depends on the nature of research work.

Before collection of data one has to work over the sample technique and its accessories qualitative approaches to research, which the researcher has opted for, demand different types of sampling techniques from those commonly used in quantitative study. Before choosing the sampling technique it is necessary to justify why sampling is required in this particular case study research method. In general term sampling enabled the researcher to study a relatively small number of units in place of the total population and to obtain data that are representative of the whole target population. This provides substantial advantage. Firstly, because in many cases complete coverage of the population is not possible, by covering through a smaller section the purpose may be served. Secondly, sampling, besides being economical also saves a lot of time and energy.

On the basis of representative quality, sampling can be divided in two groups, the probability sampling and the non-probability sampling. Among the probability group the main typologies are:-

i. Sample random sampling.
ii. Systematic sampling;
iii. Stratified random sampling;
iv. Cluster sampling;
v. Multi-stage sampling, etc. whereas non-probability sampling techniques covers- i) accidental sampling; ii) purposive sampling; iii) quota sampling and iv) snowball sampling. The-probability sampling techniques are used in those situations where accurate representation, high reliability is reburied, because the purpose of the study is generalization. The non-probability sampling techniques are lying in the opposite pole. They are commonly used for exploration and qualitative analysis.

Since the researchers' main focus is in providing insights about the rural tourism impacts in Himachal Pradesh, the choice of non-probability and probability sampling technique is justified. The number of respondents has been chosen as per following detail. In the present study local community and tourists were contacted in Kangra and Kullu districts. These Districts are chosen because they bear rich potential of rural tourism. Further multi stage sampling was used in the study for selecting sample.

Population/ Universe for the sample selection

The total number of tourists, local community and other stake holders of Kangra and Kullu districts constitute the population. Present study has been undertaken in two districts of Himachal Pradesh and for sample selection multistage sampling has been used in the study.

Table 3.2

<table>
<thead>
<tr>
<th>Respondents</th>
<th>Kullu</th>
<th>Kangra</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local people</td>
<td>396,216</td>
<td>1,420,864</td>
</tr>
<tr>
<td>(Rural population)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tourists</td>
<td>2529697</td>
<td>1722941</td>
</tr>
</tbody>
</table>

Stage 1

Two districts have been selected as they are very rich in culture, heritage, religious attraction, adventure and rurality. Furthermore both the districts bear a model heritage village as Pragpur in Kangra and Naggar in Kullu districts.
Stage 2:

Main focus of the study is upon rural tourism. Hence in the second stage cluster sampling have been used. Rural tourism can be divided in following categories
(a) Historical sites and monuments.
(b) Cultural tourism
(c) Art and Handicraft centres.
(d) Temples and Religious places.

Eight rural areas within each district (Table 3.3) were selected using a process that took into account the tourism significance and tourists arrival in these villages. In Kangra district Garli, Pragpur, Baijnath, Jwalaji, Chamunda, Bhagsunath, Masrur, Bir billing. In Kullu district Vashishth, Naggar, Manikaran, Banjar, Bijli Mahadev, Malana, Old Manali and Ptlikoohl were chosen. These destinations also receive maximum number of tourists and local people are directly involved in rural tourism activities.

Table 3.3

RURAL AREAS SURVEYED

<table>
<thead>
<tr>
<th>District</th>
<th>Kangra</th>
<th>Kullu</th>
</tr>
</thead>
</table>

Stage 3:

Stage three: Selection of Local Community, tourists (Cluster Sampling)
In the third stage rural areas under each cluster/category have been selected. On the basis of *quota sampling* three spots have been taken under each category on *convenient cum judgement* basis.

**Stage 4:**

In this stage 5 tourists and 10 local people have been selected as quota on convenient cum judgment basis from each rural destination.

Responses of Local people from each district = 20×4×3 = 240

Responses of Tourists from each district = 15×4×3 = 180

Responses from tourists for both districts = 420×2 = 840

Resones of Panchayat officials, Travel Agents and accommodation Providers in both the districts = 90×2 = 180

Total Responses = 840 + 180 = 1020

3.7 DATA ANALYSIS AND INTERPRETATION

For the analysis of data the Statistical Package for the Social Sciences (SPSS, version 11.5) was used. Specifically, the data analysis plan was divided into three parts – univariate, bivariate, and multivariate – based on the numbers of variables used in the analysis. The main univariate statistics used in the analysis included: frequency distributions, means, and standard deviations. Keeping in view of the study, the data collected have been analyzed and interpreted with the help of the

1. Mathematical methods
2. Statistical methods
3. Graphical methods

**1. Mathematical Methods**

In the present study the data collected was analyzed with the help of the mathematical method as follows:

**a. Arithmetic Mean**

A mathematical representation of the typical value of a series of numbers, computed as the sum of all the numbers in the series divided by the count of all numbers in the
series. Arithmetic mean is commonly referred to as "average" or simply as "mean". The arithmetic mean is the "standard" average, often simply called the "mean".

\[ \bar{x} = \frac{1}{n} \sum_{i=1}^{n} x_i \]

b. Standard deviation

Standard deviation is a widely used measurement of variability or diversity used in statistics and probability theory. It shows how much variation or "dispersion" there is from the average (mean, or expected value). In the case where \( X \) takes random values from a finite data set \( x_1, x_2, \ldots, x_N \), with each value having the same probability, the standard deviation is

\[ \sigma = \sqrt{\frac{1}{N} \sum_{i=1}^{N} (x_i - \mu)^2}, \quad \text{where} \quad \mu = \frac{1}{N} \sum_{i=1}^{N} x_i. \]

c. Coefficient of Variation

In probability theory and statistics, the coefficient of variation (CV) is a normalized measure of dispersion of a probability distribution. It is also known as unitized risk or the variation coefficient. The coefficient of variation (CV) is defined as the ratio of the standard deviation \( \sigma \) to the mean which is the inverse of the signal-to-noise ratio. The CV is defined only for non-zero mean and the absolute value is taken for the mean to ensure it is always positive. The coefficient of variation (CV) is defined as the ratio of the standard deviation \( \sigma \) to the mean \( \mu \):

\[ c_v = \frac{\sigma}{\mu} \]

which is the inverse of the signal-to-noise ratio.

d. Skewness

In probability theory and statistics, skewness is a measure of the asymmetry of the probability distribution of a real-valued random variable. The skewness value can be positive or negative, or even undefined. Qualitatively, a negative skew indicates that the tail on the left side
of the probability density function is longer than the right side and the bulk of the values (possibly including the median) lie to the right of the mean. Karl Pearson suggested simpler calculations as a measure of skewness, the Pearson mode or first skewness coefficient, defined by,

$$\text{Skew} = (\text{mean} - \text{mode}) / \text{standard deviation},$$

2. Statistical Methods

Following descriptive statistical technique have been employed in the present study. Statistical methods provide an indispensable tool for collecting, organizing, and analysing and interpretations data expressed in numerical terms.

a) Descriptive statistical measures

b) Non-Parametric tests.

a) Descriptive Statistical Measures

The statistical analysis based on the computation of descriptive statistical measures is mostly applied in action research, and provide valuable information about the nature of a particular group and that group only. Weighted Arithmetic mean method has been used in this study.

b) Non-Parametric Tests

1. $\chi^2$ test

Non-parametric test, which has been used in this research, is chi-square test. The chi-square test is used to test if a sample of data came from a population with a specific distribution. A chi-square test ($\chi^2$ test) is any statistical hypothesis test in which the sampling distribution of the test statistic is a chi-square distribution when the null hypothesis is true, or any in which this is asymptotically true, meaning that the sampling distribution (if the null hypothesis is true) can be made to approximate a chi-square distribution as closely as desired by making the sample size large enough.

2. Wilcoxon signed-rank test
The Wilcoxon signed-rank test is a non-parametric statistical hypothesis test used when comparing two related samples or repeated measurements on a single sample to assess whether their population mean ranks differ (i.e. it's a paired difference test).

It can be used as an alternative to the paired Student's t-test when the population cannot be assumed to be normally distributed or the data is on the ordinal scale.

Let $Z_i = X_i - Y_i$ for $i = 1, \ldots, n$, The Wilcoxon signed ranked statistic $W_+$ is defined as

$$W_+ = \sum_{i=1}^{n} \phi_i R_i.$$

**Factor analysis**

Factor analysis is a statistical method used to describe variability among observed variables in terms of a potentially lower number of unobserved variables called factors. Factor analysis searches for such joint variations in response to unobserved latent variables. The observed variables are modeled as linear combinations of the potential factors, plus error terms. The information gained about the interdependencies between observed variables can be used later to reduce the set of variables in a dataset.

3. Graphical Methods

In the present study the data collected have been analyzed with the help of the graphs where needed in the following ways:

1. Bar Diagrams
2) Pie Diagram.

3.8 LIMITATIONS OF THE STUDY

The research study focused on the interviews that are conducted with the local areas such as villages of two districts namely Kangra and Kullu districts of Himachal Pradesh and having involvement and understanding of the issue in consideration. Interviews with other relevant stakeholders such as tourist, hoteliers and tour operators could not be conducted. The structured questionnaires were administered only to the literate persons and scribes assisted the illiterate persons, the communication losses may not have been reflected in the data. Here, much depends
Research Design

on individual perceptions, value system and interpretations, which obviously differs from person to person. While working on the present research problem, the researcher, besides the above constraints had many other limitations, some situational and few self imposed. The complex nature of study area in its large parts has particularly been a major hurdle in conducting the research. In the present study limitations are:

1) The study is limited to only two districts of the state.

2) Very limited study has been undertaken upon the people perception about tourism impacts in Himachal Pradesh.

3) The study was limited to the particular season as the Geographical and climatic hurdles restricted the researcher to conduct research.

4) The study was limited to only major stakeholders of selected districts and minor stakeholders couldn’t be investigated due to paucity of time.

Summary

The present study focuses upon various tourism impacts in Lahaul-Spiti, Kullu and Una districts of Himachal Pradesh. It investigates various aspects of sustainability of rural tourism, capacity building, community participation and tourists’ expectation and satisfaction about rural tourism products and services. The statement of the problem selected is

"Sustainable Rural Tourism in Himachal Pradesh: A Study of Kullu and Kangra Districts"

In particular, the study tries to assess the opinions of various stakeholders on sustainability issues of rural tourism.