CHAPTER III
UNDERSTANDING THE PROBLEM FROM MULTIPLE PERSPECTIVES: A LOOK INTO SOME MODIFICATIONS IN THE RESEARCH METHODOLOGY

3.1 Introduction

In the previous chapter a review of literature as well as the aims and objectives of the study were discussed. The review of literature section had covered the detailed study of literature concerned to the international, national and regional level. It had highlighted what work had been done in the concerned field and how the present work was going to be different from earlier ones. After going through an intense review of literature, I had mentioned the various aims and objectives of the study. The current chapter deals with the research methodology based on the aims and objectives clarified in the previous chapter. It has been thoroughly and clearly framed over here.

The word research is made up of two syllables, “re” and “search”. Dictionaries define “re” as a prefix meaning again and “search” as a verb meaning to look for something. Together, the syllables form a noun which means “to look again” (Collins, et al.; 2000).

According to the New Oxford Dictionary of English research means to engage in the systematic investigation into and study of materials and sources in order to establish facts and reach new conclusions (Pearsall, 1998). The Webster’s International Dictionary proposes a very concentrated description of research as a careful, critical inquiry or examination in seeking facts or principles; diligent investigation in order to ascertain something. Probably here the words “new conclusion” could be replaced by “valid conclusions” to give the definition more weight. Methodology supplies the logics, procedures and processes for attainment of data and processing of information. It is a system of explicit rules and procedure upon which a research is based and against claims and knowledge that is evaluated (Adegoke, et al.; 2010). In a general way, Mukherjee states that methodology denotes a fusion of:

a) “technology of data collection, namely methods and tools of research such as the case study, interview guide, questionnaires, life history, survey and participant observation, and analysis of content.”
b) Analytical tools such as statistical tests and methods.
c) Philosophy and theory to get the in-depth understanding of the subject.

In another context methodology as a discipline lies between two poles. On the one hand is techniques, the study of specific research techniques of research - interpreting a Rorschach protocol, conducting a public opinion survey, or calculating a correlation coefficient. On the other hand is philosophy of science, the logical analysis of concepts presupposed in the scientific enterprise as a whole—evidence, objective, truth, or inductive inference (Kaplan, 1985).

Madan (1972) elaborated three different meanings of the world “methodology”. First, “methodology” may be used to refer to the theoretical discussions of the nature of social science and the consequent implications for the conduct of social research. “Methodology” is also often used in a narrow sense to refer to the methods, techniques, or tools, employed for the collection and processing of data. Finally “methodology” is sometimes used to designate the concepts and procedures employed in the analysis of data, however collected, to arrive at conclusions.

3.2 Various Steps Followed in the Research Programme
The important components of the research programme included in this study are

- The research design
- Selection of study areas
- Focus group discussions and in-depth interviews
- Survey sampling
- Validity and reliability
- Data analysis

3.2.1 The Research Design

The research methodology used in this empirical study is combination of different research techniques which mainly refers to the qualitative and quantitative methods of data collection and analysis.

It is a well-planned overall scheme of study, structure and strategy of investigation conceived so as to obtain answers to research questions and to
control variance. It is a systematic plan that guides the researcher at the various phases of research and gives a proper direction for the research (Adegoke, et al.; 2010). It is a strategic plan for a research programme and research project, setting out the wide outline and main features of the work to be undertaken, including the various methods of data collection, data analysis, data processing and showing how researcher strategy addresses the aims and objectives of the study (Scott and Marshal 2005).

Adegoke, et al.; 2010 highlighted two major aspects of research design; one must specify precisely what one wants to find out and second one must determine the best way to do that. Formulation of a perfect research design helps researcher to complete his/her work timely without any chaos and confusion. Depending upon the intention, the proposed study was seen to be a descriptive study. A descriptive study is more flexible in design than any other method of research design (See Fig. 3.1). A descriptive study is much more structured and describes some phenomenon. Descriptive data are usually collected through an interview and questionnaire survey. “Basically a fact-finding enterprise, it focuses on relatively few dimensions of a well-defined entity and measures these dimensions systematically and precisely, usually with detailed numerical descriptions. The information is gathered from a set of cases that are carefully selected to enable the researcher to make estimates of the precision and generalizability of the findings” Singleton, Jr. and Straits (2005).

3.2.1.1 Qualitative Data

Qualitative data deal with meanings, which are mediated primarily through language and action. Qualitative data are thus data in the form of words. These words are derived from documents, interviews and observations (Ruona, 2005). There is no objective observations, only observations socially situated in the worlds of and between the observer and the observed (Denzin and Lincoln, 2000).
Fig. 3.1: Research Design Flow Chart

Research Design

Defining the problem

Literature researched showing lacunae of problems
(Explore the literature to deduce a clear framework for the theoretical construct)

Based on review of literature aims and objectives were designed

Narrowing down the area

Data Collection

Primary Data

Secondary Data

Benefits and problems of Community based ecotourism

Effects of Eco-development Projects in Conservation of GHNP

Role of women in conservation and development

Analysis

Discussion

Conclusion
Qualitative data analysis is a process that involves:

1. Sensing themes
2. Constant comparisons
3. Recursiveness
4. Inductive and deductive thinking
5. Interpretation to generate meaning (Ruona, 2005)
6. Qualitative research implies an emphasis on processes and meanings that are not rigorously examined, measured (if measured at all), in terms of quantity, amount intensity, or frequency.
7. Informant’s words depict the ground realities of society. Their statements provide an in-depth concrete description of their day to day life and problems that they face. The main aim of qualitative research is to understand the informant’s perception and give it descriptive and elaborated shape. Qualitative data analysis is all about interpreting the informant’s feelings and statements. It gives a deep understanding of the social and ecological perspectives of a person. Flow diagram showing the qualitative research approach given in Fig. 3.2.
Fig. 3.2: Process Using Qualitative Research Approach

Qualitative Steps of Research
- Research Problem and Idea
- Theoretical Framework (identifies and clearly defines concepts)
- Formulation of Research Questions
- Research Design
- Preparing for Material Collection
  - Identify Parameters for Material Collection and Analysis including Participants (Sample)
  - Delineate Researcher’s Role
  - Design and Write Proposal
- Collect Material
  - Literature Research
  - Survey questionnaire
- Identify Properties of Concepts
- Find/Develop Instruments to Measure
- Apply Instruments- Collect Data
- Statistically Analyze Data
- Interpret Statistical Results
- Report

Source: After Du Plessis, 2004
Population and Respondent in a Qualitative Study

Besides the villagers residing in eco-zone area the population for qualitative study is the Government officers linked with National Park, NGO director, Leaders of Women Saving Credit groups, BTCA members, guides involved with Ecotourism related activities, NGO director working outside the Ecozone area. The number of each respondent are as following:

The State Government Official Authorities
Director Great Himalayan National Park (2009) – 1
Director Great Himalayan National Park (2010) – 1
Assistant Conservator Forest - 1
District Forest Officer- 2

NGO
Director SAHARA -1
Director BTCA-1
Director Jagriti-1
Director Sunshine Himalaya-1
Head of Regional Operation Grass Route India-1

Women Saving Credit Groups Leader
Leaders of Women saving credit groups in GHNP- 6

Guides/ Field Assistants
Guides associated with Ecotourism – 4
Porters/cook associated with Ecotourism- 3

Eco-lodge Owners
Eco-lodge Owners- 5

Tourists met during field work
Number of tourists- 6

Researchers met during field work
Number of researchers – 2
Total- 36 Persons
3.2.1.2 Tools and Techniques of Data Collection

The tool of the proposed study was the “schedule” and the “technique” was the interview. The questions were framed in regard to the objectives of the proposed study. The questions were simple and specific, avoiding vague, ambiguous, hypothetical, leading and personalized questions. The questions asked in the interview schedule were both open ended and closed types. The questions are classified into different sections regarding the objectives of the proposed study. Data collection is done by two main ways – primary sources and secondary sources. Adegoke, et al.; 2010 explained the primary and secondary sources as follows: Primary sources deal with the direct account of an event or phenomenon given by someone who actually observed the event and phenomenon and secondary sources deal with the account of an event or phenomenon by someone who did not actually witness the event or phenomenon.

3.2.1.3 Case Study

Case study exists in different forms of qualitative traditions and the design of research within each has distinct features (Cresswell, 1998). Combining multiple techniques for eliciting data in case study research actually strengthens and confirmed results. There are many strength and weaknesses of case study method. It has been criticized by some as lack of scientific rigour and reliability (Johnson, 1994). Case studies become particularly useful where one needs to understand some particular problem or situation in great depth and where one can identify cases rich in information (Patton, 1987).

All research begins with a question or problem. The subject matter of the proposed study has already been discussed in the previous sections. The next phase is to describe the research design. Research questions and research methodology are based on the aims and objectives outlined in the previous chapter. It would also state problems faced during research/field study and in designing tools like schedules, asking questions, facing informants and so on.
3.2.1.4 Tools of Qualitative Study

Detailed and in-depth interview method was carried on to obtain primary data in the qualitative study.

The highlights of in-depth interview are:
1. People’s knowledge regarding National Park.
2. Problem faced by Eco-zone area after Park formulation.
3. People’s involvement in community based ecotourism management.
4. Participation and level of participation in the CBET.
5. Benefits and problems of community based ecotourism management.
6. Government’s assistance in promoting CBET.
7. CBET’s effect in improving socio-economic condition of people.
8. Mainstream Women’s participation in WSCGs.
9. Opinion and perception of women role in conservation.
10. Problem and obstacles of women participation.
11. Other opinion and recommendations.
12. Eco-development projects role in improving socio-economic conditions.
13. Success and failure of Eco-development projects.
14. NGO and Governments role in EDP.
15. Conservation politics in region.
16. Role of state leaders in PA conservation.

3.2.1.5 Quantitative Data

Quantitative research as a type of research that is done by explaining phenomena by collecting numerical data that are analyzed using mathematically based methods (Creswell, 1994). It is all about collecting numerical data to explain particular phenomenon. It deals with an investigation of problem, based on testing a theory composed of variables, measured with numbers and analyzed using statistical methods. The main target of qualitative research is to verify whether the predictive generalization of a theory hold true.

It helps in establishing research numerically. Though it seems qualitative and quantitative research are contradictory to each other but they are complementary to each other. While quantitative methods have some notable
advantages, they also have disadvantages. This means that some phenomena are better studied using qualitative methods.

Though qualitative and quantitative methods appear quite opposite to each other but both are complimentary. Qualitative research provides the understanding of an issue and the results appear in the form of discussion of the entire content and on the other hand quantitative research is a statistically-based approach.

3.2.1.6 Population and Respondents of Quantitative Data

The universe of the study would be 1,358 households covering the seven panchayats of the biggest Tirthan Range. The researcher had taken two villages from each panchayat. Details are given in Table 3.1.

<table>
<thead>
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<th>No.</th>
<th>Panchayt</th>
<th>Total No. of HHs</th>
<th>No. of Surveyed HHs</th>
<th>Villages Taken</th>
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<tr>
<td>1</td>
<td>Mashyar</td>
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<td>Dhaliyad</td>
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<td></td>
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<td>Bathad</td>
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<td>34</td>
<td>Shill</td>
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<td>Gurulli</td>
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<td>305</td>
<td>61</td>
<td>Barnagi</td>
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<td></td>
<td></td>
<td>Chipni</td>
</tr>
<tr>
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<td>Pekhri</td>
</tr>
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<td></td>
<td></td>
<td>Kulthi</td>
</tr>
<tr>
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<td>Jawal</td>
</tr>
<tr>
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<td>Kalwari</td>
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<td>4</td>
<td>Dehuri</td>
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<td>Galidhar</td>
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</tr>
<tr>
<td></td>
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<td>Thanch</td>
</tr>
</tbody>
</table>

3.2.1.6.1 Sample Size

Sampling is a process of systematically selecting respondents, cases and households in the research study. Though a standard sample size comprises 15% of the total population, that is, 203; to get more accuracy in the result the researcher has taken 20% of the total population, that is, 271.
3.2.1.6.2 Sample Design

Random sampling was done to choose two villages from each panchayat. The criteria were to choose one from an interior region and the other from an easily accessible area. 20% of the households were chosen from each of the panchayats.

3.2.1.7 Tools of Quantitative Study

Following are the tools of quantitative study:

3.2.1.8 Questionnaire

For Adegoke, et al.; 2010, questionnaire is a printed document that contains instructions, questions and statements that are compiled to get answers from respondent. A questionnaire is a means of drawing the feelings, belief, viewpoint, experiences, perceptions, or attitudes of some sample of individuals. As a data collecting instrument, it could be structured or unstructured. The questionnaire is a very concise, preplanned set of questions designed to yield specific information to meet a particular need for research information about a relevant topic. The research information is attained from respondents normally from a related interest area. In a common sense a questionnaire is a written or printed form used in gathering information on some subject consisting of a series of questions to be submitted to one or more persons (Key, 1997).

It can be open ended as well as close ended. However most of the time it does not provide in-depth information.

3.2.1.9 Interview Schedule

An interview is a direct face-to-face attempt to get reliable and valid measures in the form of verbal responses from one or more respondents. It is a conversation in which the roles of the interviewer and the respondent change continually (Key, 1997).

Interview schedules were tools to collect the quantitative data from the respondents. The whole structure of the interview schedule was developed by intense review of literature and by keeping in my mind the objectives of the work. The interview schedule has nine sections. Each section covers various aspects of the objectives.
3.2.1.10 Oral Interview

The interview was one method in data collection. The main methodological issue in the interview was to reach and then to identify the informants. Initially, the researcher had conducted random discussions with villagers to get an idea about the villagers and their perception towards the Park. After that, snowballing method was followed in which randomly interviewed persons helped to recognize the knowledgeable persons who had a sound knowledge regarding the Park and Park-related issues. Since work was based on people’s participation in the conservation of the National Park as well as people’s dependency on Park resources the preference was to interview old people, who had been residing in the periphery of the Park before and after the establishment of the National Park. During the interviews the author had to take many precautions. The interview session started with simple discussions without using any tape-recorder or a pen. The reason was to familiarize the respondent with the situation and the comfort level being taken into consideration. Once it was realized that the respondents had no objection and had developed a rapport with the interviewer, the researcher started recording and jotting the information. Interviews were also conducted with NGO heads, Ecotourism operators, ecolodge owners, Deputy Director of the Park and Director of the Park. A descriptive cross sectional research design used for the study comprising of schedules and group discussions with different stakeholders involved in eco-tourism in the study site was involved. The schedule was administered to the eco-tourism service provider (like guides, trek cooks, animal operators, porters), hotel and lodge operators, shopkeepers, foreign and Indian tourists, etc. Semi-structured informal interviews with officers of the Park administration were also undertaken.

3.2.1.11 Focus Group Discussions

Focused group discussions (henceforth FGD) were carried out to define ideas, concepts of protected areas and to identify the factors and norms of policies that are important. The main purpose of qualitative focused group discussions were to get the participants knowledge, beliefs and attitudes towards protected area and its protection. FGDs have many advantages. FGDs are useful for research study due to its exploratory nature. It is understandable to illiterates and communicates their thoughts
well during discussion. FGDs have a high validity rate as a researcher is able to read facial expressions and gestures of participants. These things tell much about one’s perception and the level of truth being narrated. This significant and important trait made this tool an important part of research methodology.

Section 1

The first section comprised questions to obtain information on the individual factors such as age, gender, educational qualification, type of family (nuclear/joint), religion and marital status. All questions were close-ended.

Section 2

The second section deals with socio-economic factors like occupation, level of living, number of animals, monthly income and monthly savings. The questions were open-ended as well as close-ended.

Section 3

The third section consisted of questions regarding basic amenities like the availability of electricity, dispensary, school, level of living (pucca/semi pucca house, rooms etc), amount of land. The questions were open-ended as well as close-ended.

Section 4

The main objectives of the thesis begin from this section. The questions were designed to obtain information on eco-development projects. Most of the questions were open-ended to get detailed information about the project and its effects. A few basic questions were close-ended. Close-ended questions were used to obtain information on the respondents’ satisfaction on regional level work and regarding attending meetings on the same. The type of answer was framed in ‘yes/no’. This section covered the peoples’ viewpoint regarding EDP, its implication, loopholes, benefits and satisfaction level.

Section 5

This section was an important section dealing with women. Close-ended questions were used to obtain information regarding women’s occupation, whether they were associated with a WSCG, NGO or BTCA. Open-ended questions were
Section 6

This section covered community-based ecotourism management in GHNP. Close-ended questions were asked to get ideas regarding awareness of the National Park and wildlife sanctuary. Open-ended questions were used to obtain information regarding tourism in the National Park, the community’s involvement in tourism, problems linked with tourism, fairs and festivals.

Section 7

Section 7 deals with the study of the culture of the particular region. Close- and open-ended questions are used to get the detailed information regarding the culture and customs of the region.

Section 8

Section 8 deals with the people’s dependency on the National Park. Questions were open-ended as well as close-ended to get a clear idea behind people’s dependency over forest resources.

Section 9

This last section dealt with the rights claimed by households in response to National Park formulation. The questions were open- as well as close-ended.

3.2.1.12 The Quality of Tools

Validity

Validity is associated with the measuring of soundness and the effectiveness of research techniques. The validity test of the objectives and of the questionnaire was firstly done by the supervisor and research degree committee (RDC). The suggestions and additions were added to evaluate all the tools that have been supposed to be used in data collection. Improved and complete questionnaires/schedules were finally prepared and used in field work.
Reliability
Realibility deals with the stability or consistency of the information. To check the same Questionnaires/schedules were tested by pre-testing them on 49 households among the three ranges which surround the GHNP.

3.2.1.13 Criteria for Selecting Informants
- Accidental selection of informants was done to eliminate the element of bias.
- Different age groups and different socio-economic status were interviewed in order to assure a clear picture.
- Sometimes groups of two to three people were interviewed to get a collective idea.
- Field assistants, porters, guides, forest guards, official authorities were interviewed to get the idea about the current scenario.
- Ecolodge owners, panchayat members and BTCA group members were interviewed to know about impact of project and the benefits of ecotourism.

3.2.1.14 Data Collection
A schedule was a tool to collect information from the respondents by the individual interviews performed by the researcher. The in-depth interview was performed by the researcher only.

3.2.1.15 Data Analysis
Data analysis is the next step after the data collection. It deals with the systematic organization and processing of collected data to get the desired results. Data analysis is the process of organizing and sorting data in the light of increasingly sophisticated judgments and interpretations (Glesne and Peshkin, 1992). It is the process of bringing order, structure and meaning to the mass of collected data. A process of inspecting, transforming and concluding the data with aim of highlighting useful information, conclusions and results.
All the collected data were tabulated systematically to avoid any kind of confusion and to get accurate results. Secondary data which was collected through Forest departments, NGOs, local newspapers and regional literature were taken as comparative measures to check the current status of work and mostly used as an appendix, though they also substantiated some primary data. Primary data related to the respective objects were placed in specific sections. Each objective of the study further subdivided to get better clarity and understanding of the issues involved. After getting into the field and getting aquatinted to the current scenario, few modifications had been done in data collection. Additional data had been collected to get in-depth understanding of a matter. Microsoft Excel was used for calculations and some statistics for generating graphs to show results. SPSS (Statistical Package for Social Sciences) was used to get further advanced statistical analysis.

Both quantitative and qualitative analysis was applied in the study. After the completion of data collection, each answer of the question was coded and fed into the Microsoft Excel sheet. Finally statistical analysis was done using the various statistical packages. The analysis of qualitative and quantitative data was done in the following parts:

- Data analysis of the individual factors, socio-economic factors comprising age, family type (nuclear/joint), education, monthly income, occupation and other related factors by using the explanatory statistics such as ratio, percentage, mean, median and standard deviation.

- Data which was obtained by the interview and detailed discussion with authorities of the Park was analyzed with the descriptive approach analysis.

3.3 Rapport Establishment

The researcher had conducted five complete field visits. The initial two were to get an idea of the field area, to collect literature, secondary data, to get official records of the study area, maps, census, as well as the previous work done in the field area. The latter two visits were to collect primary data from the field.
It took time to develop faith and confidence among the villagers. The arrival of the researcher at first had created an element of chaos among people ranging from common villagers to those who were responsible for the administration of the area. The presence of the researcher, the questioning, interviewing and discussions, etc. had made the host community a bit suspicious. Once the researcher revealed her identity and the purpose of the visit, respondents were very co-operative and generous in imparting information. Being a native of same state had proven a blessing for the researcher and after the brief introduction about herself and her work, people warmly welcomed her. The researcher explained in detail about her university, study and ideas behind asking such questions to them. Establishment of rapport was done through stay in villages. Sensitive information was mainly collected at the later period of the fieldwork. Knocking at the doors of the strangers sometimes at odd hours by an uninvited guest needs a lot of patience. Heads of panchayat showed double the interest in all the sessions and provided additional information. To gain the element of trust, the researcher started with the basic discussion regarding their village, crops and day-to-day activities. To make them feel comfortable the researcher did not use any tape recorder. Earlier sessions were just an interactive session to get the idea about villagers and their lifestyle. Initial interactive sessions proceeded without jotting any information to avoid suspicion. Unlike other foreign visitors, villagers treated the researcher as their own family member and more or less every informant offered tea and food to the researcher. After a few days stay in the village the researcher developed very cordial relations with the villagers.

3.4 Problems Faced During Field Study/Research

Research is like a voyage of exploration, which is full of adventure and thrill. During the entire field visit the researcher had faced many problems, but after completing the thesis work, it felt like another chapter of life. It is immensely challenging and enjoyable to work in a real-life situation. Field work provides a kind of intellectual stimulation, it offers something challenging and exciting. To continue fieldwork smoothly, the researcher should have flexibility and autonomy in decision-making. During
the phases of fieldwork, the researcher had adapted the various ways to meet the social background of local people, their history, problems and missing links between government and localities. Sharing field problems was an important part of the field study. Each researcher may face some major or minor field problems. The researcher also had her share of problems.

The researcher had faced several problems during the later two visits. In the beginning, there was much enthusiasm to visit the field and to meet the respondents, but gradually, as the work progressed, some basic problems began to surface. Villages were covered as per the map. The study area was so widely spread and scattered that it needed a lot of energy and stamina to walk on foot in search of respondents. The problems were in terms of stay, harsh weather conditions, and poor road accessibility. The highest village that the researcher had covered was “Pashi” village in “Jeewanal range” at a height of 8598 ft above the sea level. To make a comparative study between all three ranges which surrounds the park area researcher had covered all of them by travelling by foot. One was not supposed to get “gender issues” in this work, but being a female researcher I had to be doubly carefully while covering interior parts of the Park. To avoid any mishap the researcher took many precautions like avoiding survey/data collection/interview at late hours, avoiding visits to secluded places without any of field assistant and so on.

Communication was another problem that the researcher had faced. Usually villages were scattered all around the Park. People only spoke the “Pahari” dialect. Another main complexity in conducting a fieldwork was the suspicion that the presence of the researcher triggered in communities in the field area. Due to the communication gap between the host community and the Park authorities, they had assumed that the researcher was an employee of the Forest Department, who had come to collect personal information regarding the people of the community. Pivotal to the whole relationship between researcher and researched is access and acceptance (Punch, 1986).

There was a genuine problem of social desirability bias. Most of the time the people wished to present themselves in the best possible light, so they might provide socially desirable rather than honest answers to personal questions. To avoid this problem, the researcher asked additional questions to establish the truth. Understanding relations and interaction between people and the
Park was a part of my work, which I found most stimulating. They were encroaching and poaching, but for them it was about basic survival. Data obtained by the researcher through interactive sessions between the interviewer and the interviewees was much more than the informant’s thought process and attitudes. It revealed much about the process of social interaction. So the researcher had to carefully consider all cases.

Researcher had never worked in a terrain as physically demanding as the Western Himalayas, and conquering the mountains of my study area on a regular basis empowered me as no fieldwork had done before (See Picture 3.1). Living among the villagers personalized the rural people who were in conflict with the wildlife I had come to study and allowed me to view the system with greater sensitivity to all aspects of the ecosystem. Work in the National Park matured me as a researcher, social scientist, conservationist and traveler carrying out fieldwork in a remote area of the Himalayas and has made me tough mentally as well as physically. Collecting data in a remote part of the Himalayan range demanded physical toughness and by this time it had transformed me from an immature person to a more mature critical thinker. During the exhausting period of field study, the researcher developed some health problems, which slowed the pace of work. To collect the data from the interior region of Western Himalayas, the researcher used to leave at around 6.30 am in the morning by bus or taxi and then return at 6 pm in the evening to her residence back in town. Living with the villagers who were in conflict with the wildlife and the forest’s natural resources was what I had come to study and showed me the actual scenario of the ecosystem. It was not possible to persuade local people to be part of wildlife conservation without first understanding and having compassion for their own fundamental needs. I conducted interviews for my data by walking up and down the agricultural fields with a translator. It took about three months time to complete the whole data collection. Circumstances forced the researcher to think out of box and it helped. Until I entered into the field, I was totally focused on data collection for my thesis work, but in the wild I realized my facts, figures and collected primary data could be used for a much larger aim of improving wildlife conservation and making new strategies regarding protected area management.
To conserve biodiversity and the natural resources of the country, land use systems like the establishment of national parks, wildlife sanctuaries and other protected areas were introduced. Conservation of protected areas had become a burning issue all over the world. The conservation of the rapidly diminishing natural habitats of the world is now a global priority (Quansah, 2004).

The growing trend of conservation was to see the ecosystem as a whole where man and nature worked in parallel to fulfill each other’s needs. As per the World Conservation Strategy, conservation is the management of the human use of the biosphere so that it may yield the greatest sustainable benefit to present generations while maintaining its potential to meet the needs and aspirations of future generations (IUCN, 1980).

Man’s activities are highly responsible for creating an imbalance in the ecosystem and creating loss of biodiversity. It pointed out the symbiotic relationship between both showings that they were beneficial to each other. In the current scenario, mutual efforts towards both the ends were the key to conservation and sustainable development. Establishment of protected areas was considered as the central strategies for biodiversity conservation and
natural resource management. Despite the advancement of such thinking in the conservation and management of protected areas, there were still many cases and reasons where local communities were fenced off from their previous lands in the name of conservation. It had not only created trouble in accessing natural resources but also formed a major problem for livelihood issues. The government’s policies were working to fulfill the goals of sustainability at the cost of local communities’ by displacement and by putting restrictions over accessing protected area resources, which had been their right since time immortal. Conservation took place mainly in isolated rural areas where the whole population depended on forest resources for their day to day’s requirements.

The government’s policies were following a “one-way sustainability” which was supposed to benefit all at the ecological level.

Sustainability should be “two-way” or “Double-sustainability” which satisfied the social aspects as well as the attainment of ecological goals. It should address the defense of both biodiversity and local people’s livelihood. No doubt, conservation has become a global issue and the government is implementing many projects at the regional, national and international level to attain the goals of conservation but simultaneously it was contributing to local poverty, denying poor peoples’ control and access to natural resources. Therefore the higher goals of conservation at the global and national level at the expense of local people’s livelihood directly or indirectly affected the socio-economic condition of the society.

Here are a few case studies to give in detail an account of some of the problems, as it is said by Martin H. Fischer

“Facts are not science — as the dictionary is not literature.”

Case Study 2

Mr.A was 75. He was permanent resident of Ropa village. His ancestors used to live here for many decades. He was born in this mountain area, and he made his livelihood through agriculture. He is disappointed with the Park and the Park Authorities. He said the forest is like a God, why would we destroy it. According to the government they had made park just to conserve it, so that our coming generations may have a better and healthy future. He pointed out was there any kind of a Park
decades ago? It was all due to our forefathers who had conserved and protected the forest. This forest was their gift to us and by banning our entry to the Park they had snatched it from us.

Forest (Park area) was holy place for us. Earlier we used to go there to collect herbs and graze our sheep. He said that just a few years back he had started buying medicines and clothes from the market. Earlier the herbs worked as medicines for them, high altitude grasses were rich in proteins and minerals so they used to produce more wool. Now the government had banned grazing. So very few villagers had kept sheep and they produced very little wool. Also allopathic medicine did not suit us and that was why the death rate was high. For all this the government was responsible.

He said we want our country to make progress, but progress at the cost of our life was not justified. The government has given claim to only three villages. Why was there this discrimination? We were equally suffering. Then why only three villages are getting the compensatory claim?

I don’t know about the EDP, but one project had been set up here few years back. I don’t know about their functions. I guess it’s like other projects, must be limited to paper work only.

The socio-political aspect of biodiversity conservation through Protected Area (PA) establishment in the large area were quite complex. Conservation of wildlife within the PAs territory does not make certain to achieve long term targets of conservation, for that we need to follow conservation strategy beyond the boundaries of PAs. Broadening the limits of biodiversity management beyond the PA plays a main role in delivering the three objectives of Convention on Biological Diversity (CBD); conservation, sustainable use and equitable sharing of benefits (Secretariat of the CBD, 2005). If we genuinely wished to contribute to biological diversity conservation, first of all we need to resolve the socio-economic issues of the local people. The survival of civilization has depended and will continue to depend on the success of the people and biodiversity relationship (Quansah, 2004). Effective and sustainable conservation can be better achieved if the objectives of protected areas do not violate the rights of native people living in and around them (Dowie, 2009). Therefore, the conservation practices that dichotomize the social and the ecological aspects of protected areas could not
bring a long lasting solution both for human and wildlife needs (Biressue, 2009).

Case Study 3

Mrs. B (38 years) a field assistant, had been associated with an NGO working in the eco-zone area of National Park for the last five years. She said that in the name of conservation government was usually making policies which were beneficial to themselves only. Earlier she was associated with another NGO working in eco-zone area, but due to improper distribution of amount and corruption Park authorities closed it down and set up a new one.

According to Mrs. B, out of the total only 30% of the amount was utilized for developmental activities. All the money went into the pockets of middlemen. She said no doubt the government was putting its own efforts but a proper channel was missing. Here villagers were illiterate or very less educated, they believed in whatever one showed to them.

The major issue of people and Park conflicts revolved around the conservation pressure that is human activities on the periphery of PAs and intrusion from outside the PA. There were many conservation challenges linked with the people and Park agenda. Attainment of conservation goals needed proper strategies for managing the whole landscape including both man and nature.

3.6 Methodology

The methodology of this study began with a review of literature regarding national parks, wildlife sanctuaries, conservation related issues and peoples’ participation in conservation of protected areas in the region, in India, and abroad. The review of literature also included the management plan and other related documents. An extensive review of literature was done in the field of national parks, wildlife sanctuaries, protected area management, ecotourism, and community-based ecotourism management, eco-development projects in India, as well as conservation and sustainable development. After the initial review of literature interviews were conducted with the Park Director and other staff who were involved in the administration and management of the study area. The outcome of the review was used in two ways:
• To enhance the researcher's understanding about the topics to get a clear idea about the previous work done in this field, as well as other issues and problems.
• It helped to shape relevant research questions and avoided the repetition of the same work.
• Data on which this research is based was generated through fieldwork that involved the collection of both oral and written materials during the period of the field visit. When we pursue our own fieldwork we fall into the trap of thinking in boxed categories like stakeholders, people/state, communities, whereas the reality was far more complex. In reality in the term environmental politics, every concept like interest, affiliation, claim, and compensation were all contradictory to each other. The procedure followed and the methodologies employed have been presented here. The research was carried out in the following phases:

• Preliminary Survey
  This involved familiarization with the region under study in order to acquaint oneself with the physical and socio-cultural environment of the area as well as direct observations regarding the objectives of the study. The following appropriate methods and techniques of research were finalized.

• Data Collection
  Both qualitative and quantitative approaches were followed to collect primary data. Structured questionnaires, interviews, observations, formal interviews, oral histories, etc. were included to collect primary data. Interaction with officials of various departments and offices were also conducted.

• In The Case of CBET and Eco-tourism
  In terms of employment and environment a quantitative study discovered some of the different aspects of the study. A quantitative study was done by investigating and correlating the scattered aspects of CBET that was the protected area, community, and development of
tourism industry, forest sectors, and the economic boom arising out of it.

(C) Information from Primary Sources

Relevant information pertaining to domestic household sector and forest sector were gathered through elaborate primary surveys. It was in addition to understanding the traditional system of forest use and management including knowledge pertaining to local traditional institutions and their implications in terms of resource use and management/control of forest areas. The following two types of surveys were conducted for collecting primary information on these aspects.

i) General (Household) Survey

ii) Village/area level survey.

In the former, the major thrust would be upon collecting information on general demographic and economic characteristics of the population living within and adjacent to the National Park and Wildlife sanctuaries.

(d) Information From the Secondary Sources

Information from the oral sources or through discussion could sometimes be complicated to accept because of errors arising either from deliberate manipulation or memory failure. Being a resident of a particular state, there could be chances of biases or prejudice in the author’s mind while conducting an interview. So to minimize the possible chances of bias from the informant and other official sources, reviewing of related material about the area and earlier work done was required. That was why baseline information related to the objectives of the study would be gathered from secondary sources of information. An extensive review of the existing literature, i.e., survey of primary literature, Government reports/publications such as census, National Sample Survey reports, different statistical reports, district gazetteer, besides different settlement and forest laws as well as secondary literature, both published and unpublished, would be considered.

Extensive study of The Forest Research Education and Extension Project
(FREEP) report was done. This was conducted by Wildlife institute of India (WII) Dehradun.

(e) Data Processing and Analysis

The data generated with the help of qualitative and quantitative methods was subjected to statistical analysis to draw generalizations. Relevant statistical procedures were used to test for associations between various socio-economic attributes of households, dependency on protected areas for monetary income and people’s perception towards the Park.

3.6.1 Use of (Geographical Information System) GIS/ Digital Cartography

Geographical site is a major feature of activities and plans. Geographical information systems are special class of information systems that keep track of not only events, things and activities, but also of where these events, activities and things happen or exist (Longley, et al., 2005). A geographical information system put together software, hardware and data for capturing, analyzing, managing and displaying all forms of geographically referenced information (Terefe, 2010).

In the thesis, the required GIS work was added to give a clear picture and an idea about the protected area zone, National Park, Wildlife Sanctuary, Ecolodges and forest area.

3.6.2 Phases of Data Collection

Many field visits were conducted by researcher to get the clear idea of field. Secondary data, NGO reports and official forest records were beneficial to set the idea of field and its problems. Besides above mentioned methodology, main data was collected in two important phases.

Selection of Study Areas

Based on the 2001 census report both the interior and easily accessible villages from the Tirthan range were purposely chosen for the study.
1) First Phase: Comparative Study between Three Ranges

GHNP is surrounded by three mountain ranges:
- Sainj Range
- Jeewanal range
- Tirthan Range

All three ranges were studied well to get an accurate idea regarding various villages inside the respective ranges and community’s livelihood dependency on the Park area. One village was selected from each range, which was adjacent to the Park (See Fig. 3.3).

3.6.3 Criteria to Select Villages

Villages were selected on the basis of their distances from the Park area, so that the study could be made on their dependency on Park resources and tourism-related activities. Distances were taken as 0-5 km, 5-10 km, and 10-15 km from the Park area. Another reason for choosing villages on the basis of distance was so that the researcher could make a comparative account of all the three ranges and their dependency on the Park on the basis of their distance from the Park.

Second phase

Interior and accessible villages were taken from the respective 7 Panchayats of Tirthan Range (See Table 3.2 and 3.3).
Table 3.2: Number of Panchayats, Wards and Villages in Tirthan Range

<table>
<thead>
<tr>
<th>No.</th>
<th>Panchayat</th>
<th>Wards</th>
<th>Villages</th>
<th>Total Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Mashyar</td>
<td>5</td>
<td>9</td>
<td>1472</td>
</tr>
<tr>
<td>2</td>
<td>Shilli</td>
<td>5</td>
<td>6</td>
<td>1037</td>
</tr>
<tr>
<td>3</td>
<td>Tung</td>
<td>7</td>
<td>12</td>
<td>1876</td>
</tr>
<tr>
<td>4</td>
<td>Nohanda</td>
<td>7</td>
<td>31</td>
<td>2298</td>
</tr>
<tr>
<td>5</td>
<td>Khandedhar</td>
<td>1</td>
<td>6</td>
<td>240</td>
</tr>
<tr>
<td>6</td>
<td>Kalwari</td>
<td>2</td>
<td>2</td>
<td>93</td>
</tr>
<tr>
<td>7</td>
<td>Srikot</td>
<td>4</td>
<td>12</td>
<td>217</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>7 Panchayat</td>
<td>31</td>
<td>78</td>
</tr>
</tbody>
</table>

Source: GHNP Management Plan, 2004b

Table 3.3: Number of Households in Interior and Accessible Villages

<table>
<thead>
<tr>
<th>Villages Taken</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Interior</strong></td>
</tr>
<tr>
<td>No.</td>
</tr>
<tr>
<td>-----</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>2</td>
</tr>
<tr>
<td>3</td>
</tr>
<tr>
<td>4</td>
</tr>
<tr>
<td>5</td>
</tr>
<tr>
<td>6</td>
</tr>
<tr>
<td>7</td>
</tr>
</tbody>
</table>

Source: GHNP Management Plan, 2004b

In the second phase of data collection two villages were taken from each of the seven panchayats. That’s how a total of fourteen villages were taken from seven panchayats. One village was taken from an interior region and the other one from accessible region. The logic behind choosing villages, that is, one in the interior region and the other in an accessible one was to test the objectives of the thesis in respect to the geographical accessibility.
condition. It was to test how peoples' opinions, outlook, thought process, intentions, demand and dependencies vary with the geographical accessibility criteria. Another reason was to check how the distance of villages from the Park affects the needs and dependencies (See Map 3.1).

To get the standard data 20% of the total households had been taken from each panchayat. Households covered from the accessible villages were comparatively more than that of those in the interior regions (See Fig. 3.4). The reason behind covering more households from accessible regions was that due to tough terrain of the region it was hard to cover villages which were in the interior due to poor road accessibility and safety measures. Moreover, data was collected during the months of June and July which was the rainy season, which was another reason for choosing accessible villages. As guided by the head of an NGO and the local villagers, safety measure was taken into consideration and the researcher avoided late night stay at the interior villages.

Map 3.1: GHNP and Adjoining Wildlife Sancturries

Sources: GHNP, Management Plan, 2004b
3.7 Ethical Consideration

The term ethics refers to “norms for conduct” that distinguish between unacceptable and acceptable behavior (Resnik, 2008). Environmental ethics is a new sub discipline of philosophy that deals with the ethical problems surrounding environmental protection. It aims to provide ethical justification and moral motivation for the cause of global environmental protection (Yang, 2006). Environmental ethics is a theory and practice about appropriate concern for value in and duties regarding the natural world (Bunnin and Tsui-James, 2003). Most environmental ethicists in developed countries highlight anthropocentrism as the ideological origin of the modern ecological crisis, their counterpart in most developing countries list environmental egoism (including environmental imperialism) as the main source of environmental problems (Guha, 1989a).

According to (Yang, 2006) the following are the environmental ethics that deserve attention:

- Environmental ethics comprises the ethical consideration beyond one’s community and nation to include all people and animal as a sum total of a nature.
It is interdisciplinary. The unique perspectives and methodologies of these various disciplines like environmental literature, environmental politics, and environmental science provide valuable encouragement.

It is interdisciplinary. The unique perspectives and methodologies of these various disciplines like environmental literature, environmental politics, and environmental science provide valuable encouragement.

Environmental ethics is plural where different ideas and perspectives compete with each other. Animal rights, liberation, ecocentrism, anthropocentrism and biocentrism all provide ethical justification for environment protection.

It is global. Environmental crisis has become a global issue. Global environmental protection largely depends on the global governance. It wouldn't be wrong to say environmental ethics are global ethics with global perspective.

It is revolutionary. On the basis of ideas it highlights the responsibility towards upcoming generation and nonhuman beings.

Ethical questions need special attention while conducting research on any community especially when the researcher was from outside the community. During the period of data collection the researcher took written permission from administrative authorities in the field as well as from village heads, to gain their confidence regarding research work. It was show to them that the data collected data would be used only for academic purposes. The anonymity and confidentiality of informants had to be seriously considered in the field visit. Those who were not willing to disclose their name during interview session were kept confidential.

The following precautions have been taken to enhance the ethics of research:

- Respondent’s names have been coded to maintain their anonymity.
- To maintain the confidentiality author did not mention sources from where reports have been taken.
- The researcher informed all respondents regarding the general purpose of research.
• The researcher made them familiar with her work and how the current data would help to get a clear idea about their problems.
• The researcher took a proper official letter from the University from where she was pursuing her study to get the legal consent for data collection from the Director of the National Park and other government offices.

3.8 Limitations of the Study

Due to accessibility problems and time constraints, Tirthan range had been selected for further detailed study. The range had seven panchayats and two villages were chosen from each one. One village was easily accessible and another one was in the interior region of the panchayat. This was to check the impact of accessibility on people’s lives.

3.9 Research Questions

This piece of work reflects my intention to understand the concept of ecotourism, local people’s participation in the conservation of the protected area, effects of eco-development projects and how it had been applied with in GHNP, and to determine whether these concepts had achieved their desired goals of conservation.

The following research questions had been addressed:

• What was the benefit and problems (socio-cultural and economic) of community based Eco-tourism Management in the Great Himalayan National Park? What was the linkage between community based people’s participation, sustainable development and socio-economic upliftment in the Park?
• What was the effect of Eco-development projects in the conservation of the GHNP?
• What was the role of women in conservation and development?
• Was the GHNP able to fulfill local people’s needs?

This Chapter discussed the methodology employed for the empirical study. It has described the complete research design and highlighted the research methodology,
tools and techniques adapted in it. Various qualitative and quantitative measures are used to collect the data. The validity and reliability of the respective research techniques were discussed in this chapter. This chapter throws light on how the research has to proceed in a step-by-step manner. It has given clearly what to do and how to do it.

The next chapter continues with the detailed discussion of the objectives and their fulfillment. It would cover the various aspects of Community-Based Ecotourism Management, linkage between community-based peoples’ participation, sustainable development and the socio-economic conditions of the people living in the Park. It would also describe the effects of Eco-development projects.