This chapter presents the empirical findings from the focus group discussions, questionnaires and in-depth interviews collected from the field. On the basis of the above-mentioned data-gathering techniques the research questions are addressed in an attempt to provide answer to the queries stated in the aims and objectives. As stated, this research study has answered five research questions earlier mentioned and tried to clarify the relation between people and the Park.

Data on the socio-economic conditions of the rural population in GHNP was collected using a household questionnaire. The questionnaire was designed and tested in the respective two villages (interior and easily accessible) of seven panchayats in the eco-zone area of the National Park as a focus group study (See Map No. 9.1). It was then modified based on this and questions were framed in order to capture the socio-economic conditions of the people. Questions were asked pertaining to the lifestyle of the people and ownership of property such as: the kind of lands they owned, the crops they grew, whether they had livestock and how and what they fed them, whether they had daily clashes with the Park officials with regard to entering the Park to collect resources or graze their cattle. The data collected from the survey was sufficient to draw a picture of the socio-economic conditions of the people living in and around GHNP. The qualitative data collected, was initially given equivalent weight in terms of whether it reflected the real aims and objectives of the study so that inconsistencies were not overlooked. Instead, they helped in understanding why such contradictions existed. Besides, the study was conducted on the Eco-development Projects (EDP), Community Based Ecotourism (CBET) and Women’s Savings Credit Groups (WSCGs) of GHNP to get a clear idea regarding the relationship between the Park and the people.

A detailed ethnographic study, horticulture and agriculture activities had also been done to get an account of peoples’ day-to-day life and their relation with forest resources.
Forests and National Park areas have become important because they contain a range of biological resources. Local communities resided within and in the surrounding area of the rural ecosystem spaces as village clusters prior to the designation of forest areas as state reserved protected areas (Mukherjee, 2011). For the rural poor, this meant dependence and control over the means of production and resources needed to meet their subsistence needs. Problems such as displacement of people, loss of livelihoods and alienation of local residents caused by conservation in PAs has necessitated the need to integrate aspects such as human development, dignity and equality into PA management plans (Pisharoti, 2008). Recent conservation interventions by the State with the creation of National Parks governed by rules and regulations entailed a loss of the former’s use and access rights. Subsequently, this also led to a change in the perceptions of the local people in the context of conservation of forests and wildlife as it created socio-economic and cultural vulnerabilities (Mukherjee, 2011). People’s abilities to cope with restrictions on access to sources of livelihoods are influenced by class, gender, ethnicity, and by the attractiveness of alternative livelihoods (Agrawal and Gibson, 2001., Li, 2001).

9.1 Social and Demographic Profile of the Region

A demographic structure of the families shows the data concerning the type and size of the family, number of adult males and females and number of children. Parallel to this, it would also highlight the number of upper caste households, lower caste households and average household size in the range to get the clear idea about the social structure of the area. The region follows Hindu norms; there were no Sikh, Muslims or Christians in the region. In this region, families were nuclear as well as joint, but the majority of the people lived in joint families.

9.1.1 Household Details

271 is the total number of sampled households. Out of these, 87.45% were from the upper castes and 12.54% from the lower castes. In the sampled upper caste households, 79.95% comprised Rajputs and 7.5% comprised Brahmins. In the sampled lower caste households, 8.04% comprised Schedule Castes and 4.5%
comprised of other lower castes like *chamar*/*lohar*. The percentage of households in the study area showed that the area was dominated by the *Rajput* caste group. Caste-wise distribution of sampled households has been given in Fig. 9.2.

The average household size in the study area is 5.84 (Range = 3-11, SD = 1.703). The mean age of the respondent in sampled households was 43.09 years (Range = 23-68, SD = 10.773). This was largely due to the requirements of data collection. A more mature person was required to give details relating to culture as well as the details of interaction with Park officials. The mean age of the head of sampled households was 58.18 years (Range 34-78, SD = 8.139). In the sampled households, 71.21% were joint families and 28.78% were nuclear families. In the study area, the ratio of joint families was more than that of the nuclear family. The average household size of joint families and those of nuclear families were 6.53 and 4.02, respectively. The average household size of lower caste families and upper caste families were 5.52 and 5.89, respectively. Average household size of families in a region has been given in Fig. 9.1.

**Fig. 9.1: Average Household Size of Families**

![Average Household Size of Families Diagram](image-url)
Map No. 9.1: Selected Villages in Seven Panchayats of Tirthan Range

ECOZONE

Kilometers

1  BATHAD  8  KULTHI
2  DHALIYAD 9  DHORI
3  GURULI  10  JAWAL
4  SHILL  11  DEHURI
5  BARNAGI 12  GALIDHAR
6  CHIPNI  13  ANAH
7  PEKHRI  14  THANCH

• NALA
• ECOZONE
• NATIONAL PARK
• WILD LIFE SANCTUARY

MALJAR PANCHAYAT
SHILLI PANCHAYAT
TUNG PANCHAYAT
NOHANDA PANCHAYAT
KHADE-DHAR PANCHAYAT
KALWAR PANCHAYAT
SRIKOT PANCHAYAT

229
9.1.2 Education Levels

Educational background of the respondent’s families that is number of literates in the family and number of children receiving education. Here attempt had been made to check the sampled households with number of primary, middle and high school education. All sampled households had at least one member with some level of formal education. The percentage of household members with their highest level of formal education listed below in Table 9.1.

<table>
<thead>
<tr>
<th>Educational Level</th>
<th>Number of People</th>
</tr>
</thead>
<tbody>
<tr>
<td>Illiterates</td>
<td>479</td>
</tr>
<tr>
<td>Primary Education</td>
<td>407</td>
</tr>
<tr>
<td>Middle Education</td>
<td>245</td>
</tr>
<tr>
<td>Matric Education</td>
<td>293</td>
</tr>
<tr>
<td>Senior Secondary Education</td>
<td>138</td>
</tr>
<tr>
<td>Graduation</td>
<td>24</td>
</tr>
<tr>
<td>Post-Graduation</td>
<td>4</td>
</tr>
</tbody>
</table>
9.1.3 Domestic Animals

In the study area, 96.67% of the households owned cattle with an average of 3.73 heads of cattle per household (Range 0-9, SD=1.592). On the other hand, 84.13% of the households owned sheep and goats with an average of 35.75 sheep/goats per household (Range 0-120, SD=22.850). As per the study conducted in the region households near to the PAs own more cattle and sheep as compared to the households which are far from the PA zone. Due to less accessibility to the nearby forest people from the distant villages keep less cattle and goats. Percentage of sampled households is given in Fig. 9.4.
9.1.4 Land Ownership

Out of all the sampled households, 11.70% households were landless. 23.61% households had less than 2 acres of land, 49.44% of households had 2 to 6 acres of land and 15.86% of households had more than 6 acres of land. A statistical analysis demonstrated that landholding sizes of SCs and other lower castes were lower than that of upper caste households. All landless households belonged to SCs or other lower castes. This is part of its past cultural background. The higher castes were dominant. They thus had access to more land, with the Rajputs keeping prime land for agriculture also. The lower castes, or service castes, were given land for householding and for kitchen gardens only. Later, some of them started acquiring more land but this was insignificant here. The percentage of land ownership is given in Fig. 9.5.

![Fig. 9.5: Percentage of Land Ownership in Sampled Households](image)

From the analysis of the data from the household survey of the socio-economic conditions of the local people resident in the eco-zone area of the Park and those that had been relocated, the following basic findings have been recognized: income, age and education played a role in explaining attitudes towards the National Park and Park authorities. Although landlessness in the GHNP ecozone is low, as compared to the general case in Himachal Pradesh (Govt. of HP, 2001), land-holding sizes of upper caste households are much larger compared to those of SC households.

These aspects are significant while analyzing the political economy of the region in order to explain some of the important nuances of the underlying resource struggles which determined the perception of the people towards PAs. Village household surveys have shown that there is an association between specific socioeconomic factors such as age, education, size and income of households. In the present study it is also found that those who were better educated had a positive
outlook towards conservation mainly because they were motivated by both its usefulness and fundamental values. Attitudes of the people were also significantly related to locally perceived benefits.

### 9.1.5 Occupations of the Residents in the Eco-zone Area

In order to understand the mode of income and economic status of respondents, they were asked to state the primary, secondary and tertiary occupations of their families. Agriculture was one of the main non-forest based sources of income, and was most advantageous to people with large land-holdings. Therefore, upper caste households were better able to capitalize on the economic prospects of commercial cultivation. Due to smaller agricultural incomes, lower caste/class households were more dependent on other economic opportunities presented by the neighbouring PA in the form of commercially important medicinal plants and morel mushrooms. As the study shows, agriculture was the primary source of income for 62.73% of the sampled households. Working on daily wages/labourer was the second largest primary occupation of 9.96% households. Horticulture was the major secondary source of income for 33.94% of the households. Agriculture was the second largest secondary source of occupation of 18.08% of the households. Tourism was the tertiary source of income for 23.98% of the sampled households. Private business was the second largest tertiary source of occupation of 22.87% households.

Household occupation was an important aspect to determine the peoples' dependency on PAs. Most of the households were dependent on agriculture as a primary source of income. Primary, secondary and tertiary sources of occupation have been given in Fig. Nos. 9.6, 9.7 and 9.8.

**Fig. 9.6: Primary Source of Income for Sampled Households**

![Primary Source of Income for Sampled Households](image-url)
9.1.6 Household Income

Annual household income means amount of income governed by the sampled households in a year. According to the study, 6.27% of the households earn up to Rs 10,000 annually, 21.40% of households had annual income between Rs 10,000-25,000, 38.75% of the households earned between Rs 25,000- 50,000 and 33.58% of the households earned above Rs 50,000. The annual income of upper caste households was higher compared to that of lower caste households. Forest resources were significant in terms of generating income for the rural poor. Areas closer to the Park...
were able to collect more resources and earn an income through the process. Adjacent areas earned a higher income from forest resources as they had better access to them than villages located outside the National Park area. Hence, these villagers frequented the Park more often than people who had been relocated outside the Park.

Annual household income is given in Fig. 9.9.

**Fig. 9.9 Annual Income of the Sampled Households**

Even though income did not sufficiently clarify the attitudes of the local people towards the Park, it was found that it was the lower income groups, the rural poor and Schedule Castes who were mostly opposed to Park rules and regulations on an everyday basis. This was mostly because as compared to the higher castes or high income groups, lower income groups lacked alternate sources of income and relied heavily on forest resources for meeting their daily subsistence needs. In addition, they were deprived of benefits like cattle-grazing and hunting that they used to receive as a result of the forest. Hence, the lower income group has been recognized as the most susceptible and vulnerable group affected by state imposed Park rules and regulations.

Another major finding was that geographical proximity to the Park also determined the attitude of the local people towards the National Park area. For instance, people living within the periphery of the Park or just in the buffer zone were less hostile to the rules and regulations compared to the rural poor households relocated in places far from the Park area. This was because the latter did not get the same benefits as the households nearer to the Park periphery who managed to get benefits by engaging in various activities such as the eco-lodge or the local tourist industry or by selling dairy products to the local hotels and accommodation places.
and were relatively better off, economically. Furthermore, the negative attitude was likely to be strong among people who had less opportunity to earn livelihoods from other sources like casual wage labourers or migrant job-seekers who moved to nearby towns and cities. The benefits that the lower income category received were often illegal as a consequence of the power struggle between the rural elite and the poor or due to the illegal nexus between forest guards and range officers who often followed the policy of looking the other way, in exchange for an informal incentive (Mukherjee, 2011).

Discussions with local villagers also revealed that people who did not get direct profit from the Park still agreed to the Park as they were apprehensive of creating ill-will between officials and themselves.

9.1.7 Level of Living

The level of living denoted households’ living standards in the eco-zone region. In layman’s terminology, the concept could be broadly or narrowly defined as the variety of satisfaction included over and above those obtainable from economic goods and services. In the present study, various parameters had been taken to check the level of living in the ecozone area. These parameters were household types, mode of conveyance, mode of cooking and mode of entertainment. All parameters were used to find the living standards and their direct and indirect impact and relationship with the PAs.

A study from Madagascar showed that the establishment of a National Park affected poorer households more than upper class households since the former lacked access to agricultural lands that could substitute for loss of livelihoods due to the PA (Ferraro, Undated). The economic class of households in the study area was largely determined by caste. There was a clear relationship between castes, land-holding, commercial agriculture, annual cash income and dependence on PAs.

9.1.7.1 Types of Households

Out of the sampled households, 28.41% houses were kutcha houses, 44.65% of houses were semi-pucca and 26.94% were pucca houses. Percentage of types of houses is given in the Fig. 9.10.
9.1.7.2 Mode of Conveyance

Out of the sampled households, 66.05% of the households had no mode of conveyance; they were totally dependent on public transport. 14.39% of households had a jeep, 9.96% had a scooter, 5.17% had taxis and 0.43% had a maruti as a mode of conveyance. The majority of the population in the study area used public transport. (Percentages of mode of conveyance given in Fig. 9.11).
9.1.7.3 Mode of Cooking

Cooking is a major daily activity in the lives of most rural women. Out of the sampled households, 53.51% households depended on the gas cylinders for cooking. The rest of the 46.94% households were dependent on wood and kerosene for cooking. In the hills, firewood had been the chief source of energy for cooking. Firewood collection is time-consuming and requires much labour. This adds to the work-load of the average hill woman. Gas cylinder (LPG) and kerosene were insufficient in supply as were coal and charcoal and therefore fuelwood was chiefly used in interior regions for cooking purposes. Results of the sampled households showed that a majority of the households used gas cylinders, then wood and finally kerosene as their preferred mode for cooking. The large number of local tea shops, tourist lodges and restaurants around the Park all relied on kerosene and LPG for cooking and other related activities. The percentage of mode of cooking is given in Fig. 9.12.

![Fig. 9.12: Percentage of Mode of Cooking in Sampled Households](image)

9.1.7.4 Mode of Entertainment

TV and radio is the mode of entertainment for 69.37% households and the remaining 30.63% households depended on radio for entertainment. The villagers in the region had very few electrical appliances. It showed that they were less dependent on the virtual world, which kept them connected to the each other and there was less use of electricity. The percentage of mode of entertainment was given in Fig. 9.13.
9.2 Current Status of Tourism in Great Himalayan National Park

As compared to other National Parks of the country, visitation inside GHNP is low. Discussion with Park authorities and Park staff highlighted the fact that due to less advertisement, the tourism influx was low and moreover it was a new National Park. The Park Director, Mr. Ajay Srivastav, estimates that less than 500 people per year visited the Ecozone and the Park. As per the permit records in the “Community tourism center, Sairopa”, out of the three ranges which surround the National Park, the Tirthan Valley receives the maximum number of visitors. Tourist permits inside Park has been given in Appendix J. The fees were not the same for Indians and foreigners. Also the fees did not include still camera charges. The tables and figures given below highlight the amount of tourism influx in the past four years that is 2005-2009. It also highlights the number of Indian and foreign tourists in respective years and income generation due to tourism in all the four years. The number of tourists in 2005-2009 and the amount of income generation is given in Table 9.2. A graph showing the arrival of tourists in the last four years is given in Fig. 9.14.

Table 9.2: Number of Tourists in 2005-2009 and Amount of Income Generation

<table>
<thead>
<tr>
<th>Year</th>
<th>Indian Arrival</th>
<th>Foreigner Arrival</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005-06</td>
<td>155</td>
<td>27</td>
<td>29665</td>
</tr>
<tr>
<td>2006-07</td>
<td>111</td>
<td>34</td>
<td>50880</td>
</tr>
<tr>
<td>2007-08</td>
<td>251</td>
<td>21</td>
<td>34128</td>
</tr>
<tr>
<td>2008-09</td>
<td>106</td>
<td>19</td>
<td>15420</td>
</tr>
</tbody>
</table>
9.2.1 CBET in GHNP

In the beginning, the community-based ecotourism did not necessarily need to generate a lot of income but it added constructive effects on conservation attitudes and behaviors of villagers and authorities. Conservation is not one event, but an interactive process with many steps (planning, implementation, monitoring) each with an opportunity for different levels of participation (Izquierdo, et al.; 2010).
This study shows that 61.25% of the households were aware of CBET while the remaining 38.74% were not aware of the concept of CBET. 51.66% of the households agreed with the fact that they were getting benefits from CBET while the remaining 48.33% were not getting any benefits from it. Percentages of the statistical data show that more than half of the population was aware of CBET and getting benefits from it. It showed that the Tirthan range had a good hold on tourism-related activities and people were getting benefits from it. The level of awareness and benefits regarding CBET are given in Fig. 9.16.

**Fig. 9.16: Level of Awareness and Benefits Regarding CBET**

Instead of spending heavily on corporate advertisements, the Himachal Pradesh Tourism Department had decided to launch a rural titled, low budget but aggressive campaign to market its historic villages located on the peripheries of the hill state. The state Chief Minister had launched *Har Gaon Ki Kahani*, the first volume of 12 stories, one from each of the historic villages in the 12 districts. In future, the state is planning to spend Rs. 13 crore on creating a high quality infrastructure of basic amenities for tourists in all these villages, to promote rural tourism (Staff Correspondent, 2011c).

The names of selected villages under this programme in the 12 districts of state are given in Table 9.3 below.
Table 9.3: Selected Villages from 12 Districts

<table>
<thead>
<tr>
<th>S.No</th>
<th>District</th>
<th>Village</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Chamba</td>
<td>Saho</td>
</tr>
<tr>
<td>2.</td>
<td>Kangra</td>
<td>Nerti</td>
</tr>
<tr>
<td>3.</td>
<td>Una</td>
<td>Nari</td>
</tr>
<tr>
<td>4.</td>
<td>Solan</td>
<td>Baniya Devi</td>
</tr>
<tr>
<td>5.</td>
<td>Lahaul and Spiti</td>
<td>Udaipur</td>
</tr>
<tr>
<td>6.</td>
<td>Sirmaur</td>
<td>Sangrah</td>
</tr>
<tr>
<td>7.</td>
<td>Hamirpur</td>
<td>Bsla</td>
</tr>
<tr>
<td>8.</td>
<td>Kinnaur</td>
<td>Bruva</td>
</tr>
<tr>
<td>9.</td>
<td>Kullu</td>
<td>Shamshar</td>
</tr>
<tr>
<td>10.</td>
<td>Mandi</td>
<td>Baghi</td>
</tr>
<tr>
<td>11.</td>
<td>Shimla</td>
<td>Hiyun</td>
</tr>
<tr>
<td>12.</td>
<td>Bilaspur</td>
<td>Slasi</td>
</tr>
</tbody>
</table>

Source: Lohumi, 2011c

In the first phase, 12 villages, one from each district, have been taken up for integrated development with focus on tourism and with the objective to divert the rush of tourists from the over-saturated destinations like Shimla, Manali, and Dharamshala to lesser known places so that the villages also reap benefits of the tourism industry (Lohumi, 2011c). Over time, more villages are likely to be added.

9.2.2 Accommodation Facilities in Eco-zone Area

The Sairopa Tourist Centre is a beautiful establishment with its Biodiversity Trails and beautiful surroundings, but in order that visitors live comfortably and so that more tourists are enticed to live here a number of issues need to be taken care of. Besides this, the eco-zone area of Tirthan range has five registered ecolodges. In order
that more and more villagers benefit from the CBET home stays/ecolodges have been encouraged. This is an attempt to enhance more community participation in ecotourism. Ecolodges in the Tirthan range are shown in Map 9.2. There are five ecolodges in GHNP as follows:

- Millennium ecolodge
- Trout Valley
- River Touch
- Trout House
- Trishla Home Stay

A growing number of ecolodges showed that tourism was increasing in the region. The first ecolodges were established in the study area in 1995 and after that many ecolodges followed it. Usually ecolodges had accommodation of 3 to 5 rooms, with a rent of Rs 1000 to 1200. All ecolodges were registered. One ecolodge owner revealed that they had many high profile regular visitors from the political arena as well as bureaucrats. Many ecolodges had not mentioned their lodge on the Internet. They had personal contacts with their clients and they wanted to keep it personal. This is in line with many home stay houses in the McKLeodganj, Bhagsunag area. Earlier, the state government had introduced the “Home Stay” scheme under which 353 units have been registered so far (Lohumi, 2011b). They provide organic cultivated home­made food to their guests and make their visits pleasant by providing them with trout fishing experience.

The concept of the ecolodge helps in conserving the local forest, with some of the money going to benefit local communities. The material with which the lodges had been built is environmentally friendly. Ecolodges are meant for people who desire to go in for an authentic experience, who do not care about luxuries (Picture 9.1). There are many aspects which make an ecolodge as an eco-friendly tool to promote tourism:
Picture 9.1: Ecolodge in Tirthan Range

- Conserve the natural environment.
- Use local, sustainable building materials and techniques when possible.
- Protect the site from unnecessary environmental destruction during construction.
- Carefully handle solid waste and sewage.
- Conserve water by reducing consumption and waste.
- Contribute to the sustainable local community through education and research.
- Blend harmoniously into the environment.
- Work with the local community.
Map 9.2: Ecolodges in Tirthan Range

ECOLODGES

19 Millenium Ecolodge
20 Trout Valley
21 River Touch
22 Trout House
23 Trishla Homestay
24 Community Training &
Tourist Center Sai Ropa

NATIONAL PARK
TIRTHAN WILD LIFE SANCTUARY

Kilometers

19 Millenium Ecolodge
20 Trout Valley
21 River Touch
22 Trout House
23 Trishla Homestay
24 Community Training &
Tourist Center Sai Ropa

Ecolodges
Nala
Tirthan Range
Mostly all ecolodge owners were from the higher caste groups. This shows the higher caste domination in the region.

**Case Study-17**

Mr. H-1 was a 53-year old resident, running a Millennium Ecolodge in Tirthan range with his wife for the last five years (See Case Study-13). He said that they were the first to open an ecolodge over there. He said that all ecolodge owners belonged to the higher caste. Though in today’s world caste had nothing to do with business but still to some extent it did exist as a significant factor. He said that under him he had a few workers who were present in the ecolodge as servants and they belonged to lower castes.

The above-mentioned case study highlights the influence of caste factors in the region. So, this clearly shows the low economic and financial status of the lower caste people in the region (See Fig. 9.8). It clearly showed their greater dependency on forest resources.

Indigenous knowledge of the medicinal plants was crucial for the continued existence of human beings. Due to the varied topography and climatic conditions, the diversity of the medicinal plants in the study area was very high. The list of locally used medicinal plants found in the Great Himalayan National Park may be seen from Appendix E. The different plant parts were used as medicines by the local people. Detailed knowledge and use of medicinal plants are listed in Chapter 6, (Section 9.2.1). The majority of the plants was used for curing stomach disorders followed by colds, fevers, coughs, cuts and wounds (Bhandari, *et al*.; 2009). In the ecozone region most of the families were involved in collection of herbs and their extraction. Families adjacent to the Park area could easily access the medicinal plants. Though government has prohibited the entry in the core area but still people went and collected.

**9.2.3 Major Constraints to CBET in GHNP**

CBET in GHNP is in its flourishing stage and trying to develop well. Scholars of ecotourism have identified at least four principles that must be satisfied for genuine ecotourism: minimisation of environmental impacts, generation of funds for conservation, benefits to local communities and education of visitors (Honey, 1999). However, even a rapid examination of wilclife tourism in PAs of India
demonstrates that few of these conditions are met, with the result that such tourism benefits neither conservation nor local communities. There are some constraints which affect CBET’s development as listed below:

- **Lack of Awareness**
  
  There is a general lack of awareness among stakeholders about the role of tourism in economic and community development. This includes the negative socio-economic and environmental effects of conventional tourism as well as alternative models of development. This was observed among villagers, Park staff, and state tourism representatives.

- **Lack of Infrastructure**
  
  In terms of physical infrastructure, the main obstacles to increasing ecotourism in the GHNP are the lack of appropriate accommodations and transportation systems in the eco-zone. There are also no environmental management systems to handle the increased number of people especially with respect to hygiene, garbage and fuel consumption. After local people, tourists are users of the Park and eco-zone also lack an awareness (or concern) about their effect on local communities and the environment, and their role in conserving it for future generations.

- **Lack of Local Ecotourism Expertise**
  
  The building blocks for a feasible CBET industry are all present in the GHNP area but there is no one individual or organization, including the Park administration, with the necessary experience and resources to develop a program.

- **Lack of Proper Policy and Coordination among Government Agencies**
  
  The tourism policy of India does not consider environmental protection or local economic development as priorities. The main emphasis is on quantity over quality, with the main goal being income generation. In India, there is generally very little coordination between government agencies and NGOs that could offer the valuable technical and social inputs needed for sustainable tourism planning. In the GHNP area, structured communication and cooperation between significant institutions including Park Administration, HP Tourist Development Agencies and working NGOs in the region is almost non-existent.
9.2.4 Failure in Implementation of Policies

In January 2009, the state forest department had leased out ten eco-tourism sites in the state, including rest houses, at some of the most pristine locations, with strict instructions to ensure that there be no environmental degradation (Tribune News Service, 2009). Ever since the creation of Eco-Societies (ECO SOCS) under the eco-tourism policy in 2005, this was the first major leap that the government had taken towards promoting eco-tourism in a big way (Tribune News Service, 2009). However, with no mention of the details in the agreement the private parties have occupied huge forest areas and built big structures, opened restaurants, bars and spas in blatant violation of the state eco-tourism policy (Lohumi, 2011b). The allotment of forest land to private parties for the ten ecotourism projects in violation of the Forest Conservation Act and state’s own policy is turning out to be a major scam with startling ambiguities and short comings in the “Memorandum of Agreement” in which even the total allotted area, leave aside the details of land as per the revenue records, was not specified (Lohumi, 2011b).

(SECTION-B)

9.3 Effects of EDP

In the study area, 52.39% of households were aware of EDP and its implementation. The remaining 47.60% were not aware of the concept of EDP. 26.19% of the households agreed that they had got benefit from the EDP and the remaining 73.80% households denied that they were getting any benefits from EDP. Discussion with the villagers highlighted the fact that they had got benefits in terms of metalled roads, village development activities like school building/playground renovation, temple renovation and water supply pipes. Villagers pointed out that as per government guidelines they did not provide employment to a large number, it was limited to a few people and the EDP programme ended soon. That was why most of the people were not aware of the EDP. Another reason for the lack of awareness was that most of the villagers mistook it for the usual government programmes. They were unaware of the fact that it was a multi-crore project Villagers said that it was all because of the fact that the government did not advertise it properly. They did it silently and the major amount of money was misused and went into the pockets of bureaucrats.
9.4 Role of Gender in Conservation

Gender is one important social variable that determines who within a host community participates in tourism and conservation of natural resources. The study highlighted the perceptions about traditional men’s and women’s roles in day-to-day activities in the farm and could determine who among a community did what in tourism, the conditions under which they worked and how they were received by tourists and Park authorities (See Table 9.5). By examining these kinds of differences in how and why people in the community work to help in tourism, they could discover not only what motivated them, but also what constrained or compelled participation in tourism, and finally, how such participation affected resource use.

The conservation of biodiversity relies on the involvement of the full community – both women and men – whose interests and perspectives regarding natural resources may differ. Women’s involvement in the conservation of natural resources is as needed as it is in any other arena of life. In GHNP, women were working well to protect forests and PAs by involving themselves in WSCGs and other alternative income-generating activities. Average sex ratio of sampled households may be seen from Table 9.4.
Table 9.4: Average Sex Ratio of Sampled Households

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Caste</th>
<th>Gender</th>
<th>Average Sex Ratio</th>
<th>Range</th>
<th>S.D</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Upper Caste</td>
<td>Female</td>
<td>2.76</td>
<td>1-6</td>
<td>2.82</td>
</tr>
<tr>
<td>2.</td>
<td>Upper Caste</td>
<td>Male</td>
<td>2.84</td>
<td>1-7</td>
<td>3.46</td>
</tr>
<tr>
<td>3.</td>
<td>Lower Caste</td>
<td>Female</td>
<td>3.02</td>
<td>1-6</td>
<td>3.55</td>
</tr>
<tr>
<td>4.</td>
<td>Lower Caste</td>
<td>Male</td>
<td>2.61</td>
<td>1-5</td>
<td>4.35</td>
</tr>
</tbody>
</table>

Gender ratio shows the ratio of male and female population in a region. As per Table 9.4, upper caste households had lower ratio of females than lower caste households. The ratio of males was higher in upper caste households than lower caste households. Day to day duties of men and women in ecozone region listed in Table 9.5.

Table 9.5: Day to Day Duties of Men and Women in Eco-zone Region

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Category</th>
<th>Responsibilities and Duties</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Use of Resources</td>
<td>Men were supposed to do manually tough tasks.</td>
</tr>
<tr>
<td>2.</td>
<td>Responsibility to manage resources</td>
<td>Men usually collect firewood and they were responsible for the collection of medicinal plants.</td>
</tr>
<tr>
<td>3.</td>
<td>Working Hours</td>
<td>Lesser working hours</td>
</tr>
<tr>
<td>4.</td>
<td>Decision-Making in Community</td>
<td>Men had rights to take decisions for community activities.</td>
</tr>
<tr>
<td>5.</td>
<td>Decision-Making at Home</td>
<td>Men and women both participated in taking decisions about the resources the family owned.</td>
</tr>
</tbody>
</table>
Since they were close to natural resources, women used natural resources with more care than men. In the ecozone region, women played myriad roles like food provider, domestic work related to all household duties such as fetching water, dusting, cleaning, brooming, and so on. Women were also an integral part of many agricultural activities. Besides all the above-mentioned duties, women worked as income generators by working with WSCGs. The working hours of women were more than that of men (See Fig. 9.18). Men's activities more often included working in the fields. Table 9.4 highlighted the gender ratio, correlating it with Table 9.5 and 9.18. It was clear that women had longer working hours as compared to men and they spent much more time in the field.

Women had always been the chief conservers of bio-diversity. Women in the ecozone were playing a crucial role in protection and the conservation of the environment. There was a huge gendered division of labour in the eco-zone region, based on the perception of males doing hard and difficult duties and women doing easy tasks. In reality, the concept did not correspond to the reality as women spent the whole day working in the fields as well as inside their houses, while men had ample time to rest.
9.4.1 Difference between Feminism and Ecofeminism

Feminism is the statement that women have been historically underprivileged relative to men, and a commitment to changing unfair structures. Feminism is considered as a movement towards the social, political, and economic equality of all people, while eco-feminism is a particular sub-part of feminism that opposes all forms of dominance that is men over women, heterosexuals over homosexuals, and humans over animals. Ecofeminism is a fusion between feminists and environmentalists which explains the relationship between nature and women.

Eco-feminism focuses on how hierarchies are linked and how these hierarchies affect not only people, but also the natural world. Followers of ecofeminism, that is, ecofeminists, insist that feminism and environmentalism are inherently connected, but in general, ecofeminist work applies feminist analyses to environmental issues, so the claim is not so much that feminist worries are environmentally grounded, as that environmental issues warrant feminist analysis. Ecofeminism associated to ecology they believed that gender inequality related to unbalanced natural resource exploitation, there women should be organizer of green movement because women are more close to natural resources more than men by their natural biological and being take advantage of similar natural resource (Phukrongnak, 2004).

In the ecozone region WSCGs were quite active, but women were involved with WSCGs for economic matters (See Table 9.19). No doubt, directly or indirectly, they were protecting the environment as well as uplifting their economic status, but as far as the study was concerned, there was no such ecofeministic movement in this region. For ecofeminism to exist, there should be an element of internal stimulus to save and protect the forest and needs conscious endeavours towards nature conservation. If we are interpreting livelihood issues with the ecofeminist movement then it would be wrong to say that the movement existed here. Other relevant details are mentioned in Section 9.4.5.

9.4.2 Womens’ Savings Credit Groups

WSCGs in the ecozone region of GHNP were actively involved in the conservation programmes which were income-generating and self-financing as well as sustainable on a long term basis. These group members saved one rupee a day and earned credits within the WSCG to invest money in natural resource-based enterprises development. This development programme was a combination of environment
awareness, education, women’s empowerment, and Joint Forest Management and it was aiming to create a decline in biotic pressures upon the biodiversity and forests of the GHNP. WSCGs provided an opportunity to the rural poor women to control decision-making through village level micro-plans. In a nutshell WSCG was a significant institution, which strove to promote an equitable access to the natural resources, and supported the vital aspect of social/environmental justice and gender sensitivity.

9.4.3 Reasons for Formulation of WSCGs

- It provided the rural poor and women an opportunity to participate in income-generating activities.
- The WSCGs worked towards sustainable livelihoods of the rural poor in a participatory mode to reduce their dependencies on the Park’s natural resources.
- To create a change in the attitude of men.
- To give exposure to females to the outside world.
- To make women independent and self-sufficient.
- To make an effort to dissolve the difference between People and the Park.
- To provide an alternate source of income-generation.
- To build up the economy of the region.

9.4.4 Cost Benefit Analysis of WSCGs

Women’s Savings Credit Groups generate income through NTFP (Non-Timber Forest Products). NTFPs play a major role in India, where dense rural populations live in close proximity to biodiversity-rich forests (Ghate, et al.; 2009). In the recent data for the years 2009-2011, we can see the rise in income generated by WSCGs through NTFPs.

In the year 2009-2010, the income was Rs 103,217 and in year 2010-2011, this became Rs 149,917. In 2009, 24 villages were associated with WSCGs and in 2010, 37 villages were involved with WSCGs. Fig. 9.19 Shows the income generated from the NTFP in two consecutive years. The data shown in the figure clearly indicates that there is a certain amount of increase in income generation from NTFP in two years.
9.4.5 Livelihood vs Conservation: Failure of Ecofeminism

Though WSCGs were working efficiently in the GHNP region and to some extent they were helping families to earn a livelihood, they were totally reliant on the NTFP of the ecozone area for their economic boost (See Fig. 9.19). After analyzing all the above-mentioned facts, one could say that the element of ecofeminism was lacking in this zone. As Ruether, 1975 said, “Women must see that there can be no liberation for them and no solution to the ecological crisis within a society whose fundamental model of relationships continues to be one of domination. They must unite the demands of the women’s movement with those of the ecological movement to envision a radical reshaping of the basic socioeconomic relations and the underlying values of this.”

This element has been totally lacking here. For ecofeminism to exist, there should be an element of inner motivation to protect and conserve the forest and need conscious endeavours towards nature conservation. Ecofeminism is multi-faceted and multi-located, demanding formation rather than individuals. In the context of GHNP women were involved with WSCGs for economic matters. As far as the study was concerned, there was no such ecofeministic movement in this region. It would be wrong to say that the movement existed here, especially if we are interpreting livelihood issues with the ecofeminist movement.
9.4.6 Function of NGOs in the Ecozone Region

BTCA (Biodiversity Tourism and Community Advancement) is a registered body under the Society Registration Act, 1886 (Pandey, 2004b). The government organizations and WSCGs have collaborated with the BTCA.

BTCA was associated with ecotourism-related activities. It provided training to the villagers as guides, porters and helpers. BTCA and WSCGs were working in collaboration to achieve the goals of empowerment and conservation. As mentioned in Fig. 7.1, BTCA and WSCGs were working in collaboration with the Gram Panchayat and the GHNP administration.

SAHARA (Society for Scientific Advancement of Hill and Rural) was the NGO working here prior to BTCA, which was a registered body under the Societies Registration Act, 1886 (Pandey, 2007). However, due to some monetary issues and internal conflicts, the GHNP administration had dissolved the NGO and formed a new one. Other NGOs working here were Jagriti and Grass Route India. Both were working independently. They did not have any collaboration with GHNP. Grass Route India was active in the Tirthan range and Jagriti was active outside the ecozone range.

9.5 Dependency on GHNP

People were dependent on the forest for the following socioeconomic needs and subsistence activities. In general, the major economic activities of the people living in the adjacent to the GHNP can be divided into two broad categories:

- Activities for earning cash
- Subsistence activities (Sharma, 1998).

Dependency on protected area for earning and subsistence activities given in Table 9.6.

Table 9.6: Dependency on Protected Area for Earning and Subsistence Activities

<table>
<thead>
<tr>
<th>Activities for Earning</th>
<th>Subsistence Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Poaching</td>
</tr>
<tr>
<td></td>
<td>Water</td>
</tr>
<tr>
<td>Timber</td>
<td>Timber</td>
</tr>
<tr>
<td></td>
<td>Land for settlement</td>
</tr>
</tbody>
</table>
With the creation of the National Park, restrictions were imposed on access to the forest in order to protect the wild animals (Saberwal, et al.; 2001). As a result, the villages adjacent to the Park faced a number of problems. People were still dependent on GHNP for their daily needs. 29.03% households were dependent on GHNP for mushrooms and 24.42% of the households were dependent on medicinal plant collection. Earlier studies showed the significance of medicinal plants and morel mushrooms to people living in the GHNP ecozone (Tandon, 1997; Baviskar, 2003). Though there was a decline in the collection of morel mushrooms and medicinal plants in past few years, the study shows a decline in dependence is most apparent among upper class households with access to economically better alternate sources of income. Decrease in the number of households collecting medicinal plants and mushrooms are related to increased incomes particularly from agriculture, horticulture, private businesses and tourism. As compared to the rest, the range people with lower income groups and Schedule Castes living near to the PAs are dependent on it. Medicinal plant collection is a strenuous activity that requires going up to remote, high altitude areas for several weeks.

15.44% of the households were dependent on GHNP for livestock grazing and 31.11% households were dependent on GHNP for wood collection. Apart from non-timber forest products which were used for a variety of purposes, fuelwood has its own significance for the resource-poor people. Fuelwood collection was one of the most important aspects of villager’s day-to-day life. Its collection was much higher than of most of the other resources that are collected from the forest. This was mainly because fuelwood had a high usefulness. It was the foremost source of domestic energy and was utilised by every household. Besides fuelwood, other domestic needs
included construction of small fences for houses, wooden furnitures and doors. A large number of the people stated that wood was an essential resource for their day-to-day survival and that they needed to collect it regularly.

Earlier, people used to get woollens from sheep but after the formation of PA people stopped breeding and keeping them. So, villagers became dependent on the market for the fulfillment of clothing. For this they needed money. So, directly or indirectly, they became dependent on the forest resources. Percentage of dependency on GHNP given in Fig.9.20.

Fig. 9.20: Percentage of Dependency on GHNP

<table>
<thead>
<tr>
<th>Activity</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medicinal Plant Collection</td>
<td>24.42%</td>
</tr>
<tr>
<td>Mushroom Collection</td>
<td>29.03%</td>
</tr>
<tr>
<td>Livestock Grazing</td>
<td>15.44%</td>
</tr>
<tr>
<td>Wood Collection</td>
<td>31.11%</td>
</tr>
</tbody>
</table>

9.5.1 People, Park and Policy

Nowadays PAs are usually established primarily as a mean of biodiversity conservation, whereas in the past National Parks were established either because of their scenic value or with a vision to protect endangered species (Dudley, 2010). Globally, there are now more than 100,000 protected areas, including National Parks, biological reserves and marine sanctuaries. They protect slightly less than 13 percent of the land on earth and slightly more than a half-percent of the oceans, though only a minute fraction are “no-take” zones that bar fishing (The New York Times, 2011). Researchers, governments and conservation organizations recognize that the long-term reliability of protected areas (PAs) in low-income nations depends upon the support of indigenous and rural communities that live within or around them. Thus, understanding the determinants of residents’ attitudes towards PAs might
provide guidance in the design, implementation and evaluation of this strategic form of biodiversity conservation (Mas, 2010).

In the Indian case, neither a technocracy nor bureaucracy acting as the authority of conflicts nor a free market system which may tilt towards privatisation of open access resources would address ecological issues effectively. The declaration of people's rights has the potential for a different kind of conservation-oriented control of their lives and lands (Rangarajan, 1996). In India, conservative conservation norms, policies and programmes have been characterized by ignorance and deliberate neglect of the significant alliance between rural communities and their natural habitat. For their survival, a majority of the country's population still depends directly on natural resources. This is even truer of PAs than elsewhere, for the simple reason that they are primarily inhabited by highly ecosystem-dependent people. The crux of the matter highlights the chaos between people, PAs and the authorities involved in PA management. The main conflict comes between peoples’ rights and Park management official norms. The Park management makes it necessary to resettle people out of the Park and remove them from using the Park’s natural resources. On the other hand, people are vehemently against any resettlement moves from the Park management area. This dispute is based on the question that “where and why are we being moved out of our land?” Though conservation of natural resources is necessary and justified in one aspect, but the people’s questions and dissatisfaction regarding PA norms are addressing the social dimensions of conservation in PAs. Whenever it comes to conservation-related issues, in the overall global context, relations between Park authorities and villagers often have been poor and aggressive clashes are not unusual. The conservation saga usually follows two main problems: first, the basic principles of the protected areas do not allow local people access to forest resources on which they have been dependent since ages for firewood collection, grazing of their cattle, medicinal plant and herb collections. Secondly, affected people who were displaced from PAs rarely get the compensation or if they do it was a very small amount, which would not help them to establish new work or to buy property. Usually, chapters of PA conservation face the same problems at the global as well as at the local level.

There is a close relationship between nature and culture, which in turns ensures a balance between human beings and nature. Similarly
tribals used the forests in quite judicious manner and preserved them as a source for posterity (Menon, 1988). This study made an effort to highlight the relation between People and the Park. This is presented by narrating the positive aspects of the People and Park relationship and highlighting the differences between People and the Park authorities.

<table>
<thead>
<tr>
<th>S. No.</th>
<th>People and Park</th>
<th>People Vs Park</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Beginning of various development activities.</td>
<td>Unnecessary interaction and disagreement between humans and wildlife.</td>
</tr>
<tr>
<td>2.</td>
<td>Awareness due to diverse developmental programmes.</td>
<td>Aggression due to lose of traditional rights.</td>
</tr>
<tr>
<td>4.</td>
<td>Formulation of WSCGs for alternate income generation.</td>
<td>Women suffered due to loss of fuel wood collection.</td>
</tr>
<tr>
<td>5.</td>
<td>Production of NTFP through which WSCGs generate income.</td>
<td>Loss of NTFP accessment.</td>
</tr>
<tr>
<td>6.</td>
<td>Various vulnerable species have been protected due to the formation of the Park.</td>
<td>Since the creation of the Park local people have been forbidden to enter the Park forest.</td>
</tr>
<tr>
<td>7.</td>
<td>PA provides a space for evolution and is a benchmark for future restoration.</td>
<td>Communities living adjacent to the PAs suffer due to PA norms and regulations.</td>
</tr>
</tbody>
</table>

Setting a fine balance between humans and Nature is one of the most basic issues we deal with today. It has been realized that human beings can not depend on judicial and economic methods to solve the problems of ecological imbalance and environmental degradation. The conservation of rapidly diminishing natural resources has become a global priority. To conserve biodiversity and natural resources many
PAs have been established all over the world. The main aim of PAs is to conserve valuable resources and protecting them from illegal poaching, hunting and encroachment. No doubt the idea behind establishing such zones are a step towards sustainable development, but parallel to this, it has created a debate on the conflict between people and Parks. People who were dependent on natural resources since time immemorial have lost their rights due to PA establishment. Pimbert and Pretty (1997) found out that reforms needed to encourage and sustain community-based conservation in situations where rural people were directly dependent on natural resources for their livelihoods. Emphasis was placed on strengthening diverse local livelihoods through more decentralization and local control of conservation and natural resource management. While the need for linking the Park with the people was heavily stressed both at the World Conservation Strategy (1980) and the World Congress of National Parks (1982), the conflict has remained unresolved, particularly in the developing nations. The main questions arise and provoke argument what’s important, monkey or man? Human being has been an integral part of nature as any other plant species or animal. Indeed, it is neither ethical nor possible to alienate poor people, living in and around Parks and PAs. Likewise, many tribes are today demanding their territorial rights (which they lost in the colonial era) over natural resources and some are even seeking the right to self-determination (Burman, 2009).

Undoubtedly, the formation of PAs had saved many species, habitats and forests from local peoples’ intrusion and destruction but simultaneously it has caused severe adversity to local communities living near by the PA, whose livelihood was based on forest resources. Communities living in and around the PAs have been regarded as a management problem, and there is little attempt made to involve them in the management of the PA. Environmental conservation is not possible without active local community participation in natural resource management. This is now being seen as critical to long-term success of a PA. Eco-tourism may help in protecting forests and traditional cultures while also meeting the needs of local residents. Eco-tourism is a special kind of market integration for rural communities. If we genuinely want to contribute to biodiversity we need to first resolve the socio-economic issues of local people.
9.6 Critique of Garrett Hardin’s the Tragedy of the Commons in GHNP Context

“Freedom in a commons brings ruin to all” Hardin, 1968

The fire epitomized in Garrett Hardin’s famous and gloomy maxim explains the disputes presented when societal interest conflicts with the individual’s interest. Hardin argued that the eventual fate of all resources held “in common” was over-exploitation because access was unrestricted and there was no incentive among individuals towards resource protection. Hardin explained the concept of ‘Tragedy of the Commons’ as a pasture “open to all”. Each herdsman acted in an individually rational fashion by adding animals to the common pasture. For him, the private benefits of adding one more animal exceeded the private cost. Since each herdsman did the same, the overall result was overgrazing and disastrous losses for all (Hardin, 1968).

Hardin argued that such problems had no technical solutions, and emphasized the need for government controls to limit this kind of loss. Hardin subsequently pointed to privatization of common resources as another solution consistent with the analysis of many resource economists. It was usual to assume that resource degradation was inevitable unless common property was converted into private property or government regulations were instituted.

Hardin’s concept did not properly distinguish the type of property regime susceptible to such a process, arguing that it applied not to “common property”, but to “open-access” regimes.

Hardin’s concept occurs in a context of unrestricted access and thus may or may not apply to a commons, but it does not in general apply to a common-property arrangement. Hardin’s essay is a source of controversy. Some of this controversy stems from disagreement over whether individuals will always behave in the selfish fashion presented by Hardin.

PAs are an essential and irreplaceable management option, the benefits of which are still only just being properly recognized. Better understanding of their values, coupled with conscious building of new partnership among stakeholders that have something to gain from the protection of land and water, can ensure the ideas and practice of PAs continue to grow in the future (Dudley, et al.; 2010).
9.6.1 Life Before and After Park Formulation

In 1980, a survey was conducted for the creation of a National Park in Western Himalayan region and in 1999 the final Notification of the Great Himalayan National Park came through. The GHNP became the latest and newest National Park of India. Before the Park was formulated, the GHNP region was unknown to the world. Though it was rich in flora and fauna but was unidentified and unexplored. No doubt the Park formulation had disturbed the localites but in many ways it had enhanced the peoples’ life and highlighted GHNP in the world map. There were various benefits and simultaneously various problems associated with the creation of the Park. These are listed here.

9.6.2 Problems

- The formation of the Park had encouraged unnecessary interaction and conflict between humans and wildlife.
- Establishment of the Park had created an economic cost on the local population in terms of their losing access to the park and the resources it contained.
- The villagers traditionally depended on the forest in and around the Park for forest produce and agricultural land after establishment of the Park. Such people had lost all rights.
- Livestock were terribly affected due to Park formation as the Government had snatched grazing rights.

9.6.3 Benefits

- UNESCO had listed it under World Heritage Site and a previously unknown region of western Himalaya has been highlighted in the world map.
- It was one of the only two National Parks in the world to sustain a population of endangered Western Tragopan (*Tragopan malanocephalus*).
- The Great Himalayan National Park Conservation Area (GHNPCA) was selected as one of the first PAs in India to launch a five-year project sponsored by World Bank to demonstrate the approach of
linking biodiversity conservation with local social and economic development broadly known as Eco-development.

- GHNP had attracted tourists from world wide. However, now GHNP has become a prominent name in the state.
- The Park establishment had attracted many researchers. Many researchers from the National and International arena had conducted their research on various aspects of GHNP.
- Establishment of GHNP had boosted the economy of region by enhancing the potential for tourism; benefits from tourism had been listed in Fig. 9.16.
- It had enhanced the level of awareness among the localities. Now people are aware of the rest of the world by their day-to-day interaction with visitors from all over the globe.
- Establishment of WSCGs and NGOs had made people aware of their rights towards forest and natural resources.
- The suppressed gender of the society, that is, women, had become aware by joining WSCGs and their various programmes.
- The local youth had got employment opportunity by joining CBET. WSCGs had made women economically independent (See Table 7.1, 7.2).

9.6.4 Rethinking Hardin’s “Tragedy of the Commons”

In the context of any PA, Hardin’s concept gives us two options. If we apply the concept of “Tragedy of the Commons” then it gives a dictatorial appeal and would widen the gap between people and common natural resources (National Parks, Wildlife Sanctuaries and Protected Areas). In case we do not apply the concept, people would destroy and over-exploit the natural resource. It would be better to follow the middle path by involving the community in decision- and policy-making. The same dilemma is true of the present study on the GHNP. On the basis of the current scenario of GHNP, the following points emphasize the rethinking of Hardin’s ideas:

- Out of the three ranges in GHNP tourism-related activity was working in only the Tirthan range (See Table 5.13). In the rest of the two
ranges, there were no such activities. Due to the NHPC project (National Hydro-electric Power Corporation) road conditions were miserable in the Sainj and Jeewanal ranges. No roads directly led to the Park boundaries. The main access was by foot only via the western boundary (See Section 6.2). The other two ranges were directly or indirectly dependent on forest resources for the fulfillment of their basic needs. Due to poor advertisement by the state government as well as bad infrastructure, very few tourists made it to GHNP. Though CBET was keeping a tight hold on the ecozone area, it would still be wrong to say the economy could totally be dependent on tourism.

- Wild animals were very few in the peripheral region of the GHNP, so it was very easy for the villagers to go to the forest area and access forest resources (See Section 4.4.2). Population was rapidly increasing and resources were rapidly diminishing. As a result, in future it would lead to the conversion of the ecozone area and peripheral area of GHNP into barren land.

- Among the three ranges of the ecozone area, Sainj and Tirthan ranges had small hospitals with all basic facilities. These hospitals had fewer staff and the doctors were not very skilled. In the Sainj area, the NHPC project had one small hospital (See Section 9.1.1). So, the surrounding ranges had very few health centers. It was thus true that people would surely dependent on forest resources for medicinal plants and herbs for curing and healing. Unlimited and uncontrolled commercial collection of wild flora in GHNP, especially of high-altitude species sought for their roots/reproductive parts, had reached a critical threshold and it was clearly the most serious threat to GHNP biodiversity at present (See Section 9.1).

- Supply of gas cylinders were low at higher reaches so it was obvious people would depend on forest resources for firewood.

- All the collected medicinal plants and herbs were sold to the middle man in small amounts, who would further market them out of state at higher prices. So, if the villagers were extracting forest resources, and breaking laws, they were still not getting enough money to sustain their
family. So, even the effort to collect NTFP was not enough. To avoid 
all these frauds and cheating there should be awareness at the school 
level and GHNP authorities must conduct awareness programmes from 
time to time for the WSCGs and all *panchayats*.

- Out of three ranges only one range, that is, Tirthan range had 
ecolodges (See Section 9.2.2). The numbers of ecolodges were very 
few – it was only five in number. Ecolodges were doing well to boost 
the household economy. Besides the increased economic growth, it 
was helping people to widen their horizon. Mostly, the children of 
ecolodge owners were studying outside. It would no doubt give them 
exposure and help them in reducing dependency on forest resources. 
So, the concept of ecolodges should be scaled up, which would be 
helpful in reducing resource pressure from the forest.

### 9.6.5 Case Studies

Deep analysis of case studies clearly shows the different reasons why people 
use the National Park. People used the National Park for their day-to-day activities, 
and were totally dependent on forest resources to fulfill their daily needs. The 
following were the basic important things for which they relied on the Park, listed in 
Table 9.8.

<table>
<thead>
<tr>
<th>Reason</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forest resources</td>
<td>People totally dependent on forest resources for their day-to-day life. It included non-timber forest resources as well as forest wood.</td>
</tr>
<tr>
<td>Medicinal plants</td>
<td>From minute to major health issues people were dependent on medicinal plants which were only available on the high altitudes of GHNP. See Appendix E</td>
</tr>
<tr>
<td>Fuel wood</td>
<td>Due to inaccessibility of vehicles people were totally reliant on forest for fuel wood.</td>
</tr>
<tr>
<td>Livestock grazing</td>
<td>Villagers were entirely reliant to PA zone for livestock grazing, as high altitude grass considered as best for grazing.</td>
</tr>
<tr>
<td>Herbs</td>
<td>See Appendix E</td>
</tr>
</tbody>
</table>

265
Timber

Villagers were dependent on PA for timber. Timber collection is major activity for earning cash and subsistence activities.

Brooms, Incense sticks, Hair colour (Mehandi)

Villagers were reliant on PAs for day to day activities to basic household needs.

The researcher’s thesis strongly emphasizes peoples’ participation in conservation, by involving people who are living near to the PA in conservation issues one could surely solve the conflicting issue of the People and Park controversy.

9.7 Agriculture and Horticulture Production in Region

In Himachal Pradesh, agriculture and horticulture play a crucial role in the state economy as they are the main source of income. Agriculture and horticulture may be considered as the main source of revenue generation. The agricultural and horticultural practices of the state differ from other parts of India due to a variety of issues. The most significant one is the exceptional climate and landscape of the Himalayas. Most agriculture takes place in the form of terrace cultivation. Various crops of the region listed in Table 6.2 (Chapter 6). Traditionally, the farmers of the Himalayas worked with basic organic methods. They cultivated their fields with local seeds saved from the previous harvest, using cow dung as fertiliser and leaving the growth up to natural conditions. In the study area, throughout year people remained busy with the horticulture and agriculture related activities. The yearly chart of agriculture and horticulture activities with detailed information of sowing, flowering and harvesting are given in Table 9.5 and 9.6.

9.7.1 Current Financial Situation of the Ecozone Region

Agriculture in the region is not a cost-effective activity for most farmers. They usually cultivate crops for own consumption. According to a study conducted by the Delhi-based NGO Grassroots India in 2008, cultivation on this scale requires the labour of at least four people for most of the year; where the production is more commercialised the labour requirement could rise up to 12 people. Since labour is expensive to hire in this region with wages of Rs. 80 per day, the input cost of agriculture is very high. Even where families do not appoint outside labour and work
on the field themselves this labour cost has to be taken into account, though this is not a common way of thinking among the farmers. In addition to labour costs, expenditure is required for new seeds when the seeds from last year's harvest are not suitable, for transport and post-harvest activities like threshing and for fertilisers and pesticides. While labour occupies the biggest share of the input costs, chemical inputs can also become costly, especially pesticide sprays.

In the case of horticulture, horticulture products like apples have a higher market value, the income from horticulture is significantly higher. However, climatic conditions are the barriers in fruit production. It was tough to get concrete conclusions about the financial status of the region from agriculture and horticulture. Market value of crops given in Table 9.9.

<table>
<thead>
<tr>
<th>Crop</th>
<th>Average Price in Rs./kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apples</td>
<td>Varies with quality</td>
</tr>
<tr>
<td></td>
<td>Around 30-50</td>
</tr>
<tr>
<td>Barley</td>
<td>8</td>
</tr>
<tr>
<td>Beans</td>
<td>10</td>
</tr>
<tr>
<td>Cabbage</td>
<td>5</td>
</tr>
<tr>
<td>Cauliflower</td>
<td>10</td>
</tr>
<tr>
<td>Garlic</td>
<td>25</td>
</tr>
<tr>
<td>Maize</td>
<td>5</td>
</tr>
<tr>
<td>Peas</td>
<td>10</td>
</tr>
<tr>
<td>Potatoes</td>
<td>5-8</td>
</tr>
<tr>
<td>Wheat</td>
<td>10</td>
</tr>
</tbody>
</table>

### 9.7.2 Economic Possibilities

The budding tourism industry and associated local crafts had become the way out of the economic crisis. Uncertain weather conditions, which at times led to crop failure, would be compensated by the ecotourism industry. So, it wouldn’t be wrong to say, CBET and farming form the perfect equation to balance the economic position.
of the region. Months of sowing- flowering and harvesting of horticulture and 
agriculture products given in Table 9.10 and 9.11.

Table 9.10: Months of Sowing- Flowering and Harvesting of Horticulture Products

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Horticulture Products</th>
<th>Month of Sowing- Flowering</th>
<th>Months of Harvesting</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Plum</td>
<td>March</td>
<td>June</td>
</tr>
<tr>
<td>2.</td>
<td>Peach</td>
<td>March</td>
<td>June-July</td>
</tr>
<tr>
<td>3.</td>
<td>Almond</td>
<td>March</td>
<td>June-July</td>
</tr>
<tr>
<td>4.</td>
<td>Pear</td>
<td>March</td>
<td>July-August</td>
</tr>
<tr>
<td>6.</td>
<td>Cherry</td>
<td>April</td>
<td>May</td>
</tr>
<tr>
<td>7.</td>
<td>Walnut</td>
<td>April</td>
<td>September</td>
</tr>
<tr>
<td>8.</td>
<td>Kiwi Fruit</td>
<td>April</td>
<td>October-November</td>
</tr>
<tr>
<td>9.</td>
<td>Strawberry</td>
<td>March</td>
<td>April</td>
</tr>
</tbody>
</table>

Table 9.11: Months of Sowing- Flowering and Harvesting of Agriculture Products

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Agriculture Products</th>
<th>Month of Sowing- Flowering</th>
<th>Months of Harvesting</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Cabbage</td>
<td>March-April</td>
<td>July</td>
</tr>
<tr>
<td>2.</td>
<td>Maize</td>
<td>March- April</td>
<td>September</td>
</tr>
<tr>
<td>3.</td>
<td>Buckwheat</td>
<td>March- April</td>
<td>August</td>
</tr>
<tr>
<td>4.</td>
<td>Millet</td>
<td>March- April</td>
<td>September</td>
</tr>
<tr>
<td>5.</td>
<td>Garlic</td>
<td>September- October</td>
<td>May</td>
</tr>
<tr>
<td>6.</td>
<td>Radish</td>
<td>September- October</td>
<td>March</td>
</tr>
<tr>
<td>7.</td>
<td>Carrot</td>
<td>September- October</td>
<td>March</td>
</tr>
<tr>
<td>8.</td>
<td>Peas</td>
<td>September- October</td>
<td>May</td>
</tr>
<tr>
<td>9.</td>
<td>Wheat</td>
<td>September- October</td>
<td>June</td>
</tr>
<tr>
<td>10.</td>
<td>Barley</td>
<td>September- October</td>
<td>May</td>
</tr>
<tr>
<td>11.</td>
<td>Cauliflower</td>
<td>September- October</td>
<td>May</td>
</tr>
</tbody>
</table>
Most of the respondents were truthful and honest about their perception of the National Park area. Persons who were reluctant to express their opinions were often asked various other questions or simply reverted to later to get a better response about their opinions and feelings about the National Park area, its rules and regulations. In-depth interviews with people further demonstrated that benefits from the National Park have played an important role in shaping people’s attitudes. A fair amount of the people viewed the Park as a tourist destination which enabled the nearby area to earn a good source of income. Locals who adapted to the changing socio-economic scenario around GHNP became economically better-off and hence had a positive outlook towards the National Park.

Under these present circumstances, the government has two alternatives. Firstly, it can use strongarm tactics to ensure that rules are followed and the people are forcibly removed from the ecozone area and rehabilitated. Past practices show this to be a very unpopular move which is likely to harm the prospects of whichever political party won from this zone. Also, court cases resulting from such Resettlement and Rehabilitation are likely to continue for years. The Park would then remain protected and safe provided protection using guards is adequate and the forest staff does not become corrupt. This practice would be true to Hardin’s recommendations to preserve biodiversity for the future.

This would become necessary, because the government had not done enough to ensure that livelihoods of the people in the Park are ensured. They had not set up adequate roads, educational and health services as well as facilities for tourists and adequate advertising so that enough of them actually go to these areas. They are more necessary the further one goes within the Park. Interior areas require more resources and more infrastructures to maintain the same level of development as those near the major roads. Unfortunately, ecolodges have only been set up near these major roads rather than creating new infrastructure.

It is at this periphery that one sees how an alternative programme might have worked. The areas where the ecolodges are set up are closer to other towns outside, and people have sent their children to schools there. They have also delinked themselves from many aspects of their livelihood linked to the Park and attempted to set up, often successfully, alternative modes of livelihood in these outside areas that complement or are complemented by their business which is linked to the Park. This
has, unfortunately, not been a model followed by the state government and so, with regret, one would have to recommend Hardin’s totalitarian regime.

Finally, the idea of ecofeminism as one more aspect of linking livelihoods that are linked to conservation has had a poor response in these areas. The government has been paying only lip-service to current trends in SHGs or Self-Help Groups. The WSCGs in the Park area are working, but their incomes are nowhere close to livelihood levels for families. They are not led by strong and powerful decision-taking women, who are linked to their sisters in other NGOs who are looking for advice and success from each other. They are not a unified group. They do not have a good presence in the local area in all these years and they are still unable to link up these ideas into a workable idea. There has also been no ideological change in the way decisions are taken in the household or how division of labour in the household has been undertaken. In fact, other studies have shown that the ecologically sensitive devta system for the conservation of sacred groves is caste- and gender-biased.

The fact that the people in the region have no unified consciousness regarding conservation and protection is seen very clearly from the Case Studies all through the research work. None of them have suggested any local or indigenous plan of action to help out in conservation activity and few have any feeling regarding conservation or protection, except the platitudes taught to them and mentioned by Park officials and bureaucrats. In such conditions, the situation looks bleak.

Thus, one sees that conservation cannot be approached from any one level. It is linked to decisions taken within families, to education of the youth, women and men regarding conservation, to daily activities and economics. The daily activities show how the women work harder than the men, working incessantly almost all the time while the men have periods of intense activity coupled with periods of rest and relaxation through the day. Thus, difficult jobs related to collection within the Park are often undertaken by the men while women do some collections. The bulk of the firewood is also collected by the men. Family sizes and decision-making issues also ensure that women work nearer homes than men, thus restricting their power, income, decision-making and political knowhow. The government has also not streamlined procurement, sale and transport of NTFP in the zone, thus making both sexes dependent on the vagaries of greedy middlemen to market their produce, however meager.
The case studies show that instead of training the people to become the backbone of conservation in the Park, the GHNP officials have rubbed many the wrong ways, thus alienating them from Park activities. This has ensured that instead of the people working with the Park authorities for conservation, they have become a classic case of ‘People vs the Park’, a story without success, which certainly does not need to be repeated here.

The lack of infrastructure and apathy among Park officials has also ensured the lack of support of locals in forming NGOs that use local development funds for conservation activities. All these issues need to be addressed before the Park becomes free of the only possible ‘final solution’, that of total control by the Park authorities and ouster of those who stay in the region. If these sorry states of affairs come to a pass, it will mean protection of the resources for a future generation, at the very least.

The final chapter of the thesis concludes the peoples’ participation in conservation of Great Himalayan National Park, India. Some recommendations are also suggested in the next chapter so that development and conservation can go hand in hand. By following these recommendations the community participation could be enhanced to a certain limit.