Policy, Gender and Institutions –
A Journey Through Forest Management Issues in the Kullu
Valley, Himachal Pradesh, India

BY

KRISTIN BINGEMAN

A Thesis
Submitted to the Faculty of Graduate Studies
in Partial Fulfillment of the Requirements
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Every now and then when travelling in the Himalayas you must disregard prudence and accept situations which in normal circumstances you would dismiss as being far too risky; you must conquer apprehension.

(Noble, 1987: 65)

Kristin Bingeman
August 2001

ABSTRACT

The sustainability of mountain ecosystems is of concern due to changes and pressures such as those that occur during expansion of urban functions. In the Kullu district of Himachal Pradesh, India, and particularly within the town of Manali, such urban expansion has been proceeding at an accelerated rate for the past three decades. As in many Himalayan regions, sustainability in this area is significantly linked to the forest; forest products and forests play an integral role in maintaining the balance of the ecosystem. Urban expansion has implications for the region's forests because it has created increased pressure on forest resources.

The impacts of urban expansion on forests are numerous. There have been responses to pressures on forest areas located near the town of Manali, and in particular with respect to pressures on forest use areas used by villagers. There are, however, differences in perception of 'forest area', rooted in the ways in which local people and the Forest Department value and describe the forest, which impact the dynamic between these groups. This research focuses on examining some of the ways in which various organizations and institutions that contribute to forest management have responded to the pressures being placed on this resource.

The setting and the general scope of this research come from a larger Shastri Indo-Canadian Institute project, *"Urban Development and Environmental Impacts in a Mountain Context"*. The research objectives of this thesis included exploring newly initiated Joint Forest Management projects in the area, examining the role of women in the management of forests at the village level, and the analysis of institutional responses to pressures on the forest social-ecological system resulting from urban development.

These research objectives were addressed primarily through semi-structured interviews, participant observation, and some direct participation. Some local secondary sources were also utilized. Research efforts were concentrated in the villages of Old Manali, Prini, and Solang, as well as in the town of Manali itself. Interviews also took place in the nearby villages of Sial, Dhungri, and Chachoga, and Forest Department officials were interviewed on several occasions throughout the field season.

As one of the most recent and formal responses on the part of the state Forest Department, the initiation of Joint Forest Management projects in the area became a research focal point. It was found that Joint Forest Management holds both the promise of partnership and also the potential to repeat experiences associated with the policy that have occurred elsewhere in India. It is in this context that the significance of the relationship between the Forest Department and local people was most clearly highlighted.

The involvement of women in formal decision processes related to the management of forests in India generally, and specifically in the context of the Kullu Valley, continues to be problematic in the absence of mechanisms that adequately acknowledge and accommodate the significant influences of tradition. This was

highlighted in the examination of women's roles and gender issues in forest management. It was found that women's participation in Joint Forest Management to date is problematic largely because acknowledged barriers, primarily related to social and cultural traditions, have not been adequately addressed by this new policy. However, evidence in the form of opinions and behavior supports the idea of traditions as dynamic and evolutionary. As an example of a socially sanctioned shift in women's roles, village women's groups (the *mahila mandals)* function uniquely in the Manali area, in contrast to other areas of India, by facilitating women's participation in forest management activities.

Focusing research on institutional responses from a wider perspective allowed for an examination of responses to pressures on the forests from a variety of groups at both the local and the state level. Within a theoretical framework of resilience, institutional responses were evaluated as to how they are contributing to the resilience of the overall social-ecological forest system. Areas of institutional capacity and weakness were identified in all groups at both levels. Institutional responses that contribute positively to overall resilience of the forest social-ecological system include the activities of the *mahila mandals,* adopting JFM policy, upholding local rules in the face of contradicting Forest Department rules, establishing a fuelwood depot, and switching to alternative fuelwood sources. "Breaking the rules" emerges as an institutional failure at both state and local levels. The strengthening of the Timber Distribution system also serves to contribute in a negative manner to overall resilience of the forest social-ecological system

This research contributes to the body of knowledge that addresses resource use and management issues in the context of urban expansion in the Himalaya. It also adds to the literature that exists regarding the Kullu Valley in Himachal Pradesh. More specifically, experiences in the Manali area with the early stages of Joint Forest Management reinforce some of the issues raised in case studies from the literature. In terms of women's roles in forest management, this research indicates that viewpoints, activities and traditions at the local level regarding women's participation in resource management decision processes are shifting and evolving. Perhaps more significantly, the functioning of the village *mahila mandals* in providing a mechanism for women's contributions to forest management is relatively unique in the context of current literature on gender issues and forest management in India. The analysis of institutional responses and resilience of the forest social-ecological system builds on the thinking regarding system resilience as including social and ecological elements as part of an integrated whole.

ACKNOWLEDGEMENTS

Finally, I wish to let my friends and my family know that I love them and that their belief in me means a great deal. Words of encouragement and advice and help from the people closest to me have made a great deal of difference to this whole process. Most of all I would like to thank my parents for offering me unbelievable support, for travelling so very far to see India and to visit me, and for understanding what it is that drew to me to the other side of the world in the first place.

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'SETTING AND CONTEXT'

Wood is like salt — too much is no good — only bring what you need.
(Old Manali, Oct. 31/99)

If you want to steal wood, steal a big tree so that everybody knows, but everybody survives.
(Old Manali, Oct. 31/99)

Trees in a plantation planted too close together; understory is completely absent.
(photo by K. Bingeman)

The bustle of the Manali bazaar.
(photo by B. Bingeman)

1.1.1   Mountain Ecosystems and Forests

Mountain ecosystems, and in particular Himalayan ecosystems, are complex and inherently fraught with uncertainty (Ives and Messerli, 1989; Jodha, 1998; Thompson and Warburton, 1988). The sustainability of these ecosystems is therefore of concern when faced with changes and pressures such as those occurring in a process of urbanization. Within the Kullu district of Himachal Pradesh, India, urbanization has been proceeding at an accelerated rate in the past three decades.

Traditional livelihood systems in mountain areas are shaped by the characteristics of the mountain ecosystem. Jodha (1998:288) terms these ecosystem characteristics 'mountain specificities' and they include a "high degree of inaccessibility, fragility, marginality, diversity, and unique production opportunities". The livelihood system of the landholding rural villager that has evolved in the Kullu district reflects these 'specificities'. Livelihood systems were and are still primarily agricultural, and livestock are commonly kept. However, as in many Himalayan regions, sustainability is also significantly linked to the forest; forest products and forests play an integral role in maintaining ecological integrity (Ives and Messerli, 1989; R.B. Singh, 1998; C. Singh, 1998).

1.1.2   Research Context

An acceleration of urban expansion in the town of Manali in recent decades has created pressures on various resources. The impacts are numerous, and the scale of analysis is important, as both perceptions and realities change depending on the spatial scale selected. There have been responses to pressures on forest areas nearby the town of Manali, and in particular with respect to pressures on forest use areas used by villages in the area. These responses are socially constructed and although they may or may not be based in fact, this is not important; concerns about the sustainability of forests are therefore concerns about livelihood sustainability of people in the region and should not be dismissed. This research focuses on examining a few of the ways in which various organizations and institutions that contribute to forest management have responded to real and perceived pressures on the forest.

1.1.3 The Importance of Forests in India and Himachal Pradesh

Forests are a significant part of India's landscape as a whole; recorded "forest area" as of 1994-95 comprised approximately 23% of the geographical area. Considering only the actual forest cover, the figure is still approximately 19% of the total area of India (GOI, 1997). In Himachal Pradesh, recorded forest area as of 1994-95 made up approximately 65% of the state area, though that figure drops to approximately 21% when actual forest cover is considered in comparison to total state area (GOI, 1997). Nevertheless, even the most conservative estimate illustrates that forests are a prominent part of both the physical landscape of India, and to an even greater extent, that of Himachal Pradesh.

The salience of the forest resource is also reflected in the incredible diversity of forest products that are used in Himachal Pradesh. In urban areas, local timber forest products are relied upon to meet fuelwood needs, and are used for construction purposes. Rural people in this district depend upon the forest for many essential products. Timber is essential for fuelwood, for construction and for making agricultural implements. Fodder and bedding for livestock is collected from the forests, and manure mixed with bedding material is critical to agriculture as fertilizer. Other non-timber forest products (NTFP) used by people in Himachal Pradesh include edible fruits and nuts, honey, wax, herbs and roots, dyes, kitchen utensils, baskets, rope, fishing nets, shoes, paper, oil, and resin (Ives and Messerli, 1989; C. Singh, 1998). Aside from providing various types of products, forests also have aesthetic and symbolic values and watershed and hydrological values attached to them. Given that the forest is still central to rural livelihood systems (Ham, 1995; Davidson-Hunt, 1995a), and also given that the majority of the population in the Kullu district is rural, the forest is clearly integral to the lives of many people in the Kullu district.

India's expanse of forest area also has other implications. As Gadgil and Guha (1995) have remarked, the Forest Department is India's biggest landlord since forests are under government control and the people retain only usufructory rights which vary according to locale. Under British administration, Forest settlement reports set down in law the rights of villagers to the forest and forest products (Davidson-Hunt, 1997). It has been suggested that village rights in the Kullu district were generously defined and that

this may have been one of the reasons that Kullu has not been devastated by deforestation (Berkes, Gardner and Sinclair, 1997).

1.1.4 Deforestation

Deforestation has taken place at a macro scale throughout all of India. Ives and Messerli (1989) maintain that the deforestation process has occurred over a long period of time (and not in the 50 years or so since independence) and is the result of government policies. C. Singh (1998) is in general agreement with Ives and Messerli.

However, both C. Singh (1998) and Shiva (1989) pinpoint the period of British control as the timeframe in which (due to a variety of circumstances) deforestation began on a large scale, although C. Singh (1998) concedes that India has historically harvested timber for commercial purposes.

Deforestation eventually alters ecosystem structure and function and as such it has serious implications for the people of the Kullu district. The area under forests in Kullu has decreased from 494 062 hectares in 1971-72 to 342 452 hectares in 1994-95; a loss of 28.26% in 24 years (Government of Himachal Pradesh, 1976-75 to 1997). Although these statistics illustrate a general trend in deforestation that cannot be ignored, they should be used with caution, as the definition of what constitutes an area under forest is unclear.

1.1.5 But What is 'Forest Area'?

The difference between recorded "forest area" and actual forest cover is not clear from the Government of Himachal Pradesh publication, though other literature (Kulkarni, 1983) indicates that forest areas are any lands containing trees or shrubs, pasture lands and any land the government designates as such. Aside from the official definition, there are differences in perception in terms of what one is talking about when referring to 'forest area'.

"By forest, according to custom, is meant all unenclosed land more or less covered with wild-growing trees and bushes." Here, Chhatre (2000:24) is quoting Lyall's description of popular perception of forests in the 1860s and he asserts that this would still hold true for most of Kangra, if not all of Himachal Pradesh. Forests are locally perceived to be everything (objects as well as functions) contained within an area that has trees and bushes; people even talk about the forests as places where there are not any

trees (e.g. some pasture areas are in the 'forest'). This description is vastly different from the perception of 'forest areas' as those with trees; trees being the primary preoccupation of the Forest Department, both in the past and in the present context (Chhatre, 2000; Saberwal, 1999; Gardner, pers. comm.).

As Chhatre (2000:24) notes, the Forest Department "has tried its best to rescue forest areas from being 'covered with wild-growing trees and bushes' by substituting 'useful' trees". This difference is important because it lies at the heart of most of the conflicts that have come to characterize the relationship between local people and the Forest Department. Chhatre (2000:26) takes this idea even further when he states that "[t]he fact that livelihood activities are being met at all is a mere accident as the management objectives of the Forest Department have never encompassed bulk-use subsistence requirements of local communities, beyond their recognition as rights to be suffered". Whether the context is access by rightholders to timber through the Timber Distribution system overseen by the Forest Department or the implementation of new initiatives such as Joint Forest Management (JFM), differences in perception rooted in how each party values and describes the forest impacts the dynamic between local people and the Forest Department.

1.2   RATIONALE

The setting and the general scope of this research come from a larger Shastri Indo-Canadian Institute project, *"Urban Development and Environmental Impacts in a Mountain Context"*(**Plate 1.1**). This research is therefore part of a team project involving several faculty and doctoral and graduate student interns from the University of Manitoba and the University of Delhi. The focus on forest resources is the result of an interest in the extensive historical relationship between people and the forests in India.

More generally, research in India was of personal interest to me because of my experiences travelling in India. Upon reflection after I returned, I realized that the people of India, the land and the relationship that binds the two together had left a lasting impression. An incredible diversity of livelihood strategies are employed by the people of India; the latest technology exists alongside (though not always in harmony with) ancient traditions, which can result in creative solutions to adversity and adaptations to change. In my reading I was interested to find that Gadgil and Guha (1992) make this same

observation of the 'mosaic' that is India and that the varied demands this remarkable mosaic make on the country's natural resources prompt them to investigate how these demands are met. The interface between rural and urban areas and rural and urban demands is one of the points where established traditions intermesh with 'modern' ways. In this sense, and in many others, I found India to be a fascinating place and the idea of returning to learn more about the social processes that link the people to the land's resources in a region undergoing change was more than intriguing.

1.3   RESEARCH OBJECTIVES

In developing objectives, background research was conducted into relevant literature, including the publications resulting from the first Phase of this project that took place in 1994 – 98. This process, and consultations with those who had been in the field, indicated that an exploration of the use and sale of forest products in the Manali area could provide some insight into the more specific dynamic that exists between regional "urban" centres and surrounding rural economies. More specifically, an examination of emergent livelihood sustainability issues related to the relationship and dependence on the forest for subsistence and cash income in the context of recent urbanization would be a logical extension of previous research. I also felt that an examination of gender issues would be relevant to this research because of the roles that women and men play in traditional forest use and management. The general purpose of the research was to examine how increased demands for forest products resulting from urban development and external market links are impacting the forest resource and the social systems that operate within the Manali area. The following objectives were initially developed to fulfill the research purpose:

i.   To identify the types of timber and non-timber forest products being used and sold in Manali and Kullu (and possibly beyond).

ii.   To determine the source(s) of these forest products

iii.   To explore the social interactions which facilitate the provision of forest products related to livelihood strategies by:

a.) gaining an understanding of whether the process of supplying forest products to urban areas has resulted in forest-based livelihood

activities that constitute in and of themselves (or can form a part of) a sustainable livelihood strategy.

b.) *investigating the political economy and gender relations in these social interactions and therefore in forest-based livelihoods.*

iv. *To gain understanding of the rural-urban dynamic through the analysis of forest resource use.*

v. *To share findings of the research with community groups, and/or NGO's, to communicate with local policy-makers (at the local and state level) and to make recommendations regarding procedures to implement appropriate policy changes.*

vi. *To become aware of the perceptions of myself as a researcher, a foreigner and as a woman, and raise my own consciousness regarding the relationships that develop between myself and individuals from the Manali area, and also acknowledge the ways that these perceptions and relationships shape the research process.*

The initial research conducted into the flows of forest products in and out of Manali, and in interviewing the *pradhans* of the various village *mahila mandals*, I realized that there would be an evolution of research objectives to adapt them to relevant local realities and concerns. During this initial process I had begun to get a good grasp of these issues, but it was also clear that some of the objectives were problematic. As an example, I found that there were not significant (legal) flows of forest products from villages to the urban area of Manali, and thus livelihood strategies involving the supply of timber and non-timber forest products was not a feasible topic to focus on. Gender issues were important, but not in the context of forest-based livelihood strategies.

However, this process also led me to new issues and situations. These opportunities could not have been foreseen in development of the original objectives. In the spirit of flexibility and of recognizing that formulating relevant objectives from the other side of the world is a challenging exercise, and because it was a natural part of the process, I began to pursue these new avenues of research. Joint Forest Management (JFM) was an issue in the area and projects had been initiated in several villages. Changes to village forest use area resulting from urban growth in Manali had prompted

institutional responses from different groups that contribute to the management of village forest areas.

The overall research purpose did not change, but in order to focus on the opportunities that became apparent after time in the field, objectives were reformulated. The first two original objectives became implicit rather than explicit, and in fact it was in researching these questions that much of the information regarding institutional issues came to light. Objective iii.b, which addressed gender issues, became more focussed and specific, with the result that it became a primary objective. Objective iv. was essentially set aside (although it is addressed generally by the whole thesis), and the two final original objectives involving sharing the findings of research and attempting to reflect on how my own experiences influence the research process remained unchanged. As a result of this process, research objectives evolved into the following:

i. To explore the process and progress of newly initiated Joint Forest Management projects in the area

ii. To examine the role of women in the management of forests at the village level

iii. To investigate and analyze institutional responses to pressures on the forest social-ecological system resulting from urban development.

iv. To share findings of the research with community groups, and/or NGO's, to communicate with local policy-makers (at the local and state level) and to make recommendations regarding procedures to implement appropriate policy changes.

v. To become aware of the perceptions of myself as a researcher, a foreigner and as a woman, and raise my own consciousness regarding the relationships that develop between myself and individuals from the Manali area, and also acknowledge the ways that these perceptions and relationships shape the research process.

1.4   THE STUDY AREA

The study area centres around the town of Manali, and includes surrounding villages in the Kullu District of Himachal Pradesh, India (**Figure 1.1**). The Kullu Valley is a region where recent studies have been conducted in cooperation with the local

peoples, prior relationships with local organizations have been established and rapid growth of settlements has called into question the sustainabilitiy of livelihoods.

The town of Manali is located on the right bank of the Beas River at an elevation of 2050m. It is the focal point of the upper Kullu Valley and covers an area of 3.5 km^2, which is extraordinary in light of the fact that Manali boasts a capacity of 693 hotels/guesthouses (1998 figures), more than in Bhuntar and Kullu (the two other urban centres in the Kullu Valley) combined (Cole, 2000).

Life in the town revolves around a colourful, chaotic, bustling bazaar (**Plate 1.2**) where one can find almost anything that life requires and a great deal that it does not. Laundry beaten clean on rocks dries in the breeze created by the exhaust of passing vehicles, while a palm reader aggressively entices passers-by to hear about tales of the future (for a special price). Deep-fried snacks sizzle in iron pans and are munched on with an accompanying glass of *chai*, which is deftly held so as to avoid being burnt by the heat of the glass. Buses and lorries blare their horns while trying to negotiate their way in or out of the bus stand, located in the very centre of the bazaar. Attire spans the spectrum from the elegant and extravagant *salwar kameez* and *kurtas* of wealthy tourists of the plains to the unmistakable woolen *pattus* worn by local women from surrounding villages to the retro sixties garb or up-to-the-minute outdoor wear of foreign tourists (**Plate 1.3**).

Auto-rickshaws, like exhaust-belching overgrown beetles, scuttle in and out of the other traffic on the street, which includes not only pedestrians, buses and lorries, but also military vehicles, jeeps, Maruti vans, tractors, donkeys, dogs, cows and the occasional bicycle. During the high seasons for tourism, however, the bazaar is burdened beyond capacity by the temporary increase in population.

Although Manali is experiencing expansion in area and urban functions, in many cases the impacts and consequences are felt in the villages that surround the town. Research efforts were concentrated in three villages in the surrounding area, Old Manali, Prini, and Solang (**Figure 1.1**). The villages differ from the town of Manali in several respects; aesthetically the villages are more "traditional", as the homes are virtually unchanged from centuries ago (**Plate 1.4**), and the majority of people derive a significant portion of their livelihood from agriculture. In terms of the forests, villagers' livelihoods

are more dependent on inputs from the forests and the rights to use the village forest area are tied to owning land in the village. People who live in Manali do not have customary or *de jure* rights to a forest area, as will be discussed in Chapter Three.

1.5 ORGANIZATION OF THE THESIS

Following this introductory chapter, research methods are outlined (Chapter Two), and I discuss guiding principles, specific research methods employed, and the way in which the experiences I brought and took away from this process influenced the research process. Some limitations are also noted. A brief outline of the historical forces and recent pressures on the forests in the Kullu Valley in Chapter Three serves to provide context for the next three chapters, which present research results.

Chapter Four explores the implementation process of Joint Forest Management in two villages in the Manali area and raises some questions about the process. Issues related both to the structure of Joint Forest Management committees that are outlined in the policy instruction, as well as the operationalization of Joint Forest Management are identified as serious challenges to the potential to achieve the stated goals of the policy.

Chapter Five is an analysis of some gender issues in forest management. The starting point for Chapter Five is a detailed examination of women's involvement in Joint Forest Management, which leads into a discussion of gender roles within the context of forest management in general. The chapter closes with an analysis of some of the dynamics (both positive and negative) that have facilitated women's institutional contributions to forest management through the village women's organization, the *mahila mandal*.

The discussion of *mahila mandals* in the Manali area leads into Chapter Six, in which I take a broader view of forest management in the Manali area in order to comment upon institutional responses by various groups to changes to the forest resulting from urban growth. I use resilience theory to construct a framework that allows some evaluation of these institutional responses.

Finally, Chapter Seven addresses the objectives that guided the research process and summarizes the learning that has resulted from the process of analysis. In doing so, some implications and opportunities are identified and I close with some final reflections on the overall research process.

Figure 1: Location of the study site: the Manali area on the Beas River in the Kullu District, Himachal Pradesh, India.

    Indicates approximate location of the town of **Manali**

    Indicates approximate location of the village of **Prini**

    Indicates approximate location of the village of **Solang**

    Indicates approximate location of the village of **Old Manali**
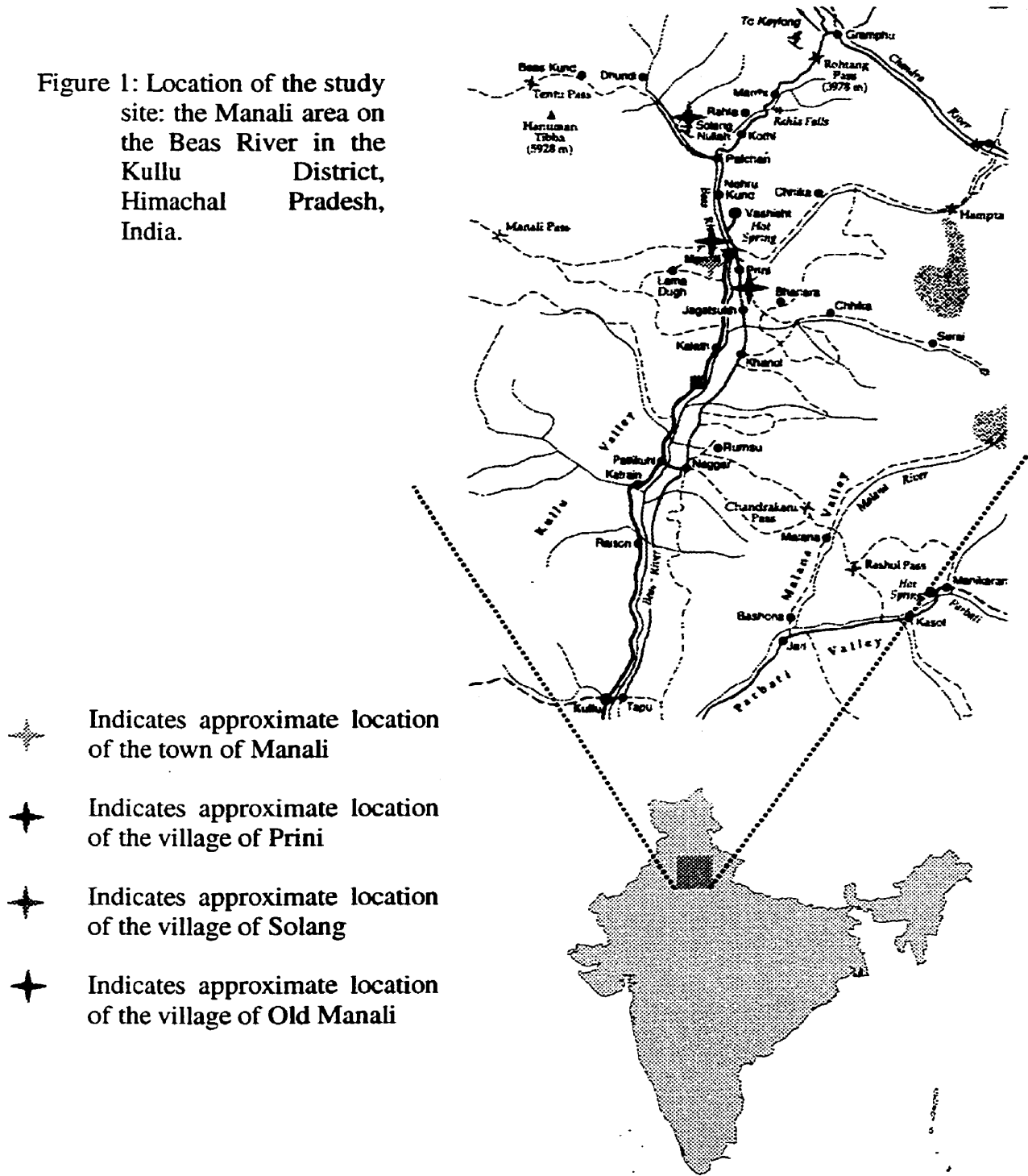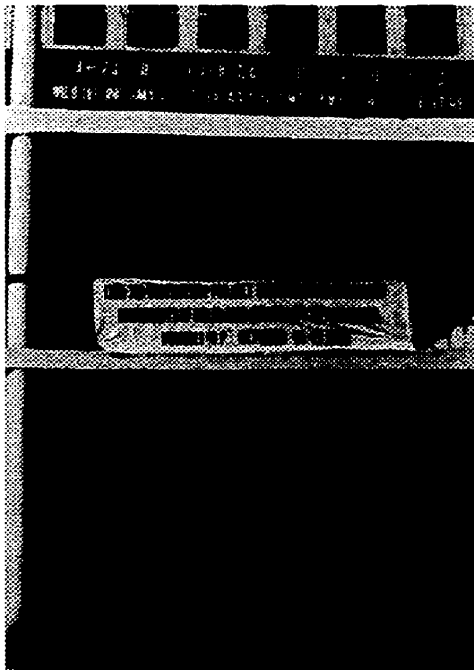
Plate 1.1 University banner indicating the October 1999 workshop in Manali.
(photo K. Bingeman)

Plate 1.4 A "traditional" home in Prini showing construction of layers of wood and stone, and featuring a second storey verandah.
(photo K. Bingeman)

Plate 1.2 *Subji* bazaar (vegetable market) in Manali.
(photo K. Bingeman)

Plate 1.3 The spectrum of fashion in the Manali bazaar.
(photo B. Bingeman)

CHAPTER TWO:

'FIELD RESEARCH METHODS'

I cannot avoid a partial view. However much I try to present a balanced and multiple perspective, I cannot escape from presenting a reality which is personal and fallible.

(Chambers, 1997:104)

Carrying a bundle of "grass" after cutting all day.
(photo K. Bingeman)

2.1 Guiding Principles and Selected Tools from Methods Frameworks

As research evolved in the field and objectives were modified, so too did the methods used to carry out research. The unique context and goals of each research project demand unique research methods and so I borrowed methods and ideas from different disciplines rather than confining myself to a single framework. The guiding principles and ideas that underlie the actual methods used in the field are located within the postpositivist paradigm and are largely taken from feminist and participatory approaches to research (Mies, 1983; Achibald and Crnkovich, 1995; Olesen, 1994; Ristock, 1998; Chambers, 1994a; 1994b; 1994c; 1997).

Research should not be treated as a neutral, value-free process, or as a simple systematic search for understanding, but as supporting and questioning (Mitlin and Thompson, 1995). Although some take for granted the rejection of positivism, I want to explicitly locate this research outside of an objectivity-seeking philosophy. In a context where the bias and uncertainty associated with research is acknowledged, the sensibility of concepts such as shifts in researcher roles, participatory approaches and reflexivity becomes plainly evident.

Biases, often perceived negatively, can also be a resource for understanding one's own interpretations and behavior in the research (Olesen, 1994). Reflexivity acknowledges subjectivity and bias, not as a fault, but as an inevitable part of research, and in doing so introduces another dimension of consciousness to the research (Proctor, 1999). Similar to Ristock (1998), I wanted to discover the basis of my understandings and how they might be shaping the production of knowledge in the research process through reflexivity. Mies (1983) also suggests that 'objective' knowledge should be replaced with 'conscious partiality', which can be achieved by partially identifying with those being studied[1]. My goal is not to provide an accurate perspective of local realities. However, this in no way devalues the perspective I have gained through field experience. This research and analysis is from the perspective of an outsider. My perspective is a blend of

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[1] Mies makes it clear that partial identification should not be confused with total identification, which is impossible in cross-cultural research.

my own standpoint as a 'Western' white female outsider, intermingled with my grasp of local realities.

Field research was grounded in PRA philosophies and techniques (e.g. Chambers, 1997), and specifically in the idea that research is a creative process, where the expertise is embedded in local people (Archibald and Crnkovich, 1995). Thus, the perspectives of local people were and are central to the research. Semi-structured interviews proved to be the most utilized research technique, but other techniques from the PRA toolbox were also used. Transect walks were employed to provide orientation to the area, participant observation occurred throughout the research process, some direct participation in village activities took place, and stories often became a part of the semi-structured interviews. Local secondary resources were accessed and interviews were conducted with Forest Department officials, business and hotel owners, residents in Manali, and people in several villages. Varying both the methods and the people who were the source of insight in the research process (Mitlin and Thompson, 1995) served not only to help in the complicated and often frustrating process of gaining an understanding of complex local circumstances, but also to help ensure the validity of information through triangulation. What follows is a brief introduction to the methods I employed in order to meet my research objectives.

2.1.1   Participatory Rural Appraisal (PRA)

Chambers (1994b) asserts that participation is now widely advocated and documented as a philosophy and mode in development, and I would add that this is also the case in social science research (see Archibald and Crnkovich, 1995; Ward, 1996a; 1996b; Mitlin and Thompson, 1995). PRA is an evolving family of methods to "enable local (rural or urban) people to express, enhance, share and analyze their knowledge of life and conditions" (Chambers, 1994b:1253). In PRA, the drawing of comparisons is given more emphasis than measurement, establishing rapport is crucial (Chambers, 1994b).

PRA methods, like others, continuously evolve in the field and so specific methods, approaches, insights and ideas are continually flowing between the various streams. PRA methods have been employed in studies with similar focus to this research, where researchers explored the uses and marketing of forest products in the forestry

sector of natural resources management or in forest policy (Chambers, 1994a cites examples; also Shah and Shah, 1995; Nesmith, 1991). This is one of the reasons that PRA was explored as a set of methods that might prove appropriate to my own field experiences. Specific PRA methods that helped me to accomplish my research objectives included (taken from Chambers, 1997:116-118; also Sheelu, 1994; RRA Notes, 1991; Mitlin and Thompson, 1995:241-3; Chambers, 1994a)[2]:

- **offsetting bias:** being self-critically aware of biases in behavior and learning, and deliberately offsetting them. (i.e. where visit, who with, when – season/time of day) I would perhaps add, embracing and incorporating biases and assumptions.

- **semi-structured interviewing:** the researcher may have a mental or written checklist, but the interview is open-ended and the researcher is free to follow up on unexpected insights. Key questions provide structure, but not all questions are predetermined and the interview allows for flexibility of responses (see Davidson-Hunt, 1995a; Thomas-Slayter and Bhatt, 1994; Nesmith, 1991 for example). Flexibility in the field means that structure is imposed after field research, during the process of analysis. Open-ended interviews are very useful in situations where the researcher is interested in hearing people's opinions in their own words, and particularly in exploratory research where the range of responses may be undefined (Palys, 1992).

- **seeking out the experts:** in talking to community members they will often suggest others who know more about a particular subject and the experts will become apparent in this way.

- **stories:** stories (narratives, oral tradition) shared by local people with researchers should be regarded as a structured and formal way of transmitting information (see Steinmann, 1998). Indeed, stories are often the means by which cultural heritage is passed on (Coffey and Atkinson, 1996).

- **transect walks:** a systematic walk (**Plate 2.1**) guided by a local individual(s) through an area, observing, asking, listening, discussing, learning (about land use, vegetation, crops, local / introduced technologies, commerce and economy, infrastructure, etc.), seeking problems, opportunities, etc.; can be a vertical transect, loop, combing, along a waterway, etc.

- **groups:** could be community group, representative group, casual encounter with some people, focus group. Specifically, the focus group consists of a small

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[2] Where other authors are referenced, it is because the information is from a discipline-specific book or article. In these cases, I wished to elaborate further on some methods and this was best accomplished by going to the disciplinary source. However, these methods have been adopted as part of PRA methods.

number of local experts addressing one specific issue at a time (see Steinmann, 1998; Thomas-Slayter and Bhatt, 1994) and can produce insights about issues from those who have experience (Palys, 1992). Focus groups are particularly useful in later stages of research when the researcher has gained a general understanding of local dynamics and more detailed and specific insights regarding a particular subject are desirable (Agar, 1996).

2.1.2 Participant Observation

Participant observation is a technique often employed in social science research (Jorgensen, 1989; Palys, 1992; Agar, 1996; Bernard, 1988). It is based upon the idea that the viewpoint of the insider can provide important and valuable insights into the subject being studied. Participant observation seeks to make accessible and to describe the meanings and realities that people use to make sense out of their daily lives (Jorgensen, 1989). In Agar's (1996) terms, participant observation means becoming involved in aspects of community life, observing and talking with people while learning from them about their view of reality.

2.1.3 Journals

Journalling as a part of research methods allows for reflexivity in the analysis. Like a field notebook, a journal captures the researcher's experiences and personal reflections, and can help to pinpoint underlying assumptions and biases. Events throughout research as well as perceptions, attitudes and personal reflections (which may influence the research process) can be recorded in journals (Ward, 1996a) and ultimately assist in developing a consciousness of the situation (Proctor, 1999).

Throughout the time spent in the field, I was interested not only in accomplishing project objectives, but also in exploring how the relationships that developed between myself and individuals from the Manali area shaped the research process. I also wanted to become aware of others' (and my own) perceptions of myself as a researcher, a foreigner and as a woman and how these perceptions influenced the way that the research was conducted. The researcher should not be left out of the analysis; I wanted to be conscious to some degree of the assumptions and biases I brought to the research process and attempt to learn from the experience.

2.2.1 Preliminary Research – Mahila Mandals

Field research took place over a four-month period, beginning in July of 1999. Preliminary interviews with the leader (*pradhan*) of the women's organizations (*mahila mandal*) in 29 villages and in the town of Manali were undertaken to gain an overall understanding of village perceptions of how the forest was being managed and the extent of village-level involvement in forest management (**Plate 2.2**). The *mahila mandal pradhans* were chosen as a source of information about the forest and management practices because forest products are an integral part of the daily activities of women and the forest has been a major focus for some of the initiatives of local *mahila mandals* (Ham, 1995; Davidson-Hunt, 1995a). These interviews provided some interesting avenues related to institutional responses by *mahila mandals* that were followed up later in the field season. However, more significantly, comments made by these women, along with information from the Range Forest Officer in Manali, provided direction in terms of the important issues related to forest management in the area and ultimately influenced the research focus. Based on initial interviews, three villages - Prini, Solang and Old Manali - were selected as case studies.

2.2.2 Prini as a Case Study

Geography, access and village dynamics in relation to the forest were key considerations in the selection of all the case study locations. Prini is not a great distance from Manali but it is somewhat removed and more importantly there is 'road' access to the village (**Plate 2.3**). There are several large hotel developments close to the village. The village is also the site of a Joint Forest Management (JFM) project initiated by the Himachal Pradesh Forest Department and an initial visit to the village happened to coincide with a JFM meeting. The *mahila mandal* in Prini, though active in protecting the forest previously, has become fragmented due to political differences, making their participation in JFM as a cohesive group difficult. These circumstances suggested that Prini would be an interesting case study and permit comparisons with Solang village where another JFM project was underway.

The people of Prini as a group were slightly more wary of outsiders than the people of other villages that I subsequently encountered during research. Prini was the first village where I attempted to carry out more in-depth interviews and speak to a representative from almost every household, and so I had few expectations with regard to how I might be received. I have to admit I was somewhat disappointed that many of the initial interviews elicited only minimal responses and lacked additional detail or elaboration. I initially attributed this to the fact that I was still in the process of refining both the content and the structure of the interviews and I thought that I just hadn't gotten it right yet. In addition, I thought that perhaps as my face became familiar and as word of mouth let people know of my intentions, that this might make interviews a more comfortable process and people would perhaps be more open in expressing their opinions. It was only after the first week that I encountered a foreigner who had a house in the neighboring village of Shuru. He asked me how the interview process had been progressing and then told me that the people in Prini had a reputation for being a more closed community than other villages around Manali. Regardless of the 'whys' and 'wherefores' of initial difficulties in interviews, I met some very lovely and hospitable people in Prini and on many occasions, by the end of the day I had consumed so many cups of tea that I thought I might float away. I also found some people who were more than willing to sit down and share some of their time and insight with me; they were very candid and honest about their feelings and in some cases about the difficulties they faced.

2.2.3 Solang as a Case Study

Solang was chosen a case study for primarily two reasons. First, geographically, it was a considerable distance from Manali and access to the village was by footbridge only. Yet across from the village is the ski hill, which is a winter tourist attraction, and it also hosts paragliders and picnickers in the warm months. Thus, urban growth from Manali in a sense spills over into this area. Secondly, there is a JFM initiative underway in Solang and I wished to compare this initiative relative to the process in Prini. The Range Forest Officer in Manali had spoken with such pride of the success of JFM in Solang to date, making me curious to explore for myself some of the ground realities of

the project. Additionally, Solang is unique because of its relative isolation; no other village has rights to the forest area where villagers from Solang collect their fuelwood[3].

2.2.4 Old Manali as a Case Study

Old Manali (also known as Manaligarh) (**Plate 2.4**) was chosen as a case study because although it was initially spatially distinct from Manali, the growth of the town in recent years has spilled into the village. The road in Manali continues up into Old Manali and has begun to transform the parts of the village that are close to the road. I was also intrigued by some of the comments made by the *mahila mandal pradhan* of Old Manali during the initial set of interviews. She indicated that she would like to expand the membership of the *mahila mandal* in her village so that all households were represented. She had some suggestions as to how this could be accomplished and she believed that this might prompt people to take more responsibility for the protection of the forest. She also wanted to establish a closer relationship with the Forest Department and begin to establish new plantations in their forest areas. I was impressed to see that in such a relatively large village, this woman wanted to take on the challenge of creating a community body to accomplish a definite goal. No JFM project had been initiated or even suggested for Old Manali because of its size and perceived lack of cohesion (from the perspective of one the Forest Guards responsible for Old Manali), but I thought perhaps there were the beginnings of village-initiated movement.

2.2.5 Spending Time in Manali

It was also important for me to understand the story of Manali as well as possible. Talking to people there confirmed the hypothesis based on previous research that although Manali was the centre of change and development in the area, forest management issues would best be explored in villages. However, in interviewing Manali residents to 'get the story', it became clear that although this was the case, the history and development of Manali is critical in terms of local formal and informal usufructory rights to the forests. Manali is important as a source of pressure and of new and changing demands on the forests. However, in terms of management, it is the villages that are

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[3] Though on the other side of the Solang River, where villagers from Solang cut some of their grass and livestock bedding, villagers from Pulchan and Buruwah also have rights.

important because villagers are rightholders and they exercise their rights to forest products in well-defined forest areas. It is also in the villages that local forest management institutions still exist. Through the stories of Manali and villages in the area, I began to sort out the complex interrelationships between the town and the villages and in particular, how the uses and flows of forest products affect, and are in turn affected by, rural-urban interactions.

2.2.6 Other Villages

Interviews with members of the *mahila mandals* in Dhungri, Chachoga and Sial were undertaken primarily in order to confirm statements made by people in Manali regarding actions that the *mahila mandals* had taken to restrict access to their village forest areas. The interviews also afforded an opportunity to triangulate other information offered in interviews in case study villages as well as in Manali. Statements made by Manali residents directed me to these three villages in particular.

2.2.7 Semi-Structured Interviews in the Villages

A total of 137 interviews were carried out in the three case study villages (**Plate 2.5**). The interviews in Prini, represent approximately 80% of households. In Solang, the interviews represent approximately 70% of households and in Old Manali, the interviews represent approximately 25% of households (**Table 2.1**). People were asked about their use of forest products, and their perspectives on the health of the forest in the past and in present day. People were asked to offer their opinions as to how the health of the forest had changed, what kinds of activities or actions were responsible for those changes, and what could be done to address any negative changes. Villagers were questioned as to their awareness, participation in and perceptions of JFM to date. Questions were also asked regarding income from sources other than agriculture and horticulture, how and whether tourism had altered lifestyles, and whether changes had occurred in the village as a result of tourism. Not all of the above questions were asked of all villagers, nor were all of the above asked in each of the three villages.

In Dhungri, Chachoga and Sial, I targeted *mahila mandal* members because my primary intention was to ask whether people from Manali ever came into their village forest areas to gather forest products, whether this was still the case, and if not why this

no longer happened. However I also took the opportunity to ask about how the forest areas they use had changed and what, in their opinion, were the reasons for these changes. I also asked some questions about changes as a result of tourism.

2.2.8 Interviews with State Forest Department Officials

I interviewed several Forest Department officials, at different levels of the Forest Department hierarchy, over the course of the field season. These interviews included the District Forest Officer in Kullu, the Range Forest Officer in Manali, the Deputy Forest Ranger in Manali and a few Forest Guards. I also interviewed employees at the Forest Department depot in Manali, which supplies fuelwood and construction timber at subsidized rates. The information gathered in some of these interviews was not directly relevant to the results of the research, but all interviews with Forest Department officials provided insights about the nature of the Forest Department in general and helped to form a more complete picture of its functioning as an organization.

Table 2.1 Breakdown of interviews conducted in the field.

	# of Interviews	% of Households Interviewed	Women Interviewed	Men Interviewed	Joint Interviews	Other Comments
Prini	35	80%	16 (46%)	19 (54%)	-	
Solang	28	70%	12 (43%)	14 (50%)	1 (3.5%)	one interview was initially with women, but when the man joined, he began answering
Old Manali	74	25%	35 (47%)	39 (53%)	-	
Manali	14	-	7 (50%)	7 (50%)	-	
Dhungri	3	-	3 (100%)	0	-	one interview involved a group of four or five women
Chachoga	4	-	4 (100%)	0	-	
Sial	2	-	2 (100%)	0	-	one interview involved a group of three women
Mahila Mandals	30	-	30 (100%)	0	-	in Dhungri I interviewed the *pradhans* of both the *mahila mandals* that were active in the village
Forest Dept	6	-	0	6 (100%)	-	• Depot employees • Two Forest Guards • Deputy Forest Ranger • Range Forest Officer, Manali • District Forest Officer, Kullu
Totals	196	-	109	85	1	

2.2.9 Some Comments About Interviews

Table 2.1 shows the breakdown of interviews and households in each village. Interviews were done on an opportunistic basis at variable timings throughout the day. I attempted to speak to roughly an equal number of men and women in each of the three case study villages, and also to speak to people of a range of ages and therefore with differing historical perspectives.

Although there was structure to each interview, which was important to interview flow, in many cases specific ideas or comments were followed up on or were spontaneously elaborated on by the person being interviewed. Facilitating this flexibility in many cases provided more insights than the structured questions would have elicited. In fact, a significant part of the analysis is built upon information offered spontaneously and in some cases repeatedly by different sources. For instance, insights related to gender roles and specific institutional responses to pressures in the forests often came out of follow-up questions linked to an off-hand comment made during an interview.

Throughout this analysis, the perspectives of local people themselves are used as much as possible. However, it should be explicitly noted that interviews relied exclusively on the abilities of a capable and reliable local translator who had participated in previous research in the area. Interviews and excerpts from the interviews used throughout this analysis are therefore not literal verbatim quotations from villagers. They have been subject to interpretation by a translator and by the interviewer while being recorded in the field, but they do reflect the sentiments of the people interviewed as accurately as possible.

2.2.10 A Researcher's Journal

I faithfully kept a journal throughout the time I was in India. To some extent my journal has allowed some reflexivity and it has been useful in several ways. I was able to draw upon my journal/field notes in a few instances in this analysis. I also find it interesting to look back because I see how off-base some of my earlier thoughts and speculations were in the context of what I had learned by the end of my journey. My journal has also served to remind me of the most significant instances where I felt that my presence was influencing the information I was receiving and I should therefore be very cautious about drawing conclusions in relation to that particular situation.

2.3 CHALLENGES / LIMITATIONS

Several factors imposed limitations on this research. Time and resources, which are both inter-related, allowed me to spend only a prescribed amount of time in the field. Adjusting to the different pace of life and research rhythm in India took some time, but this soon became less of a limitation and more of a way of life. The nature of the research, the fact that it was cross-cultural also posed some specific challenges. Some of these challenges were contextual; a limited understanding of religion and the subtleties of the caste system, both of which pervade daily life in India, made it inevitable that I would be oblivious to some of the cues and unspoken customs.

Language was perhaps the most significant limitation to this research. Culture is embedded in language and without an understanding of the local language it is a challenge to attempt to grasp a sense of the local reality. Non-verbal communication is instructive, and a capable interpreter helps a great deal, but there are always nuances such as humour that are unintelligible and details that are lost when one doesn't speak the language. Although I learned to understand more than a few words of Hindi, I found I was very much dependent on my interpreter, sometimes to my intense frustration.

The use of an interpreter in itself also places limitations on research. Information and stories are filtered through the interpreter's selective translation, and then the researcher's perspective (even if she does try to take verbatim notes). An interpreter means one additional level of interpretation and another built-in bias to what is finally recorded and attributed to the person being interviewed. Although my interpreter was an excellent resource and facilitated access to people I would not have been able to seek out without him, I found I had to be careful not to make explicit the kind of information I was interested in or the comments I felt were important, as this affected how he asked and interpreted both questions and answers. After a time, I became familiar with the way that many questions were being asked and I noticed when there was a deviation and I could therefore discuss changes to the form of the question with him.

My interpreter also perhaps influenced research in another subtle way; in many instances he facilitated the opportunities and circumstances in which I was able to make use of both 'participant observation' and direct participation. Fulfilling this role, which extended over and above simply interpreting interviews, provided unique opportunities

but at the same time these opportunities were circumscribed by his contacts, resources, perspective, and social position. It is important to recognize that the interpreter's reality and experience to a certain extent then becomes incorporated into the research process.

Plate 2.1 A guided tour of a plantation area on the right bank of the Beas River.
(photo K. Bingeman)

Plate 2.2 Two women from the *mahila mandal* in Solang village.
(photo K. Bingeman)

Plate 2.3 The village of Prini blends into the landscape, while recently constructed hotels dominate the foreground.
(photo K. Bingeman)

Plate 2.4 Houses in Old Manali – "traditional" alongside
"modern" constructions.

(photo K. Bingeman)

Plate 2.5 Interview with two women on the lower porch
of a home in Prini (Mehar Chand, the interpreter, is
seated in the middle).

(photo K. Bingeman)

'SOMETHING IS HAPPENING IN THE FORESTS . . .
HISTORICAL FORCES AND RECENT PRESSURES IN THE
UPPER KULLU VALLEY'

The forests near Old Manali.
(photo K. Bingeman)

Construction of a "traditional"
style home in Solang village.
(photo K. Bingeman)

3.1   PRE-COLONIAL PERIOD

One of the most important distinctions between pre-colonial times and the British administration in India was how and which lands were included in government revenue divisions. The designation of land was and is significant in two respects. Firstly, policies regarding forests are directly impacted by the way in which revenue is generated by forest lands and secondly, the designation of land, through forest policies, indirectly affects the system of property rights to forests. In pre-colonial times, large expanses of forests and 'wastelands' were not included within revenue divisions (C. Singh, 1998) and local rights to forests were not clearly documented (Guha, 1989; Davidson-Hunt, 1995a); there was only customary regulation of people's rights over forest lands and forest produce (Kulkarni, 1983). This meant that governments generally had little interest in the management of these lands and forest policies did not significantly infringe on the daily lives of villagers[4]. Forest management was therefore effected at the village level in the Himalaya and elsewhere in India (Gadgil and Guha, 1995) and villagers had *de facto* (if not *de jure*) rights to all forests within village boundaries (Guha, 1989). The uncultivated land of villages, including forest areas, was managed and used communally (Agarwal, 1994). An awareness existed in pre-colonial India of the value of forest timber as a commodity and a market of sorts for timber did exist. However, the incentive and the vast market for timber facilitated by colonial ties to Britain did not exist at the time and the scale of deforestation paled in comparison to what was to later occur (C. Singh, 1998).

3.2   COLONIAL CONTROL

British control in India drastically altered the existing system associated with the forests both at the government and village level, although colonial administration of forests applied to parts of India, not the country in its entirety. The British were not lacking in vision regarding the commercial value of the seemingly endless forests in India, and it was with the establishment of firm British control in India that timber extraction began in earnest (C. Singh, 1998). Early British treatment of Indian forests involved harvesting on a massive scale to supply Britain with timber for shipbuilding and

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[4] There were exceptions; in some of the princely states and in certain of the Moghul and Sikh jurisdictions, 'the state' was actively involved in forest management at the local level (Hamilton?)

other materials. Initial colonial revenue policy was similar to the pre-colonial system and did not include forests as revenue lands, but as the property of the village communities within whose boundaries they fell (Gadgil and Guha, 1992). The policy nevertheless contributed to the denudation of forests in that the removal of trees resulted in land that could be assessed for revenue. Thus, forests were simply an obstruction to agriculture and therefore to prosperity (Gadgil and Guha, 1992). Compounding these incentives to devastate the forests was the decision to build the great railway network, adding pressure on forests not only for construction materials and rail sleepers, but prior to the coal mines to fuel the engines, this burden also fell to the forests (Gadgil and Guha, 1992). The scale of the deforestation that took place up until, and to a certain extent subsequent to, the first Forest Act in India in 1878 leaves little question as to the relationship between colonialism and ecological decline according to Guha (1989) and the many others who have commented on this subject (Shiva, 1989; Gadgil and Guha, 1992; Ives and Messerli, 1989; C. Singh, 1998).

3.3   THE NATIONALIZATION OF INDIA'S FORESTS

The formalization of forest management practices (i.e. forests brought under state ownership and control) took place in India through the formation of the imperial forest department in 1864 and was secured through the enactment of the Government Forest Act 1865, which was quickly replaced by the Indian Forest Act 1878. The nationalization of India's forests was couched in concerns regarding the supply of timber for development in India and in particular, for the expansion of the Indian Railway (Gadgil and Guha, 1992).

As the imperial forest department was formed to check the deforestation of past decades, this required a mechanism for the state to assert and safeguard control over the forests. To accomplish this control effectively, legislation was required that curtailed the previously 'unrestricted' access enjoyed by communities (Gadgil and Guha, 1992). This marked a radical adjustment in government policy and in community rights to the forests. The first Indian Forest Act of 1865 was soon replaced by a more comprehensive piece of legislation, the Indian Forest Act 1878 (Kulkarni, 1983). The legislation gave the government sweeping powers to designate lands as state forests; outlining rules for use,

punishable offences, and empowering the government to make rules regarding the preservation of trees.

The priorities of colonial forestry were essentially commercial in nature (Gadgil and Guha, 1992; Guha, 1989; C. Singh, 1998), and the classification of forests under the Indian Forest Act 1878 reflects these commercially/revenue-generating oriented values.

> *Reserved forests were created in areas remote from habitation where there were limited or no rights, or in areas close to the villages where there was sufficient other forest land available for use by local people. Demarcated protected forests (DPF) were generally those remote from habitation often containing valuable timber species such as deodar (Cedrus deodara); rights were clearly defined in these forests. More rights were permitted in the less commercially valuable portions of these forests. DPF differed from undemarcated protected forests (UPF) in that grazing rights were clearly defined and the land could not be alienated for cultivation. UPF's close to habitation were considered to be a resource available for cultivation and a supply of grazing and tree products.*

(ODA, 1994:6)

In other words, areas designated as Reserved Forests were often lands that were "compact and valuable areas" (Gadgil and Guha, 1992:134) and well connected to towns that would lend themselves to sustained exploitation. In these areas, total state control was exercised by extinguishing private rights, transferring them elsewhere, or in some exceptional cases, by allowing limited access. Within Demarcated Protected Forests rights were recorded, but not settled (written into law) (Gadgil and Guha, 1992) and control was maintained through provisions for the reservation of specific species and also for the closure of the forest to grazing and fuelwood collection as required by the government[5]. Over the years, many DPF areas were reclassified as Reserved Forests in India, thus gradually increasing the control by the state.

The monumental task of demarcating and classifying India's forests and in the process, recording the rights of local people to the forests, was accomplished through the Forest Settlement. The Forest Settlement was carried out under the purview of local Forest Department Officials. In order to claim rights in the forest, individuals had to

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[5] This is true in general in India, but as will be demonstrated, the situation in the Kullu Valley is somewhat unique.

petition the Forest Settlement Officer, and this individual had the power to record such rights and ensure their provision (Kulkarni, 1983).

3.4 THE FOREST SETTLEMENT IN THE KULLU DISTRICT

Anderson, the Forest Settlement Officer, was involved in the forest settlement in the Kullu district in Himachal Pradesh until 1886, but A.H. Diack ultimately completed the settlement. An extensive area totaling 1200 square miles was demarcated and approximately 60 percent of the total forest areas in Kullu were designated demarcated or reserved forest area (C. Singh, 1998).

In contrast to other areas of India, the forest settlement process in the Kullu District did not result in the termination of rights to the forest, but rather their acceptance and formalization (ODA, 1994). Under the Anderson settlement report of 1886, only limited areas of forest were placed in the category of Reserved Forest; the greatest proportion was defined as Protected, primarily in recognition of the importance of the needs of local people (ODA, 1994). Like Lyall in the context of the forest settlement in the District of Kangra, Anderson, in some of his writings, revealed his concern for people's dependence on forest rights for their existence (Davidson-Hunt, 1997). Nevertheless, he was obliged to operate within the directive of the Forest Act 1878, which was to demonstrate state ownership of the forests and virtually extinguish village customary usufructory rights (Gadgil and Guha, 1992). The compromise was that Demarcated Protected Forests (DPF) were divided into first and second class protected forests. First class forests tended to be nearer to the villages and/or contained more valuable timber and had more restricted rights. Anderson also used the Revenue Settlement and the rights recorded therein as justification for upholding local rights to the forest (Davidson-Hunt, 1995b). These local rights persist in the present day and are exercised in customary "village use areas", each of which are well defined for each village. However, forest rights were vested in the individual, not the village, making it difficult for the village to regulate the activities of its members and forest rights also became tied to land ownership, so that anyone who did not own land was not guaranteed forest rights (ODA, 1994).

The forest settlement in Kullu was exceptional in its generous definition of village rights and resulted in a diminished Reserved Forest and a larger forest area with recorded

village rights (in comparison with other parts of India). Yet, responsibilities for management, regulation and enforcement were nevertheless appropriated by the state under the Indian Forest Act of 1878. This is the *de jure* situation in the present day.

Gadgil and Guha (1992) observed that perhaps the most serious consequence of colonial forestry was the (*de jure* and in most regions, the *de facto*) erosion of traditional conservation and management systems through the changes in proprietary status of the forests (Gadgil and Guha, 1992). This alienation of the villagers from their forests in most regions of India also undermined the capacity of forest-dependent modes of subsistence for sustainability. Recent research by Berkes, Davidson-Hunt and Davidson-Hunt (1998), Duffield et al. (1998), Duffield (1997), Davidson-Hunt (1995b; 1997) suggests that the generous definition of forest rights in the Kullu District helped to prevent the complete alienation that Gadgil and Guha (1992) refer to, and that *de facto* or customary management practices of common lands survive in the present, along with the *de facto* use of village forest areas, though no provisions for local management exist in law[6].

3.5   CURRENT LEGISLATION AND POLICY

Presently, forest management takes place within the legislative context of the Indian Forest Act 1927 and within the context of the National Forest Policy of 1988 and a Joint Forest Management circular of 1990. The Indian Forest Act 1927 was "brought into existence to consolidate law relating to forests, the transit of forest produce and duty leviable on timber and other forest products" and it makes "provisions for reservation of forests, its protection, imposed prohibitions, and restrictions in dealing with forest property" (GOI Ministry of Environment and Forests, 1998). This legislation does not recognize the forest rights of villagers beyond those rights that were outlined in the Forest Settlement accompanying the Indian Forest Act 1878. However, the National Forest Policy of 1988 signified a shift in priorities toward environmental conservation and protection, meeting fuelwood, fodder, minor forest products and small timber needs of rural and tribal populations and was a departure from prior forest policies that focused on

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[6] The *de jure* context in which this management occurs implies permission unless prohibited, so in effect it is not strictly contrary to the law.

meeting industrial and commercial forest product needs and maximizing revenue (Sarin, 1995a). Up to this point, and even today in law (given that the 1927 Act is the formal legal instrument that guides forest management), the primary focus of forest management has been on sustained timber yields and conservation has been a secondary concern (ODA, 1994)[7].

Another less formalized, yet critical principal that currently influences Forest Department operations is the Joint Forest Management (JFM) circular issued in 1990 by the Government of India. The circular was a policy instruction that defined an operational and institutional framework for the 1988 National Forest Policy. Neither the policy nor the circular goes as far as to delegate any management or regulatory responsibility to local people, but JFM represents an important shift in attitude and approach to the management of the forests.

In the Kullu District at the local level, the Joint Forest Management committees that are being formed as a result of the policy instruction, the *mahila mandals* (village women's organizations), and village rules-in-use are examples of institutions important in the management of the forest. These groups and their associated institutions will be detailed as the discussion progresses.

3.6   FORCES OF CHANGE IN THE PAST THREE DECADES

The past two centuries have seen several external factors imposed upon the local village-centric system of landuse and land management. The latest and least organized of these forces has taken the form of rampant growth of commercial activities in horticulture and tourism and related urban services and functions. Commercial horticulture and tourism are not new phenomena to the Kullu District of Himachal Pradesh, or to the town of Manali. Orchardry has played a small role in the economy since the arrival of the British in the 1870's (Gardner, 1995), and the Western Himalaya has long been a destination for various tourists and pilgrims (Sarin and Singh, 1995). However, in the past three decades, several factors have combined to intensify the importance and influence of these commercial activities, resulting in pressure on the forests in the area

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[7] Conservation has not, however, been entirely absent from the rationale for the Indian Forest Acts. The Indian Forest Act of 1878 came into being under the 'scientific forestry' approach, which had water conservation and erosion prevention as part of its rationale (Saberwal, 1999)

and therefore also on the complex social-ecological system in place which governs the management of the forests.

Improvements in communication and in transport, including paved (to some extent) and relatively reliable motorable roads have improved the accessibility of the area to distant markets and have made the area more accessible to the general population (**Plate 3.1**). Electrification, improved telephone systems, television (and satellite capability) and the Internet have been instrumental in opening the area to global influences and have been key factors in subjecting the area to outside forces of change, and as such have intensified the importance of commercialization. The road through Manali has become a major national road link (National Highway N-21) and crosses Rhotang Pass *en route* to the Districts of Lahaul and Spiti and further to Ladakh and Kashmir. This accessibility has directly facilitated a greater number of visitors to the area and has made commercial provision and the supply of goods and services more economically viable both for agricultural and horticultural products and also for products related to the tourism industry (Sandhu, 1996). As one villager in Solang remarked,

> *In the past, if salt were needed, people would have to walk all the way to Mandi. Now people can go anywhere and even fly to Bombay in one day.*
>
> (Solang, Oct. 24/99)

Conflicts in Kashmir have caused the road to become strategically important as a transport route for troops and supplies to areas of conflict; during the summer and fall of 1999, convoys carrying troops and supplies were a daily source of traffic delays.

Aside from conferring strategic importance to the National Highway, the conflicts in the popular tourist destination of Kashmir beginning in 1989 had direct implications for the tourism industry in Kullu. Escalations of conflict in Kashmir resulted in the area becoming essentially closed to tourists, consequently directing a flow of tourists to the Kullu area (Sandhu, 1996). Economic prosperity and the growth of the middle class of the Indian population have also brought the costs of a Kullu vacation within the reach of an increasing number of Indians (Sandhu, 1996).

Clever marketing and subsidies have supported both tourism and the commercial agricultural and horticultural industries. The Himachal Pradesh Tourism Development

Corporation acted as a pioneer in the development of hotels, "luxury" buses and restaurants and the Himachal Pradesh Finance Corporation and the Department of Tourism have in the past offered direct economic incentives for hotel and restaurant building (Singh, 1989). Although these incentives indeed stimulated development, often those who benefited most were outsiders,

> *To develop tourism, the government offered subsidized rates (25%) to build. At the time, local people were poor; they couldn't afford to build and therefore did not benefit from the subsidy. When local people became prosperous enough to take advantage of this offer, the government stopped offering the subsidy. Outsiders made money and they still do.*
>
> (Manali, Sept. 16/99)

The apple products of Himachal Pradesh are marketed throughout India and are perhaps the most visible horticultural products (**Plate 3.2**). However, markets have also been created for the Kullu Valley vegetables marketed in the "off-season" in urban centres to the south and the area is a staging point for the distribution of potatoes to other states. Local people associate the vegetable markets with tourism and recognize the trade-offs of expanded markets.

> *Farmers are getting good prices for their fruits and vegetables because of tourism, but they also must pay higher prices themselves.*
>
> (Old Manali, Oct. 27/99)

Population growth in general has occurred throughout the area, in addition to the population growth in Manali attributable to in-migration. This has both heightened the importance of tourism and commercial activities as well as directly put pressure on the forests.

The recent boom in tourism and commercial horticulture is manifest in many ways in Manali. Manali was declared a town in 1981 and in 1997, the local government became an elected Nagar Panchayat – a form of local government, which, according to the Indian Constitution, is reserved for an area "in transition from a rural to an urban area" (Cole, 2000). The number of guesthouses and hotels has increased dramatically in the rush to provide accommodation for seasonal visitors, and the number of shops to supply both souvenirs and handicrafts and other provisions similarly expanded (Cole, 1999). A concurrent increase in services such as medical facilities, restaurants, and taxis

and in various urban functions and associated pressures from solid wastes and sewage has also taken place during these decades.

3.7   A Focus on Manali

A brief look at the story of Manali town, its origins and initial expansion is important in terms of understanding rights to the forest and forest products and also explaining why it made sense to move beyond Manali and concentrate research in a few villages within the surrounding area. Forces of change in recent decades remain most relevant to what is happening in the current context of forest management, but a closer examination of the implications of some of these changes for Manali residents further adds to the overall understanding of the complexities of forest management.

The town of Manali actually borrows its name from the adjacent village of 'Old Manali' or Manaligarh, as it is now known in order to distinguish it from the town of Manali. Since 1870, when Scottish Forester Duff Dunbar built his house in Dhungri and up until the 1950's, the official name of Manali (on maps and other documents) was Duff Dunbar (Chetwode, 1972; Singh, 1989; Shabab, 1996). However, the spot was known locally as Dana or Dana Bazaar, which was translated to me to mean 'fodder for the horses'. Chetwode (1972) also translates Dana as 'fodder' and similarly, Singh (1989) translates Dana as 'grain'. Regardless, Dana was a stop for explorers and traders travelling on mules or ponies to collect fodder for the onward journey to and over Rohtang Pass and onwards to Lahaul, Spiti, or further to Ladakh. Thus, Manali was not a village that developed into an 'urban centre' but rather a rest stop on a trade route that grew into a tourist destination and a staging point for access to larger commercial markets on the plains. Consequently, unlike villages in the area whose residents exercise usufructory rights in various forest areas, there are no forest areas that are known as 'Manali's forests'[8].

Singh (1989: 38) comments, "Surprisingly, what was once a mere cluster of a few farmsteads, Manali has acquired a personality of a tourist agglomeration, vying with many a nature resort in the adjoining Kashmir Himalaya." Manali began its initial

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[8] Aside from the Manali Sanctuary – a Reserved Forest – though even this area is claimed as a usufructory area for livestock bedding by the villagers of Old Manali (though they don't claim exclusive use).

expansion following a visit in 1958 by then Prime Minister Jawarhalal Nehru, who "waxed eloquent in its praise, having discovered a place of exceptional calm and natural beauty" (Singh, 1989:104). Local residents also mark Nehru's visit as a significant event that was to help promote the town as a tourist destination. The government of the time[9] capitalized on the media publicity of Nehru's visit and began a program to develop tourism infrastructure in the region (Cole, 2000).

Also of significance to the beginning stages of urban development in Manali was the Kullu to Manali road. Singh (1989:138) suggests that the expansion of accommodation in Manali was concurrent with the completion of the Kulu Manali road by the government of Himachal Pradesh. "Tourists tide swelled after the road, and tourism firmly established its feet in the 60's." Still, the pace of growth was slow; the owner of a dry goods store in the bazaar recalled that even in the mid seventies,

> *Manali bazaar used to have one line of small stores that were really only sheds; there weren't any buildings.*
>
> (Manali, Sept. 17/99)

Another resident commented,

> *Twenty to twenty-five years ago the area above the bazaar was all [rice] paddy fields.*
>
> (Manali, Aug. 4/99)

3.8   RIGHTS TO FORESTS

The paddy fields referred to above and the process by which the land was eventually converted to its current condition, where little remains undeveloped, have implications in terms of the rights of Manali residents to the forests. The paddy fields were owned primarily by the villagers of nearby Sial, though the town has also expanded onto the lands of villagers from Dhungri and now infringes on Old Manali. Many villagers have sold, leased, or themselves developed what was once agricultural land. Whether it is true under the law or not, the perception and *de facto* present situation is that those land-owning 'outsiders' do not have rights to the forests, even though the land purchased was originally part of village holdings.

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[9] Himachal Pradesh did not exist as a state until 1971.

*Manali residents don't have rights to collect fuelwood from the forests; we
don't have rights on any forest areas.*

(Manali, Sept. 17/99)

*Villagers still have rights, but in the bazaar we don't have rights. Go to
the villages.*

(Manali, Sept. 17/99)

Yet this is a recent issue; the abundance of forest resources in the past meant that
there was little concern over who was using the forests, what area they were procuring
forest products from, and whether they had rights to do so.

*There used to be so much wood lying around, no one used to care or say
anything if someone took a fallen tree.*

Manali, Sept. 17/99)

3.9   CHANGES TO FOREST AREAS AND REASONS FOR CHANGE

As of summer 1999, the situation regarding forest resources is much different.
The growth of Manali and all of the associated changes discussed above have resulted in
pressure on forest resources and, according to local people, one of the most important
manifestations of this pressure is the felling of trees (**Plate 3.3**). The changes to the forest
as a whole do not appear to be significant in terms of area under forest cover;
photographic documentation shows that the area under tree cover has not receded to any
significant extent in the past decades (Duffield et al., 1998), and in some areas the
boundary of the forest has in fact expanded (Gardner et al., 1997). Changes *have* taken
place, however, in terms of the density of tree cover, species composition, age class
structures, and the accessibility of useful species to any one community (Duffield et al.,
1998; Duffield, 1997). The felling of trees has been concentrated in village forest use
areas that are utilized extensively by villagers. It is the changes to these areas and the
associated changes to the availability of the forest products collected and harvested from
village forest areas that are a source of local concern and have led to the emergence of
issues of rights and rules regarding the forests.

*There used to be so much broken and dead wood in the forest. Now, from
a distance, the forest is still there but when you go, there is nothing, no*

broken branches. The needles from the trees used to be two feet deep on the forest floor and now you end up bringing mud as well as needles.

(Old Manali, Oct. 31/99)

People from Manali used to come [to use our forests] and some still come . . . In the past, there was lots of wood, so no one used to stop them from coming, but since the mahila mandal came into existence, we have stopped allowing this. We thought the forests would disappear so we started restricting who could use the forest. We wondered where our children would go so we began to stop them from coming.

(Dhungri, Oct. 17/99)

Trees have been felled to supply different needs. One of the questions that usually generated a great deal of discussion during semi-structured interviews was how the forests had changed over the past three decades (or as far as they could remember) and what the reasons were for those changes. Usually, people listed several factors they considered relevant in terms of changes to the forest. **Table 3.1** depicts some of the most common responses from villagers in Prini, Solang, and Old Manali. Although many people mentioned illegal felling as reason for the changes to their forests, this is a general comment and cloaks the specific reasons for which the trees were felled. Those who elaborated on the subject indicated that in earlier years, timber was in demand for boxes in which to transport apples. Multiple sawmills in villages where previously only one had existed or none at all became the norm and one sawmill owner in Old Manali indicated that before the use of local timber for apple boxes was banned in 1985 or 1986 the sawmills were running 24 hours/day.

. . . when the apples began to be sold, people needed apple crates. People used to get TD rights to five trees, pay the Forest Department, and then cut fifteen and take them to the sawmills.

(Manali, Sept. 17/99)

People indicated that in recent years, trees have been felled to supply the construction boom in the Manali area to build guesthouses and hotels,

Manali town is built from the forest of Old Manali.

(Old Manali, Oct. 26/99)

As the hotels have increased, the forest has decreased.

(Old Manali, Oct. 26/99)

Since building, construction, hotels, tourism, people are not thinking; they chop down the trees and use a little and sell the rest.

Local people also indicate that an increase in the number of houses and structures being built, which villagers attribute to population increases, has significantly affected their village forest use areas (**Table 3.1**),

The needs of the people have increased because the population has increased. People need wood for cooking, heating, building houses, and construction.

Table 3.1: Reasons given by villagers for changes in the state of local forest resources.

Village	Attribute forest resource problems to illegal felling	Link forest resource problems to sawmill processing for apple boxes	Link forest resource problems specifically to tourism	Link forest resource problems to pressures from increased population	Attribute forest resource problems to Forest Corporation Contracts where more timber was felled than was contracted
Prini	10 (29%)	3 (9%)	---	9 (26%)	---
Solang	5 (18%)	---	---	9 (32%)	16 (57%)
Old Manali	39 (53%)	1 (1%)	19 (26%)	23 (31%)	---
Total	*49 (45%)*	*4 (4%)*	*19 (17%)*	*32 (29%)*	---

Local people's comments about changes to their forest areas and the reasons given for these changes should neither be accepted wholesale as completely accurate, nor should they be rejected out of hand as speculation. They should be regarded with caution without support from other sources. However, the fact that a number of people independently voice similar concerns indicates that changes to forest areas are a real issue at the local level.

As one of the most recent initiatives designed to rehabilitate and reforest degraded forest areas in India, Joint Forest Management (JFM) is predicated on local participation in forest management. The perception that village forest areas are changing is therefore an important ingredient for the initiation of Joint Forest Management projects. In the Manali area then the pressures on village forest use areas as a result of expansion and growth in the town of Manali have established a context in which JFM is feasible. In Chapter Four, I explore the implementation process of JFM in two villages near Manali and comment upon the dynamics that are influencing this process.
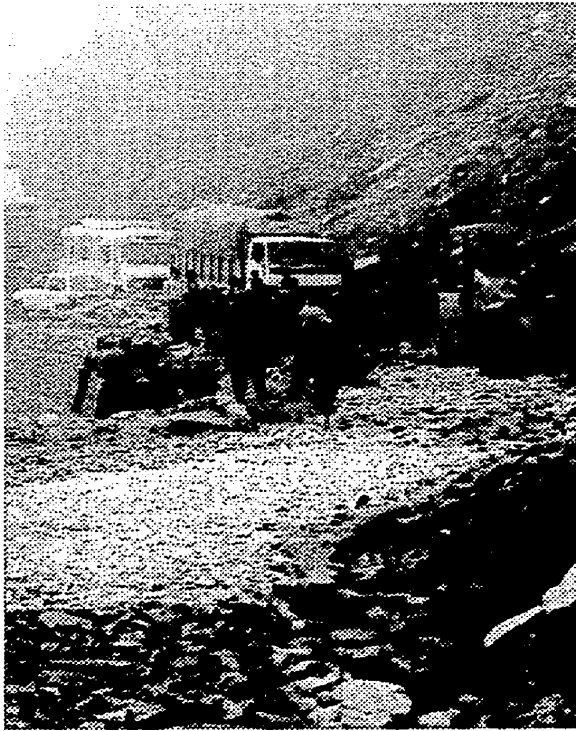
Plate 3.1 Working to make the road to Rohtang Pass negotiable following a landslide.

(photo K. Bingeman)

Plate 3.3 Evidence of illegal felling in forest areas used by the village of Old Manali.

(photo K. Bingeman)

Plate 3.2 Apples growing in John Banon's orchard, Manali.

(photo K. Bingeman)

CHAPTER FOUR:

'RECENT EXPERIMENTS WITH INDIA'S JOINT FOREST MANAGEMENT POLICY'

View of Solang village from the ski hill on the other side of the Solang River.
(photo K. Bingeman)

The medicinal plants nursery, Solang, as part of the Joint Forest Management in the village.
(photo K. Bingeman)

4.1 Introduction

As a starting point in the discussion of the various responses to pressures on the forest areas and changes to the forests, India's Joint Forest Management (JFM) policy is a natural choice for several reasons. The initiation of Joint Forest Management projects is the most recent response to pressures on forest areas in the Kullu Valley, and in a broader sense to the overall forest social-ecological system[10]. Although JFM addresses the general national desire to rehabilitate degraded forest areas and involve local people in forest management, recent urban growth in the Manali area has created additional rationale/justification for the program. Finally, JFM is a logical place to begin an analysis of responses to pressure on the forest social-ecological system as it is the most formal response, a government initiative, funded both by external agencies and the Government of India.

Although a large literature on JFM in India exists, I drew upon some points that are relevant to issues in the Manali area. JFM has been critiqued using many criteria, both ecological and social. I tried to focus on that which is pertinent to the questions I asked in the two communities where JFM was underway, and highlight some areas where comparisons may be made with the literature. It is too early in the process to evaluate the extent to which the goals of the policy have been met in the Manali area, but it is possible to begin to comment on early efforts to operationalize the policy. The process itself contains insights into why JFM may or may not be 'working' at this early stage. In this way, the objective to explore the process and progress of newly initiated Joint Forest Management projects is explored in this chapter.

4.1.1 Thumbnail Sketch of JFM

JFM is a recent policy initiative devised to implement progressive notions outlined in the National Forest Policy (NFP) 1988 regarding the rehabilitation and sustainable management of degraded forests. Ideas outlined 1988 NFP such as the creation of "a massive people's movement with the involvement of women" (Government of India 1988, as cited in Sarin 1995a) are the foundation upon which JFM

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[10] The phrase 'forest social-ecological system' encompasses the idea that the ecological forest processes and social structures are inextricably linked and each in turn influences the other.

is based. The National JFM policy instruction defines the vehicle for realizing the above objectives in the form of benefit-sharing agreements between the forest department and newly established community institutions for the protection and rehabilitation of degraded forest areas in order to meet local needs. The specific structure of the benefit sharing agreement and the community institution is outlined in State JFM policies.

The first JFM resolution was the 1989 West Bengal resolution. In 1970, A.K. Banerjee, an Indian forest service official in Aribari, West Bengal, offered local villagers employment and in return asked them to cease grazing activities and cutting fuelwood on 'his' field station where he was conducting silvicultural experiments (Poffenberger, 1996). This agreement with villagers was the beginning of JFM[11]. By 1972, the first forest protection committees (FPCs) were created in the villages surrounding Aribari. JFM was not widely implemented during the 1970's because informal JFM arrangements tended to be carried out in isolation from one another (Poffenberger, 1996). Forest officers did, however, communicate their experiences to superior officers and slowly incentives for JFM programmes were developed to encourage other forest officials. By the 1980's, Forest Department officers were actively encouraging JFM. This is the process by which JFM became more widely embraced. The evolution from an informal to a formal policy in West Bengal involved forest department officials at individual and institutional levels, and the people of West Bengal. The lessons learned from West Bengal shaped the national resolution, and due to successes in West Bengal, a group of individuals from government and NGO's came together to draft the policy which would become the 1990 National JFM resolution (Poffenberger and Singh, 1996).

JFM became part of State Forest Department policy in Himachal Pradesh in 1993. The goal of the policy is explicitly "to arrest [degraded forest areas'] further environmental degradation and to augment fuelwood, fodder and small timber production for use by local people" (Government of H.P., 1993). Also affirmed in the policy is that "active participation of the local people is vital for planning, aforestation and judicious

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[11] Sarin (1995a) also mentions a pilot experiment in "social forestry" in Haryana in the 1970's as also shaping some principles that later formed the basis of JFM, such as membership to all households and equitable sharing of costs and benefits of protection amongst all members. However, it was the West Bengal JFM framework that was ultimately used as a model for other states (Sarin 1995a).

use" (Government of H.P., 1993). JFM committees are termed Village Forest Development Committees (VFDC), and it is stipulated that "one adult mail (sic) and female member of each family shall be enrolled as member of the General House of VFDC". Further, the executive body will have 9 to 12 members, including the *mahila mandal pradhan*, the *pradhan* of the youth group in the village, and members of the *panchayat* from the village. At least 5 members of the executive body must be from the general village and half of these 'general' members of the executive must be women.

4.1.2 Framing the Issues: Joint Forest Management

Joint Forest Management has been the subject of a considerable amount of discussion and analysis from many standpoints in the literature. The broader question of whether JFM is a policy that is flexible enough and suitable to implement wholesale in communities across India has been raised by more than one author (Chhatre, 2000; Ogra, 2000). However, it is not my intention to delve into the debate on the appropriateness of JFM. Instead, JFM will be examined as an attempt to implement a participatory policy. The discussion regarding JFM within the literature spans the disciplines from scientific perspectives that examine JFM in terms of forest regeneration and increases in area under forest cover to the social science disciplines[12] where the perspectives vary considerably.

Although the scientific literature is by no means unimportant – forest regeneration is one of the goals driving JFM policy – much of the social science literature explores the underlying social dynamics that are arguably responsible for the success or failure of forest regeneration. Chhatre (1996; 2000) chooses to focus his analysis of JFM from a historical perspective; and Sundar (2000) comments on JFM as a co-management initiative. Saigal (2000) and Kant and Cooke (1999) explore some of the conflicts that have emerged within local groups, between local groups and external groups, as well as conflicts at the policy level.

There is also a significant group of authors who examine JFM in the context of gender issues and social equity (Sarin 1995a; 1995b; Agarwal, 1997a; 1997b; Ogra, 2000; Locke, 1999), and still other authors evaluate JFM with respect to property rights

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[12] I use the term 'social science' in a very broad and inclusive sense.

regimes (Agarwal, 1997a; Wisborg et. al, 2000). A broad spectrum of institutional issues in the context of managing forests as a common property resource are addressed by such authors as Lele (1998) and Sekhar (2000).

Regardless of disciplinary or interdisciplinary perspective, a great deal of the literature concerned with JFM centres on evaluating the success of JFM initiatives. Some take a macro view and compare criteria between many projects from a large region (Sarin, 1995b; Ogra, 2000; Agarwal, 1997a; Lise, 2000), while other discussions evaluate a smaller number of initiatives at the micro scale (Wisborg et. al, 2000; Sekhar, 2000). In the Manali region, JFM projects are in relative infancy and thus an analysis of 'success' is not only unproductive, it is not particularly feasible.

"Success" is, however, by no means the only useful or interesting aspect of policy analysis. There is a great deal to be learned from the implementation process and it is often the dynamics and details at this stage which ultimately dictate whether a policy initiative will even reach the stage at which there are outcomes to be judged as successful or unsuccessful. The implementation process involves examining context, how the policy fits into local realities; in many instances analysis at the micro or local scale is important (Lele, 1998). Although there are dangers associated with applying conclusions from local level analysis at broader scales or generalizing from very specific circumstances, the nature of a participatory approach to policy implementation demands a 'bottom-up' approach that incorporates flexibility and inclusiveness. In this context, analysis at the local level becomes not only pertinent, but also essential. Although generalizations may not be possible from such an analysis, issues that require critical thought and discussion in designing or implementing policy are often highlighted.

The implementation process is a major focus in the literature on JFM; several areas of discussion are relevant to the present discussion. (1) Participation, (2) the consequences of the policy structure for the implementation of JFM, (3) heterogeneity within communities are issues that have received a fair amount of attention and comment. (4) The role of history and historical relationships has been discussed to a lesser extent in the literature, and (5) some points related to the significance of the Forest Department as an organization have been the subject of debate, while others have been almost ignored.

References in the literature related to these specific issues will be integrated into the discussions in the following analysis.

4.2 Experiments with JFM in Prini and Solang

JFM projects were underway in two of the villages where research was conducted, both in Prini and in Solang. Prini is a village of approximately 40 households, situated on the left bank of the Beas River, downstream approximately seven kilometers from Manali. The village is set back from the river on the slope of the hill that becomes the Hampta Jot, a popular trekking route into the Spiti Valley. Below the village proper are relatively gently sloping rice paddy fields or *ropa*, which are intersected by the road. On both sides, a small stream or *nallah* delineates the village area. Many of the homes in Prini are of the traditional construction of layered timber beams and stone with the gorgeous and often ornate verandahs circling the second story. The centre of the village is the social hub. The primary and secondary schools are located here and there is a large courtyard area, which functions as the volleyball court and game area, as well as the village gathering area. On the periphery of the schools and courtyard is a small teahouse, which also caters to the sweet tooth of the children on their breaks from school. The teahouse is also a place for the very old, the very young, and the otherwise idle to indulge in a game of cards or catch up with the daily news or political debate. The village also has a dry goods shop and on the outskirts of the village on the road are a few other shops and a tea stall.

In contrast to Prini, Solang is more removed from the urban influences of Manali. However, across from the village is a ski hill, which is a significant winter tourist attraction and also has paragliding and picnicking in the warm months. In addition, the development of the ski hill across from the village has stimulated the growth of not only tea stalls and *dhabas* to service tourists, but also a few guesthouses on this side of the *nallah*. Thus, Manali's urban growth in a sense spills over into this area. To reach Solang, one must cross over the Solang River via footbridges and then begin a winding ascent up a steep hill for about 10 minutes. The road only extends as far as the ski hill across the Solang River from the village. Houses in the village are clustered together and there are very few 'modern' style homes here. The central courtyard surrounded by the primary and secondary school seems to be the focal point of the village, similar to Prini and

indeed most villages in the area. Many of the houses are side by side, sharing a wall and appear to be single dwellings, and other houses are uncharacteristically large. The JFM *pradhan* of Solang informed me that there were 40 households in the village, but there are scarcely more than twenty homes. I suspect that these large houses support extended families that, within the village, are considered separate households. Many families in Solang are shepherds in addition to farming the land. Some families have herds that are kept at Beas Kund in the summer and are taken to Mandi in the winter. My impressions and information from interviews suggest that the number of families involved in keeping a herd has declined and many have sold off their sheep and goats.

JFM is about the rehabilitation of the forests and the people of the Kullu Valley value their forests. This is evidenced by comments in interviews that indicated an almost unanimous level of support for the ideas and activities of JFM (i.e. the plantations and the control structures intended to check erosion and attempt to reduce incidents of flooding).

> *If we plant trees and protect them, no one loses.*
>
> (Prini, Sept. 9/99)

> *In this [JFM] there is benefit for the children's future.*
>
> (Prini, Sept. 12/99)

> *The plantations are good and the closure of areas means that the grass is nearer.*
>
> (Solang, Oct.1/99)

Some individuals in Solang expressed appreciation for some of the recent efforts on the part of the Forest Department to establish a mutually beneficial relationship with their community. In particular, meetings initiated by the Forest Department with the *mahila mandals* to introduce JFM and discuss the priorities of the *mahila mandals* were cited. There was also some recognition of the shift in the approach of the Forest Department regarding relationships with communities.

> *The Forest Department told us that these are our forests. In the past, there was a communication gap, but now people are beginning to realize that they have a moral duty to save the forests. The relationship between the Forest Department and the village is better; there is more cooperation. Before, the Forest Department was giving orders and now they are asking for opinions.*
>
> (Solang, Oct. 27/99)

Support and appreciation, however, do not always translate into participation. Nor are they necessarily a sufficiently strong foundation on which to build a partnership between a formal bureaucratic organization and a socially and economically heterogeneous community, which encompasses competing interests and some pre-existing resource management structures.

Thus, the above comments about support for JFM are a caveat of sorts. There is support for the initiative, yet this does not necessarily translate into participation in JFM. In the discussion that follows, an initial quantitative analysis of the interviews carried out in Prini and Solang facilitates further discussion on (indirect measurements of) participation levels in JFM projects. The quantitative analysis clearly draws attention to the need for qualitative analysis of the interviews in the villages and of interviews with various forest department officials. In discussing the structure of a policy, the point is made that structures designed to promote representation of various interests within a village are not sufficient to create a forum where this can in fact take place. In addition, history, heterogeneity within the villages, and the very nature of the Forest Department organization and operation are examined as layers of complexity that are not only masked by quantitative analysis but also must not be ignored in attempting to implement a participatory policy.

4.3   PARTICIPATION IN JFM IN PRINI AND SOLANG

Participation by local people in the management of the forests is an explicit goal of both the National JFM policy circular (Government of India, 1990) and the state JFM policy in Himachal Pradesh (Government of H.P., 1993). Adequate levels of participation in the JFM projects of Prini and Solang are therefore fundamental to the policy implementation process.

The use of the term 'participation' requires some clarification. The current popularity and preoccupation with participatory approaches to almost everything has meant that minimal involvement of local people has lead to claims of participatory policies, management, projects, etc. Similar to 'sustainable development', 'participation' will soon be a word rendered meaningless without an accompanying explanation. One author notes that the use of the term to describe radically different strategies has led to confusion and allows for the easy adoption of rhetoric (Vira, 1999). The structure of JFM

allows for input into decision-making at the level of the meetings of the village forest development committee, and limited decision-making at the level of the executive committee.

During the summer and fall months of field research, JFM meetings were sporadic. However, this was normal for the time of year. Several people interviewed made the comment that during the busy times of the annual agricultural cycle, meetings often did not take place, though it was not for lack of interest or organization. As a result, direct measurements of participation in JFM were not feasible. Ideally, primary observations of the process and dynamics of multiple meetings would have enabled the assessment of participation both in terms of numbers of people attending meetings, and in terms of the number of people actually offering opinions and contributing to the discussion. In fact, there was opportunity to observe only two JFM meetings in Prini. On one occasion, the Forest Guard was present and on the other occasion, the Deputy Range Officer was present as representatives of the Forest Department. Both meetings were sparsely attended and only men were present. In Solang, a JFM meeting had been scheduled, but was postponed on several occasions.

Through the interview process, however, it was possible to determine the level of awareness with respect to village initiatives and activities associated with JFM in the villages, as well as to approximate the level of attendance at JFM meetings. Thus, these two criteria formed the basis for the assessment of participation.

Quantitative analysis of the level of awareness regarding issues or activities associated with village JFM projects, and levels of attendance at JFM meetings revealed several things (**Table 4.1**). In Prini, 26% of people interviewed could not comment on issues or activities related to the JFM initiative in their village. This was surprising, given that in Solang, all 22 people asked about JFM possessed some degree of awareness.

Similarly, in Prini, only 34% of those interviewed indicated that they had attended a JFM meeting, while in Solang, 60% of people had attended meetings. Thus, in Prini there are clearly difficulties with the interrelated issues of both awareness of the JFM initiative, attendance at meetings, and by extension, participation in general at JFM meetings.

Table 4.1. Levels of participation in JFM in Prini and Solang measured through awareness and attendance at meetings.

	Prini	Solang
Number of Households	approx. 40	35-40
Number of Households Interviewed	35	28
Degree of awareness of JFM or JFM activities in village		
• no awareness	9/35 (**26%**)	0/22[13] (**0%**)
• low awareness (haven't attended a meeting)	14/35 (40%)	5/22 (23%)
• aware of JFM issues/meetings/activities	12/35 (34%)	17/22 (77%)
Attendance at one or more JFM meetings	12/35 (**34%**)	12/20[14] (**60%**)

The differences between the two villages illustrate a few key points. Firstly, from the differing situations of village level implementation of JFM it may be possible to highlight some of both the positive and negative aspects of the implementation process. Secondly, though it is stating the obvious, each village has a unique history and local context that must be considered on a case by case basis in any analysis. From this perspective, the qualitative information shared in interviews becomes essential to an understanding of why these quantitative differences in awareness and participation in JFM exist. The qualitative comments and information shared by villagers also offer more insight into the implementation process of JFM in these two villages.

4.4 THE IMPLICATIONS OF POLICY STRUCTURE

Having attended only two JFM meetings, I can not confidently make direct comments about the extent to which a variety of opinions may or may not be represented or expressed at JFM meetings. These kinds of interactions are often very telling in terms of the functioning of participatory processes. However, JFM in Prini and Solang may not

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[13] Six people were not questioned as to their awareness of JFM or JFM activities.
[14] Eight people were not questioned as to their attendance at JFM meetings.

even be at a point where meetings can function as a forum to accommodate or address differing interests or needs. There is evidence that at the structural level, there is a gap between the structure of the committees, which are designed to address issues of representation, and the reality of whose views are being represented on those committees.

The executive committee in Prini was exclusively male and did not have the required representation from the *mahila mandal*. In addition, though not in the state guideline, but in the national policy circular, the interests of the 'poor' and the Scheduled Castes are also to be represented within the executive body. The Deputy Range Forest Officer for the area acknowledged this and he indicated that there were plans to rectify the issue of both the representation women and the most economically disadvantaged persons in the village in the future. Yet the failure to include the interests of the economically disadvantaged had already begun to have consequences. Labour for projects in relation to JFM was contracted out because at the meeting the Forest Department was given to understand that none of the villagers had time or interest to do the work. In fact, some of the more economically disadvantaged villagers subsequently approached the *panchayat pradhan* and asserted that they would have appreciated the opportunity to work. As they were not present at the meeting, their interests were not considered.

Adhering to the letter of a policy does not, however, guarantee adequate representation of interests. In Solang, women were represented on the committee at first glance. The names of three women were recorded as members of the executive committee. However, one of these women had no knowledge that she was on the committee.

> *I just attended two or three village meetings. I don't know how my name was mentioned; maybe they just took my signature. I haven't been asked to be on the committee.*

(Solang, October 27/99)

Another woman explained her role on the executive committee,

> *When all the people are there – the District Forest Officer, the Chief Conservator of Forests, etc. – then I attend . . . they want the women there participating so we go.*

(Solang, Oct.30/99)

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Thus, even when the structure is being adhered to, if the spirit or intent is lacking, representation may be occurring on paper only. Although the importance of committee structure outlined in the policy should not be negated, from the above discussion clearly this is not sufficient to ensure all voices are heard.

4.5 HETEROGENEITY AND DIVISIONS WITHIN VILLAGES

Representation issues, however, go beyond ensuring that the community groups identified in the policy are represented in JFM committees. Saigal (2000) and Ogra (2000) have raised the point that, in addition to problems with women's representation in general, certain subgroups of women, the landless, and the lower castes are often inadequately represented. At the root of this perhaps are oversimplifications in terms of describing communities. Although the term 'community' is often associated with territorially discrete, homogeneous social units, increasingly there is a recognition that in practice, this idea of community often has little to do with reality; communities and community interactions are subtle and complex. This recognition has sparked renewed interest in interdisciplinary discourses that attempt to deconstruct notions of community and in doing so redefine thinking on community-based management (Agrawal, 1997; Jeffrey and Sundar, 1999). Sundar (2000) points out that it is not that which is shared, be it values or understanding, but perhaps the fact that members of a community are engaged in the same discourse in which conflicting values, interests, goals are 'threshed out' that is important in thinking about communities.

Potential exists in every community for divisions both between and within various groups. These 'groups' can include formal and informal community organizations as well as sectors of society. They may be described as 'village politics' or 'village dynamics', and whether it is as a result of economic, social, cultural, political or any other type of difference, heterogeneity is inevitable and results in different positions and interests irrespective of the issue in question. Community alliances, disputes, the complex web of politics, and unspoken or assumed relationships are often extremely difficult to unravel. These complexities are not necessarily readily apparent, especially to an outsider, and particularly an outsider who must rely on translation instead of being able to directly grasp the subtleties embedded in language. Nevertheless, even to an unacquainted researcher, it became apparent that following the JFM recipe does not necessarily result

in the representation of all, or even most, of the community interests present in these two villages.

Heterogeneity in terms of economics and livelihood requirements were a source of divisions between social groups in the two villages. In Prini, the opinion was voiced that meetings were for the 'rich'.

They do their own meetings. The rich people go; we are poor.

(Prini, Sept. 14/99)

This was not a universal opinion, but divisions between 'rich' and 'poor' also surfaced in terms of access to timber through Timber Distribution (TD) entitlements. In this case, several respondents who identified themselves as 'poor' made reference to the difficulties encountered by people from the lower economic strata in negotiating the process of applying for and receiving timber through the TD system. As intimated in earlier quotations, the 'rich' reportedly encounter fewer problems in receiving TD timber. Or as one villager bluntly put it,

I think money is going under the table and TD timber is only given to those who can do that.

(Prini, Sept. 15/99)

In Solang, one of the main conflicts within the village was related to the livelihood requirements of those families who herd sheep and goats and those families who do not. Several individuals who moved their herds seasonally from pastures above Solang in the summer to pastures near the town of Mandi in winter months expressed frustration at their perceived lack of sensitivity to their needs.

The people who don't have sheep were asked and they said the area should be fenced. They didn't ask me.

(Solang, Oct.9/99)

Areas have been fenced and trees have been planted. It has caused problems for grazing the sheep. If they had fenced one area, it would be okay, but almost everything has been fenced.

(Solang, Oct. 6/99)

Closing both areas [on each side of the village] has made things difficult – there is no pasture to graze sheep. One area should be fenced and one area should be left open. People who have sheep have a problem; for people who don't have sheep, this isn't a problem.

(Solang, Oct. 9/99)

Although there were also many people in Solang who felt that closing forest areas posed no problems, there were others who felt that the herding families' views had been adequately heard and addressed.

> There are not so many sheep now, there is enough area to graze sheep for one or two days above the village. We spoke to everyone – this is why some area was left open for pasture.
>
> (Solang, Oct.24/99)

Saigal (2000) and Ghate (2000) have described similar situations where closing forest patches and grazing bans had differential impacts on different sectors of the community and on other stakeholders such as migratory herders, and where these differential impacts had not necessarily been considered because of inadequate representation. The message to be taken from these contradictory opinions is that positions and interests related to the issue of closing areas of the forest are not uniform throughout the village. Further, these differing interests are a source of conflict and have the potential to impact the success of JFM in Solang. To date, herding families clearly did not feel their needs were being adequately accommodated and interviews with the Forest Department did not suggest that they had recognized the potential for these opposing interests to become a source of conflict and potentially hinder the success of JFM in this village. The Range Forest Officer for the area spoke of nothing but the successes and progress of JFM in Solang.

Heterogeneity exists not only between groups with competing interests within the village, but can also be found within groups. At the time when research took place, the *mahila mandal* in Prini was essentially non-functional. Following the most recent *panchayat* elections and a shift in power, many of the women in the *mahila mandal* left. The present *pradhan* was of a different political affiliation and no longer was supported by the *panchayat* and meetings essentially had ceased. There were also rumours that money was part of the dispute. This had implications for JFM in the village. The *mahila mandal pradhan* had no influence with which to encourage and motivate the women of the *mahila mandal* to participate in JFM meetings and women had lost the opportunity to bring a coherent voice to meetings. Additionally, any potential to encourage other women to come to meetings that could have been provided by the participation and presence of the *mahila mandal* was lost. This had become a significant factor (though there were

others) contributing to women's lack of attendance at meetings, and therefore their overall lack of participation in the JFM project in Prini.

These specific examples of heterogeneity within the villages of Prini and Solang are indicative of how such factors as politics, livelihood requirements, and economics are mingled with people's needs and opinions related to forest management. It does not appear that these differences are being recognized and addressed within the context of JFM initiatives thus far, despite provisions for structuring JFM committees to help ensure representation by some major interests. It is also not reasonable to expect that a policy, which is to be applied throughout the state, should specify all groups whose interests require representation. However, this does not preclude the design of a mechanism or process, specified by local people, to identify the interests within their village. Addressing representational issues and acknowledging and accommodating heterogeneity are key to at least having the potential to discuss or have dialogue that includes perspectives of people with different interests, needs, and priorities.

4.6 HISTORIC RELATIONSHIPS WITH THE FOREST DEPARTMENT

> . . .communities have a strong historically based sense of community ownership to resources, within the framework of formal government ownership. "Re-crafting of village institutions" does not happen in a historical vacuum, but builds on this sense of ownership.
>
> (Wisborg et. al. 2000: 23)

In both villages, evidence of the historic relationship between the community and the Forest Department surfaced in comments in the interviews. Each of the villages has a unique historical relationship with the Forest Department, resulting from associations with different Forest Guards and specific to the interests, priorities and personalities in each village. Nonetheless, individuals in both Prini and Solang referred to past alleged incidents of corruption.

People in Prini did not speak as freely as many respondents in the other villages during interviews; they seemed guarded and many people chose not to elaborate on their responses (see Chapter 3). However those who did discuss issues beyond the minimum required to answer a question often referred to Forest Department Officials and incidents involving the Forest Department in a less than positive fashion. In Prini, many of the negative feelings towards the Forest Department are related to past and current

difficulties and criticisms of the system regulating the exercise of rights to (in particular) timber.

> *We are poor, from the Scheduled Caste, if we were to cut a tree, they [Forest Department] would take away our TD rights. If rich people take a tree, they do not lose their TD entitlements — the Forest Department gives them the tree as their 'friend'. I wanted to cut down a small dead tree, but the Forest Department said: 'Why did you not ask last year when your father died? They would not allow it. I wanted to plant trees on my own land, but I thought the Forest Department might say that I had stolen or taken the wood if any was used, so I gave up the idea.*
>
> (Prini, Sept. 15/99)

> *We don't get our TD timber; the timber that was supposed to be sanctioned for me was given away to someone else. We think the smugglers sell it.*
>
> (Prini, Sept.18/99)

> *Houses used to have one layer of wood and one layer of stone. The Forest Department doesn't allow us to have enough wood for that now and most people can't afford to buy it. In the past, a villager could mark a tree that had fallen and it would be his. Now, the Forest Department takes these trees and gives them to someone else. This creates problems. Why are they doing this?*
>
> (Prini, Sept.12/99)

The difficulties associated with the relationship between the people of Solang and the Forest Department were primarily related to the history of Forest Corporation contracts in the forest areas around Solang. The Forest Corporation is an arm's length company of the Forest Department that is contracted when the Forest Department makes a decision to remove dry and dead trees from a forest area or when trees are uprooted during such sever weather events as flooding or storms. It is the Forest Corporation which stocks the Forest Department timber depots (**Plate 4.1**). Many residents in Solang associate damage and deterioration of their forest areas with Forest Corporation contracts, and in particular, alleged corrupt practices associated with these contracts.

> *The forests used to be so thick, it was scary to walk in them and they used to be right near the village . . . 30-35 years ago the Forest Corporation started removing trees on contract in the area . . . When the Forest Corporation came, we were lacking in education — no one knew what would happen. There used to be 300 Walnut trees in the area; we didn't know, didn't realize; they were all taken by the Corporation.*
>
> (Solang, Oct.24/99)

There was a Forest Corporation Contract 20 years ago where all the Walnut trees were cut down. Trees were marked, but more were cut and the Forest Department was paid not to notice.

(Solang, Oct. 1/99)

The forests have changed; they used to be thick and come almost right into the village. Then the Forest Department gave a contract to the Forest Corporation and people sold sleepers. This was eight or nine years ago.

(Solang, Sept. 30/99)

The Forest Corporation has cut the trees and the forest has been left thin. They cut down green trees as well as those they were supposed to.

(Solang, Sept. 30/99)

The Forest Guard and Forest Department are involved in smuggling . . . People who can afford to pay [baksheesh] are not bothered by the Forest Department. Smugglers and the Forest Department are working together and causing damage to the forests . . . The Forest Corporation marks trees and then cuts down more — the villagers and the Forest Department should be checking up on them.

(Solang, Oct. 9/99)

Many of the comments made by people in Solang are in fact serious allegations in terms of Forest Department operations. However, the intent here is not to condemn or judge the Forest Department, nor is it important to verify the truth of these allegations. The simple fact that these perceptions exist, whether strictly true or not, colors the present relationship between the local people and the Forest Department.

The feelings and perceptions of local people in Prini and Solang are very relevant to current JFM initiatives because these feelings of mistrust and doubts as to the sincerity of the Forest Department and their intention to work alongside local people impact local commitment to participate in such a joint initiative. One woman in Prini summed up the current relationship with the Forest Department very succinctly,

No one tells the Forest Department that they are corrupt, but when they are not getting their TD rights they don't feel motivated to go to a meeting.

(Prini, Oct.24/99)

Thus, there is work to be done in terms of recognizing and addressing the history that exists between the Forest Department and villages. Ignoring the fact that these feelings and perceptions exist and assuming that local people will embrace and welcome a new Forest Department scheme borders on the insulting.

The Forest Department has been recognized as an organization having a "rigid and hierarchical structure with centralized planning and decision-making" (Vira, 1999: 266), and the bureaucracy of the department has been characterized as paternalistic (Hannam, 1999), and top-down (Saigal, 2000). The hierarchical structure of the Forest Department is readily apparent from the professional interactions within the organization, and it is impossible for this not to be reflected in behavior and attitudes outside the organization. Although there may be a sincere commitment to listening to the needs, respecting the voices, and involving local people in forest management, paternalistic attitudes towards villagers pervade the Forest Department and go hand in hand with the entrenched hierarchical structure. The culture of the organization and the attitudes of Forest Department officers have an impact on how JFM, and indeed any Forest Department policy, is implemented. Individuals are also key to the policy implementation process; the 'who' does matter and the rotational system for Forest Department Officials undermines and is at cross-purposes with the goal of building partnerships with local people.

The organizational structure of the Forest Department is not only hierarchical, but also highly formal. The lines between the various levels within the hierarchy are very clearly drawn. In explaining the workings of the Forest Department, the Range Forest Officer offered to draw out the structure of the Forest Department. His sketch illustrates clearly this point (**Figure 4.1**). Personal experiences with District and Range Forest Department Officials also reinforce these ideas. One of the first encounters with Forest Department Officials was recorded thus in my journal entry of July 8, 1999,

> *The District Forest Officer, Mr. X, granted us an interview. 'Granted' was the right word in this case . . . To see Mr. X, you must write your name on a little slip of paper (I assume your name and perhaps your business) and then the assistant takes it into his office. If you are approved (and I guess we were), eventually you will be ushered in . . . He wanted to see our letter of permission for research and then he said something to the effect of 'In what way can I be of assistance?' but he made it sound like he was bestowing a great favour . . . [H]e told us to put our requests in writing and fax them to him or give them to the Range Forest Officer who would pass them on to him.*

PRINCIPAL CHIEF CONSERVATOR OF FORESTS

⬆

ADDITIONAL CHIEF CONSERVATOR OF FORESTS

⬆

CHIEF CONSERVATOR OF FORESTS

⬆

CONSERVATOR OF FORESTS – CIRCLE

⬆

DIVISIONAL FOREST OFFICER – DIVISION

⬆

ASSISTANT CHIEF CONSERVATOR OF FORESTS

⬆

RANGE FOREST OFFICER – FOREST RANGE

⬆

DEPUTY RANGER – BLOCK

⬆

FOREST GUARD – BEAT
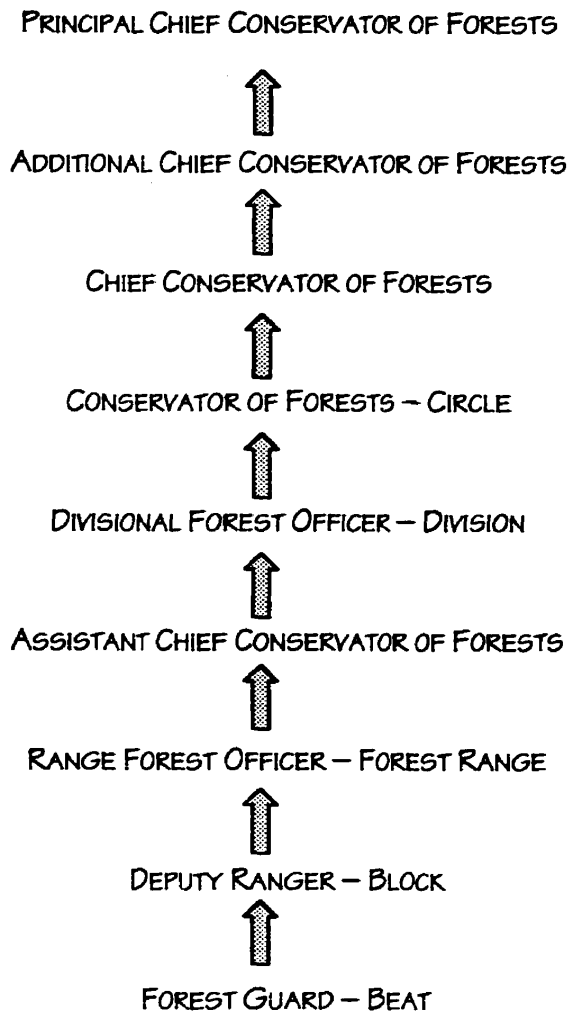
Figure 4.1 The organizational structure of the Forest Department in Himachal Pradesh. (As depicted by R. Sharma, Range Forest Officer, Manali.)

Both offices of the Forest Department observed in this research were structured such that the highest Officer had an office and at least one employee to wait upon him (there are no female Forest Department employees in the Manali range). In the case of the Range Forest Office, officials at the next level (the Deputy Ranger and the Forest Guards) shared an office space (though this was also a function of the fact that they spent a good deal of their time in the forest areas under their responsibility). Anyone wanting to see the Range Forest Officer had to be announced by the assistant, including the Deputy Ranger.

Observations, conversations, and interviews with Forest Department officials demonstrated contradictions between some genuine commitments to the philosophy of

participatory forest management intended to be the foundation for JFM, and unmistakably paternalistic behavior and comments. Other authors have also noted similar contradictions (Ghate, 2000). At the JFM meeting in Prini on September 12, 1999, the Forest Department representative commented that "The forests belong to the villagers", and "We need you to help convince the women to come to the meetings . . . The Forest Department has failed in taking care of the forest; everyone is needed – men and women". Such comments send a message of inclusiveness and partnership.

In the same spirit, the RFO indicated that he would like to see three or four teams established just to carry out PRA exercises and facilitate the preparation of village microplans[15]. Further he would like the composition of the team to include one female Forest Guard, one male Forest Guard and one Deputy Ranger.

However, as Vira (1999: 265) asserts, "The adoption of the rhetoric of participation does not guarantee the *implementation* of a new and decentralised form of forest management at the field level" (emphasis in the original). Forest Department Officials also repeatedly made reference to the paternalistic assumption of a need to "educate" and "sensitize" local people as part of JFM, though research indicates that local people have detailed knowledge of their forests. Through conversation it was stated that in the meetings with the villagers, education regarding the environment and about the importance of conservation was necessary. "Sensitization", a term unfamiliar to me, is something that apparently takes place through PRA exercises, according to a Forest Department Official. The assumption persists that local people are ignorant or insensitive with respect to their forests. Previous research in the area (Duffield, 1997) and my own experience and results indicate that this is not the case. Throughout the interview process (in Prini and Solang and in other villages), people offered comments and information that reflected not only concern for but also deep knowledge of the forests.

> *Poplar should be planted first to take the pressure off the other trees. It grows quickly and the people NEED fuelwood for the winter. If people had a choice, they would protect the forest. The trees that are already there must first be saved.*
>
> (Old Manali, Sept 22/99)

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[15] The microplan is a detailed plan derived from PRA exercises with the community and outlines the specific JFM activities for that community.

Deodar, kail, and tosh should be planted for oxygen benefits, prevention of soil erosion, beauty, and timber.

Old Manali, Sept. 23/99)

With the loss of trees has also come a loss of wildlife.

(Old Manali, Oct. 25/99)

Paternalistic attitudes were also demonstrated through behavior. My journal entry of September 12, 1999 describing a JFM meeting in Prini is an illustrative example:

> . . . *the [Forest Department representative] dominated the meeting and spoke almost exclusively for the first 10-15 minutes. The monologue appeared to be a sermon or lecture and the translation of what was being said confirmed this. I could not determine whether the lengthy exposition was strictly in honour of my presence or whether it was one of the methods of 'education' or 'sensitization' previously been alluded to.*

The importance of individuals and individual relationships should not be overlooked, especially in the context of implementing a participatory policy and attempting to succeed with joint management efforts. Other authors such as Wisborg et. al (2000), Ogra (2000), Hannam (1999) and Chhatre (1996) specifically refer to the importance of individuals and indeed in other situations of collaborative management, the significance of individuals in building trust has been highlighted (Weitzner, 2000). Local people's trust and respect for individual Forest Guards varied either positively or negatively in a consistent fashion. Certain forest guards were respected for their fairness in enforcing Forest Department rules, while others were dismissed as not caring about who was misusing the forests or how they were being misused.

Although interviews and observations pointed to the importance of relationship with individuals within the Forest Department, the system by which Forest Guards and Range Forest Officers are rotated to different posts also undermines positive relationships that may be established with local people. Indeed, this rotation every few years may serve as a disincentive for such relationships to develop because of the short duration of the postings and because there is no benefit or reward for building trust and goodwill with local people. Saigal (2000), Kant and Cooke (1999) and others also have identified the transfer policy of the Forest Department as detrimental to attempts to implement JFM.

The practice has been in place since the colonial era and it was designed to reduce opportunities for corruption by ensuring that Forest Department staff would not develop a personal interest in communities.

Specific to the implementation of JFM, continuity with regard to Forest Department representatives would at least confer the opportunity to build trust. In Prini, neither the current Range Forest Officer nor the Forest Guard had been a part of the initial stages of the JFM project. Aside from trust issues, it is difficult for the incoming Forest Department representative to know the history and dynamics of the village and local people can also feel frustrated by having to renegotiate a relationship with the new representative.

4.8   SUMMARY

If JFM, or any other participatory policy or initiative is to succeed, it is imperative that an environment/atmosphere that fosters and supports participation is created. To date, this is not occurring in the Manali area. Unfortunately, experiences in the Manali area indicate that the criticism that JFM has been lifted from the West Bengal model and foisted wholesale upon dynamic, unique communities with little consideration or accommodation afforded to local realities and variations (Chhatre, 1996) is valid. Further, the potential of existing organizations and institutions, such as *mahila mandals*, that already play a role in forest management is largely being ignored. Similarly, JFM is being implemented in the absence of provisions for flexibility or for the involvement on any meaningful level of local people in the adaptation of JFM to suit the needs of individual villages and conditions of their forest areas, as has been suggested by Ogra (2000) and Sekhar (2000). Further, in this analysis I have not addressed the controversies that exists surrounding issues of donor funding, state control, and tenure arrangements (Locke, 1999), though these issues also have implications for the implementation of JFM.

This analysis has examined some of the issues apparent in the Manali area that should be taken into consideration in the context of the implementation of any participatory initiative.

- Support at the local level and prescribing the structure of village forest development committees are not sufficient to ensure participation. Support for activities that promote the health and regeneration of the forests has not necessarily translated into participation in JFM, though both villages

supported the activities of JFM almost unanimously. The structure of JFM committees as outlined in the state policy is designed to promote representation of various village interests, yet what is outlined in policy is not always reflected in practice. Further, when structures are in place, it may be for appearances' sake only.

- Heterogeneity within communities can often be complex and include interests beyond those emphasized or identified in policy structures. Each village is unique, having characteristic dynamics, politics and issues that need to be acknowledged and addressed.

- In this context, attention to the history of a village becomes significant, particularly the historical relationship with the Forest Department.

- The Forest Department itself, the way in which it functions and is organized, impacts the capacity for individual Forest Department officers to implement policy.

These conclusions are consistent with those drawn by other authors regarding provisions for flexibility in the design process and the meaningful involvement of local people such that unique local circumstances and history can be accommodated. So, why is it that the same conclusion is repeated in the literature, clearly indicating that action is slow to occur? There are several factors that may be contributing to the perceived inaction. The onus of change is certainly on the Forest Department; unless or until there is a true willingness to devolve power to local people, informally, and in a formal manner as well, the *status quo* will be maintained and participatory policies are almost certain to fail. Although many opportunities for the Forest Department to improve their capacity for implementing participatory policies exist, assigning blame to the Forest Department is simplistic and ignores complexities at the village level. It is important to recognize that building partnerships and/or rebuilding relationships requires time. Certainly in the Manali area, JFM is in the early stages. In this same spirit, it should not be forgotten that it easy to suggest changes through the printed medium, while putting suggestions into practice is a great deal more difficult, and also requires a great deal of time, effort, and resources.

The next chapter examines an issue raised as part of this chapter: the role of women and the implications for management of the forest. Women's roles in JFM will form a part of the discussion, but indeed issues related to the gendered division of labour

and power, women's participation and contributions in local groups, and their role in the creation and enforcement of institutions, and the local social and cultural context are perhaps major considerations in the overall discussion of forest management.
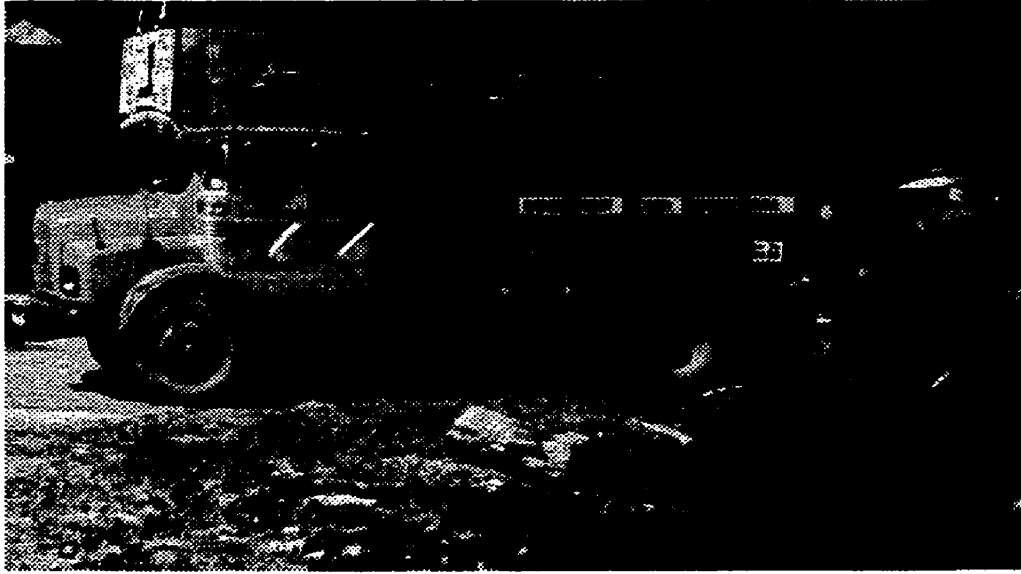
Plate 4.1 Forest Corporation trucks deliver fuelwood to the
Manali depot in fall 1999.

(photo K. Bingeman)

'THE ROLE OF WOMEN AND THE IMPLICATIONS OF GENDER RELATIONS IN FOREST MANAGEMENT'

Waiting in line at the dry goods shop, Manali bazaar.
(photo B. Bingeman)

Ali relaxes after a day of picking corn and beans in fields near Prini.
(photo K. Bingeman)

5.1   Introduction

Women's role and participation in Joint Forest Management (JFM) were touched upon in the last chapter as part of the analysis of the implementation of JFM in the villages of Prini and Solang. In this chapter, I examine the role of women in the management of forests at the village level. A separate examination of JFM from this perspective is warranted, given that 'women's work' in the villages surrounding Manali involves the procurement of the majority of the forest products utilized on a daily basis by the household, whereas men are involved either on a seasonal basis or are responsible for specific forest products (particularly timber). However, JFM is only a part of the overall context of the interactions between people and the forests, and forest use and management.

The second part of the discussion elaborates on the wider social / cultural / political context in which women live so as to better understand women's role in forest management as well as perhaps explain some of the barriers to the successful implementation of JFM. Within this broader context, it is also appropriate to explore women's participation and contributions within local groups and their role in the creation and enforcement of local institutions. Examples and experiences from villages other than Prini and Solang are incorporated as part of the discussion. The perspectives of the people of Old Manali are drawn upon as part of this discussion and comments from the people of the town of Manali, and the villages of Dhungri, Chachoga and Sial are incorporated to a lesser extent.

The analytical approaches to gender issues in relation to the environment are constantly evolving and are also relatively diverse. In order to locate this analysis within the research literature, I begin with a brief discussion of some of the ideas I will borrow from theoretical frameworks.

5.1.1   Theoretical Underpinnings

Why a gender perspective? Ignoring gender makes the assumption that men and women are equal, that their roles are the same, that there is no division of labour, no difference because of sex (Hewitt, 1991). The fact is that women and men experience life in a mostly unequal and distinct fashion in all societies. "A gender relations perspective

regards current social roles as established and maintained through power and authority, and therefore intrinsically contested and dynamic" (Locke, 1999:269). Specific to the management of resources, a gender perspective is relevant because issues of access, use and management of resources are linked to prescribed gender roles, which are in turn situated within the broader social and cultural context.

As an outsider, I realize that there exists a danger of importing values and defining what is important in a culture as what happens in the public sphere, and simultaneously judging women's position according one's own cultural norms. As Hewitt (1987:22) observes, "if we see that women do not exert or exercise power in the public sphere (because not only do we value the public sphere, but in many cases, this is the arena that is visible to an outsider), we label women 'dominated' or 'oppressed'. This is a dangerous, value-laden, ethnocentric and often erroneous conclusion." She further makes the point in the context of some village communities in the Karakoram (Hewitt, 1987:155),

> . . . men and women do not compete for the same kind of work. Both are essential to maintain the household, in the way that tradition, handed down from past generations, demands . . . It means that there is asymmetry rather than inequality between men and women. It is only when women are judged by their place in the male-dominated public sector, or by male-oriented values that they appear subordinate and backward

However, there is also danger in defining and accepting any static notion of the division of labour or gender roles. Jewitt (2000:122) remarks upon the dynamic nature of gender roles and the division of labour when she writes, "work allocation in all cultures is socially constructed and subject to constant renegotiation". Further, focussing on practical needs can undermine strategic interests (Locke, 1999:278) or as Agarwal (1992:150) argues, interpreting current resource use as an indicator of resource needs without proper context "serve(s) as an argument for the continued entrenchment of women within a given division of labour". Nanda (1991:36) makes explicit this political aspect to a gender perspective in noting that "the political context in which most Third World women live their lives needs to stress gender equality if any real gains are to be made for the majority". So although it is important to try to understand the subtleties of the different cultural traditions and spheres of influence of both women and men, this

does not mean it is necessary to accept (or reject) current gender roles as culturally immutable. The broader social and cultural context holds the potential for understanding the current opportunities and barriers for women's participation in forest management, and is key to understanding how traditions and gender roles have changed, and can and adapt.

Whether labeled as part of a 'gender analysis' (Jackson, 1993a; 1993b), a 'feminist environmentalist' perspective (Agarwal, 1992), a 'gender and development (GAD)' (Locke, 1999) framework, or not bearing any particular label at all, central to the analysis of the above authors (among others) is a rejection of the view of women and men as unitary categories (undifferentiated by class, age, ethnicity, region and wider political economy / ecology factors). Women are not to be lumped together as a homogeneous group; the risk in this assumption is that in doing so, women's exploitation by other women on the basis of marital status, seniority, social standing may be masked (Agarwal 1992; 1997a; Jackson, 1993a; Locke, 1999). This view contrasts with the women, environment and development (WED) framework, which does not explicitly acknowledge or focus on differentiating between the various realities and life situations of women (Gujit and Shah, 1998).

In terms of environmental and resource management issues then, paying attention to the implications of policies and institutions for different groups of women may be very important, for instance in improving participation in meaningful ways in JFM, or in identifying successful elements of *mahila mandal* groups, as well as limitations of such groups. As such, Agarwal (1992; 1997b) emphasizes the need to concentrate on the material realities of men's and women's environmental dependence and recognize issues of gender that impact participation in environmental management. These ideas are central to the rationale for critically examining the participation of women in JFM, and for looking at the organizations in which women are participating, recognizing that these organizations may have entrenched inequities as well.

5.2 WOMEN AND JOINT FOREST MANAGEMENT

The previous chapter examined the dynamics and factors that were hindering both people's participation and overall successful implementation of JFM. From a gender perspective, it becomes important to understand whether there are differences in women's

and men's participation in JFM, and how the current mechanisms to promote women's participation are working. Also significant is whether in practice women are impacted in differential ways by JFM depending on social status, economic situation, etc., and why the situation is unfolding as such.

5.2.1 Women's Participation - Practical Realities

In Chapter 4, participation was analyzed by determining the level of awareness with respect to village initiatives and activities associated with JFM in the villages, and by quantifying the level of attendance at JFM meetings (Chapter 4, Table 4.1). These two criteria formed the basis for an assessment of participation. **Table 5.1** is an elaboration on the Table in Chapter 4 and within it, women's awareness of JFM issues and activities and attendance at meetings is distinct from that of men in the villages of Prini and Solang. From **Table 5.1** it is clear that twice as many women as men in Prini had no awareness of JFM, and of those who attended a JFM meeting, there were three times as many men as women. In Solang, although no one was unaware of the issues and activities associated with JFM, of those who had attended a JFM meeting, there were more than twice as many men as women. Thus, there are differences in the level of participation of women, when compared to men's participation. This difference exists in the Manali area, despite specific provisions and efforts to encourage women's participation. During interviews, men also qualitatively confirmed the results of **Table 5.1** and suggested that women were not attending JFM meetings in any significant numbers.

Mostly men attend [JFM] meetings, sometimes women.
(male respondent, Solang, Oct. 1/99)

Table 5.1 Levels of participation in JFM in Prini and Solang measured through awareness and attendance at meetings. Women's and men's awareness of JFM and attendance at JFM meetings are broken out of the totals in each village.

	Prini			Solang		
Number of Households	Approx. 40			35-40		
Number of Households Interviewed	35 (16 women, 19 men)			28 (12 women, 15 men, 1 joint interview)		
Degree of awareness of JFM or JFM activities in village	Women	Men	Total	Women	Men	Total
• no awareness	6/35	3/35	9/35 (26%)	0/22	0/22	0/22[16] (0%)
• low awareness (haven't attended a meeting)	7/35	7/35	14/35 (40%)	3/22	2/22	5/22 (23%)
• aware of JFM issues/ meetings/ activities	3/35	9/35	12/35 (34%)	5/22	11/22	17/22[17] (77%)
Attendance at one or more JFM meetings	3/35	9/35	12/35 (34%)	3/22	8/22	12/20[18] (60%)

In Himachal Pradesh, the JFM policy makes several references to women. Although these were discussed briefly in Chapter 4, the reiteration is worthwhile so as to be able to compare the theory with the reality. Membership in the General House Village Forest Development Committees (VFDC) is based on representation by one adult male and one adult female member from each household. The executive body should have 9 to 12 members, including the *mahila mandal pradhan*, and at least half of the 5 required general village members (i.e. not formally representing a village organization or group) on the executive must be women (Government of H.P., 1993). Some authors have pointed out that the designation of one adult male and one adult female as members of the JFM General VFDC in practice results in voices and interests being excluded from JFM (Sundar, 2000); widows and younger daughters-in-law may still be left unrepresented. Without going as far as to look at whether a variety of women's interests and

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[16] Six people were not questioned as to their awareness of JFM or JFM activities.
[17] There was one joint interview where both a woman and the man were participating.

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perspectives are being represented on the VFDC and the executive body of JFM, in Prini and Solang the reality is that existing provisions are not resulting in women's participation even in a general sense, and certainly not when compared to the number of men participating.

In Prini, women were conspicuously absent from the two meetings observed, and no women were registered as members of the JFM executive body[19]. The JFM executive body in Prini was also exclusively male and did not have the required representation from the *mahila mandal*. In Solang, though I did not have an opportunity to attend a JFM meeting, after obtaining a list of the JFM executive body members, I did endeavor to interview each person. There were three women listed as members of the JFM executive body in Solang, yet as referred to in Chapter 4, in two instances women's names had been recorded without their knowledge. One of the women was surprised and did not know why her name listed as a member of the JFM executive body, and the other woman candidly told me that she goes if a high ranking Forest Department Official will be present because they like to see the women participate. This is similar to cases and experience from other states in India where symbolic women's 'representatives' are often not invited to the meetings at all or, even if invited, they seldom open their mouths (Sarin, 1997).

5.2.2 Barriers to Participation

The woman in Solang who is an active member of the JFM executive body is also the Solang *mahila mandal pradhan*. She confirmed that the other two women were not attending JFM meetings or participating. She also offered an explanation as to why women are not more involved in JFM.

> *There haven't been any other women attending the [executive] meetings. Other women did not want to, and I did not want to because I do not have the time – there is so much work to do, children to look after. When I have a daughter-in-law then maybe I will have less work, and I can have an*

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[18] Eight people were not questioned as to their attendance at JFM meetings.

[19] I was, however, assured by the Deputy Forest Ranger that this situation was soon to be addressed, and an equal number of women would join the executive body.

*interest in JFM. Other women are not educated and they don't have time
so they don't want to participate.*

(Solang, Oct. 5/99)

Both women and men offered a variety of reasons for women's lack of attendance and seeming reluctance to participate at meetings by expressing their view and opinions. Like the Solang *mahila mandal pradhan*, other women talked about education levels.

*. . . don't really want to because I don't know very much, I am not
educated or intelligent enough. I have time, but others could do this [be a
member of the JFM executive body].*

(Solang, October 27/99)

It is unclear whether women in general had been invited to attend JFM meetings in Prini. The Prini *mahila mandal pradhan* indicated that the *mahila mandal* had been invited to the last JFM meeting. However, according to another woman,

*Women were not invited to the [JFM] meetings. A man from our
household went.*

(Prini, Sept. 11/99)

There may be several explanations for these contradictory statements. The *mahila mandal* because of their relative position of power in Prini may have been informed and invited to the meetings, but because not all women are members of the *mahila mandal*, and fewer still because of recent political conflicts, this information may well not have reached other women in the village. It may have been assumed that women outside of the *mahila mandal* would be notified through word of mouth (i.e. through their husbands or male head of the household). If the message that women were to be encouraged to come to the meeting was not made explicit by the Forest Department, the information might not have traveled past the male members of households. In addition, if only men of higher caste or social and economic standing were notified the chances of lower-caste women and women in households at the lower end of the social and economic spectrum being made aware of the meeting would diminish further. Although this is only speculation, it illustrates the point that it would not be difficult for a differential awareness of meetings and perception of who and what the meeting was intended for to have arisen, not only among women, but also within the village in general.

Only once did anyone assert that in fact women were contributing to the decision process within JFM committees. One man in Solang cited a rule that had been put forward by women. The rule was in relation to cutting the 'grass' (fodder) that grew at the sides of people's fields. It used to be that this grass was open to all. The problem was that by the end of harvest (when it was time to build up the supply of fodder for the winter) all of this grass close to the village was gone. The new rule barred anyone from cutting this grass unless it was on the edge of their field. The end result, however, was that people who own more land can then supply more of their winter stores for winter from the grass on the periphery of their fields, in relatively close proximity to the village. This also reduces time and energy expended in going into forest areas to cut grass. Those with less land are further penalized by not being able to access this nearby supply, increasing their daily workload. Thus, the rule that allegedly was suggested by women in fact may make the work of collecting fodder more burdensome for certain women. It was not clear from the man's story which women and how many women made this suggestion. The point to be taken from the anecdote is twofold; first some women may be contributing to the decision process (though it is curious that no one else raised this example) and second, the participation of some women does not necessarily result in the interests of all women in the village being considered.

Women generally cited time constraints as reasons for not attending meetings and education levels as reasons they did not offer opinions in meetings; however men also had ideas about women's participation.

Women are 'participating', but they are not talking. Many are not educated and feel nervous – speaking Hindi [as opposed to Pahari] makes them nervous. When the Forest Department is talking, they mix Hindi and English . . .[women] are coming and participating but they just sit and listen – they feel shy. The major problem is that they are uneducated.
(Solang, Oct. 27/99)

Mostly the gents are participating. It is the culture: women think that men are more intelligent and when a woman speaks, no one listens. Women also aren't interested.
(Solang, Oct. 23/99)

Despite the structure and provisions of JFM that are explicitly intended to promote participation, in the villages of Prini and Solang, the presence of women on JFM committees is altogether missing, or merely symbolic. Locke (1999:272) offers one explanation for the failure of structural provisions to promote women's meaningful participation, "[i]mplicitly the preoccupation with formal representation assumes that such women may unproblematically seek to advance their interests, vis-à-vis the forests once installed in general bodies and management committees." This assumption does not hold true in the Manali area. Both men and women raised the issue of education as a barrier to participation. Men also acknowledged the low value accorded to women's opinions and ideas. Coupled with the fact that women are a minority at JFM meetings, it is perhaps not surprising that few women may feel confident enough to voice an opinion. To do so, she would not only challenge perceptions of the value of women's opinions but would also risk public humiliation. This is in keeping with the observations of other authors such as Jewitt (2000:124) who concludes, "the ideals of participation and empowerment are worth little if they fail to acknowledge the power structures that influence the opinions expressed and the fact that non-dominant groups, especially women, may well feel unable to articulate alternative viewpoints".

It should be noted that specific structural provisions for women's participation are a strategy that has been employed previously in India, notably in the *panchayat* system of local governance where there is a 30% minimum quota for women's representation. Success is arguable. There are women who are functioning as valuable and contributing members of the *panchayat*, but in some instances the original intent of the provision is manipulated and women function as puppets, simply acting as the voice of their husbands (Ogra, 2000).

The above discussion offers some explanations for the low level of participation by women in JFM in the villages of Prini and Solang, both in relation to men's participation rates, and in general. However, in many ways these explanations are not entirely satisfactory; they simply serve to raise further issues. Why do women and men refer to formal education when the topic for discussion is the forest, a subject in which women have a great deal of practical experience and 'education'? Why are women's opinions not valued? These questions go below the surface and come closer to the heart

of women's participation (or lack thereof) in JFM. These questions also lead into the broader social and cultural context within which forest management and forest policy initiatives are situated.

5.3 GENDER ROLES AND SOCIAL AND CULTURAL CONTEXT - IMPLICATIONS FOR FOREST MANAGEMENT

5.3.1 Women and the Forests

The nature of gender roles and the division of labour in villages of the Upper Kullu valley are such that women are the primary collectors of forest products. Women are primarily responsible for collecting bedding and fodder for livestock and fuelwood on a daily and seasonal basis (**Plate 5.1**). In general men are not responsible for meeting daily forest product needs – this is women's work. Similarly, the collection of fodder and bedding for livestock in order to build stores for the winter largely remains the domain of women in the household. The seasonal collection and building up of fuelwood stores for winter months, however, is often done by both women and men.

Notwithstanding the above, subtle variations in this relationship with the forest and the rules that govern the division of labour do exist, even amongst villages in close proximity. In Prini there were few instances where either men or women indicated that men in the household help with the work of bringing fodder and bedding for livestock. In Old Manali, the village adjacent to the town of Manali, a similar trend exists. However, in the village of Solang there were households where men shared in the work to build up the stores of fodder and bedding, including households where women were not physically hindered in some way (by pregnancy or disability, for example) from taking on this task. One possible partial explanation for this may lie in variations associated with relatively significant changes in elevation over short distances in mountain environments. Situated at a higher elevation than Prini or Old Manali, Solang receives snow earlier and in more abundance than these villages. The time between harvest at the end of summer and the first snow fall in Solang can often be shorter, putting more pressure on people to build adequate supplies of fodder, bedding and fuelwood before first snowfall. Concern to meet winter needs may be a motivator in mobilizing all available labour in the household at this time of year. The fact that reciprocal labour practices are integral to other activities in

Solang such as house building, more so than was evident in Old Manali and Prini, may also contribute to the shared nature of forest product procurement[20]. The point is that generalizations are possible, but it is important that generalizations do not become assumptions, as even between villages in a relatively small geographical area there is a degree of fluidity in the roles of women and men with respect to the forest. It is also important to note that these exceptions to the 'general rule' highlight the point that women's role as primary collectors of forest products is not a 'natural' role as is sometimes asserted in Women and Development theories (Gilgit and Shah, 1998; Jewitt, 2000) and is better discussed in terms of women's various material realities (Agarwal, 1992).

The division of labour in the Manali area results in women's daily interaction with the forest and practical (if not formal) education regarding the forest. Most of the women interviewed, once we explained what it was we wanted to talk to them about, spoke confidently and were comfortable expressing opinions about the local use and the state of village forest areas. Interviews in Prini, Solang and Old Manali indicate that women have knowledge of forest flora and they are paying attention to how their forests have changed. Among men, there was also a recognition that women's opinions about the forests were important.

> *In Indian villages, women are involved with the forests and we need their opinions.*
>
> (Solang, Oct. 27/99)

Thus, women's opinions are most definitely relevant to decisions that are being made that affect village forest areas. In this sense it is puzzling that emphasis on mechanisms to involve women in initiatives such as JFM is required. Yet women's use of the forest, their knowledge and practical experience, and the recognition of the importance of women's opinions pale in significance as reasons that women might

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[20] It will be interesting to observe whether this sharing both within the household and between households in the village changes as Solang is impacted by tourism. At the time of research, several houses were being built both within the village proper and across from the village adjacent to the ski hill. These houses differed from the older and decidedly larger houses in Solang (which accommodated either very extended families, or several families, depending on your definition). Will physical splitting of 'families' and wealth from tourism change the interdependencies of families and reciprocal labour practices?

participate in decisions related to the forests and initiatives such as JFM when considered in the context of social and cultural traditions.

5.3.2 The Implications of Cultural Traditions and Social Customs

Public expressions of opinion by women in the presence of men are not the norm. This is often the case elsewhere in India (Agarwal, 2000) and in the villages in the Manali area, this was evidenced subtly in several ways. Although women seem comfortable in interviews, more often than not when first asked if they would be willing to take some time out to be interviewed, their initial reaction was to tell my interpreter that they would go and find their husband or other male relative to speak with us. When we established that we in fact would like to interview them and not their husband or father, it was not uncommon for the woman to express surprise and in some cases question this because they "didn't know anything". In interviews where male and female members of the household were present, it was rare that the woman would contribute anything to the interview, and younger women almost always deferred to men. In some instances, when we began an interview with a woman and her husband joined us, the man then became the interviewee because he began answering the questions. Men did not always dominate interviews; there were times when women continued with the interview in the presence of men, but this was often when the woman was older, the mother or aunt of the man in question. Occasionally an interview with husband and wife would also involve the wife's participation.

Despite limitations on the degree to which most women express themselves in public and more precisely, in the company of men, this does not warrant a leap to the assumption that a strong voice and influence in the private sphere necessarily balances this limited voice in the public sphere. The reality is more complicated. Women in the Manali area do exert influence within the home and men do understand and value the work that women do.

Women work very hard, but their work is not paid.

(Pulchan, July 23/99)

However, if husbands and wives do have a dynamic dialogue in which issues are negotiated and renegotiated, the interests of other members of what is usually an

extended household may still be silenced. The only female perspective that may be heard even within the household, and therefore represented as the interest of the household as a whole is that of the most elder or senior woman. Hierarchical intra-household power issues may be muting the opinions of young wives, daughters and sisters. Even in the arenas where women may in fact exert influence, not all women may be able to do so.

Compounding cultural traditions that limit public expressions of opinion is the customary convention that in India, environmental resources are usually managed by decision-making bodies dominated almost exclusively by men (Agarwal, 1997a; 1998). In fact, in many parts of India women's exclusion from any village political matter is the norm (Ogra, 2000). In the Manali area, in the past at the village level decisions were made by an informal council chosen by high caste village men during a religious celebration (Davidson-Hunt, 1995b). Research suggests that this traditional council is still involved in village level resource management decisions, despite the existence of the *panchayat*, which is the formally recognized village governing body (Davidson-Hunt, 1995b). This perhaps explains men's continued domination of decision processes.

> *At the [JFM] meeting [I attended], mostly men were present and the men decide everything.*
>
> (Solang, Oct. 27/99)

> *Most of the women, their husbands don't allow them to attend the mahila mandal meetings.*
>
> (Prini, Oct. 24/99)

Thus, despite strong practical rationales for women's participation in decisions related to the forests, traditions and attitudes nevertheless have major implications that ultimately require consideration. Initiatives such as JFM largely assume that formal provisions will address these obstacles even in the face of previous experiences where such strategies have met with limited success.

5.3.3   The Dynamic Nature of Traditions

Traditions and customs are extremely significant in terms of decision-making processes and the management of forest in the Manali area, and further they deserve acknowledgment and respect. Yet it is also important to recognize that traditions and

customs are not static and inflexible; they change over time. "Culture" is not immutable; it is a constantly evolving adaptation to changing circumstances and the 'traditional' is responsible for having brought people to their present stage in life (Ogra, 2000). The word 'tradition' evokes ideas of stability and endurance; however, traditions can also be conceived as evolutionary. Berkes (2000:2) discusses 'traditional' as a word "used to refer to historical and cultural continuity, but at the same time recognizing that societies are in a dynamic process of change, constantly redefining what is considered 'traditional'".

This dynamic aspect to tradition means that even deeply embedded, traditional attitudes and behaviors are changeable and "[t]hough traditions persist, they are constantly evolving to adapt to the challenges of a changing world" (Ogra, 2000: 23). Indeed, with regard to women's participation in formal decision-making processes, shifts in tradition have already taken place. Conflicting comments and perceptions from both male and female villagers in the Manali area are indicative of this shift. To a certain degree there has been a generation of consciousness and there is a level of recognition by villagers that women should be involved in the formal management of village forests. As quoted in previous pages, some men candidly state that increasing the role of women in community decision-making processes is an important change that the village must undergo.

There are several forces behind these shifts in consciousness. Some people cited the influence of tourism and exposure to other cultures.

> *We are becoming educated – some of this comes from tourists (one of the good aspects of it) – about the position of women.*
>
> (Pulchan, July 23/99)

Similarly, changes in attitude by some members of the Forest Department impact tradition. Some authors have remarked that gender and equity sensitization in villages and within the Forest Department is already making a difference in the way men and women perceive the contribution of one-another's roles in decision-making about resource management (Sarin and SARTHI, 1998; Ogra, 2000). The Forest Department in the Manali area is in transition in terms of internalizing ideas about not only the role of women in forest management, but also the relationship between the Forest Department

and local people. They are half way between the trappings of hierarchy and the "participatory" partnership dogma (Chapter 4 discussion). An acceptance of the importance of women's contributions to forest decision-making is one step on this path, but capacity is perhaps lacking in terms of helping to facilitate women's involvement and recognizing that this must be done despite the fact that this involves contradicting some very strong traditions.

The instances where women are actively and independently functioning in their roles as members of the *panchayat* also contribute to a shift in perception and a change in the spectrum of roles that are acceptable for women to take on in the community. For example, though there are still references to instances of female *panchayat* members acting only as puppets for their husbands, women are also acting independently and decisively in their roles as members of *panchayats*. There are female *panchayat pradhans* who are comfortable with their position and assertive in public. The *panchayat pradhan* in Prini was a prime example of a woman who appeared to be comfortable in her role and with the power accorded to her position. I witnessed members of the community coming to her for advice and support in their difficulties and her demeanor suggested confidence, pride and self-assurance.

The existence of the *mahila mandal* is one of the most significant manifestations of a shift and an evolution of women's roles within the village. Most obviously, it is a forum in which women do actively participate. As such, I turn to it in order to explore its origins, the limitations of the organization in its current incarnation in terms of inclusiveness and equity among women, and finally its significance as a forum for decisions about the forest in which women are comfortable participating.

5.4   Mahila Mandals

5.4.1   Origins and Adaptations in the Kullu Valley

The *mahila mandal* or village women's group has its origins in the 1952 Community Development Programme, but was strengthened by Indira Gandhi's vision to empower women in village India and facilitate women's involvement, structurally and economically in rural life (Davidson-Hunt, 1995a). The *mahila mandal* is an all woman forum that exists at the village level throughout India. The concept of the *mahila mandal*

was developed at the level of the central government and is administered as a government program (Ham, 1995; Davidson-Hunt, 1995a), and as such it is an institutional structure that has been imposed on communities. However, the flexibility in terms of the purpose and objectives of *mahila mandals* has meant that in some cases the organization has been adapted to the local needs of the village. Women's role as primary collectors of forest products and their consequent concern for the health of village forests has resulted in the *mahila mandals* in many villages in the Kullu Valley taking a proactive role in the protection of these areas (**Box 5.1**) (Ham, 1995; Davidson-Hunt 1995a). Almost all *mahila mandals* in the 29 villages surveyed in the summer of 1999 indicated that they were active to some degree in the protection of the forests. The *mahila mandals* also have the official support of the Forest Department for their activities related to protecting the forest.

Box 5.1

The *Mahila Mandal* of Old Manali as a Case Study

The *mahila mandal* in Old Manali was established in 1987. The *pradhan* has remained the same for the past seven years because no one else wants to take over. She would like someone else to take over the position, but since no one else is willing, she stays on. In addition to her duties in the home and her obligations to the *mahila mandal*, the current *mahila mandal pradhan* is also a member of the *panchayat*.

The *mahila mandal* would like to have a stronger relationship with the Forest Department. Ten years ago, the Forest Department planted trees and committed to fencing the area but failed to do so. Some of the trees survived, but the land has now been allocated as *nautor* land. Recently, the *mahila mandal* made a request to the Forest Department because they wished to plant trees in an area above Old Manali; however the Forest Department never allocated them the trees, according to the *mahila mandal pradhan*. The *mahila mandal pradhan* is concerned because she believes that the forest is not healthy; it is dying. She would like to plant new trees. She thinks that the village can take responsibility for protecting the new trees, but the Forest Department must first give them the trees.

Old Manali is a large village and the *mahila mandal pradhan* recognizes that some of those who are not involved in the protection of the forest are contributing to its destruction. She believes that if one woman per household were a member of the *mahila mandal*, they could be effective in protecting the forest. She thinks that having a mandatory membership would also enable the *mahila mandal* to raise awareness about the damage that is done through lopping of small branches. She would like everyone to wait until the branches are bigger before lopping. In the past, the *mahila mandal* has been effective in halting the sale of fuelwood in Manali. The *mahila mandal* imposed a complete ban on this practice some years back when there were many people who supplemented their income in this fashion and the *mahila mandal pradhan* believes that the group's ban played a significant role stopping the sale of fuelwood. I think that this success is part of the reason that the *mahila mandal pradhan* believes that with representation from all households, the village could work towards the revitalization of its forests.

5.4.2 Limitations

This research confirms previous experience that demonstrated the existence of issues of representation and equity within *mahila mandals* (Davidson-Hunt, 1995a). In contrast with research from other areas of India, it is the women of higher economic status (and usually higher caste status) who have more interest in the stewardship of the forests and these women tend to dominate the *mahila mandals* (Davidson-Hunt, 1995a). As a result of the integral role of forest products in the traditional system of agriculture (**Figure 5.1**), greater numbers of livestock require more forest inputs, and more land demands more fertilizer in the form of manure supplied by livestock[21]. This linkage between higher economic status and interest in forest issues and continuing availability of forest products is valid when economic status is associated with relatively larger land holdings and the practices of traditional system of agriculture, which is still true in the majority of cases in the Manali area. However, elevated economic status is now possible from income sources such as tourism, which does not increase interdependence on inputs from common property resources. As time goes on and tourism expansion continues, this may become more common outside of the urban area and may change the dynamics of the village *mahila mandals*.

'Poor' and lower caste women are not necessarily adequately represented within *mahila mandals* (Davidson-Hunt, 1995a). Caste is a sensitive issue and one I did not actively or overtly pursue in interviews with *mahila mandal pradhans* and representatives. However, in the village of Nasogi, the scheduled caste women had left the *mahila mandal en masse* because of negative comments from higher caste men. Lack of representation by poor and scheduled caste women has meant that some institutions originating from and enforced by *mahila mandals* have made the lives of some women more difficult and negatively stigmatized certain livelihood strategies, such as the sale of fuelwood from village forest areas in urban areas. This practice of selling fuelwood has largely disappeared, in part as a result of a ban by several *mahila mandals* in the villages nearby Manali.

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[21] Larger land holdings reduce the dependence on forest inputs to some degree because crop "waste" is used as fodder for livestock and this reduces the need to cut "grass" in the forests.

The lower caste people used to go and sell wood in the bazaar, but we stopped them.

People used to sell fuelwood in the bazaar but the mahila mandal started to take action and banned the sale of fuelwood.
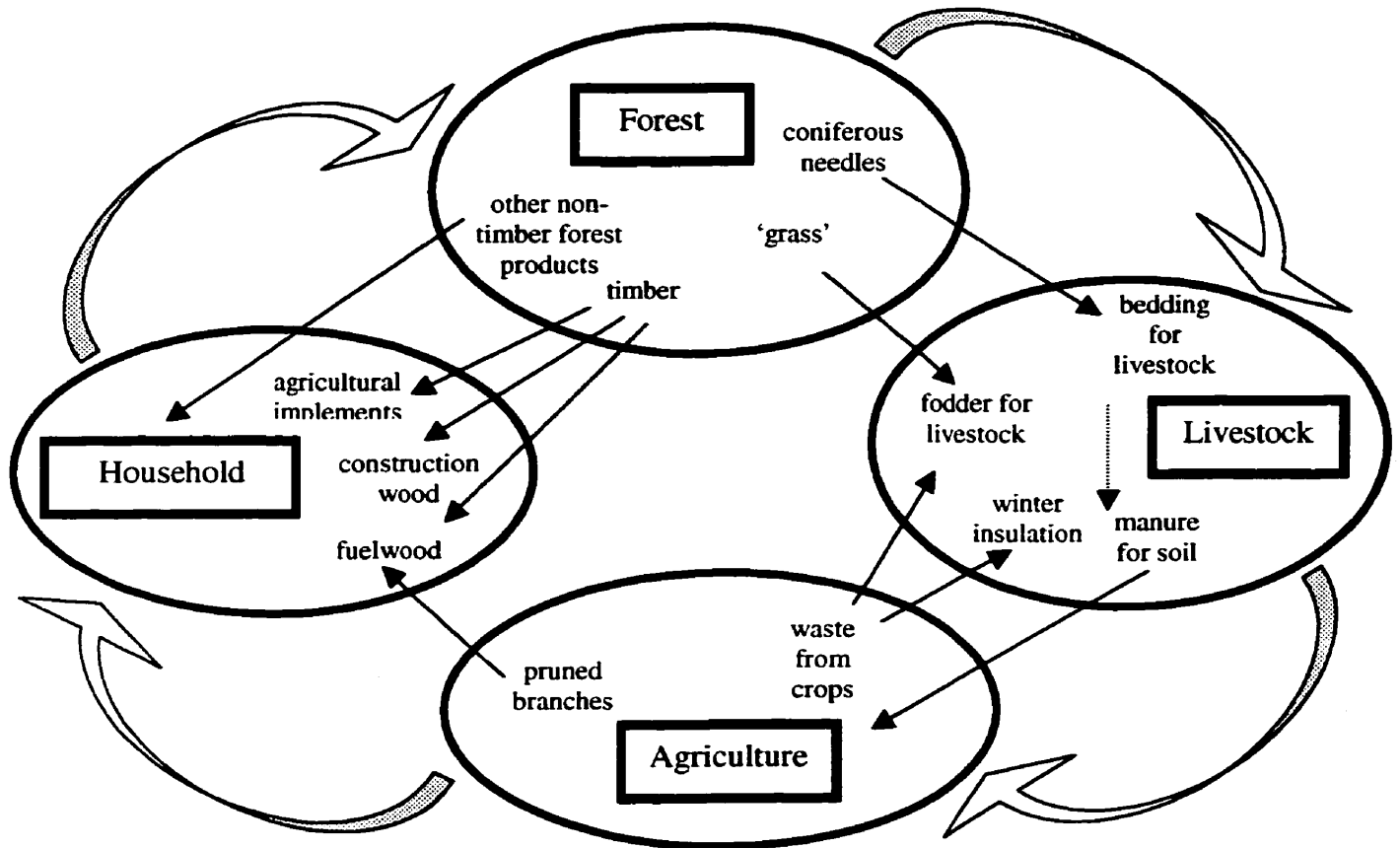
Figure 5.1 Centrality of the forest to rural livelihood systems (adapted from Davidson-Hunt, 1995a).

Despite continued problems with representation, there is also a certain level of recognition of the need for broad representation of women in the village and awareness that equity issues should be explicitly addressed. Some *mahila mandal pradhans* volunteered information about the composition of their membership and indicated that scheduled caste women were part of the *mahila mandal*, as was the case in Chyal and

Simsa. In Sial, activities to increase skills and opportunities for poor and scheduled caste women were part of the activities of the *mahila mandal*.

Most recently, *mahila mandals* in the Manali area have faced problems with politics. The politicization of *mahila mandal* functioning along party lines has negative impacts in several ways, including by impacting representation. Political friction has resulted in *mahila mandals* simply ceasing to function, or groups have split and two *mahila mandals* then operate independently of one another, and in some instances the members not affiliated with the ruling party of the *panchayat* simply leave.

There are obviously several negative impacts associated with these types of outcomes. Where *mahila mandals* are *defacto* defunct, there has been a halt to their

> **Box 5.2**
> **Political Friction and the Prini *Mahila Mandal***
>
> The *mahila mandal* in Prini was established eight or nine years ago. The present *pradhan* (leader or president) was initially elected the leader and has recently again been elected to the position. Following the elections for the *panchayat* (the local form of government – an elected council that governs a group of approximately five villages), the *mahila mandal* began to experience problems related to politics within the group. When the election for the *panchayat* took place, the Congress Party got more support and the *panchayat* reps are now predominantly Congress supporters. As a result, all the Congress Party supporters in the *mahila mandal* left (the *mahila mandal pradhan* is a BJP supporter).
> According to the *mahila mandal pradhan*, there were approximately 25 members before the political problems, but now there are only 15. However, I only encountered two women that told me they had been members of the *mahila mandal* and three others indicated that a family member was a member. My impression from them and also from the interview with the *mahila mandal pradhan* was that the *mahila mandal* was not currently meeting on a regular basis and was inactive.

activities altogether (**Box 5.2**), including forest protection. The preoccupation with politics and distraction from goals and activities also contribute to the lack of capacity to participate in any cohesive manner in an initiative such as JFM, as was demonstrated in Prini. Fragmentation of *mahila mandals* and the exodus of non-ruling party members from the group both have implications in terms of representation. In the case of the existence of two groups, one may be paralyzed while the other receives support from the panchayat. In both scenarios, those women who do not belong to the ruling party are no longer part of the decision-making process, and domination by a certain group of women results.

5.4.2 Significance

The *mahila mandals* will continue to struggle with issues of representation and equity, but it is encouraging that some recognition of these issues exists and also that there may be some capacity to drive changes to the *mahila mandals* from within. Despite the limitations, *mahila mandals* in the Manali area are significant as a decision-making forum in relation to village forest areas where women are comfortable participating.

Although women may have a distinct role in the use of the forests because of the gendered division of labour, in many areas of India, environmental management is strongly male dominated (Jewitt, 2000). Jewitt (2000) found that forest labour often is more evenly divided between women and men than many WED/ecofeminist accounts suggest, whereas all the major decisions about forest protection and management are still made by men. In the Manali region, this is not the case. The role of the *mahila mandals* in the area has evolved to include activities and decisions that contribute to the *de facto* management of the forests.

The women of the *mahila mandals* are conscious of changes to village forest areas and as a result of their monitoring, they have set rules regarding how fuelwood may be collected (i.e. banning lopping of branches). They have also patrolled the forests for rule-breakers, caught and confiscated illegally felled trees, and actively excluded non-rightholders from their village forest areas.

> *People from the bazaar used to come to collect wood and they used to be permitted to do this. When we started the mahila mandal, we began to stop these people from coming. We made this decision not to allow others to use the forest because the forests were decreasing. The Nepali women argued that they were not going to sell the wood, that they were poor, so we let them come. Then we stopped them because they were lopping, but they are allowed to take dead wood and kathi . . . Now, no one from the bazaar comes to our forest . . . They don't have rights in these forests.*
>
> (Dhungri, Oct. 17/99)

> *People used to come from Manali to our forests, not through the village, but at the side. There was a lot of wood, so no one was concerned. But this created problems because people had to go further and further and the people were lopping branches nearby the village. The wood was finishing. Since the mahila mandal started, we have stopped people from entering our forests. We still continue to do so, but sometimes we are busy and we*

*can't catch everyone. Still some people come and if we catch them, they
must pay a fine.*

(Chachoga, Oct. 17/99)

The above comments are representative of statements and stories from women in many villages in the Manali area regarding the role of the *mahila mandals* in forest decision-making and management. This is in contrast to case studies elsewhere in India where although women USE the forest to a greater degree than men, they are often almost entirely left out of management. Until the *mahila mandals* came into existence and began to function as such, village level decision-making structures in the Manali area, as exemplified by the *mimbers,* were dominated by men. Given this role of the *mahila mandals,* the focus of JFM on forest management and the fact that women's participation has thus far been problematic raise an important question. 'Does an initiative such as JFM threaten to undermine the existing pattern of women's involvement in forest management that has been established by a village level group such as the *mahila mandal?*

This is a question of significance because the structure of the *mahila mandal* appears to be conducive to achieving meaningful participation in forest management in a forum where women feel uninhibited to express their views. Membership levels and accounts of personal involvement support this idea, as does the process followed in the one *mahila mandal* meeting I was fortunate enough to be invited to observe in the village of Old Manali. Approximately 25-30 women were in attendance and many were accompanied by young children and babes in arms. A big urn of tea was brought in and everyone gathered on a mat on the floor of the school. I cannot comment on the specifics of the content of the meeting, and I was unable to gauge what kinds of power dynamics might have been influencing the process. Nevertheless, many women contributed to what appeared to be a lively discussion. A decision was taken (ostensibly by consensus) to approach the Forest Guard and open discussion regarding planting trees, and there was support and a commitment from those present to protect the seedlings that could be planted.

Perhaps even more significant than even the activities of the *mahila mandals* is the notion that as an organization, it may be providing opportunities to develop

confidence, opportunities to legitimately express opinions in public, and to play a role in shaping and adapting cultural traditions.

5.5 SUMMARY

In short, there is a need for alternative, culturally appropriate strategies to involve women meaningfully in decision processes related to the forests, whether it is within a model like JFM or any other initiative. Social customs and cultural traditions influence women's participation in decision processes to a great extent; however, traditions are far from immutable; in fact they are dynamic and constantly evolving.

In contrast with the findings of case studies elsewhere in India, the *mahila mandals* in the Manali region have established a tradition of women's involvement in resource management, in this case in relation to the forests. Although there are problems with representation and equity and in some cases the *mahila mandals* have become fragmented by party politics, the *mahila mandals* represent a locally adapted institutional framework that is functioning to greater and lesser extents in different villages. This existing institutional structure is not being adequately recognized as perhaps already performing some of the same functions as initiatives such as JFM. Nor is the potential of local organizations like the *mahila mandals* and local institutions being recognized as contributing in a significant way to the management of the forests. Thus, in the next chapter, I take a broader view of the institutions, both local and otherwise, that are contributing to the management of the forests in the Manali area.
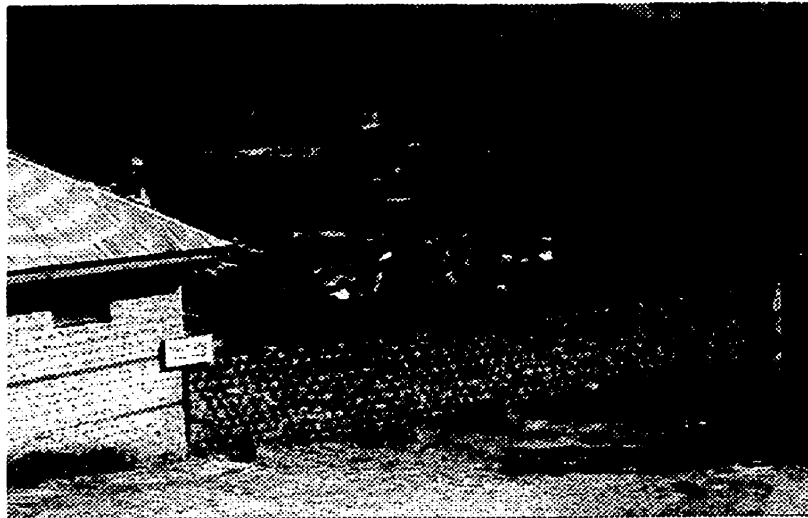
Plate 5.1 Cutting grass near Old Manali (on a 60° slope!) to store for winter livestock needs.

(photo K. Bingeman)

CHAPTER SIX:

'INSTITUTIONAL RESPONSES TO DEVELOPMENT PRESSURES AND THE RESILIENCE OF THE SOCIAL-ECOLOGICAL SYSTEM'

The stock of fuelwood at the Manali depot increases as cold weather approaches,

(photo K. Bingeman)

6.1 INTRODUCTION

It is clear that the forests in the Kullu District of the western Himalaya form an integral part of the local village-centric system of land use and land management (Duffield at al., 1998; Berkes et al., 1998; Berkes and Gardner, 1997). Although the past two centuries have seen several external factors imposed upon this system, the latest and least organized of these forces has taken the form of rampant growth of commercial activities in horticulture and tourism and the related urban services and functions. As detailed in Chapter Three, this recent growth has resulted in pressure on the forests in the area and therefore also on the complex social-ecological system in place which governs the management of the forests. In this respect, institutions, which can be thought of as one aspect of this social-ecological system, acquire a significant role. In the Kullu District, and in particular the area surrounding the town of Manali, village-based and state institutions interact to contribute to the management of village-use areas of the forest.

The preceding two chapters have examined in detail some of the ways that organizations and groups have responded to the changes and pressures on the forests. The implementation process of Joint Forest Management (JFM) has been explored as a formal response to (among other things) pressure on the forest. The role of women and some of the responses by women to the growing scarcity of forest products in localized areas has been discussed as a significant response that is neither adequately addressed within formal policies such as JFM, nor in the overall management of the forests. In this chapter, a broader perspective is employed. The rationale for this broader perspective is that analysis of various management institutions of groups at both state and village levels that contribute to the management of forests may provide valuable insights. The idea is to identify areas where capacity exists and should be nurtured and to highlight areas where strengthening of institutional capacity is perhaps needed. To do this, I turn to the concept of resilience. Within this discussion, resilience provides the overall framework to address objective v.; how institutional responses are contributing to the resilience of the system.

6.1.1 Theory, Resilience of the Social-Ecological System, and Assessing Institutional Responses to Development Pressure

The idea of resilience and the inextricability of social and ecological systems has only recently been explored in the research literature (Folke and Berkes, 1998; Holling and Sanderson, 1996; Holling, 1995), though the concept of resilience itself is not recent. Institutions are one aspect of this social-ecological system where there exists the potential to respond to forces of change in ways that may either confer resilience or weaken the system.

Institutions are described by North's (1994) definition as "humanly devised constraints that structure human interaction. They are made up of formal constraints (rules, laws, constitutions), informal constraints (norms of behavior, conventions and self-imposed codes of conduct), and their enforcement characteristics". It is important to note that institutions are fluid over time; they are not static and therefore any description of an institution represents merely a snapshot in time.

Resilience, in an ecological sense, is the ability of a system to absorb a perturbation and maintain its ecological processes. However, following the definition by the Resilience Alliance (2001), resilience can be applied to "ecosystems, or to integrated systems of people and natural resources" and has three defining characteristics,

- the amount of change a system can undergo and still retain the same controls on function and structure

- the degree to which the system is capable of self organization

- the ability to build and increase capacity for learning and adaptation

In applying the concept of resilience, it becomes possible to look beyond static institutional forms and instead shift the focus to institutional dynamics by examining how social groups and their institutions behave in the face of social, political and environmental/ecological change (Berkes, 2000). Resilience is also defined more generally as "the capacity of a system to buffer and survive disturbance" (Folke and Berkes, 1998:3).

According to Folke and Berkes (1998:4) the social-ecological system is an open system, and is therefore subject to influences such as "population growth, technology, effects of capital markets and trade. Political change occurring outside the study area and

the ubiquitous pressures of globalization may also have major influences on the system". They propose that the functioning of institutions can buffer the social-ecological system against various pressures and driving forces, thereby providing resiliency to the system.

Hanna et al. (1996) present the complementary idea that institutions must recognize, interpret, relate, and I would add respond to, ecosystem dynamics in a fashion that secures the flow of resources and ecosystem services. A difficulty is that resilience is a relative concept; no clear operational procedures to assess resilience have been defined, even though there are mathematical approaches (Gunderson and Holling, 2001).

Nevertheless, linking ideas discussed above provides a means by which institutional responses can shed light on system resilience,

- resilience thinking can enable a dynamic perspective on institutions,
- the functioning of institutions can buffer the social-ecological system against pressures,
- institutions must respond to ecosystem dynamics to secure ecosystem services

Thus, institutional responses to development pressures may be assessed as to whether and how they are affecting the buffering capacity of the forest social-ecological system, and are therefore providing resiliency. The pressures and associated problems of the forest social-ecological system provide the context for the discussion of institutional responses. Through the outline of institutional responses, some of the more direct effects regarding resilience emerge. These are further discussed in the synthesis, which links the effects of institutional responses to the three characteristics of resilient systems. This provides the basis for evaluating the outcomes of institutional responses in terms of resilience.

6.1.2 Pressures and Problems of the Forest Social-Ecological System

Development pressures and the implications for forest areas have been discussed in general terms in Chapter Three. However, it is relevant to briefly outline the problems and pressures on the forest social-ecological system in the Manali area, as it is these pressures that are evoking institutional responses. **Table 6.1** summarizes problems and pressures on the forest social-ecological system, focussing on villages that are case studies or, due to proximity to the urban area, are being encroached on by the growth of

Manali. The two peri-urban villages of Dhungri, Sial and Chachoga have nearly identical problems and thus are aggregated in **Table 6.1**. The location of each village area is indicated in **Figure 6.1**.

Table 6.1 Problems and pressures on the forest social-ecological system in the Manali area.

Village / Area	Problems / Pressures
Manali	Demands for timber to supply the construction boom – creation and growth in black market for timber; increasing demands for fuelwood by growing urban population;
Prini	Illegal felling and sale/"smuggling" of trees; forest depletion by sale of fuelwood in urban area; dissatisfaction with inequities associated with the Timber Distribution system; pressure due to construction needs; population growth
Solang	Alleged corruption involved with forest corporation contracts; pressure due to construction needs; population growth
Old Manali	Proximity to urban area – accessible to outsiders, road access; illegal felling and sale/"smuggling" of trees; forest depletion by sale of fuelwood in urban area; dissatisfaction with inequities associated with the Timber Distribution system; pressure due to construction needs; population growth
Dhungri, Sial, Chachoga	Proximity to urban area – accessible to populations of outsiders; non-rightholders (from Manali) using forest areas; illegal felling and sale/"smuggling" of trees; forest depletion by sale of fuelwood in urban area; pressure due to construction needs; population growth

Some problems described in **Table 6.1** require explanation. "Smuggling" is a term used by local people to describe the covert (and illegal) practice of cutting trees at night or otherwise surreptitiously and delivering the timber to hotel builders for construction (**Plate 6.1**). According to local people, "smuggling" has been and is carried out by local people and to a lesser degree by outsiders.

The Timber Distribution system, commonly referred to as the TD system, is the process by which rightholders (those holding land) claim rights to timber, primarily to meet construction needs. The Forest Corporation is the entity contracted by the Forest Department that clears out dead, uprooted, or dried out trees in areas designated by the Forest Department, which then supply the various fuelwood and timber depots in the area.
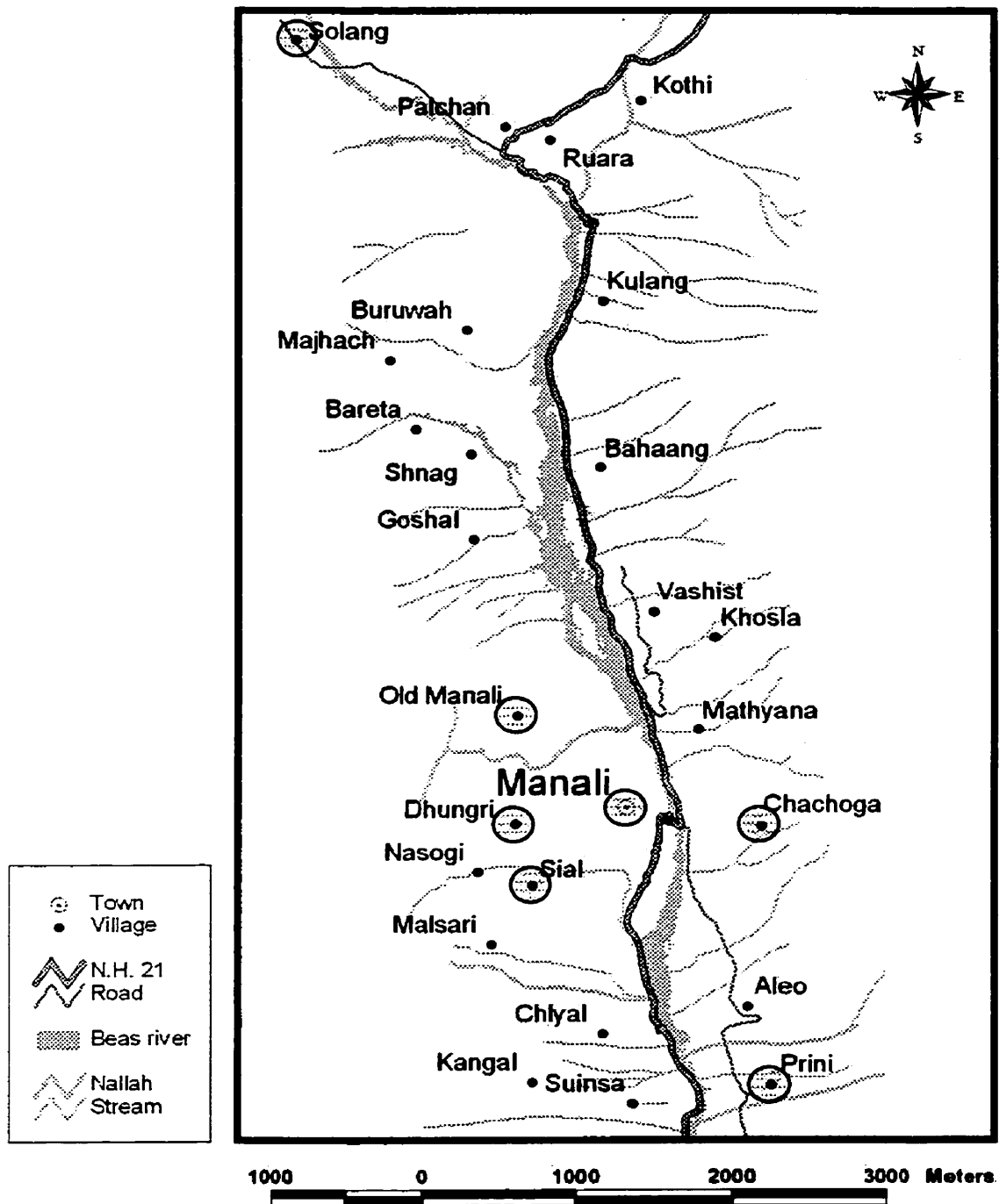
Figure 6.1 Map of the Manali area. Villages referred to in Table 6.1 are indicated by ◎

The similarities across villages in proximity to Manali, and therefore more physically accessible to the source of timber demands, enables some generalizations to be made in terms of institutional responses.

6.2   OVERVIEW AND DISCUSSION OF INSTITUTIONAL RESPONSES

Both village-level and state institutions contribute to the management of village use areas of the forests in the Manali region. The purpose of this discussion and analysis is to examine how institutional responses affect the capacity to buffer the forest social-ecological system from development pressures, thereby commenting on forest social-ecological system resilience. The institutional responses discussed in the following pages include responses by the state Forest Department (including the adoption and implementation of Joint Forest Management), the village *mahila mandals*, and the informal rules-in-use at the village level. The institutional responses examined are not an exhaustive list of ways that the social groups and their institutions in the Manali area have responded to pressures on the forests. The responses included in this analysis are a reflection of the research process and are the responses that became most readily apparent or were observed during the course of research. The range of institutional responses reflects the reality of the involvement of both government and non-government entities in forest management, the levels at which institutions function (state, local), and the fact that both formal and informal institutions contribute to the management of the forests.

6.2.1   The Manali Fuelwood Depot

A depot to provide timber and fuelwood was established by the Forest Department in Manali approximately 10 years ago. The depot was a response to increasing demands for fuelwood and timber by a growing urban population (perhaps partially due to banning the use of local timber for producing apple crates[22]), and a growing cash economy that made purchasing fuelwood feasible for a growing number of people.   The depot provided an alternative source of fuelwood, which had several implications. Availability of fuelwood from the depot contributed to the decrease in

demand for fuelwood brought into Manali for sale by villagers and was also an economic disincentive to villagers who were involved in this practice. It was suggested that the depot prices were better.

Villagers were just bringing small bundles for Rs. 80 and the depot was cheaper.

(Manali, Sept. 17/99)

Comments from interviews supported this idea; one woman admitted that she used to sell fuelwood in Manali. She indicated that she stopped doing so because it made better economic sense to pursue other income-generating activities. Indirectly, the existence of the depot also helped to support the efforts of the *mahila mandals* of the area who had banned the sale of fuelwood by villagers in Manali. In terms of meeting some of the demand for timber, however, the depot was ineffective because timber prices at the depot were exorbitant in comparison with black market prices.

6.2.2 Strengthening the Timber Distribution System

The Forest Department in Himachal Pradesh does not permit the felling of trees without its approval. Villagers who are rightholders (who have a right to timber for the purpose of house building or repair, known as a Timber Distribution or TD right) must make an application to the Range Forest Officer of the State Forest Department and prove need in order to have a tree allocated to them. 'Strengthening' the TD system under which timber is allocated to village rightholders for construction or repair of houses may be interpreted as a measure that could have positive implications for the health of the forest. The Forest Department has imposed further limitations on the amount of timber that a villager is entitled to over the past decades and the requirements to demonstrate need have become more stringent. Villagers in Prini and Old Manali indicate that they are no longer permitted to claim a broken or fallen tree in the forest; instead, all timber must be allocated through the TD system,

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[22] Several people interviewed said that they used to use the wastewood from sawmills for fuelwood prior to the ban on use of local timber for apple crates. This ban resulted in the closure of mills and the loss of the wastewood supply.

Twenty years ago if a tree was broken or fallen, no permission was required to take it; it used to be that making a mark on the tree indicated that it had been claimed. Now the Forest Department takes that tree and gives it to someone else as TD timber. This creates problems.

(Prini, Sept. 12/99)

The difficulties with this response are twofold. First, strengthening the TD system reinforces responsibility for management and decision-making power as the domain of the Forest Department, further alienating responsibility for management or monitoring from local villagers. Secondly, strengthening the TD system places further emphasis on formal aspects of the process such as filing forms and pleading cases to Forest Department officials. This makes the application process more accessible to some people than others and makes it vulnerable to corruption,

TD rights are being misused. If someone is uneducated, another can apply for TD entitlements in his name.

(Old Manali, Oct. 27/99)

The Forest Department gives some people trees and yet others are not even allowed the dry and broken ones. They take money from the rich and allocate trees but poor people's requests are always scrutinized closely.

(Old Manali, Oct. 26/99)

6.2.3 Adopting Joint Forest Management as a policy

The adoption of Joint Forest Management (JFM) in Himachal Pradesh is linked to the nation-wide shift in the approach to forest management, pioneered in West Bengal and directed by a national policy instruction (Government of India 1990). Almost all states in India have followed the lead of the national policy and adopted resolutions of their own. JFM is a program applied to degraded forest areas so the situation in the Manali area, which has heightened pressure on forest areas, makes JFM applicable in this context. The adoption of JFM in the Manali area is an institutional response to the illegal felling of trees and to an inability on the part of the Forest Department to control the illegal activities. The principles of JFM represent a fundamental shift for the Forest Department towards a more participatory approach to the management of the forest.

On paper, this is a progressive institutional response and it has the potential to move in the direction of formally reestablishing greater local responsibility for the care, protection and management of village-use areas. Through the creation of village level committees, local people are encouraged to participate in the management of their forest areas. As discussed in Chapter Four, these committees have been mandated by the Forest Department to set the terms and rules that dictate the villagers' relationship with the forest (Government of HP, 1993).

More importantly, JFM may be viewed as an opportunity for some measure of trust between local people and the Forest Department to be reestablished or reinforced. This is significant to system resilience according to Adger (2000) who emphasizes social capital, the inclusivity of the institution, and the degree of development of trust among the parties in analyzing the resilience of institutions. Villagers express mistrust and the approach of the Forest Department has been described as one where they were simply 'giving orders' (see Chapter Four). Alleged corruption related to the Timber Distribution system and the supervision of Forest Corporation contracts for the removal of dead trees has further added to villagers' wariness with respect to the Forest Department. From this perspective, JFM represents an opportunity to begin to restore faith in the Forest Department as an organization with credibility from local people's perspectives.

6.2.4 Implementation of JFM

JFM is an institutional response on the part of the Forest Department to perceived pressures on the forest. However, the way in which the policy is being implemented will be discussed separately from the adoption of JFM, as the two have different implications with respect to the resilience of the forest social-ecological system. JFM is intended to promote participatory forest management involving local people. Manifestations of JFM at the village level take the form of Village Forest Development Committees (VFDC). VFDCs are a new institutional phenomenon in the Kullu District and even more so in the Manali area (interview with the Range Forest Officer, Manali). The comments regarding the implementation of JFM are based on interviews in Prini and Solang - two of the villages that were the focus for field studies – where JFM initiatives are underway.

The structure of and representation on VFDCs is prescribed by the state policy resolution, and in this sense JFM imposes institutions. There are difficulties associated

with this imposition. Two considerations emphasized by Lele (1998) in his analysis of JFM are relevant in this context. They relate to two underlying empirical assumptions of JFM: that the pre-JFM property rights regime is either one of full state control or open access, so that there is a "blank slate" on which the new regime may be written; that the "community" exists as a cohesive body. Neither of these assumptions holds true in the villages in the Manali area (see Berkes and Gardner, 1997). Sensitivity to local context and adaptation of JFM as required *could* result in village level institutions that are able to respond positively to externally imposed institutional structures, however to date this is not occurring.

The diversity of livelihood, social and economic positions, and cultural subtleties is not being recognized and accommodated by the current structuring of JFM. The policy makes provision for women and the 'poor' through membership requirements (Government of H.P., 1993); however, Sarin (1997) points out that when representation is prescribed, particularly through minimum requirements, the minimum often becomes the maximum. More troubling is evidence that these requirements are being ignored or circumvented. For instance, in Prini, the Executive body has no female members, and in Solang, women whose names were on the list of Executive body members had no knowledge that they were on the committee.

Although JFM holds the potential to encourage local management responsibility in that VFDCs are mandated to design operational rules, there are several issues that minimize this power and potential responsibility. As many authors have pointed out, the Forest Department retains control over the entire process; village institutions do not have any real legal status or formal authority, and the policy instruction can be withdrawn at any time (Lele 2000, Chhatre 2000, Ghate 2000). VFDCs perform the same function as Forest Department staff; however the committees cannot even claim this degree of authority (Saigal, 2000). Further, VFDCs do not have autonomy over functioning – the Divisional Forest Officer has the power to dissolve a committee if he feels it is not functioning properly. Finally, even the power that the VFDC does have in the creation of operational rules is subject to the approval of the Divisional Forest Officer.

6.2.5 The Activities of the Mahila Mandals

The responses by *mahila mandals* in the area to pressures on the forest social-ecological system stem directly from depletion of localized areas of the forest, and indirectly from the economic changes driving the activities that have resulted in depletion. The responses of the *mahila mandals* function to promote the protection of their forest areas. Ham (1995) and Davidson-Hunt (1995) established that the *mahila mandals* in the Manali area have reacted by monitoring the extraction of timber from the forest areas through patrols and confiscation of illegal timber, by instituting and attempting to enforce a ban on the sale of fuelwood outside the village, and by discouraging the practice of lopping branches. In addition, *mahila mandals* also began to exclude women from collecting fuelwood in their forests unless they had rights to do so, which had implications for women from Manali town who did not have rights to collect fuelwood in any forest,

> *People from the bazaar [town] used to come here to collect fuelwood, it*
> *was allowed. When the mahila mandal became established, we stopped*
> *them from coming because there was less and less fuelwood available.*
>
> (Dhungri, Oct.17/99)

Most of the institutional responses of the *mahila mandal* are synergistic; the Forest Department, which has started to enforce some of its rules in a more even-handed manner, has supported the activities of the *mahila mandals*. In addition, other factors have reduced pressure on the village forest areas over time, for example, the construction boom has slowed resulting in reduced demand for timber. Recent court cases against persons caught illegally felling timber have acted as a deterrent as well.

> *Last year the Forest Department took someone to court for illegal felling*
> *and this court case has made an impression. People think that it has made*
> *a difference and is deterring smugglers. People are scared to smuggle*
> *now.*
>
> (Old Manali, Sept. 27/99)

Nevertheless, many local people and Forest Department officials acknowledge the positive influence and dedication of some of the *mahila mandals* in the area.

Also noteworthy is the fact that the *mahila mandals* function at the village level and as a result, rules are adapted to the local situation. For instance, in Solang, illegal felling by villagers to supply the construction industry was not a concern because of the relative isolation and lack of road access to the village and the associated difficulties with transporting timber. The *mahila mandal* was concerned only with policing outsiders; villagers were not subject to rules that prohibited the felling of trees. In contrast, Prini and Old Manali are both accessible by road and villagers are subject to incentives created by the black market for timber. In both these villages, villagers and outsiders are subject to *mahila mandal* rules prohibiting felling of trees. In Old Manali, the problems associated with illegal felling have become such a concern that the *mahila mandal pradhan* (president) aspires to expand the membership of the *mahila mandal* so that it may become effective in protecting the forest and working towards a healthier forest.

6.2.6 Fuelwood Choices

The rise of horticulture, specifically the cultivation of apple trees, in recent years in the Kullu Valley also has provided the side-benefit of an alternative source of fuelwood. The use of pruned branches from apple trees alleviates some of the demand for fuelwood from the forest. Although no one indicated that they were able to meet all their household needs from pruned branches from apple trees, villagers in Prini and Old Manali indicated that this is a conscious effort to decrease demand for fuelwood and a recognition that reducing pressures for fuelwood on the forest is beneficial.

> *More people are using fuelwood from the apple trees and they are trying to protect the forest.*
>
> (Old Manali, Sept. 22/99)

Similarly, certain species of shrubs are also used as an alternative source of fuelwood. The local rules-in-use that guide need-based fuelwood collection have changed and the common wisdom is to make use of non-forest and non-timber fuelwood sources.

Switching to non-forest derived sources of fuelwood for cooking is also occurring, but this is based on economic feasibility for individual households and is a response to changes in economic conditions. Non-forest derived alternatives for heat through the winter months is beyond the economic means of the majority of people.

6.2.7 Social Objectives vs. Forest Department Rules

Another common village level rule is in response to Forest Department measures to regulate further the use of timber. Even in the case of extenuating circumstances such as a death, according to most villagers they are required to have permission before taking a tree for the cremation and funeral feast. Interviews from both Prini and Old Manali revealed that it was in fact socially acceptable to ignore this Forest Department regulation and take what is needed.

> *For a funeral, no one makes things difficult if you cut a tree, but for other occasions you must ask the Forest Department.*
>
> (Prini, Sept. 16/99)

> *If someone dies you do not need permission for the wood for the funeral. You can cut a tree if necessary, a poplar or a whole tree.*
>
> (Prini, Sept. 12/99)

In a similar fashion, because limited accessibility precluded difficulties with "smuggling", the felling of trees by villagers in Solang was assumed to be need-based and was socially sanctioned within the village, regardless of Forest Department regulations. In fact, the felling trees by villagers was not even considered to be 'illegal' by villagers in Solang,

> *People cut trees for their own needs; illegal felling is not an issue.*
>
> (Solang, Sept. 30/99)

> *There are no problems with people from the village cutting trees and selling sleepers [timber], they are just bringing what they need for themselves.*
>
> (Solang, Oct. 5/99)

In these instances, social and economic needs override ecological considerations and Forest Department rules. Although the practice itself may appear to disregard values which dictate that one should protect the forest, in effect it also indicates a capacity for the rules-in-use to be sensitive enough to distinguish between activities such as "smuggling" that are purely destructive to the forest, and practices which are based on a

social and local economic needs and may not have seriously detrimental consequences for the forest.

6.2.8 "Breaking the Rules"? – The Forest Department

The instances of local people telling stories about bending or breaking the rules by members of the Forest Department are too numerous to be discounted. If true, such activity would indicate an institutional failure on the part of some members of the Forest Department. Indeed, Forest Department officials themselves acknowledge *past* corruption. Villagers have indicated that individuals in the Forest Department have received *baksheesh* (bribes) and in return have ignored individuals who sold the TD timber they were allocated, or felled more trees than were allocated, or who were simply cutting down trees with no pretense of applying for TD timber. The system allegedly became compromised to the extent that those who could not afford to pay *baksheesh* to Forest Department officials were not having their applications for TD timber processed. If these incidents are based in fact, this response on the part of the Forest Department is detrimental to the forest because it makes the Forest Department complicit in the illegal felling of trees.

Perhaps more importantly, allegations of corruption damage the credibility of the Forest Department, impact the already precarious trust relationship with local villages, and reinforce any justifications on the part of local people who are felling trees. As one man from Old Manali explained,

> *How can the Forest Department tell people to stop cutting green trees and smuggling when they are involved in the business? It is laughable when they try to tell people not to harm the forest.*

(Old Manali, Sept. 28/99)

6.2.9 "Breaking the Rules"? – Local People

Although it is tempting to condemn the Forest Department for bowing to pressures, the reality is more complex. Local people have responded to the creation of a black market for timber in a way that was perhaps predictable. Illegal felling by villagers in Old Manali and Prini was accomplished either by simply flaunting the regulations prohibiting felling of trees or through circumvention of the TD system,

The people who are building hotels have used smuggled timber. They have not purchased the timber at market rates, but from local smugglers.

(Old Manali, Oct. 26/99)

When someone is granted one tree for TD entitlement, they cut four or five trees in order to sell them illegally. The smugglers pay money and the Forest Department allows this to happen. The Forest Department is the problem.

(Old Manali, Sept. 22/99)

Breaking the rules by local people can also be viewed as a failure of social capital and local trust relationships. As Hanna (1998:201) explains, "[t]he development of markets for any natural resource introduces strong pressures on resource appropriators to maximize short-run gains at the expense of long-run sustainability." This incentive to take advantage of opportunities created by markets is a temptation that has been documented time and time again (Ciriacy-Wantrup and Bishop 1975, Hanna 1998). In this case, market incentives were reinforced by the alleged corruption within the Forest Department that helped to facilitate illegal felling of trees. The threat of social disapproval and the confidence in the capacity of others to forego the short-term economic benefits to be had from depleting the resource were clearly insufficient to prohibit illegal felling.

According to villagers, those who could afford to encourage the Forest Department and other village officials to ignore rules were those that realized the benefits of "smuggling" timber. Thus, divisions within the community along economic lines were reinforced and enhanced with the emergence of this lucrative and damaging activity.

6.3   ANALYSIS OF INSTITUTIONAL RESPONSES

The institutional responses discussed within this chapter are responses to problems of and pressures on the forest social-ecological system in the Manali area. These problems and pressures, summarized in **Table 6.1,** largely result from recent forces driving urban growth in the town of Manali. In the preceding pages, some of the effects and implications of the institutional responses to the pressures on the forest social-ecological system have been outlined. These effects and implications are relevant to the resilience of the forest social-ecological system in a variety of ways.

Table 6.2 summarizes an analysis of institutional responses and their effects on system resilience. The effects on system resilience of each institutional response were analyzed in the context of the three characteristics of resilience described by the Resilience Alliance (2001) and this forms the basis for the outcome of the institutional response as it relates to each of the resilience characteristics. Although **Table 6.2** is fairly detailed and self-explanatory, the effects on system resilience listed have a basis in the resilience literature and thus require some explanation. Many of the effects and outcomes of institutional responses noted in the Table are used to illustrate the reasoning and thought process. However, the intent is not to dissect each effect and how it is applicable to each and every resilience characteristic.

6.3.1 Management Responsibility

Management responsibility is referred to in several instances in **Table 6.2**, both in the context of reinforcing state control over management of the forest and with regard to encouraging or promoting local responsibility for management. Closely linked to promoting local responsibility for management is the idea of the presence of shorter feedback loops, both of which promote resilience. In resilience discussions, local rule making promotes quick feedback and prompt response to changes; more hierarchical decision processes can be costly and time-consuming to coordinate (Hanna, 1998). Levin et al. (1998) further explain tight feedback mechanisms as a coupling of stimulus and response in space and time, accomplished by embedding management responsibility in the local context.

Embedding management responsibility in the local context and promoting tight feedback loops have a positive effect on system resilience through increasing capacity for self-organization, and for learning and adaptation – two characteristics of resilience. As an example, the adoption of JFM as Forest Department policy potentially encourages the embeddedness of management responsibility in the local context through joint responsibility with Village Forest Development Committees. Empowerment is possible through joint arrangements, contributing to the capacity for self-organization. Local management, by closing the gap between use and management, also shortens the feedback loop that regulates responses to resource changes and also increases opportunities for local learning and adaptation.

Conversely, the opposite can be argued in the context of the Forest Department response of strengthening the Timber Distribution system where one of the effects on system resilience was to reinforce management responsibility as the domain of the state. As Hanna and Jentoft (1996:47) remark, "[f[rom the perspective of the local community, bureaucratic involvement in resource management can disembed (sic) management responsibilities from local contexts of interaction", affecting feedback loops and also potentially the capacity for self-organization.

In the context of **Table 6.2**, the activities of village *mahila mandals* – monitoring and creating new rules in response to resource depletion – are actions that are based in ecological knowledge, but also potentially build ecological knowledge. Further, monitoring that leads to corrective responses, in and of itself, is important for resilience (Holling, 1995). Taking action in the face of changes to forest resources builds institutional memory for decisions regarding future changes to the forest, but only if the knowledge is transferred to the next generation.

6.3.2 Redundancy and Heterogeneity

Redundancy, in the discourse of ecological resilience, contributes to the capacity to adapt to changes and is usually discussed in terms of redundancy of structure and function (Holling et al., 1995). Additionally, "having many management units located at smaller scales backed up by larger scale coordination arrangements appears to generate more resilient management of resources, rather than relying in a singe, all encompassing management unit" (Resilience Alliance 2001) is another way of thinking about redundancy. It is in this sense that the adoption of JFM as a policy builds redundancy (**Table 6.2**).

6.3.3 Imposition / Facilitation of Institutions

Imposed institutions and institutional structures can be adapted and incorporated into local systems (*mahila mandals*, for instance), especially when flexibility and inclusiveness needs are part of the structure. However, another approach is to recognize legally and support local systems and or share resource management and power between government agencies and local institutions, as suggested by Folke and Berkes (1998).

Table 6.2 Institutional responses to problems of the forest social-ecological system and outcomes with respect to resilience.

Response	Effect of Response on System Resilience	Resilience Characteristics	Outcome
1. Establishing fuelwood depot (Forest Department)	Subsidized fuelwood - positively impacts health of the forest; is an adaptation to ecological and economic changes; reinforces efforts of local *mahila mandals*	1. absorb change 2. self organization 3. learning and adaptation	1. + 2. 0 3. 0
2. Strengthening of Timber Distribution system by Forest Department	On surface, positively impacts forest health; reinforces management and decision-making as domain of the state, further alienates local responsibility; does not promote shorter feedback loops; limits accessibility and claiming of rights	1. absorb change 2. self organization 3. learning and adaptation	1. + 2. - 3. -
3. Adopting JFM as a policy (Forest Department)	Potentially is an adaptation to ecological and economic change; potentially encourages embeddedness of management responsibility in local context; promotes shorter feedback loops; builds redundancy; promote trust with local communities; potentially builds capacity to increase local ecological knowledge	1. absorb change 2. self organization 3. learning and adaptation	1. + 2. + 3. +
4. Implementing JFM (Forest Department)	Imposes institutions as opposed to creating context or conditions out of which appropriate institutions can emerge; does not give legal recognition or support to local systems; not true sharing of resource mgmt and power; ignores social heterogeneity; limited opportunity to build trust with local people	1. absorb change 2. self organization 3. learning and adaptation	1. 0 2. 0 or - 3. 0 or -
5. Monitoring, exclusion of non-rightholders, banning sale of fuelwood, discouraging lopping (all by *mahila mandals*)	Promotes health of the resource; is an adaptation to ecological and economic change; promotes embeddedness of management responsibilities in local context; promotes shorter feedback loops; monitoring leading to corrective responses; maintains and enhances institutional memory; builds ecological knowledge	1. absorb change 2. self organization 3. learning and adaptation	1. + 2. + 3. +
6. Switching to alternative sources of fuelwood (local people)	Promotes health of the resource; is an adaptation to ecological and economic changes; is an example of shorter feedback loops, incorporates flexibility into rules	1. absorb change 2. self organization 3. learning and adaptation	1. + 2. + 3. +
7. Overriding Forest Department rules for appropriate social and economic reasons (local people)	Is an example of how local institutions can allow for exceptions that serve local village social objectives; incorporates flexibility into rules; builds social capital; but does not necessarily promote forest health	1. absorb change 2. self organization 3. learning and adaptation	1. + 2. + 3. 0
8. Bowing to pressures to break the rules (Forest Department)	Institutional failure on the part of regulators; negatively impacts forest health; negatively impacts trust relationship with local people; perverse learning	1. absorb change 2. self organization 3. learning and adaptation	1. - 2. - 3. +
9. Bowing to pressure to break the rules (illegal felling by local people)	Failure of social capital and local trust relationships; negatively impacts forest health; creates and/or reinforces divisions within the community; perverse learning	1. absorb change 2. self organization 3. learning and adaptation	1. - 2. - 3. +

Legend: + indicates positive response regarding resilience
- indicates negative response regarding resilience
0 indicates response is neutral or undetermined

Thus, the emphasis should be on creating context or conditions out of which appropriate institutions can emerge, facilitating a learning and adaptation process.

6.3.4 Flexibility

Flexibility is also characteristic of resilient systems, generally allowing adaptation to ecological and economic changes (Hanna and Jentoft, 1996). Flexibility, specifically in reference to rule making, "allows revision of management decisions that do not led to the desired outcome" (Hanna, 1998: 204). With reference to the first resilience characteristic, it can be argued that flexibility contributes to system capacity to undergo change and still retain controls on structure and function. However, flexibility in rule making is perhaps more relevant in terms of capacity for learning and adaptation. To illustrate, local people's decisions to override certain Forest Department rules for social and local economic reasons show flexibility that the state does not entertain. However, by maintaining the broader system of social values and cultural practices, and by serving local needs, flexibility in rules may contribute to overall capacity to undergo change and to self organize, two of the resilience characteristics.

6.3.5 Institutional Memory and Ecological Knowledge

Institutional memory is "memory of experience which provides context for modification of resource use rules and regimes" (Berkes and Folke, 2001: 3). This memory can be built and retained through the generation, accumulation, and transfer of ecological knowledge, which are key to the capacity to actively adapt to disturbance (Folke and Berkes, 1998). Ecological knowledge, the basis of institutional memory, is a source of capacity for learning and adaptation, and institutional memory contributes to system capacity for self-organization by making possible a response with experience (Berkes and Folke 2001).

Although JFM is promoted as a power-sharing arrangement, as opposed to a mechanism for lending support to local systems, under JFM new institutional structures are created and institutions imposed; local people are not involved in the design of the structure of committees, nor are they involved in what Ostrom (1990) refers to as collective choice rules and constitutional choice rules.

6.3.6 Perverse Learning

Although the assumption is often made, and is indeed intuitive, the results of learning processes do not necessarily produce positive outcomes. Learning can occur that results in a negative social outcome. When rules are broken, actions are nevertheless reinforced by the benefits derived and there is often creativity involved in the process. Learning simply becomes perverse as it benefits neither the resource nor society; only individuals benefit from activities that break or circumvent rules. In both responses involving rule-breaking – on the part of the Forest Department and local people – perverse learning results in a positive outcome with respect to the third resilience characteristic, the capacity to learn and adapt. However, it should be emphasized that the learning is perverse because it benefits few at the expense of others as well as forest resource health.

6.4 SYNTHESIS AND CONCLUSIONS

The analysis provides outcomes of institutional responses with respect to each of the three characteristics of resilience. From these outcomes it is possible to comment as to how each institutional response affects or contributes to the overall resilience of the forest social-ecological system. **Table 6.3** is a summary of institutional responses and the contributions to overall resilience.

Table 6.3 Institutional responses and contributions to forest social-ecological system resilience. Response items refer to Table 6.2.

Contribution to Overall Resilience of the Forest Social-Ecological System	Institutional Response
Positive	• Monitoring, exclusion of non-rightholders, banning sale of fuelwood, discouraging lopping by *mahila mandals* • Adopting JFM as a policy by the Forest Department • Switching to alternative sources of fuelwood by local people • Overriding Forest Department rules for appropriate social and ceremonial reasons by local people • Establishing fuelwood depot by the Forest Department
Ambiguous or perhaps Negative	• Implementing JFM by the Forest Department
Negative	• Strengthening of Timber Distribution system by the Forest Department • Bowing to corruption pressures (Forest Department) • Bowing to corruption pressures (local people)

To recap, this chapter makes use of a resilience framework to examine institutional responses to development pressures from a broader perspective. The starting point was the idea that institutional responses could be assessed as to whether and how they were affecting the buffering capacity of the forest social-ecological system, and therefore impacting resilience. This assertion was based on linking three ideas from the resilience literature. The pressures and associated problems of the forest social-ecological system provided the context for the discussion of institutional responses. The outline of institutional responses detailed some of the more direct effects regarding resilience. The synthesis linked effects of institutional responses to the characteristics of resilient systems, which provided the basis for evaluating the outcomes of institutional responses in terms of resilience characteristics as depicted in **Table 6.2**. From the outcomes to each of the characteristics of resilience, institutional responses may be contributing positively, or in a neutral fashion, or negatively to overall forest social-ecological system resilience (**Table 6.3**).

Institutional responses that contribute positively to overall resilience of the forest social-ecological system include the activities of the *mahila mandals*, adopting JFM policy, upholding local rules in the face of contradicting Forest Department rules, establishing the fuelwood depot, and switching to alternative fuelwood sources. The implementation of JFM by the Forest Department appears to be a neutral response or perhaps may even negatively impact overall forest social-ecological system resilience, in contrast to the positive contribution to resilience that the adoption of JFM appears to make. In this analysis, perceived corruption emerges as institutional failure at both state and local levels. The strengthening of the Timber Distribution system also serves to contribute in a negative manner to overall resilience of the forest social-ecological system

The analysis of institutional responses helps identify areas where institutional capacity exists and should be nurtured, and highlights areas where strengthening of institutional capacity is perhaps needed. Clearly, institutional capacity currently exists at all levels; responses that contribute positively to system resilience are drawn from informal and formal institutional responses and span local and state levels. The fact that institutional capacity exists is perhaps not surprising, given the long history of both local

villages and the Forest Department. However, the actions of the Forest Department, as exemplified by the manner in which Joint Forest Management is being implemented, do not indicate a true recognition of either the robustness of local institutions or the institutional capacity at that level.

Plate 6.1 An abandoned "sleeper" (and an aborted smuggling operation?) in forest area a few kilometres from Old Manali.

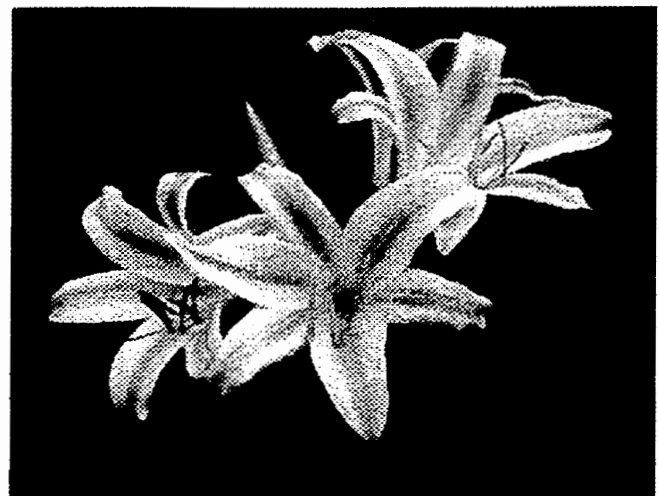(photo K. Bingeman)

CHAPTER SEVEN:

'CONCLUSION - LEARNING, OPPORTUNITIES AND FINAL REFLECTIONS'

My home for four months, John Banon's Guesthouse in Manali.
(photo K. Bingeman)

Early morning lilies in John Banon's garden.
(photo K. Bingeman)

7.1 Looking Back

The focus of this project evolved as I became aware of the situation and context in the field. The original purpose did not waver; it remained centred on examining how increased demands for forest products resulting from urban development and external market links place pressures on the forests around Manali, and the social system that operates in order to manage the forests. After some time in the field, the objectives shifted according to concerns and issues that became apparent and according to analytical focus. In particular, the responses of organizations and institutions that contribute to the management of forests to pressures on forest areas became the focus for field research. The research objectives were as follows:

i.   *To explore the process and progress of newly initiated Joint Forest Management projects in the area*

ii. *To examine the role of women in the management of forests at the village level*

iii. *To investigate and analyze institutional responses to pressures on the forest social-ecological system resulting from urban development*

iv. *To share findings of the research with community groups, and/or NGO's, to communicate with local policy-makers (at the local and state level) and to make recommendations regarding procedures to implement appropriate policy changes.*

v.   *To become aware of the perceptions of myself as a researcher, a foreigner and as a woman, and raise my own consciousness regarding the relationships that develop between myself and individuals from the Manali area, and also acknowledge the ways that these perceptions and relationships shape the research process.*

In this final chapter, I return to these objectives and review the learning that has come out of analysis, and identify some of the implications and opportunities derived from this research. I close with some final reflections about the overall process.

7.2.1   Lessons, Implications and Opportunities from the Implementation Process of Joint Forest Management

The primary idea to be taken from the experience in Prini and Solang is that Joint Forest Management (JFM) requires an environment that fosters and supports participation. This enabling environment does not yet exist in the Manali area and there are several reasons for this.

- The significance of village heterogeneity and a diversity of interests is not yet being adequately acknowledged or addressed

- The historical relationship and pattern of interaction between the state Forest Department and local people influence the present relationship. Yet this dynamic is also largely being ignored.

- The hierarchical nature of the Forest Department as an organization, the attitudes towards local people that have been part of the philosophy of the Forest Department for many years, and the way in which the department functions in some instances work at cross-purposes with a participatory policy that emphasizes building partnerships.

Further, in the Manali area, in accordance with other authors,

- The basic structure and process appropriate in West Bengal for Joint Forest Management have been imported wholesale to communities in the Manali area and elsewhere in India, with little consideration or accommodation afforded to local realities and variations or existing institutions that already play a role in forest management.

- JFM is being implemented in the absence of provisions for flexibility or for the involvement on any meaningful level of local people in the adaptation of JFM to suit the needs of individual villages and conditions of their forest areas.

Although the above points indicate that there are clear challenges to overcome in order to create an atmosphere that fosters local participation and partnerships, it is important to recognize that building partnerships and/or rebuilding relationships require time. Certainly in the Manali area, JFM is in the early stages. Given that many of the observations regarding JFM in the Manali area are echoed in the literature, the implication is that without a shift in initiative on the part of either the Forest

Department or a local village leader or group, there is a danger that some of the criticisms leveled at JFM projects elsewhere in India will become applicable in the Manali area. Opportunities do exist; the commitment of the Range Forest Officer in Manali is genuine, and there are some Forest Guards in the area that have won the respect of villagers. The level of villager support for projects to enhance forest areas is significant and the recognition that local involvement can make a difference is becoming internalized by many people. Local institutions such the *mahila mandals*, which are already active in forest management issues, are functional in most villages.

7.2.2 The Blending of Old and New: Gender Issues and Forest Management

There is a need for alternative, culturally appropriate strategies to involve women in decision processes related to the forests. To date, strategies such as reserving membership on committees specifically for women has resulted in very few women participating in the decision process in a meaningful way, whether it is within JFM or a system such as the *panchayat*. These strategies have largely "failed" because social customs and cultural traditions influence women's participation in decision processes to a great extent. However, recognizing the implications and extent to which traditions prescribe women's roles in decision processes is not an end point that restricts any further discussion of mechanisms to meaningfully involve women. Far from it, such recognition is only the beginning because traditions are not immutable; in fact they are dynamic and constantly evolving. A closer look reveals opportunities for further transformations of tradition; some women are actively involved in challenging what is acceptable behavior for women and the attitudes of some women and also some men are shifting towards recognizing the value of women's contributions to forest management.

Of particular interest is the role of the *mahila mandals* in the Manali region. *Mahila mandals* in the area have established a tradition of women's involvement in resource management, in this case in relation to the forests. This directly contrasts with the findings of case studies elsewhere in India. Although there are problems with representation and equity, the *mahila mandals* represent a locally adapted institutional framework that has implications for the management of the forests generally and specifically for JFM. The potential exists for this institutional structure to perhaps

perform some of the same functions and help meet the objectives of initiatives such as JFM.

7.2.3 Problems and Potential Capacity – Resilience and Institutional Responses

In this chapter I used a resilience framework to examine institutional responses to development pressures from a broader perspective. The analysis is based on the idea that institutional responses can be assessed as to whether and how they are affecting the buffering capacity of the forest social-ecological system, and therefore contributing to system resilience. The pressures and associated problems of the forest social-ecological system provided the context for the discussion of institutional responses. The outcomes of institutional responses were evaluated in terms of resilience characteristics. Institutional responses are contributing positively, in a neutral or negative fashion, or negatively to overall forest social-ecological system resilience.

Institutional responses that contribute positively to overall resilience of the forest social-ecological system include,

- the activities of the *mahila mandals*

- adopting JFM policy

- upholding local rules in the face of contradicting Forest Department rules

- establishing the fuelwood depot

- switching to alternative fuelwood sources.

The implementation of JFM by the Forest Department appears to be a neutral response or perhaps may even negatively impact overall forest social-ecological system resilience (it is difficult to make any definitive comments at this early stage), in contrast to the positive contribution to resilience that the adoption of JFM appears to make. In this analysis, perceived corruption emerges as institutional failure at both state and local levels. The strengthening of the Timber Distribution system also serves to contribute in a negative manner to overall resilience of the forest social-ecological system

Theoretically, this type of analysis within the resilience framework offers potential for an additional method of assessing aspects of resilience. Within the

framework, I evaluate institutional responses to pressures on the forest social-ecological system using criteria derived from the resilience literature.

This analysis of institutional responses identifies areas where institutional capacity exists and should be nurtured, and areas where strengthening of institutional capacity is needed. It is important to note that opportunities to develop capacity currently exist at all levels. The responses outlined above that contribute positively to system resilience are drawn from informal and formal institutional responses and span local and state levels.

7.3   SHARING FINDINGS AND GIVING BACK TO THE COMMUNITY

I think perhaps that devising ways of sharing findings in an appropriate format and in a way that may be meaningful to the community where the research took place has been one of the most difficult aspects of this process. This research has been presented to policy-makers in Delhi as part of the larger project and will be presented as part of the final dissemination workshop in Manali. However, I have always been concerned with the question of how to share findings with those people who shared with me their time and insight and who inspired me along the way.

Notwithstanding the above, the primary purpose of this or any other research project is not to effect change. Research is not development (though it may provide the foundation and background for development), the length of time particularly in the case of research at the graduate level is limited, and this largely restricts the ability to make significant contributions in areas such as capacity building. However, during the interview process a local person pointed out to me that the fact that I was there and asking these questions was making people think about their forests and talk about this issue amongst themselves. That comment validated my presence as a researcher and I feel it is perhaps the most significant way that I may have contributed to the local situation in my short time in the villages and Manali.

7.4   SUMMING UP

Expansion in recent decades in the town of Manali has put pressure on the forests, and particularly on village forest use areas of nearby villages. As one of the most recent and formal responses on the part of the state Forest Department, the initiation of Joint

Forest Management projects in the area holds both the promise of partnership and the potential for the reinforcement of perceptions of mistrust by villagers towards the Forest Department. Many of the challenges noted in the two case studies in the Manali area mirror those documented in other areas of India. The initiatives are relatively recent and it is difficult to predict whether leadership (both local and state) will begin to drive the process such that it can be adapted to suit the individual needs of these villages and make use of the potential that exists within pre-existing local management institutions.

The involvement of women in formal decision processes in India and specific to this context, in the decisions relating to the management of forests, continues to be problematic in the absence of mechanisms that adequately acknowledge and accommodate the significant influences of tradition. Women's involvement in forest management needs to be culturally appropriate and sensitive to unique local situations; however, traditions are dynamic and without this recognition, tradition can become a justification for the *status quo*. The functioning of the *mahila mandals* in the Manali area, as contributing to forest management, in contrast to other areas of India where women use the forests but are largely left out of management decisions, represents a unique situation. Although there are limitations associated with the structure and function of the *mahila mandals*, it is a forum where women freely express opinions and may also be developing skills and confidence to do the same in other spheres.

From a wider perspective, institutional responses to pressures on forest areas by local and state groups indicate that institutional strengths exist in some instances, while in other situations pressures and temptation related to short term gains and lack of social sanctions have meant that institutional responses weaken forest social-ecological system resilience. This type of analysis is insightful in that it highlights capacity that should be nurtured and shifts in the institution that should be made in order to curtail responses that contribute negatively to system resilience. The practical work of designing strategies to achieve institutional change, however, is a major undertaking to be shouldered by the community in question.

7.5 FINAL REFLECTIONS

Even prior experiences travelling in India did not prepare me for actually carrying out research in the Kullu Valley. The experience was personally rewarding beyond

anything I could have imagined, and at the same time, astonishingly frustrating. I came to love the rhythm and routine of interviews and setting forth on what would inevitably be an adventure every single day. I now have an eternal love for chai and orange squish and momos. I am privileged.

I was able to make many friends and forge connections that I hope to be able to go back and renew. I learned how to conduct an interview that did not elicit only one-word responses and to appreciate first hand the sheer physical strength that many villagers and particularly the women build through their daily activities.

I know there were times that my presence and identity influenced what people said and how an event unfolded. For the most part, I felt this in situations involving government officers and official proceedings such as meetings. It was very rare that I got the impression that the people I spoke with in villages were simply telling me something I wanted to hear. I did not encounter a great deal of suspicion; more commonly I encountered curiosity as to why I wanted to ask such questions.

I think that the links I made, the discussions I started with people and the simple fact that someone from a far-away Canadian university was interested in their forests will make as much if not more of an impact upon people involved in the management of village forest areas around Manali than a presentation to a policy-maker. But more importantly I believe that I have added in a small way to the body of research that exists in relation to this very unique, fascinating and complex part of the world.

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