

Intensive Micro-Study to Assess Socio-  
Economic Conditions of People Using  
the Great Himalayan National Park  
and Wildlife Sanctuaries

**Amita Baviskar**  
Department of Sociology  
University of Delhi  
INDIA

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## TERMS OF REFERENCE

### **Task No. 3: Intensive micro-study to assess socio-economic conditions of people using the Great Himalayan National Park and Wildlife Sanctuaries.**

Duration 2MM.

- (a) Conduct an intensive micro-study within the broad framework of Task No. 2, highlighting the following:

Current resource use practices and perceptions, specifically examining local dependence on the environment as part of a diversified household survival strategy; the possible correspondence between the use of different 'ecological niches' and particular social groups (the tribe/caste/gender-specific variations in environmental use); ways in which ecological knowledge is employed, expanded and transferred; and ways in which ecology is integrated into a system of religious belief and ritual.

Conflicts and their negotiation, specifically examining the institutional structures and mechanisms by which groups of people resolve potential situations of ecological conflict (between livestock herds from different villages, between Nepali migrant/settlers and older inhabitants, between local people and the state).

- (b) Interact and inter-relate your work with fellow-researchers, WII resource persons and consultants working in the field in order to obtain the maximum value of research. Prepare and submit report on above-mentioned aspects.
- (c) Besides presenting a formal report of the study, preliminary insights from the study will be shared with the officials of the Great Himalayan National Park and local officials (if any) in meetings. Such meetings will also be part of a process of creating a dialogue aimed at working out solutions and evolving feasible recommendations that can be incorporated expeditiously into the implementation of the Ecodevelopment Project.



## RESEARCH DESIGN

This intensive micro-study has been conceptualized as a self-contained task, nesting within the larger structure of Task No. 2 (Assessment of the Social Context and Socio-economic Conditions of People using the GHNP and WLSs). Whereas most other tasks in the study approach the subject by focusing on ecological conservation as a primary goal, tasks no. 2 and 3 are explicitly anthropocentric in orientation since they focus on local communities, according priority to their rights, both statutory and customary, and to their social welfare. Conducting high quality research on these aspects requires close interaction over an extended period of time with the communities in question. Since this consultant's input was going to be limited to two man months, it was decided that this period would be optimally used in working intensively on a micro-study in order to generate good qualitative data on the subject. Such a micro-study, while envisaged as a separate module, would rely substantially on related research being conducted by other researchers and consultants working on task no.2.

Consultancy work on the project started formally with the Start-up Workshop in July 1995 at Sai-Ropa, near GHNP. This provided an opportunity to meet fellow-researchers and hold introductory discussions, as well as to get a sense of local geography and ecology. A preliminary review of the literature on various aspects of GHNP was conducted at the Indian Institute of Public Administration, Delhi and at the Wildlife Institute of India (WII), Dehradun. This was followed by the two field trips in June and October 1996 respectively. Some interim findings and observations were also presented at the FREE-GHNP Research Workshop in June 1997 at Kulu. Further fieldwork was carried out in June 1997 and in May-June 1998. The findings of this research were shared with the Park administration, Wildlife Institute of India and other researchers at the workshop on 'Planning Monitoring Programme for Great Himalayan National Park Conservation Area' at Sai-Ropa in May 1998 and at the 'Ecodocumentation Workshop' at WII in November 1998. This report is the final statement of findings upon conclusion of research.

The first intensive micro-study was conducted in Sharan village in the Jiwa Nala Range. Sharan was chosen as one of two representative villages in consultation with the rest of the research team. The research methodology consisted of ethnographic fieldwork based on participant observation supplemented by in-depth interviews. The study was timed to coincide with the peak season for grazing and herb-collection — activities which are believed to be highly significant in terms of people-park relations. In addition to the village study of Sharan, data was collected from the Park Director, the Divisional Forest Officer - Inner Siraj, the patvari - Raila *phati*, and the forest guards and wildlife watchers of Jiwa Nala Range. Besides these officials, interviews were conducted with local shopkeepers at Seund (the road-head), the office-bearers of Raila panchayat, and the *kardar* (custodian) of the Raila *devta* (god). Most of the data was collected while staying with a family in Sharan. In order to understand the extended kinship and other co-operation networks of Sharan, a brief spell of participant observation was carried out in Shangarh village during a visit by Sharan villagers. Discussions were also held with members of a local NGO — SAVE (Society for the Advancement of Village Economy) — who were mobilizing villagers on the issue of ecodevelopment.

The second intensive micro-study was conducted in Lapah village in the Sainj range. The choice of research site and the timing of the study were decided in the same manner as in the case of Sharan village. Given Lapah's close ties with Shangarh village, some time was spent in Shangarh as well. Unfortunately, the early onset of the monsoons in 1998 cut short the stay at Lapah.

## SHARAN AND LAPAH VILLAGES: DEMOGRAPHIC AND GEOGRAPHIC PROFILE

**Sharan** village is a part of the larger revenue village<sup>1</sup> of Raila in the Kulu block of *up-tehsil* Sainj, Kulu district. Since census data is not disaggregated below the level of the revenue village, we are compelled to rely on data for Raila as a whole, of which Sharan is a part. According to the 1991 census, Raila has 512 households with a total population of 2822 people (1462 men and 1360 women). 23 per cent of the population belongs to the Scheduled Castes (now referred to as *Harijans*, formerly the *Kolicaste*). 47 per cent of the men and 20 per cent of the women are literate.

Raila revenue village is spread over an area of 569 hectares (ha) on the slopes of the right bank of the Jiwa Nala, just before it joins the Sainj nala. Of the total area of Raila, 386 ha are unirrigated agricultural lands. Another 157 ha consist of culturable wastes (including pastures and groves) and the remaining 26 ha consist of unculturable wastes. The revenue village is surrounded by Protected Forests — Shangarh to the west, Raila to the south-west, Mandraun to the north and Thanaur to the east. These are moist temperate forests of oak and conifers.

**Lapah** village is a part of the larger revenue village of Shangarh in the Kulu block of *up-tehsil* Sainj, Kulu district<sup>2</sup>. Lapah consists of two hamlets: Lapah and Dhara Lapah. According to the ecodevelopment micro-plan of 1998, Lapah has 28 households with a total population of 145 people (26 men, 40 women and 79 children). There are four scheduled caste households while the rest are upper-caste *Rajputs*.

Lapah is only a kilometre away from the western edge of the Park. Thus there is great dependence on resources inside the Park. Its location makes access to the road difficult. The cultivable land lies on the slopes, is prone to erosion and is not as fertile as in the case of Sharan. Therefore, unlike Sharan and Shangarh proper, Lapah does not market much of its agricultural produce. However, higher value medicinal plants are extracted from the area and transported outside. Homkhani Reserve Forest lies to the east of the village and Dolnu Protected Forest to its west.

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<sup>1</sup> In Kulu, a revenue village is traditionally called a *phati*. Eight to ten *phatis* together make up a *kothi*. Thus Sharan is a part of Raila *phati* in *kothi* Bahlan. Depending on the population, a panchayat may consist of one or two *phatis*. Raila *phati* falls within the old forest administrative division of Waziri-Rupi.

<sup>2</sup> In the case of Lapah, the *panchayat*, *phati* and *kothi* are all Shangarh.



## CURRENT RESOURCE USE: PRACTICES AND PERCEPTIONS

### (i) The dalits: labourers, artisans and herb-collectors

As is the case in all Indian villages, ownership, control and access to resources in Sharan and Lapah is mediated through the structures of caste, class and gender. In Sharan, the bulk of the cultivable land is owned by members of the 40 Rajput households. The remaining 20 scheduled caste households are either landless or own tiny plots of land. In Lapah as well, most of the cultivable land is in the hands of the Rajputs. There are four landless households, which are all scheduled caste. Ownership of land is closely related to the ability to keep livestock. Thus the largest livestock owner in Sharan also owns 60 bighas of land which are planted with plum, apricot and apple trees. Even when landless families have access to common fodder sources in the village (e.g. in harvested agricultural fields<sup>3</sup>) and in its grazing grounds<sup>4</sup>, this is not enough by itself for, traditionally, around 40 per cent of fodder consisted of agricultural residues to which the landless have no access. Most scheduled caste members of the village get seasonal agricultural employment in upper-caste fields, in private house-construction and coolie-work or on occasional public works projects such as road maintenance. Many of these families have also expanded wool-weaving and make *pattus* (large shawls worn as dresses by women) for the upper-caste villagers who supply them with wool (increasingly synthetic substitutes such as cashmilon) and pay them cash for their labour<sup>5</sup>. The weavers also buy wool from transient Gaddi pastoralists. Certain occupations are also caste-specific. Weaving baskets, for instance, is exclusively the task of the scheduled caste families. This specialization points to a heavy dependence of the poorest villagers on certain plant species in the forest such as bamboo (*Arundinaria falcata*) and *bhashal* (*Salix wallichiana*). Several basket-weavers complained of the difficulties of collecting the raw material for their livelihood, difficulties compounded by legal ambiguity since the Forest Settlement Report does not mention rights to bamboo for artisanal work. It must be noted that basketry as well as *pattu*-weaving are activities oriented to local demand within the village and are not incorporated into the wider regional economy.

As in most Indian villages, access to the commons plays a critical role in the survival strategies of the poor. Scheduled caste families depend heavily on collecting medicinal plants from the forest<sup>6</sup>. If access to medicinal plants is curtailed, it will entail serious hardship for the poorest section of the village. The dependence on cash earnings from the sale of medicinal plants is crucial also for

<sup>3</sup> The *ghasnis* (village pastures owned by the Forest Department and leased out at nominal rates) are generally leased to individuals and thus do not constitute commons to which the landless have access.

<sup>4</sup> Dalits' access to grazing grounds such as *ghasnis*, while theoretically possible, does not seem to be actually available. *Ghasnis* are owned by the Forest Department and leased out to cultivators for a nominal fee. These cultivators may make informal arrangements to allow others to harvest grass upon payment. Generally, the lease is transferred to the heirs of the previous right-holder. In effect, control over *ghasnis* is monopolized by the caste Hindus.

<sup>5</sup> However, weaving is not a caste-specific activity traditionally. Men and women of all castes may weave.

<sup>6</sup> See appendix for a list of important medicinal plants.

remote villages like Lapah which do not have access to other sources of monetary income. For those households in Lapah which are landless or have small or marginal land holdings, the collection of medicinal plants is economically much more important than agriculture.

Collecting medicinal plants is considered to be an extremely arduous and risky task, generally attempted by young men who go to the higher altitudes in small groups, or by shepherds. Many men said that it was only the lack of other remunerative opportunities that kept them from giving up *jadi-booti* collection. At the same time, plant-collection has become more lucrative because of rising demand from the pharmaceutical industry. There are reports that the traders have started coming to the *thaches* directly in order to purchase herbs as soon as they are harvested. Even though collectors get lower rates for 'wet' (as opposed to dried) herbs, the incentive of getting cash on the spot is often strong. Villagers also report that the traders employ 'Nepali' migrant labourers to not only transport medicinal plants, but to also collect them. Morel mushrooms, locally known as *chhunchhru* or *guchchhi* (*Morchella esculenta*) are also collected for sale.

**(ii) Women: the home and the farm**

Women do not participate in either grazing or medicinal plant collection — activities that involve staying away from home for extended periods of time. Women's activities are located closer to home, within the household and in the surrounding fields, forests and *ghasnis*. Women's access to natural resources is mediated by men; it is by virtue of being wives, daughters and daughters-in-law that women can use resources, not in their own right<sup>7</sup>. Collecting fuelwood and fodder for stall-feeding are primarily women's tasks, for which they use private as well as common lands<sup>8</sup>. Women are also artisans who weave woollen cloth, knit socks and sweaters, and make goat-hair blankets and grass mats.

**(iii) Upper-caste villagers: farming and livestock**

The life of upper-caste Sharan and Lapah villagers has traditionally been built around the use of a complex of local natural resources — land, livestock, trees and herbs. Over time, land use practices have altered as has the relative importance of different activities. Earlier, the kharif crop mainly consisted of maize, with some legumes (rajma and mah), and small millets (sariyara, kathu and koda) also being grown. In recent years in Sharan, the coarse cereals have come to be replaced by orchards of fruit trees such as apples and plums and by vegetables. For the rabi crop, wheat continues to be important, but the more traditional barley has been overtaken by commercial vegetable crops such as garlic. The general trend seems to be away from cultivation for self-consumption and towards increased commercial cultivation. However, most farmers voice a preference for a mix of the two. In Lapah, the poor quality of the land and the distance

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<sup>1</sup> This means that women who lack male support, such as widows or women deserted by their husbands who do not have adult sons, have only a tenuous claim on resources that they have to struggle to maintain.

<sup>2</sup> See appendix for a list of important fuel and (locally available) fodder species.



from the road are factors which have prevented a shift towards commercial horticulture. In the case of this remote village, maize, wheat, potato, rajma and amaranth continue to be the main crops.

It must be noted that while people identify horticulture as the route to greater economic prosperity, there are also misgivings about abandoning traditional crops. Besides concerns about the quality of grain purchased from outside, there are also anxieties about the loss of a traditional way of life which was based on self-sufficiency. Some of these concerns were reflected in an incident during the annual *jaulai mela*, festival in honour of the local deity Ringu Nag, in Sharan in 1997 where the *devta* pronounced through his medium that he was angry with the village for extensively planting garlic instead of wheat. The *devta* said that he only liked the wheat which had been ripened in his own fields; worshipping him with store-bought wheat was a desecration. Indeed, the marring of the garlic crop by unseasonal rains that year was attributed by villagers to the *devta's* wrath.

The importance of livestock rearing for the household economy is correlated to the pattern of land ownership and use as well as the availability of labour. Those upper-caste households which have diversified into off-farm occupations tend to limit livestock to the minimum necessary to supply the household with milk. The maintenance of large herds appears to be the choice of land-owning households which can make available the labour necessary for shepherding, collecting fodder, cleaning sheds and byres, and other tasks related to livestock rearing. The largest livestock owner in Sharan who owns a buffalo, seven cows (one of them a Jersey), a pair of bullocks, a hundred sheep and fifty goats, devotes full-time attention to the job, including taking the sheep and goats to the *thaches* (upland meadows). According to this pastoralist, none of the wool is sold. The herds are prized not only as sources of wool, skin and meat for self-consumption, but also as an investment which can be cashed at short notice. Since the current price of a local sheep is about Rs. 600 and that of a hybrid goat ranges from Rs. 1000 to Rs 2100, livestock is an important source of mobile wealth.

The centrality of livestock points to the continuity between the household, the farm, the grazing field and the forest (and the market) in the local economy. Maintaining this continuity is crucial for the successful management of each of these elements. Any change in people's access to one set of resources will necessarily bring about changes in the other sets of resources. For instance, if access to *thaches* lying inside the proposed Park boundaries is curtailed, it will not only affect people's ability to keep livestock, but will also affect soil fertility on the farm, access to nutrition in the household, and commercial relationships with the world outside the village. In the case of Lapah, not only are livestock taken to the *thaches*, fodder is collected throughout the year from inside the Park.

The social relations organizing agriculture are also changing in Sharan. Earlier, most labour-intensive tasks such as weeding, thinning, and harvesting were done through the practice of calling *jvarus* (labour reciprocity) from other Rajput households. *Jvarus* would be given a meal for their services, with the understanding that their gift of labour would be later reciprocated. Now this practice is confined to fewer occasions and only the households of one's immediate kin, with hired labour stepping in to fill the breach.

**(iv) Other villages: kinship and reciprocity**

It is also important to conceptually locate the village in a wider economy composed not only of commercial relations, but also bound by kinship. Ties of kinship and marriage unite villages by constructing ongoing linkages of reciprocity. Thus villagers from a household in Sharan go to Upraila, a nearby village, to visit their maternal relations and, at the same time, to collect a grass used for weaving mats — a resource they are entitled to extract by virtue of their kinship status. For the villagers of Lapah, Shangarh is the village that they visit the most often for, not only are they linked to the larger village by kinship and marriage, they have to visit Shangarh for buying necessities, selling produce, panchayat-related work, and to use its school and health centre.

It is interesting to note that, where kinship ties are absent, people often construct relationships of fictive kinship in order to facilitate social interaction. Fictive kinship involves publicly 'adopting' someone as a *dharm-bhai* or *dharm-behen*, i.e. a brother or sister who is socially recognized. The process of adoption of a sibling in this way involves a ritual at home, followed by a feast for the immediate family and friends. The ritual is not religious and does not involve the intervention of any religious specialist, but consists only of an *arti* (a brief ceremony honouring the brother with auspicious objects). Once established, the bond of fictive kinship is useful for visiting villages and further trade and exchange.

**(v) Contraband crops: cannabis and opium**

A special mention needs to be made of two crops whose status has drastically changed in recent times. These are opium and cannabis, both legally prohibited yet consistently cultivated. Cannabis was traditionally grown as a source of fibre (for making ropes and shoes) as well as a narcotic for local use. However, it has now been integrated into a national economy of drug use with links to Delhi and Goa. Several individuals mentioned that they regularly cultivated these crops, with cannabis being much more common than opium. Production and processing are small-scale and limited to the household, especially because of the illicit nature of the crop. The ability to grow and market these crops depends partly on the chance of discovery (which may be low in remote areas) and on the ability to bear the risk of penalty (good relations with the police help). If the risks are affordable, the prospects of profit are large. Two bighas of cannabis produce about three kg of *bhang*, after a month's work in extraction. A kilo of *bhang* sells for Rs. 5000 locally. Opium margins are even higher; one bigha of land produces about five kg which sells at Rs. 15,000 per kg. The production of opium and *bhang* appears to be quite significant, though it finds no mention



in official discussion of the local economy. Although these crops should be discouraged, the fact of their production gives valuable insights about economic activities in the region. Like the people who collect medicinal plants, all the cultivators and dealers of cannabis and opium were young men. Both these activities are highly risky and their prevalence points to the presence of risk-taking, entrepreneurial talents in the village. One particular opium cultivator described how he had visited Goa for seven consecutive years in order to establish direct trade which would cut out the middleman at Kulu. This quality of persistence and organizational ability is an asset that can perhaps be successfully employed in more socially desirable activities such as cooperative marketing of medicinal plants. However, when this possibility was broached, some of the men said that the profit margins of medicinal plants were not attractive enough, and that the supply was already monopolized by existing permit-holders.

**(vi) Off-farm employment: service and trade**

The avenues for economic improvement in the village now consist of two sets of off-farm activities, of which only one retains links with the land-based economy. These activities can be broadly classified as (i) service, and (ii) trade. With improvements in roads and transport, and greater access to formal education (Sharan has a primary school and children go to nearby Sainj to study upto the higher-secondary level), more people have opportunities to compete for white-collar jobs in the government or in the tourism sector. This trend seems to apply to upper-caste men and, to a lesser extent, to women. (Two girls from Sharan have gone on after college to train as teachers in Jalandhar.) The change to commercial horticulture (enabled again by improved transport facilities) and the growth of medicinal plant collection have increased opportunities for trade, opportunities which have been seized by those with access to some initial capital. The better-off households in Sharan have thus diversified their economic activities with one male member setting up as a trader, buying medicinal plants as well as stocking manufactured items of daily use. These traders also act as conduits between the village and the larger regional economy, working as petty contractors on public works, and as agents of the companies which promote commercial crops such as garlic. In contrast, the size and location of a village like Lapah discourages off-farm employment. The opportunities for trade are limited and poor access to higher education means that the ability to get 'service' jobs is severely circumscribed. For Lapah, off-farm employment is only available in seasonal works opened up by the Forest Department for plantation, maintenance and road repair.

From the point of view of village-level resource use, the movement into off-farm employment in the form of 'service' is probably beneficial in that it prevents the further partitioning of land into what may be unviable units. Yet those in service also consume natural resources, often at higher rates by virtue of their increased purchasing power. In conceptualizing off-farm employment as a strategy for removing environmental pressure, one must take into account the increased demand for fuel, timber and non-renewable resources that the service sector generates, the impacts of which may be geographically dispersed but are nonetheless substantial. The second set of off-

farm activities, which relate to trade, are directly dependent on more intensive patterns of local resource use. So far, the potential for increasing profit through value-addition (processing medicinal plants or horticultural produce) has not been explored.

**(vii) Trends in village economy: implications**

The pattern of economic and ecological resource use in Sharan village shows a clear trend towards greater social differentiation. The disparities of class-caste are becoming wider with the selective integration of households into different levels of the state and the market. This aspect of intra-village diversification is key to understanding the impact of any state-initiated change in access to natural resources. That is, one cannot expect that all villagers will be uniformly affected by a given change. There will have to be a conscious effort to ensure that the more vulnerable social groups do not suffer, and that these groups are the primary beneficiaries of the proposed change. There also needs to be careful consideration of the implications of encouraging off-farm/off-land activities which combine higher incomes with higher resource-extraction.

In the case of Lapah, the trend towards greater social differentiation is harder to discern. The opportunities for economic change (shifting to horticulture and off-farm employment) which are available to Sharan are fewer in Lapah. Access to medicinal plants is open to all able-bodied males, so this source of income is not skewed by caste/class factors.

**(viii) Ecological knowledge**

The existence of highly diversified economic strategies points to a complex knowledge system which has changed with time to incorporate new elements (e.g. the processes of the state and the market, new technology) as well as to erase the old and the obsolete. At the same time, 'traditional' knowledge is often put to 'modern' uses. It must also be recognized that knowledge is created and transformed only within an institutional context. In the case of ecological knowledge, this context was earlier primarily provided by village-level structures for natural resource use and management. In recent times, one may identify a trend towards the more rapid incorporation of 'outside' elements, such new agricultural and horticultural practices learnt from extension agents or agribusiness firms, environmental education in schools, or knowledge gleaned from travels outside the area. The institutional structures which enable the organization of ecological knowledge are also rooted in legal and moral discourses of rights and entitlements. We will be examining these institutions in detail in the next section on the negotiation of conflicts. Here we shall limit the discussion to tracing the changing contours of ecological knowledge vis-a-vis resources in the village and around it.

From their childhood processes of socialization onwards, Sharan and Lapah villagers have gained an intimate familiarity with their environment and have also modified it to their will, to make it more habitable and productive. This transformation is writ large on the landscape — the terraced fields carving farmlands out of slopes, the steeper hillsides which are annually burnt and harvested



for grass, the paths and bridges which find optimal ways of connecting the village to the rest of the world, the crops and fruit trees which are planted to make best use of aspect, soil, altitude and gradient, the houses of local stone, wood and slate, and so on.

Key economic activities such as grazing and herb collection build upon knowledge of natural processes as well as social institutions (the latter will be discussed later). Sharan sends its combined livestock herd to graze with three or four *fuaals* (shepherds) and their dogs, from July to October. Like Lapah and other villages, Sharan too has a fixed route with specified numbers of nights to be spent at places along the way. The route is detailed with as many as ten stops along the way (see appendix), and is planned to optimally utilize the combination of grass and sedge species available in different meadows along the way. This involves knowing and exploiting the life-cycles of different plants, and also knowing their nutritional values. For instance, the highest pastures at Khandadhar become snow-free last and have the richest grass. So the grazing run of Sharan village is timed so that their livestock reaches Khandadhar in August and stays there for most of the month. Another pasture is known for its protein-rich 'black grass', over-indulgence in which can cause livestock to fall sick, so their time in this pasture is carefully limited. Some ecological knowledge may also be directed towards maintaining the long-term sustainability of the pastures. For instance, while the pastures are vast, the shepherds always bed down the flock for the night near the small stone shelters where they can themselves stay dry and warm. This has the effect of limiting the spread of *Rumex* and other 'weed' species that tend to proliferate in the presence of intensive livestock activity. There are several other skills which are crucial to successfully conducting the grazing run — being able to build makeshift bridges to ford streams, managing to survive at extreme temperatures, veterinary skills, and so on. All these skills are acquired through the process of 'learning by doing'. With fewer people being involved in these activities now, these skills are also fading away. And as we shall see later, the social management of grazing is probably the strongest element in this system of knowledge.

The collection of medicinal plants involves a similar set of skills and a knowledge system. Sharan villagers say that the area inside the Park yields more than fifty species of medicinal and edible plants during spring and summer. However, they report collecting only five species in a major way. These are *dhoop*, *kadu*, *patees*, *hathpanja*, and *nhaini* (see appendix for botanical names). Apart from these, people could only name another sixteen. Younger men and women shook their heads after naming ten or so. A woman who had married into Sharan from Pashi village which is closer to the forest was among the best informed. It was not possible to find out how many could correctly identify the plants that they named. People were also often vague about the medicinal properties of various herbs, and said that they rarely used them themselves. This suggests that knowledge about medicinal plants is limited to a few species and to those who collect them. Collectors have an understanding of habitats (aspect, altitude, topography, vegetation types, etc.) where particular plants may be found, and of moisture, soil and other micro-conditions favourable to particular plants. And of course, they are able to identify different species of plants.

The limited realm of knowledge about medicinal plants is accompanied by an absence of institutional checks to prevent over-harvesting. Collectors report that, whereas three years earlier they harvested *dhooproots* as thick as their arm, now they can only find roots no thicker than their fingers. One collector also reported that, earlier, plants would be harvested only after they had flowered and set seed. All villagers blame depletion on a convenient scapegoat — the ‘outsider’. These are said to be people from the Kanavar side or Ani tehsil or, most often, Nepali migrant labourers employed by local traders. These ‘outsiders’ are sometimes stopped and turned back, especially the Nepali labourers. Yet the power to exclude others is not exercised consistently; high up in the hills, if half a dozen outsiders outnumber the shepherds or local collectors, the latter usually let them pass unchallenged. So far, the situation remains one of somewhat uneasy accommodation. The issue of insiders or outsiders aside, the most important reason for over-harvesting is the steadily rising demand for medicinal plants from pharmaceutical companies. Now, the collection of medicinal plants seems to have been integrated with knowledge of the market rather than with that of plant lifecycles. People were also aware of the Forest Department’s ban on collection of *shingli-mingli*.

The most valuable plant collected is *guchchi* or *chhunchhru*, morel mushroom (*Morchella esculenta*). This is relatively easy to find since it grows in May-June in the mid-elevation forests. Its collection is therefore not confined to men. Increased competition to collect *guchchi* seems to have reduced its availability per collector, but people do not report any absolute decline in its prevalence. Like most medicinal plants, *guchchi* collection is entirely unregulated.

Another important arena of ecological knowledge which has also shifted its terrain towards the market and the state is hunting. Hunting and trapping for flesh and fowl used to be a common pastime for villagers in the winter months when snow would move the animals to lower altitudes. Besides food, snares were also set for two prized quarries — the musk deer for its valuable pod and the male monal for its iridescent crest used as an ornament on caps worn by local men. Success in hunting and trapping calls for, among other skills, knowledge of animal habitat and behaviour. However, because hunting is now forbidden, this knowledge is declining and has also gone underground. From occasional reports, though, it appears that these skills are still practised.

Ecological knowledge is being quickly transformed. With the spread of new agricultural technologies which are standardized, and non-ecological knowledge which, again, is not locally defined, there is generally a movement towards a less sensitive and nuanced appreciation of the land and its species. Increased pressure on the land due to increased off-farm employment, medicinal plant collection and general market demands also creates an institutional context which offers no time and space to local knowledge.



(ix) **Ecological identity**

For the people of Sharan and Lapah, what defines their being vis-a-vis the rest of the world is their location in a particular ecological-cultural space. Villagers often use metaphors and analogies to naturalize their traditional practices and to attribute to them a timeless quality. As a shepherd said, 'Just as God put the bird in the sky and made seeds for it to eat, so He placed our sheep on the earth and gave them pastures upon which to graze'.

The feeling of cultural continuity between one's environment and oneself is heightened by the sacredness with which places are endowed. Forests, mountain peaks, stream sources are identified with different divinities arranged in a complex hierarchy. Sharan village worships Plaini, a fierce god who is appeased with iron offerings every two months. According to villagers, Plaini is sent off by other, more senior gods on missions to wage war against each other. The forest on the opposite slope across the Jiwa nala is sacred to Plaini. Various interdictions have to be observed when in this forest. Ringu nag is the special god of Sharan, whose idol is carried in procession during festivals and fairs. Ringu *van*, the forests on the slope above Sharan are said to belong to Ringu *devta*. No cutting or grazing is allowed here except once a year, when the men of the village go there to collect wood for a bonfire during the *mela*. Besides association with a social entity such as a hamlet or a *phati* (revenue village), a god is also associated with particular sacred sites. For instance, Jamadgna rishi, the god of Pashi village, is said to have been thrown off Thanor *dhaar*, where he was swinging, to Pashi village on the opposite bank of the Jiwa Nala, which is where he came to rest. The delineation of such a sacred geography is intrinsic to people's understanding of their environment, not only as a set of natural resources, but also as a cultural resource.

It is also believed that the higher one goes, the more powerful the god. The highest peaks of Khandadhar, above the final point of the pastoralists' route, are believed to be the site of the greatest mystical power. This is the place where the wind spins around seven heaps of sand, the sight of which can make people blind and bewitched. Thus the cultural field of local religion extends in two directions — towards Kulu (the former princely state's capital, where the Dussehra fair is held to which Ringu nag is taken) and towards the remote high mountains where sacredness is writ large on the landscape.

## RESOURCE CONFLICTS AND THEIR NEGOTIATION

In this section, we examine the institutional structures through which people manage natural resources. These structures also define mechanisms and processes for dispute resolution. We shall also analyse the legal and moral discourses of rights and entitlements which people use to explain and defend their actions.

### (i) Rights and entitlements

To be a legitimate user of common pool resources in Sharan and Lapah, one has to be a 'local' villager. Rights are accorded to all residents, both landed and landless. Because of laws restricting the transfer of land in Himachal Pradesh, it can generally be assumed that most inhabitants of the villages are long-standing residents. Their rights pertain to the use of village commons for fuel and fodder, to surrounding forests and also to pastures further afield (e.g. inside the Park). These resources are demarcated for use by individual households as well as by the village as a whole. For instance, certain patches of forest are restricted to the use of the local *devta* and timber from these areas can only be used for the temple and for the celebration of village festivals. Even though these areas may legally be designated as Protected or Reserved Forests under the control of the Forest Department, harvesting timber from these areas has to be sanctioned by the *devta* committee. However, local villagers can harvest resources from other forests without any check by the *devta* committee or any other village institution.

The shared understanding of who is or is not a legitimate user is partly rooted in law. Legally, the rights of local villagers are recorded in the Forest Settlement Report of 1886 (revised in 1894). The Report provides a highly detailed account of rights to timber, grazing, fodder, and other 'minor forest produce' such as medicinal plants and game in different categories of forests, and for different tree species. For instance, prime timber such as *deodar* (*Cedrus deodara*) was reserved by the state and could not be cut without permission. It is important to note that the Kulu Settlement Report acknowledges the centrality of access to forests for villagers' livelihood and makes fairly generous provision to continue the same. The Report supports its stand by quoting from the Forest Bill debate where it was said that, 'there exists throughout India a vast mass of forests which are not reserves and for the most part never can be.. mostly because they have other purposes to fulfil and are needed for the current use of the people... To maintain the forests on which the population at large depend for the grazing of their cattle, the thatching, repair and construction of their houses and even (in some cases) the fertilisation of their fields and the eking out of their slender meal, and *to ensure with this view the provident and reasonable exercise of rights, the existence of which is not disputed, appears to be as essential a part of forest conservancy as the formation of reserves and the nursing of gigantic trees*' (emphasis added). The Settlement Report goes on to say that, in Kulu, it would be 'impossible' to commute rights by cash payments, since 'the people are dependent on these rights for their very existence and the extinction of these rights would be most unjustifiable expropriation'.



The Settlement Report of 1886 demarcated forests and allotted villagers' rights in specified forests, generally those adjoining the village. Thus Sharan village has rights in Sharangarh PF, Thanor (C/1, C/2) for fodder, Nadar and Karaila PF for fuelwood and fodder. These rights are common to all the residents of Raila panchayat. No other panchayat has rights to these forests. In this way, a close correspondence was created between the ecological map of the forests and the social map of the villages, with rights being detailed even for hamlets and individual clans. However, the Settlement Report has not been revised for more than a hundred years. The natural landscape and the human population that the Report describes have been radically transformed over this period. Thus a village may have doubled in size, its livestock holdings may have changed, and the consequent demand for fuel, fodder etc. could be vastly increased, but the Report set no upper limits on extraction. By virtue of being residents of a village, people claim rights to forests as guaranteed by the Settlement Report, and the legal system is clearly inadequate for regulating this use.

The failure to revise the Settlement Report has meant that legal rights have not kept pace with the changing demography of the region. Besides being unable to respond to this internal dynamic of village societies, the system of legal rights has also not been able to address the increased commercialization of forest resources, a factor responsible for sharply increasing the demand for medicinal plants. Many villagers have emerged as traders who deal in medicinal plants and who have links with larger traders in towns such as Banjar, Sainj and Kulu and even outside the region in Amritsar and Delhi. Some of these villagers also employ Nepali migrant labourers to collect plants and, even though these collectors do not have rights, their activities are enabled by the protection offered by 'right-holders'. Thus the system of rights and entitlements has a legal backing which promotes unchecked use. To be sure, non-'local' villagers either have no rights or very specific rights (e.g. villages in Ani tehsil are allowed to graze their livestock in Kulu), but if one is a local resident, anything goes.

Why does this liberal system of rights to resources (other than timber) not encourage regulated use in all cases? Why are there local institutions for managing grazing but none for regulating the collection of medicinal plants? Why are Nepali collectors not always checked? Why do villagers often overlook instances of other villagers trespassing and collecting medicinal plants in the forests to which only they have rights? To understand the weakness of certain local institutions, we must focus attention on the nature of rights. Where rights are secure, have legal sanction and are long-standing, we find stable local institutions for managing natural resources. This is the case with grazing. However, when rights seem to be unclear and extraction is relatively recent, we find that villagers seem to have little stake in forest management and there are few mechanisms to regulate use. This is the case with the collection of medicinal plants.

**(ii) Rights and the state**

The legal discourse of rights is embedded within the framework of authority provided by the

Forest Department. Exercising control over forests is seen to be the responsibility of the Forest Department and attempts by the FD to check use are often resented because they curb the unhindered exercise of rights. The often arbitrary exercise of power by the FD is also a frequent cause for complaint. For instance, timber rights are strongly regulated in theory, but a larger than legal quota of timber can be negotiated for a 'consideration'. This results in genuine hardship for dalit households who are too poor to bribe their way into the good books of the FD. Thus the legitimacy of the Forest Department is not accepted without question, but is often only grudgingly acknowledged.

Villagers' relationships with the Forest Department are complex and manifold. Some villagers may have cordial relationships with FD personnel which gives them privileged access to forest resources. Others may not be able to construct mutually rewarding relationships. While there may be consensus about some issues, e.g. about excluding 'outsiders', there may be sharp disagreement on others, e.g. about the declaration of the area as a National Park. Conflicts with the Forest Department are dealt with in a variety of ways. Besides attempting to petition the FD and highlight local opposition or misgivings about FD activities, both ongoing and proposed, villagers also resort to direct political action. Villagers draw on resources such as their elected representatives or influential NGOs to put across their point of view. Patterns of consensus, collaboration and conflict are not given but change in response to different circumstances.

**(iii) The management of grazing**

In the case of livestock grazing, we see that an ancient activity is managed through long-standing local structures which minimise the occurrence of conflicts between villages. The importance of livestock in the local economy makes fodder a critical resource demanded by all landowners. Yet, a potential situation of competition and conflict is managed by villagers so that grazing occurs in a smooth and co-ordinated manner. Each village has extremely well-defined and codified grazing runs, where the route and the duration of stay at each point is specified. The routes are designed to minimize the possibility of overlap and of livestock herds getting mixed up. In the process, the pastures are also not over-grazed. Much of the knowledge about the system is internalized by shepherds and passed on from one generation to another. Rules about grazing are respected by all the villagers. The entire system of co-ordinated grazing runs works so well that villagers report that they cannot remember any case where a dispute needed to be settled by a third party. The rare cases of infringement are settled by the panchayats, without involving even the Forest Department.

**(iv) The collection of medicinal plants**

Unlike the case of grazing, there is no well-established system for regulating the collection of medicinal plants. Earlier harvested for own use and only marginally for sale, medicinal plants now command high prices in the market and their extraction has risen enormously. The quantum of extraction has gone up, and so have the number of people engaged in this activity. As mentioned



earlier, while most of these people are 'right-holders', there are 'outsiders' involved in collection as well. In certain instances, 'outsiders' may be stopped from collecting and turned back, but their presence is also tolerated, especially if they have the backing of a local trader. The panchayats would charge a royalty on medicinal plants from traders, but the amount of the royalty was generally nominal and did not serve the purpose of regulating collection. Of late, several panchayats seem to have given up this practice altogether. For instance, even though the Shainshar panchayat still collects the royalty, the Raila panchayat does not. So far, the panchayats or other village bodies have not mobilized for checking plant collection. Since everyone seems to be benefitting individually from exploitation, there is little motivation to collectively deal with the possibility of some species disappearing in the future.

Resource conflicts may thus be acknowledged or ignored. There may be attempts to resolve them within the village or to take recourse to other institutional structures, whether political or bureaucratic. Whether action is taken or not, and what kind of action is taken, depends on several factors of which the social standing of the villager, individually and collectively, is one. Equally important are perceptions about scarcity, the desirability of management, and the extent of identification with the local environment. Only when people feel that their management efforts carry weight and will be respected do they attempt to act decisively. Creating the conditions for collective action is the challenge before us today.



## IMPORTANT MEDICINAL AND EDIBLE PLANTS

| <i>Local name</i>     | Botanical name           |
|-----------------------|--------------------------|
| <i>bhootkeshi</i>     | Selinium vaginistrum     |
| <i>dhoop</i>          | Jurinea dolomieae        |
| <i>farran</i>         | Allium humile            |
| <i>guchchhi</i>       | Morchella esculenta      |
| <i>hathpanja</i>      | Dactylorhiza hatagirea   |
| <i>kadu</i>           | Picrorhiza kurrooa       |
| <i>lalchuri</i>       |                          |
| <i>lingad</i>         | Deplegium esculentum     |
| <i>nhaini</i>         | Nardostachys grandiflora |
| <i>nhainu</i>         | Valeriana jatamansi      |
| <i>pateesh</i>        | Aconitum violaceum       |
| <i>shingli-mingli</i> | Dioscorea deltoidea      |
| <i>tangul</i>         |                          |



## IMPORTANT FUEL AND FODDER SPECIES

|                |                                |
|----------------|--------------------------------|
| <i>akhrote</i> | <i>Juglans regia</i>           |
| <i>baan</i>    | <i>Quercus leucotricophora</i> |
| <i>chammu</i>  | <i>Morus himalayana</i>        |
| <i>kathi</i>   | <i>Desmodium spp.</i>          |
| <i>marinia</i> | <i>Robinia pseudacacia</i>     |
| <i>moru</i>    | <i>Quercus dilatata</i>        |
| <i>phagu</i>   | <i>Ficus palmata</i>           |
| <i>saadi</i>   | <i>Prunus armeniaca</i>        |
| <i>syaru</i>   | <i>Debregeasia salicifolia</i> |



## GRAZING ROUTE FOR SHARAN VILLAGE

Start in *Aashadh* (July) from Sharan — Pashi (stay for two nights) — Gati (three nights) — Jimaan (3 nights) — Apgain (1 night) — Beeda thach (1 night) — Khnedsu (5-6 nights) — Majhan (10 nights) — Dvara (15 nights) — Khandedhar or Lahodivaat (60 nights)

**or**

Karaila (3) — Shfadi (2) — Taliyara (1) — Bagi Shyad (10) — Karaasha (4) — Dhoong — Raadi (5) — Dvara (15) — Khandadhar (30 days) — Dvara (1) — Khnedsu (2) — Beeda thach (10) — Majhan (10) — Pashi (4) — Braid (10) — Murda thach (30) — end in *Kartik* (October).