



**Mountain Population and Employment**

**Discussion Paper Series**

**CASH CROPS AND THE CHANGING CONTEXT OF  
WOMEN'S WORK AND STATUS: A CASE STUDY  
FROM TEHRI GARHWAL, INDIA**

**Manjari Mehta**

**MPE Series No. 2**

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## FOREWORD

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## FOREWORD

This discussion paper by Manjari Mehta is the second in the series of five papers (MPE Series Nos. 1-5) that deal with the role of women in mountain development. The objective of these is to highlight the importance of gender issues which have lately gained some ground in the development dialogue, but are yet far from being internalised in mainstream planning and implementation. This is particularly true in the case of women in the mountains where the harsh realities of a subsistence economy and the fragile high altitude environment, have alienated women from the benefits of mainstream development. Women in the mountains are crucial to the production system. Yet there are several indications, that the changing socio-economic conditions are contributing to greater marginalisation of women. This is unacceptable from the standpoint of equity and effectiveness of the production system. The development process needs to recognise this unfortunate state of affairs, make deliberate efforts to incorporate gender perspectives, and involve women as active participants in decision making and control. I hope that the publication of the Discussion Papers under ICIMOD's Mountain Population and Employment Division will shed some light into the complexity of the tasks that lie ahead.

Manjari Mehta's paper presents a relevant case study in the current context. Saklana in Tehri Garhwal, Uttar Pradesh (India), represents a village where, she argues, monetisation of the local economy has contributed to women's low status and "invisibility", and thereby constrained their life options. This is by no means an isolated instance in the communities of the Hindu Kush-Himalayan Region. The author does not, however, argue against the introduction of cash crops per se into hill agriculture. This is perhaps inevitable, given the present realities. The challenge, however, lies in mobilizing women for active participation in situations where the intensity of labour in daily activities is so great, and the socio-economic stigma against their participation, so prevalent. Equally important is the need to identify the means of overcoming constraints -- legal, socio-cultural, and economic-- to ensure women's access to and control of the means of production? I am confident that readers will find the case study of Saklana stimulating, especially in light of the conclusions drawn and recommendations made by Manjari Mehta. We would be happy if you would write to us with your comments and suggestions and join in the discussion on important issues raised by the paper.

Finally, I would like to take the opportunity to thank the Ford Foundation for their generous support to ICIMOD's programme on the "Role of Women in Mountain Development." The grant has made it possible to establish collaboration with relevant institutions in the Hindu Kush-Himalayan Region, engage professionals to conduct case studies, write conceptual papers, publish and disseminate the findings. At ICIMOD, Dr. Deepak Bajracharya, Division Head of Mountain Population and Employment, is the overall Coordinator of the Programme. Thanks are due to Dr. Deepak Bajracharya and Ms. Prabha Thacker for providing professional input in improving the final text of this paper and others in the MPE Series (Nos. 1-5).

E.F. Tacke  
Director

## ACKNOWLEDGEMENTS

This case study emerged out of a perceived concern for the neglect of hill agriculture, in general, and for the position of women in particular. It inevitably represents the culmination of many people's insights and inputs. Particular thanks go to Dr. Jayanta Bandyopadhyay who brought to my attention the context under which agrarian systems in the hill districts of Uttar Pradesh are being transformed, and on whose advice I first explored the possibility of doing fieldwork in Saklana. Both he and Dr. Vandana Shiva provided the intellectual stimulation and support to think through the complex and multifaceted issues that emerged from the fieldwork.

The actual field work would not have been possible without the tremendous warmth and kindness extended to me by the people, and especially, the women of Pujargaon. Manohar Lal Saklani, in particular, provided invaluable assistance in preparing and conducting the initial village surveys. His and Vishveshwar Dutt Saklani's families took me in as one of their own, providing me with a "home away from home", friendship and laughter.

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Manjari Mehta

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## INTRODUCTION

The central and western Himalayan districts are amongst the poorest regions of the north Indian State of Uttar Pradesh. These areas are characterised by subsistence agrarian systems (based on coarse grains cultivated under rain-fed conditions) and typified by low (and declining) productivity, fragile natural resource bases, poor infrastructural development and market linkages, and high levels of male migration. The widening gap between subsistence production and consumption needs has historically resulted in a high dependence on external markets. In recent years hill development directives have sought to redress this lop-sided relationship by introducing commercial agriculture into certain resource-rich regions, thereby enabling communities to participate in the market economy as producers.

### Trends in Hill Development

Although the applicability of mainstream models of development for the hill regions has long been questioned on national and regional eco-development agendas, there remains a curious vacuum regarding how "hill development" is conceptualised and operationalised. Preoccupation with issues of productivity has obscured discussion of related parts of the equation -- notably equity and sustainability; even less concern has been directed towards gender dimensions.<sup>1</sup>

This neglect, in part, stems from the popular perception of mountain communities as "backward" and "marginal," whose survival is dependent on linkages with labour markets in the plains. This image, which implicitly informs policy prescriptions, has served to justify all interventions that purport to facilitate regional development through more complete integration into the market economy as "necessary evils".

The problem is two-fold. On the one hand, inadequate attention has been directed towards the implications of the growth-oriented (plains) model of development to sensitive (and highly dissimilar) mountain environments. This has not only hindered a better understanding of the types of constraints which set mountain areas apart from other ecological zones -- not to mention the tremendous micro regional variations that exist within them -- but has also had important consequences for the types of solutions that are advocated.<sup>2</sup>

On the other hand, preoccupation with quantitative methodologies, drawing exclusively on district and block-level data, which focus on economic criteria as key indicators of viability and success, has failed to disaggregate the "community" and to uncover differentials operating at the inter and interhousehold level. Thus, the human dimensions of processes of social change -- the emerging class and gender differentials -- have not found much space in the existing literature.<sup>3</sup>

New directions towards making hill agriculture commercially viable beg a re-examination of the oft-posed question -- "prosperity" or "development" for whom and at what (and whose) cost? -- compelling a reassessment not only of conventional paradigms of development, but also the sustainability of such models both for local ecological, and social environments.

## Scope of the Study

### *The Case Study*

This case study is based on fieldwork carried out in Saklana, a high-rainfall valley located in the outer hills of Tehri Garhwal. Within the past decade there has been a rapid transition from the cultivation of traditional subsistence foodgrains to that of cash crops (potatoes, peas, and beans).

The new cropping patterns for market sales have brought a degree of monetary prosperity hitherto unknown to the region, in terms of enhanced purchasing power and improved standards of living. The reverse side of this prosperity, however, is that increased pressure is being placed on the natural resource base; women have to put double time in the fields; and subsistence needs are being pitted against commercial imperatives.

This case study examines some of the gender structured consequences of ecological and economic transformations that are emerging as a result of these developments. Particular focus is given to the interplay between the economic and socio-cultural forces affecting women's work, decision-making, and status that are reshaping gender relations and defining (and indeed, limiting) the extent to which women are benefitting from, or bearing the costs of, the new cash-based prosperity.

### *Objectives and Methodology*

The specific objectives of this research were:

- o to investigate the impact of cash crops on women's roles in hill agriculture by looking at their work patterns and participation in agricultural decision-making;
- o to highlight, through an analysis of the socio-cultural and economic factors operating at both the household and community levels, the barriers to women's effective participation in the production process and market economy;
- o to assess the "gender dichotomy of interests" in the face of growing dependence of hill communities on the market economy, both as consumers and as producers; and
- o to propose some arenas for future research, that contribute to base-line data on women's roles in hill farming systems and articulate a participatory and gender-sensitive approach to hill development.

### *Research Design*

The emphasis was on qualitative rather than quantitative analysis. A combination of methodologies was used to explore two interrelated research agendas. The first phase consisted of survey-work in four villages to identify broad patterns.<sup>4</sup>

- o household demographic composition; (including sex, age, and migration pattern)
- o education levels and employment patterns;
- o income and expenditure patterns; and

- o the impact of changes in cropping patterns and resource (forest) endowment on animal husbandry strategies; and the viability of subsistence production to cover household and consumption requirements.

The second phase consisted of an in-depth fieldwork in one of the villages over the course of one year.<sup>5</sup> Several methodologies were used, including household agricultural surveys, informal discussions, and group interviews. These highlighted some of the less visible yet no less crucial dimensions of village women's lives that are all too easily obscured by more rigid and figure-oriented approaches.

The following questions were considered:

- o How has male migration enabled women as de facto heads of households and managers of the land, to respond to new spheres of responsibilities and opportunities? What types of institutional, structural, and socio-cultural factors help to limit or facilitate this?
- o Has differential access to off-farm income eased some women's workloads by virtue of households being able to hire labour and services or purchase resources?
- o How has the increasingly time-consuming nature of fodder and fuelwood collection created greater sensitivity amongst women to issues of resource depletion and the need for ecological regeneration? If not, what sets of constraints can be identified?
- o Are processes of commercialisation reinforcing traditional gender hierarchies and widening notions of differential entitlements, thereby preventing women's high profile in agriculture and other subsistence activities from being translated into enhanced status in the public domain?
- o How are women excluded from playing a more active role in the market sector?
- o How is surplus used to transform society in general, and women's lives in particular? How do women experience the costs and benefits of participating in an increasingly monetised domain, and how do they respond to processes of marginalisation?
- o What types of interventions would enable women to participate more actively in and benefit from the cash-based economy?

### **Agricultural Change and Women**

In the aftermath of the U.N. Decade for Women (1975-1985), a huge body of literature has emerged documenting the myriad ways in which the development process is bypassing and marginalising women. The backdrop for this discussion is the incorporation of traditional subsistence agrarian systems into larger market systems, and the ways in which processes of rural transformation are restructuring sexual division of labour, patterns of resource allocation, and decision-making; both within the household and in the community.<sup>6</sup>

#### *Invisibility and Devaluation*

The evidence drawn from different agro-ecological zones conclusively points to the intensification of women's work burdens, along with a deterioration in the conditions of their work. Despite their centrality to the agrarian economy and household sustenance, rural women's work remains largely "invisible" by conventional gauges of productivity and is devalued in

relation to what men do. A complex web of economy and socio-cultural constraints, operating both within and outside the household, undermines survival strategies and challenges rural women in their struggle to adequately provide for and sustain their families. These constraints include restrictions on their mobility, inability to gain independent access to productive resources (such as land and credit) or to benefit from improved methods of technology, and structural biases which force them into disadvantageous positions in the labour market.

That women's work is invisible and under-valued, and that their status is declining rapidly, finds expression in policy statements which recognise that women bear a disproportionate burden of the costs of development (and underdevelopment) without necessarily sharing in the benefits relative to men. Nonetheless, whilst the need to incorporate "gender-sensitive" perspectives into the planning process has become the cornerstone of policy rhetoric, efforts to translate this into an operational level have been less than satisfactory.

### *Neglect of Women's Roles in Hill Farming Systems*

Thus far the debate on agricultural change and its impact on rural women has focussed on the socio-economic and ecological transformations engendered by the "green revolution" technological interventions, in the farming systems in the plains. The bias towards "progressive" agriculture has been at the expense of traditional coarse grain and rain-fed agrarian systems, a neglect which is reflected in the paucity of empirical documentation of mountain agriculture in general, or women's role within it, in particular.<sup>7</sup>

Despite growing awareness to gender issues, the extent and nature of hill women's contributions to the agrarian economy, as well as the impact of processes of change on their lives continue to be veiled. Although anthropological perspectives have tremendous potential in bridging some of these shortcomings, these have not been effectively utilised. The older anthropological literature on the U.P. Himalayas, in particular, provided rich ethnographic documentation of specific regions, but had little to say about women. Even now, although gender and class perspectives are recognised as legitimate and indeed necessary concerns, the more recent record for the region is poor.<sup>8</sup>

This absence of a data base to inform a more coherent and gender-sensitive hill development policy is a cogent reminder of the extent to which, rhetoric notwithstanding, hill women's lives and needs remain peripheral to wider policy concerns and academic discourse. Much of the available information on women of the U.P. hills is based on the body of writing that emerged out of the Chipko actions of the 1970s. This material has played an immensely important role in giving expression to the hitherto muted lives, concerns, and visions of hill women. It has not, however, realised its potential for providing a point of departure for deeper investigation into the changing context of hill women's lives.<sup>9</sup> Three features of this writing, drawn from a limited and region-specific empirical base, have played an important role in defining, and actually limiting, perceptions of the critical parameters of hill women's lives.

- o The impetus for collective action centred around forest movements. This inevitably focussed attention on women's relationship to forest resources to the exclusion of the other interrelated domains and contexts of their work;
- o Women's receptivity to mobilising has typically been located in the sexual division of labour, through which women are the first to experience and suffer from any adverse changes in the environment. From this emerges greater sensitivity to threats to their livelihoods and responsiveness to the benefits of collective action; and

- o Related to this is the posing of subsistence and commercial livelihoods and interests as theoretical polarities. Women's responses were, thus, conceptualised as emerging out of needs and interests in opposition to those which dictated local men's actions.

How useful are these categories for understanding the dynamics of contemporary socio-economic and ecological changes in the hills and women's responses to them? A re-evaluation of basic assumptions is necessary -- for instance, women's "natural" affinity to the environment, their roles as "resource managers", and the inevitability of tension between gender perceptions and interests. Changing environmental conditions, market relationships, new values, and economic imperatives are not only altering the context of women's work and their survival strategies, but also throwing up new compulsions and constraints that have to be considered in any assessment of women's responses to contemporary processes of social change.

### *The New Interventions*

Until recently, the hill districts' relationship with the wider national economy was based on an extractive mode of development. During this phase, from the nineteenth century onwards, the primary linkage was based on the export of natural resources (timber and labour) from the hills into the plains.<sup>10</sup> In the past decade, however, new pressures have emerged which challenge the old dichotomy between local subsistence needs and non-local commercial needs. The earlier forces of transformation centred around the imperatives of commercial forestry. These included a set of personnel (forest guards, contractors) and goals based on the exploitation of natural resources for commercial ends, and posed a threat to communities' livelihoods and were detrimental to local interests.

Contemporary changes are considerably more complex. Commercial agriculture is, literally, "rooted" at the very core of subsistence strategies. Although a new set of sectors (extension agents, seed merchants, marketing middlemen, and money lenders) has emerged, these positions are often occupied by local people rather than outsiders, thus making it more difficult to place the new relationships within a "us against them" framework. In addition, whilst the ecological costs of new cropping patterns (based on high yielding seeds, chemical fertilisers, and the decline of traditional fallow systems) may be recognised, there is a sufficiently long-term dimension which enables those who lack other options, to pursue more immediate survival strategies.

### *Contemporary Pressures on Hill Women*

These new developments are tearing the fabric of hill society and may prove to be more disruptive than the earlier ones. This fragmentation of society, against the backdrop of increasing monetisation of hill economies, has important implications for what women, specifically, stand to gain and lose. The dual process of ecological and economic transformations, thus, provides an important context in which to examine the shifting parameters of women's work and, more critically, offers insights into how changing relations between women are affecting their traditional support mechanisms and survival strategies.

What insights do the experiences of rural women in other parts of India offer for understanding how agricultural changes affect the roles and status of women in hill farming systems? There are a number of commonalities. Like their counterparts elsewhere, rural hill women are being pushed by two contradictory forces. Compelled to assume responsibility for their families' survival, they are at the same time constrained to do so effectively by a host of structural and socio-cultural factors. The erosion of traditional subsistence livelihoods and support networks, along with deterioration of natural resource bases, privatisation of traditional common property resources, and male migration, have greatly intensified women's "double days," whilst new



## OVERVIEW OF THE AREA UNDER STUDY

Saklana lies in a south-facing valley, its boundaries extending from an elevation of 10,000 feet at Surkunda in the north, along the Mussoorie-Chamba ridge and down to Maldevta abutting Dehra Dun district in the south. Approximately fifty kilometers away from the large city of Dehra Dun in the south, it is easily accessible by road (see attached Map).

Located in the outer hills and in the catchment of the Song river, Saklana receives abundant rainfall and has well-endowed water resources which are the basis for its dynamic agricultural base. Despite some thinning of forest cover, encroachment on to grasslands, and diminishing of water resources, in recent years, the region's rich and varied natural resources make it stand out in striking contrast to more depleted agro-ecological zones a few kilometers away, on the other side of the ridge in the rain shadow.

Climatically, the valley conforms to the pattern typical of the middle hills. There are four distinct seasons: the monsoon months from the end of June to early September, which bring heavy rains; a cool and dry autumn from September until November; the cold months from December to February, with some rain and occasional snowfall; and the warm summer beginning at the end of March and continuing until the onset of the rainy season.

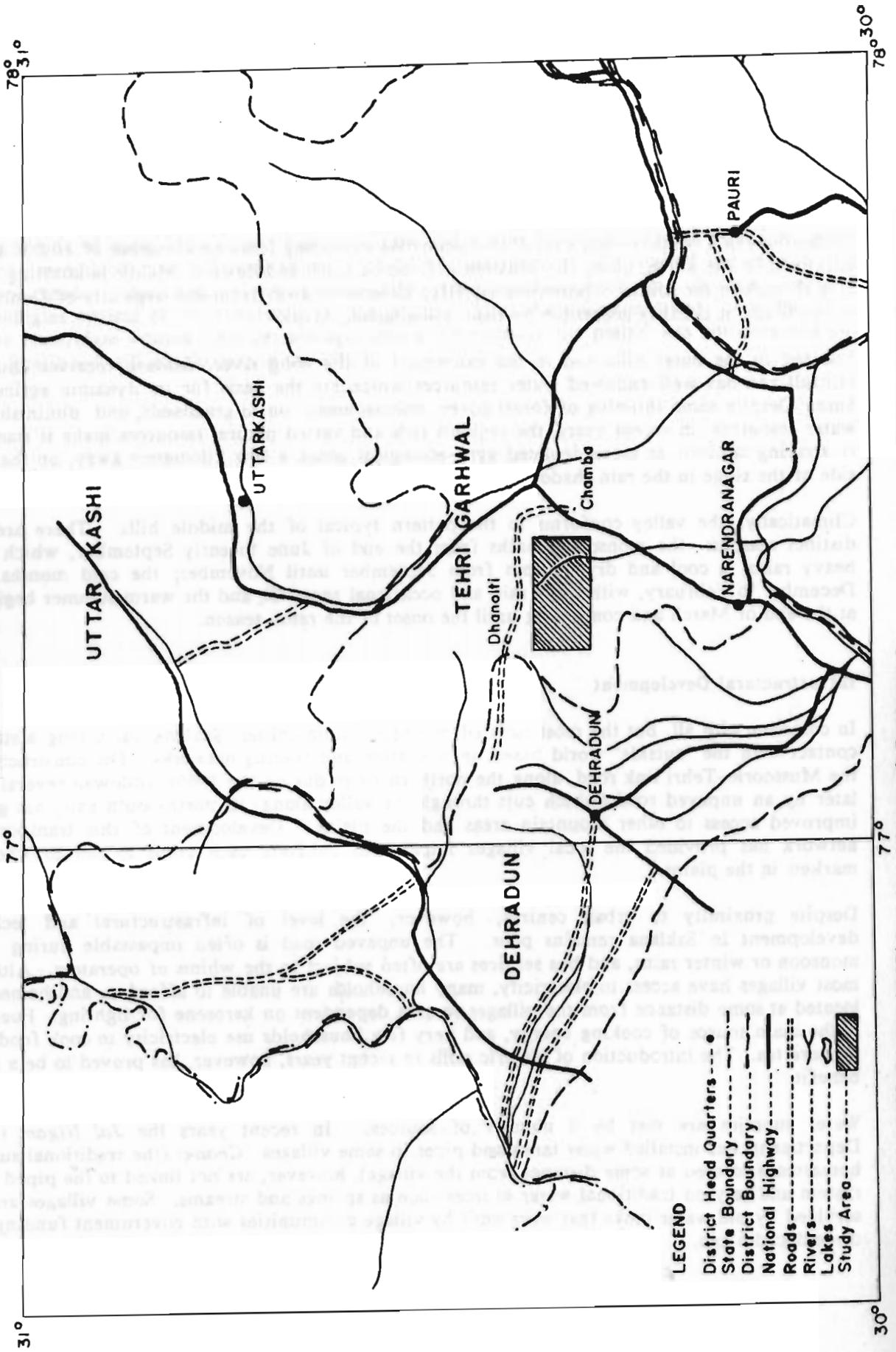
### Infrastructural Development

In common with all, but the most isolated mountain communities, Saklana has a long history of contact with the "outside" world based on migration and trading networks. The construction of the Mussoorie-Tehri link road, along the northern ridge during the 1960s, followed several years later by an unpaved road (which cuts through the valley along its north-south axis) has greatly improved access to other mountain areas and the plains. Development of this transportation network has provided the local villages impetus to cultivate cash crops to sell to wholesale markets in the plains.

Despite proximity to urban centres, however, the level of infrastructural and technical development in Saklana remains poor. The unpaved road is often impassable during heavy monsoon or winter rains, and bus services are often subject to the whims of operators. Although most villages have access to electricity, many households are unable to afford it, and homesteads located at some distance from the villages remain dependent on kerosene for lighting. Fuelwood is the main source of cooking energy, and very few households use electricity to cook food or to prepare tea. The introduction of electric mills in recent years, however, has proved to be a major benefit.

Water supplies are met by a number of sources. In recent years the *Jal Nigam* (Water Department) has installed water tanks and pipes in some villages. *Chaans* (the traditional summer homesteads located at some distance from the village), however, are not linked to the piped water system and rely on traditional water sources such as springs and streams. Some villages are still serviced by old water tanks that were built by village communities with government funding over three decades ago.

# THE SAKLANA AREA HILL REGION OF UTTAR PRADESH



## LEGEND

- District Head Quarters ●
- State Boundary - - - - -
- District Boundary - - - - -
- National Highway - - - - -
- Roads - - - - -
- Rivers - - - - -
- Lakes - - - - -
- Study Area - - - - -

Source:- Taken from RS Tripathi (1987) Investment, Income & Employment Pattern of Hill Farming in Tehri Garhwal Himalaya

Although piped water has facilitated certain aspects of daily work, particularly for women, poor construction and inadequate maintenance are resulting in periodic and seasonal water shortages. In recent years, there has been a decline in the availability of water during the hot season which is attributed to less reliable winter and monsoon rains.

### Commercial Centres

The growth of commercial centres in this area, underscores both the extent of communities' dependence on markets and their enhanced purchasing power. Two commercial centres serve the villages of Upper Saklana. The main one, Satyon, is located in what was once a forested bowl. Two decades ago, there was only one all-purpose shop here. Today, there are over thirty commercial enterprises, including two ration shops which sell essential commodities such as kerosene, sugar, rice, and wheat at controlled prices, and a number of open-market shops stocked with a wide array of items ranging from clothing, toiletries, biscuits, and powdered milk, to fabrics, umbrellas, and school books. Apart from the larger shops, there are a number of smaller enterprises which sell tea, and stock a few items of dubious vintage and quality. There are in addition several tailors, a goldsmith, and several small eating places.

Other services include a primary school and an inter-college which services a wide area, a post office, bank, an agricultural extension office, and two allopathic health centres. These two centres (one private, the other government-run) provide only limited services, and those requiring more specialised care have to be taken to Dehra Dun, Mussoorie, or Chamba where medical facilities are better. An allopathic nurse from Chamba is also based in Satyon. However, women in childbirth are generally attended to by *dais* (traditional midwives) who live in various villages.

### Natural Resources

The local agricultural economy is intricately related to and dependent on the natural resource base. A variety of strategies are used to exploit all its available components. Key components of the biomass system are forests, grasslands, agricultural lands, private orchards, and water resources. There is tremendous micro-regional variation in natural resource endowment, and within short distances, the landscape changes from dense oak forest to sparsely-covered rocky hillsides.

#### Forests

Forests play a major role in supplementing agricultural strategies, by providing fodder grasses and leaves for the maintenance of livestock, fuelwood for domestic needs, timber for construction and ritual purposes, compost, food and other minor forest products. There is considerable variation in the type and condition of forests. The composition, condition, and distribution of forests are influenced by aspect, slope, and proximity to villages and roads. The condition of forests is generally good, although those on the periphery of villages show sign of over-utilisation and poor lopping practices.

The main forest stocks consist of coniferous chir pine (*R. roxburgii*) and oak (*Q. incanna*), locally known as *bani* (which is the favoured species for fodder and fuelwood). At higher levels, this is interspersed with other broad-leafed species such as morru (*Q. dilatata*), rhododendron (*R. arboreum*), locally known as *buras*, and other species. The lower-lying west-facing slopes are dominated by large tracts of monocrop; natural chir pine forests. Above these are thick stands of

oak which, because of their distance from areas of habitation, remain untouched. Forests on east-facing slopes in the middle level lands are less dense, reflecting heavy utilisation by villagers. Areas closest to the roadhead on south-facing slopes below the ridge consist primarily of open grasslands and agricultural fields with very sparse tree cover. In this area, large tracts of forests were felled during road construction. Subsequently, improved access to markets has provided a further impetus to clear land for cultivation.

### *Administration of Forest Lands*

There are several categories of forest land: those that come under the jurisdiction of the Forest Department (*Junglaat*) and the Uttar Pradesh State Government, civil/soyam (earlier known as Revenue) lands, and *gram samaj* (village or *panchayat*) lands. Though nominally under the control of the Revenue Department, civil/soyam lands are managed on a de facto basis by local communities. These are often the most degraded and can be taken over by the Forest Department for afforestation purposes. Villages have the right to fell trees on these and *panchayat* lands, whilst user rights to other forest resources is based on special permits issued by the Forest Department. Households claim de facto rights to trees planted on civil/soyam lands, which lie adjacent to their homesteads.

Household fodder and fuelwood requirements are met largely from the Forest Department and U.P. State Government-owned lands. Farm trees, located near *chaans* or on the fringes of agricultural lands, provide some, but not a significant amount of household needs. Few households own orchards (acquired and/or planted with government assistance over 20 years ago), most of which are neglected due to lack of adequate household labour. Fruit is grown mainly for household consumption although some apples and apricots are sold locally.

### *Pressures on Forest Resources*

So far, outside demands for fuelwood and timber are relatively small, catering primarily to a few non-local residents in Satyon (school teachers and other government and private employees). Growing pressure on forests also comes from agricultural expansion, although this is still not very obvious. Most encroachments take place on civil/soyam lands. In recent years, some agricultural extension has taken place with new fields cut out of steep slopes (*khuds*) just below the road. This has contributed to erosion of soil and manure during heavy rainfall and has resulted in increasing instability of roads. Some commercial felling (by the *Van Nigam*) is also taking place in heavily forested areas along the ridge.

### *Grazing Lands*

The traditional common grazing areas (*gochar*) are located on the edge of forests, adjacent to and above the villages. Earlier, lands along the contours of irrigation channels in the valley were also used to pasture livestock, but these have been encroached upon to expand landholdings. Some fallow fields in the valley are also used as common grazing land. Unregulated lands kept permanently open are in poor condition due to heavy utilisation. Others are closed during the monsoons and are exploited only for grasses, which supplement those from private orchards.

### **Resource Management**

Most subsistence communities have traditionally drawn on institutionalised or informal systems to regulate access and in doing so have contributed to the sustainable use of forest, water, and pasture resources. In resource-rich areas such as Saklana, there are typically fewer imperatives

for ecological consciousness and hence, the need for formal communal regulatory structures. Whilst there is little documentary evidence of earlier management systems in the valley, oral histories provide some insight into how common property resources were utilised and managed.<sup>11</sup>

Conditions of abundance, rather than of scarcity, define the context of resource management in the valley. There were no formal boundaries that demarcated village forests and grazing lands. Nor were formal sanctions employed against trespassers. A village elder arbitrated over disputes when the need arose, a practice which ended over four decades ago "when people began to have more money".

A *chowkidari* system was organised by each *gram sabha* to protect agricultural fields from damage by wild animals and from theft (mainly of fodder grasses) by villagers. The guard was employed for the duration of the agricultural season from June until October and was paid for his services in grain. This system has died out quite recently--within the past twenty years. Villagers say trespassing is less common since there is a much stronger sense of personal property now. In addition, tending to the fields, when only two crops were cultivated (coarse millet and paddy) was much easier than it is today. In present times during the summer months, five different crops are grown, apart from millet, potatoes, peas, and beans.

Access to water resources in the past was also loosely structured. Irrigation channels (*guhls*) were constructed annually. This was a collective task performed by men, whose fields lay adjacent to the *guhls*. In recent years, the *Jal Nigam* has built permanent irrigation channels in some mid-level villages and in the flatlands. A tax is levied on the latter according to landholding size. This has effectively ended one important aspect of men's collective work.

These informal regulatory systems have virtually ceased to exist. There are two exceptions. First is the closing of common grazing lands on the periphery of villages from June-end to early October. This is when grassland production is at its peak, and only grasses are allowed to be cut. Second, is a practice in which one mid-level village observes an enclosure system for regulating access to forest resources. The decision to close certain parts of the forests surrounding the village, was taken by the *panchayat*, about 40 years ago. It is enforced by informal sanctions. Households are permitted to collect deadwood, twigs and litter, and even to bring their animals to graze in certain areas. A recently formed *yuvak mandal dal* (youth group) ensures that trespassing is kept at a minimum, and that sanctions are observed.

### *Women's Role in Resource Management*

Women have traditionally not been involved in *panchayat* activities. The forest enclosure initiative discussed above, is controlled by men since, according to the *Pradhan*, women are considered "irresponsible". This attitude continues today, and recent afforestation efforts have made little attempt to include women. The absence of informal women's groups, which could serve as the basis for mobilising around these and related issues, only further accentuates their marginal position within the community. The problem, however, is a general one. The absence of organisational base for developing community participation is reflected in developmental changes that effect traditional practices. New agricultural imperatives based on intensive and extensive landuse, for example, are beginning to transform the physical landscape. These, along with the emergence of centralised systems of control over local water and forest resources, are altering community relationship and responsibility for the environment.

The few attempts at environmental conservation and/or regeneration are conducted on an individual basis. These are generally restricted to planting trees on private *chaan* lands. One striking exception is an afforestation/conservation initiative in an area of the mid-level forests. Although large in scale and vision, this too is an individual effort which has failed to develop community participation. This will jeopardise the longer-term viability of the initiative because fellow villagers are becoming hostile to the individual.

Other efforts reveal the oft-noted problem of over-bureaucratisation and lack of communication, between the funding agency (the Block Development Office), the Forest Department and the villagers. Conflict of interest, between immediate grazing rights and longer term concerns of afforestation, coupled with lack of community support and involvement, have also proved to be major stumbling blocks.

### **Agrarian Relations**

Caste configurations, based on the numerically dominant land-owning and cultivating *Brahmins* and *Rajputs*, on the one hand, and the traditional service castes (scheduled castes or *Harijans*), on the other, provides the basis for contemporary social and labour relations in Saklana. Most villages are multi-caste, while a few are single caste villages. The majority of villagers are owner cultivators, operating small holdings which rarely exceed 5 acres and are typically between 1-3 acres.<sup>12</sup>

### *Caste Relations*

Traditionally, social and labour relations between castes were based on mutually-recognised forms of reciprocity and redistribution, in which the higher castes were obliged to provide payments in kind, for services rendered by the outcastes. This tradition is still observed, though it is beginning to erode. At the same time, interlocking structural and socio-cultural biases limit the extent to which scheduled castes have been able to either develop their traditional skills, or to find a foothold within the emerging market economy. Thus, the "attenuated" form of hill caste notwithstanding, there is a noticeable air of impoverishment amongst the scheduled caste communities. Their lack of independent access to productive resources, which has historically defined their dependence on the higher castes, continues to be expressed in social interactions and economic relationships even today.<sup>13</sup> In the past, the service castes did not own land, although it was possible to acquire land by entering into sharecropping arrangements with higher caste households. This system, which continues to be observed, was based on *aadhi* which enabled the lessee to cultivate land in return for half the produce. Today, more typically, the lessee keeps the entire produce, in return for providing assistance to the leaser at labour-intensive periods in the agricultural cycle. Although it is generally the scheduled castes who enter into such arrangements, other castes also do so.

Since independence and particularly in the mid-1970s, the U.P. Government has sponsored land distribution schemes which has ensured that all scheduled households now own some land. It is not entirely a coincidence, however, that despite the absence of glaring disparities in landholdings, scheduled castes tend to have the smallest, most marginal and least productive holdings, whilst the larger landowners are generally *Brahmins* and *Rajputs*.<sup>14</sup>

Apart from traditional caste prejudices, there is tremendous resentment towards the scheduled castes, who have been recipients of government welfare programmes. These schemes included granting freeholds, draught animals, pack animals, and Rs. 10,000 for construction of houses. According to members of the high castes, the scheduled caste has not been able to pull itself out of poverty, mainly because members don't work and because they drink away their earnings.

Relatively few men in the latter caste category are employed in well-paying and secured jobs, a pattern which is reinforced and perpetuated by low levels of education.<sup>15</sup> Traditional work like tailoring and wood and leatherwork (much of which is home-based, since renting shop space in Satyon is expensive) is becoming financially unviable, as cash needs increase, and the local markets are flooded with cheap consumer items. Most scheduled caste men, thus, have to depend on local wage labour (road and house construction) and on agricultural work (land clearance to build new fields, ploughing, and terracing) to a greater extent, than do higher caste men. The latter also participate in local wage labour, but have greater access to external (and more secure) labour markets. High caste men are also found to engage in trading as a primary occupation, or to supplement agricultural and off-farm incomes.

### *Organisation of Production*

The domestic unit, in its nuclear or extended form, is the primary unit of production, and all family members, in varying degrees, assist in domestic and agricultural work. Ploughing is the only activity which is strictly gender structured. Households in which males are either too old, infirm or young, or where members are all-female, are compelled to hire labour to initiate the agricultural cycle. In this sense, widows without sons (who are often estranged from their in-laws) are the least enviable. They do not have *bahus* (daughters-in-law) to work for them, and have no access to financial resource to hire labour for ploughing the land. Their participation in agricultural production is thus limited. This underscores the extent to which women are dependent on men to initiate the agricultural cycle. Apart from this, the sexual division of labour is relatively flexible, based on individual households' specific needs and constraints. Nonetheless, in most instances, women and girls carry more of the work burden, than do men and boys. This will be discussed in greater detail in the following Chapter.

Inter-household reciprocal labour exchanges (*padiyaal*) though not as common now, are still observed. The specific organisation of agricultural work is determined by cropping patterns. In the highly labour-intensive paddy-growing areas of the lowlands for example, *padiyaal* is still practiced. Elsewhere, these labour exchanges are less frequent, particularly in the case of cashcrops.

The extent to which women have absorbed greater work burdens is indicated in the remarkably low incidence of hired agricultural labour (which is provided by the scheduled castes). Payments used to be made in kind (in grain) and, though still observed, is gradually declining, as labour hiring becomes more contractual.<sup>16</sup> Most households which have access to outside help draw on sharecropping relationships, which entitles them to labour assistance.

In recent years, a new component to the existing socio-economic hierarchy has been introduced, in the form of Nepali migrant labourers. These migrants, either alone or with their families, live along the ridge (there are none in the middle level villages), clearing and cultivating upland fields on an *aadhi* basis, or even for the full produce. They work on the land for two or three years, before it reaches its maximum productivity when the owners reclaim it. These labourers are exploited, often underpaid and occasionally not paid at all. Their presence causes some resentment amongst the locals, as it is said they take away jobs and encourage a flourishing illicit alcohol trade. Nonetheless, most villagers agree that Nepalese are hard workers, whilst *paharis* (hill people) are *kaam chores* (lazy). Nepalese are more receptive to local employment opportunities, such as those within the horticultural schemes along the fruit belt zone, where they constitute the largest labour force in fruit and vegetable harvesting. They are also engaged in clearing and tilling agricultural lands. *Garhwalis*, on the other hand, prefer contracting for packing and transporting the produce.

A smaller, more transient population of workers comes from Delhi and Bihar. Brought in by labour contractors for specific jobs such as house construction along the ridge, these workers are readily engaged. Local labour on the other hand is considered unreliable, and skilled labour is scarce. As a result, there has been very little generation of local employment in the area despite the claim that much of the development and infrastructural work is being carried out, in order to create employment opportunities for local villagers.

## The Agrarian Economy

Agriculture and animal husbandry constitute primary economic activities in Saklana. Hill farming is highly labour-intensive and with the exception of ploughing, for which bullocks provide traction, all activities are performed manually, with the use of very basic wooden implements (*dharanti*: a sickle used for cutting grasses and wood; and *kuddaal*: a small pick used for weeding and turning the soil).

### *Animal husbandry*

Traditionally, when livestock was an indicator of status and wealth, most households owned large numbers of cows, sheep, and goats. Ecological and socio-economic transformations over the course of the years, in the form of declining availability of forest and field fodders, and changing household composition, have brought about changes in the nature of animal holdings. These have had important implications for sexual division of labour. The transition from cows to buffaloes has impacted labour allocation amongst household members. Unlike cows, buffaloes are unable to negotiate steep mountain paths and must be stall-fed. Thus, the decline of cow holdings has meant that the predominantly male task of grazing has been replaced by fodder collecting, a female activity which is becoming an increasingly arduous aspect of women's daily activities.<sup>17</sup>

Today buffaloes and bullocks are the main animal stock. The former are maintained primarily for manure, and secondarily for milk; whilst the latter are used for ploughing and threshing. Farmyard manure (dung mixed with crop residues, forest leaves, and pine needles) is still the main form of fertiliser, despite the increasing use of chemical fertilisers in recent years. Although buffaloes are superior milch animals as compared to cows, milk production is low and animals rarely produce more than a kilo per day (the average is 2 litres). This is used mainly for domestic consumption, although a small amount is sold within the village, or to tea shops, in the commercial area.<sup>18</sup> In addition to buffaloes and bullocks, a few households own mules and the occasional sheep and goats.<sup>19</sup>

### *Agriculture*

Traditional agriculture was based on the cultivation of coarse millet (*mandua* and *jhangora*), wheat, paddy (both irrigated and rain-fed), potatoes, and a variety of legumes. The area being generally cold, agricultural productivity was low, and subsistence production often had to be supplemented by grain purchased from warmer hill areas and markets in the plains. Often this was done by selling animals. Few households actually produced a surplus, or had the means to transport the produce to marketing centres in the hills and plains.

Over the last decade, the cultivation of peas and beans, along with new varieties of potato (the *pahari* variety is no longer grown to the same extent) has resulted in a decline in acreage for traditional foodgrains. These are now often grown in smaller quantities and/or relegated to more marginal lands which, in turn, has affected productivity. Apart from the main crops, most households also have small kitchen gardens and grow cucumber, pumpkins, radish, coriander,

garlic, and chilli. These vegetables are mainly for household consumption, although some homesteads near the road are also engaged in selling small amounts.

There are three types of land: irrigated fields in the valley bottom; terraced rain-fed *ukhar* and some irrigated fields near villages; and *ukhar* lands near *chaans* on the periphery of forests in the higher levels. Fields are small and fragmented. It is not unusual for households to cultivate as many as between 15-25 individual plots of land, located in various locations and elevations. Each area of land has a specific name which is recognised by fellow villagers and indicates, amongst other things, the quality of soil. Scattered holdings make many aspects of agriculture even more labour-intensive. For instance, simply moving animals between fields, during the ploughing season can take up a lot of time. Nonetheless, they offer some security against localised crop loss.<sup>20</sup>

### *Cropping Cycles*

The traditional cropping cycle was based on two annual harvests which conformed to the *khariif* (monsoon) and *rabi* (winter) seasons, characteristic of plains agriculture. The main season was the *Khariif*, when paddy, millet, and various minor legumes were planted in May and early June, and harvested from the end of September through October. This was followed by *rabi* wheat crop which was planted in October and harvested in June. Four varieties of wheat were cultivated in the valley. Each type adapted to a specific altitude, highly suited to rain-fed conditions and the low availability of FYM. Today, only one variety, *lal mesri*, is cultivated, mixed with new seed varieties. This is being extensively practiced so that most villagers now only distinguish between *ghar ka* (home grown) and purchased seeds. Wheat used to be grown in smaller quantities than coarse millet and was kept only for special occasions. Some mixed cropping was (and still is) practiced using *mandua* as primary, and a variety of legumes, as secondary crops.<sup>21</sup>

Agricultural work came to an end after the wheat had been sowed and, for the duration of the winter months animal husbandry was the main activity. Households with large herds often migrated into the lower lands in the south to pasture their animals, returning to their villages in the early spring. This practice began to die out some fifty years ago. The festival of *Basant Panchami* which is celebrated according to the lunar calendar, towards the end of February or early March, designated the end of this lull period and ushered in the new agricultural season.

The introduction of new cropping patterns has changed traditional agricultural patterns and *Basant Panchami* has lost all, but its symbolic and ritual value. Land is used intensively for four annual harvests, and there are now three intensive periods of agricultural work.

- o End March - May, when *khariif* crops; millet and paddy are planted, and the *rabi* crop; wheat, is harvested;
- o Mid June - early September, during which time the millet is weeded and paddy transplanted; potatoes and beans are harvested; and the main pea crop is planted; and
- o September - early November, when paddy, *mandua*, and *jhangra* are harvested and wheat is sown.

The winter months are still less busy than other times of the year. Nevertheless, agricultural work does not actually stop since preparations have to be made at this time, for planting of the main potato crop, beginning at the end of January and continuing through March.

## *Cropping Variations*

Rotation patterns vary, reflecting micro-regional features such as access to irrigation and differences in altitude and aspect. In the well-watered flatlands, the main rotation is between rice, potatoes and peas. Wheat is cultivated primarily on rain-fed *chaan* lands and coarse millet, (when grown at all) is grown in the most inferior lands. In mid-level villages wheat and coarse grain continue to be grown (in smaller amounts), along with cash crops. In these areas, potatoes and peas are often cultivated on *chaan* lands, which are often more productive. One reason why these lands are more productive than village and unirrigated valley lands, is that these lands are consolidated around the homestead (rather than scattered), which facilitates manuring and, if necessary, watering.

An important change that has occurred in the mid-level villages in the past few years, is that irrigated paddy is no longer cultivated, though a very small amount of the rain-fed variety continues to be grown. The abandonment of paddy is commonly attributed to a decline in irrigation, and to the poor monsoons of 1986-87. However, this interpretation has to be weighed against economic imperatives and labour allocation strategies. The main consideration, was perhaps the potential profitability of peas.

## *Agricultural Dynamism*

At a glance, the transition from subsistence to market-oriented production in Saklana has been successful. Despite the inevitable insecurities brought about by this new mode of integration into the market economy (e.g. fluctuations in market prices of inputs and produce, the credit trap, etc), household incomes have increased. Nonetheless, this agricultural dynamism has not been without cost. The displacement of traditional food grains by cash crops is but one of the more discernible aspects of this development. Related to this has been:

- o an increase in agricultural workloads;
- o a perceptible decline in the availability of agricultural fodder;
- o an increasing dependence on and vulnerability to markets; and
- o settlement dispersal.

How have these developments affected local agricultural strategies. And what are some of the longer-term implications?

Agricultural Workloads. Two key features of the new market-oriented agriculture is that it has not initiated changes in traditional sexual divisions of labour; nor is it based on new techniques of crop husbandry. Agriculture remains highly labour-intensive. Increased levels of productivity are less a function of inputs (improved seeds and chemical fertilisers) than of intensive use of land and labour. Since sexual division of labour remains untouched, women are being forced to absorb increased labour requirements. This trend, discussed in greater depth in the following Chapter, is reinforced by the migration of men out of the area.

Impact of Fodder Production. Agricultural residues derived from traditional foodgrains formerly served as important sources of fodder; whereas the new crops do not. Changes in cropping patterns consequently have important implications on animal husbandry, as well as agricultural strategies. Shortfalls in field fodder has placed greater pressure on forest-based grasses and leaves. According to villagers, the quality of fodder has deteriorated over the years, affecting

manure production and milk output. This coincides with the rising demand for farmyard manure (FYM), in order to ensure a minimum level of productivity. Although chemical fertilisers are used, they are applied in a haphazard way.

There is considerable variation in individual household access to agricultural residues, depending on acreage under fodder producing crops, and the size of animal holdings. Estimates for how long agricultural residues contribute to household fodder supplies, vary from a few weeks to, more commonly, six months. Those with access to secure off-farm income are less dependent on the sale of cash crops and have greater flexibility to plant fodder-producing crops. This choice is, ironically, denied to the less well-off, for whom the sale of cash crops remains a key income-earning strategy.

New Dependencies. Successful agricultural production is no longer a function of landholding quality, but is increasingly tied to externalities. Over the past few years, fluctuations in market prices of inputs has increased, whilst sale prices have dropped, particularly for potatoes.<sup>22</sup> In addition, the absence of a marketing infrastructure (along with a regularised credit system) forces producers to often sell at prices disadvantageous to them.

The new crops are tying communities into new dependencies on external markets for agricultural inputs. The purchase of seeds and chemical fertilisers requires cash which is frequently not available at critical junctures in the planting cycle. Most households, as a result, have little choice but to acquire production inputs on credit (*udhar*) and subsequently find themselves bound to local seed merchants. Once the crop is harvested, they are required first, to repay these loans at unfavourable prices. The credit trap could mean that little, if any, of the money from the sale of vegetables, is realised as profit.

One consequence of growing less subsistence foodgrains is that a greater proportion of consumption needs need to be purchased. This trend has been further exacerbated by changes in dietary habits and tastes which no longer favour the old foods. *Mandua* and *Jhangora*, major components of the traditional diet, are now considered unproductive and dismissed as low status food. Young people, in particular, often refuse to eat them. These are now commonly grown for fodder and, for due payments in kind, *Mandua* is usually combined with *atta* (whole wheat), except in very poor scheduled caste households, where it is eaten unmixed. Although household wheat and (in certain areas) rice production can cover a considerable portion of consumption needs, most households have to supplement their requirements by buying in the market. Tea and sugar, rarely consumed forty years ago, today constitute a major drain on household expenses.

Who Benefits. Who Loses? Participation in the cash crop economy has increased household incomes; and even modest households recently command a purchasing power unheard of a decade ago. Villagers, irrespective of caste or socio-economic status, agree that in many respects this new-found access to cash has made life considerably easier.

The nature of hill agriculture limits avenues for substantial productive investment. Small, scattered holdings and limited irrigation preclude the use of mechanisation. Although there is scope for investing in the construction of private water tanks in the water-vulnerable upper and mid-levels, this has not been tapped. Investments which could take the form of better quality, seeds, improved livestock quality and application of correct amounts of chemical fertilisers to crops, have not been made.

Households with surplus cash invest in trade and employment rather than in agriculture. Local traders, who also function as seed merchants and marketing middlemen, have been able to expand their roles by investing in lorries to transport goods and local produce. On a more modest level, investment also takes place in small commercial enterprises.

Prosperity, of a sort, is also evident in conspicuous consumption and investment in social ceremonies. There has been a tremendous spurt in the construction of houses (built on the "plains" model with flat roofs and reinforced concrete and cement), in recent years. The introduction of dowry, first observed by wealthy traders in the area and subsequently adopted by everybody, has also contributed to a high level of consumerism. Dowries now include television sets, radios, furniture, and other consumer items that represent a tremendous drain on household resources.

Settlement Dispersal. A significant trend that has emerged from recent market-oriented agricultural production, is settlement dispersal.<sup>23</sup> In the past, seasonal migration to upland *chaans* (during the warm months), and into the lowlands (in the cold months) was linked to the pastoral cycle. Over the years, this pattern has become more closely linked to the agricultural cycle. Temporary migration back and forth, to cultivate valley, village, and upland fields, is quite common.

Taking up semi or even permanent residence in *chaan* homesteads was noticeable as far back as 30-40 years ago. It has increased in recent years, and now a large number of households only return to the village for 2-4 months in the year. Others continue to maintain homes in the village, but use them only for storage. *Chaans* are attractive for various seasons. The quality of life in villages has deteriorated, and proximity to forests and water resources facilitate certain basic subsistence activities. A more compelling reason, cited earlier, is that the conditions for agricultural work in these upland fields is often much easier. This pattern of permanent settlement is particularly evident in areas close to the road, where accessibility to transportation and markets, enables households to market their produce more directly, thus dispensing with the need for middlemen.<sup>24</sup>

The fragmentation of village communities, both literally, in terms of settlement dispersal, and figuratively, through the erosion of traditional collective institutions and values, has important implications for social organisation. The emergence of a more individualistic ethic began in the post-independence period, with the introduction of education on a mass scale, higher levels of male migration, and more employment opportunities. The village therefore, no longer serves as the focal point of interaction as it once used to, though, this is temporarily renewed during the winter months, when those who still maintain their village houses return for a few months. The emphasis on cash crops has placed great emphasis on money through increased opportunities for cash income. One comment, heard with unflinching regularity, by both women and men is the decline of unity amongst people. Today, "*alu muttar sub ko kha rahe hain*" and "*aaj kal sub paise ke peeche bhag rahe hain*" (literally meaning that people have been consumed by the desire to earn more money).

## CONCEPTUAL ISSUES

*"Women's lives are spent in the gobar (manure)".*

Women are the lynchpins of hill agriculture, playing a central role in the management of family farms, animal husbandry, and non-farm subsistence work, apart from carrying primary responsibility for domestic activities and childcare. This notwithstanding, hill women have traditionally been denied access to productive and socially and ritually prestigious resources, and are perceived as beasts of burden, not just by men but amongst themselves. This perception of their lives is vividly and poignantly reflected in the above statement.

### **The "Double Day" and Marginalisation**

This glaring disparity between women's economic roles, and their low status, has long been reinforced by economic imperatives which force men to participate in external labour markets. Male migration, coupled with changes in natural resource endowment, force women to assume the main burden of work and harden the conditions of their labour. It is in this context that the "double day/triple burden" is increasingly defining the realities of hill women's lives.

Another dimension to women's "double day" relates to the cultivation of cash crops. This, as noted in the preceding Chapter, is based largely on women's labour. Though women farmers generate a sizeable portion of the household income, this work is not accorded much recognition, let alone status. Whereas in other farming systems, women's marginalisation is typically associated with their displacement from so-called "productive" spheres of work, the Saklana experience suggests that marginalisation will occur, even as women's roles in surplus and income-generating work intensifies (if that work is differentially valued when measured against what men do).

This Chapter identifies the interlocking economic (e.g. structural) biases which deny women independent access to, and control over productive resources) and socio-cultural processes (such as constraints on their mobility) which alter perceptions of "productivity", and intensify women's work burdens - whilst at the same time they devalue and render their work "invisible".

### **The Market Economy and Gender Relations**

These twin processes of devaluation and marginalisation need to be considered in the relationship that has historically been forged between village communities and the wider national economy. This linkage, reinforced by contemporary policy interventions, has important ramifications for status within gender vis a vis the market economy, and consequently for gender relations.

Since agriculture cannot (even under these relatively prosperous conditions) ensure a minimum subsistence, households are forced to draw on migration and other strategies to provide cash to cover an ever-widening array of basic needs and luxury items. Men's withdrawal from agricultural work is thus associated with their growing involvement in off-farm employment. This is a critical factor in understanding the context of women's increasing participation in the

agrarian economy. Higher level of male participation in the market economy (both local and outside the village) is a function of their socialisation, greater mobility and generally greater access to education and capital. This equips them better to participate and compete in the market economy. But "female labour is available within the family to assure that whatever land and livestock resources the household has, are fully utilised to provide as much of a subsistence base as possible" (Emphasis added).<sup>25</sup>

Women's dependence on men as earners of income is reinforced by the latter's mediatory roles amongst institutions, services, and personnel of the "outside" world, that are "socially and conceptually inaccessible" to women. This has repercussions for women's ability to deal effectively with credit institutions, agricultural extension services, and bureaucratic structures that play a vital role in hill agricultural production strategies.

These dependencies serve to elevate men's roles and simultaneously undervalue women's contributions in the agrarian economy. Those who command access to external labour markets and remunerated activities are accorded a value and prestige, that far exceeds that attached to activities which appear to be unconnected to the monetised domain (and which are performed largely by women). An important component of this implicit under or de-valuation is the milieu in which women's income-generating work is carried out. Because connections between the family farm unit and the market sphere appear to be more tenuous, women's actual and potential roles as de facto managers of agricultural production is either obscured or undermined.

### Women's Work

*"This life is useless. Fodder, water, wood, gobar: that is the extent of women's lives".*

*"Women are our arms and legs".*

### Labour Allocation

Although sexual division of labour defines the formal parameters for the allocation of tasks, there is considerable flexibility in how individual households spread the workload between sexes and generations. Who does what, when, and with what frequency, and the input of different members into the decision-making process, depend amongst other factors, on the composition of the domestic network (e.g. sex, age, and health of members); size of land and animal holdings; seasonality and period in the agricultural cycle; and, finally, the household's financial or social standing to draw on outside labour.

Some renegotiation of gender roles is necessary in households which either do not have enough females, or where ill health prevents women from assuming full responsibility for their workloads. There is also greater sharing of certain so-called "women's" work (e.g. collecting water, fodder, fuelwood, winnowing, etc.) amongst scheduled castes, than in upper caste households. Women's work is structured by their position within the household. Newly-married women and those with very young children, living under the watchful eye of their *saas* (mothers-in-law) and/or older sisters-in-law, carry the heaviest work burdens and play a minimum role in defining their work agendas. On the other hand, those with older daughters living in households with other women, are considerably better off and are able to apportion the work load. Older women, especially those with *bahus* (daughters-in-law), hold positions of relative prestige and power that accrues with age, and derives specifically from their ability to command the labour of other, younger women.

## Differential Valuation

Implicit differential values are attached to different tasks, and to those who perform them. A case in point is the relationship between household survival strategies, boys' access to education, and changes in animal stock. As noted in the preceding Chapter, there has been a switch from cows to buffaloes in recent decades. The overt reasons for this change are, the lack of household labour (due to the loss of family members through marriage, migration, death), and declining availability of forest and field fodders, which have made the conditions of animal husbandry more difficult.

This switch coincides with expanding opportunities for education and employment in the post-independence years. Educating sons is a critical channel for securing a decent job, and represents an important investment in households' future financial security. More than ecological factors, then, a more compelling explanation can be sought in the socio-economic interpretation. Since grazing cattle was traditionally done by boys, it is reasonable to suggest that a major reason for declining household labour is that boys are being sent to school in greater numbers. The increasingly arduous conditions under which animal husbandry is practiced has not brought about a more equitable pattern of labour-sharing between the sexes. The imperatives of stall-feeding make the maintenance of buffaloes highly time and labour intensive. This work is almost invariably performed by women and girls and is certainly not sensitive to their increased work burdens. Education has distanced youth from agricultural work so that boys are only very peripherally involved in farm work. And very often, a de facto labour deficit exists even in households with enough working members. The high value placed on boys time and labour, thus forces women and girls to carry an unequal portion of the domestic work load.

### Non-farm Subsistence Work

There is a regularity to women's domestic and non-farm subsistence work, which is only marginally affected by seasonality. Responsibility for the greater part of the work burden falls on the *bahu*. In a household with two or more, the youngest *bahu* will be required to do the heaviest work. In households without *bahus*, these tasks are evenly shared by the mother and older daughters.

The day begins before daybreak, as early as 4 a.m. during the summer months and 6 a.m. in the winter. The *chullah* (hearth) is cleaned (ashes are thrown into nearby fields), the fire is stoked, and tea prepared for the household. Lentils for the morning meal are placed on the fire; a number of important tasks are completed around the homestead whilst women cook. The *chullah* is strictly the preserve of women. Older girls share in the preparation and cooking of food, but responsibility for distributing the cooked meal generally belongs to the senior women. Men and boys rarely assist, even with the preparation of tea, although they do cook for social and ritual functions.

Women are responsible for all tasks relating to animal husbandry, such as stall cleaning, milking, and fodder collection; most of which are done early in the day. The twice-daily milking of buffaloes is performed by the household's most senior women, the *saas* or mother. Stall cleaning is a laborious task, performed by *bahus* and younger women. The dung, collected by hand, is stored in heaps either near the homestead or carried in headloads to nearby fields. This work is time and energy consuming since most lands are at some distance from the village and baskets can easily weigh 20-30 kilos. Moreover, several trips are made back and forth. Men and boys rarely assist in this work, except under extenuating circumstances. When they do, they use shovels to gather the dung and carry it in gunny sacks on their backs.

After the morning meal, household members disperse for the day to go to school or to attend to various agricultural and domestic tasks. Older women remain around the homestead, attending to infants and small children as well as watering animals and doing some kitchen gardening. Other activities around the house include washing the entire family's clothes, food processing, oil pressing, and winnowing (done by older women), and pounding which is labour-intensive and is usually done by younger ones.

The opening of electric mills in the commercial centre has greatly facilitated women's work in the sphere of food processing. Traditionally, grain had to be carried down to the flatlands to be ground (except during the monsoons when most villages had their own seasonal *gharats*). This was a laborious and time-consuming task. Large groups of women would leave their villages early in the morning, often leaving behind small children and babies locked up in rooms or tied to bed posts, if there was no one to tend to them. They would return home in the late afternoon, often after dark, carrying 20-30 kilo sacks of grain several kilometers each way. Today, grain is carried to Satyon by men or children on their way to school, and only millet is manually pounded.

### *Fodder and Fuelwood Collection*

Daily trips are made to the forests to collect fodder or fuelwood, normally by younger women (generally *bahus*) and non-school going older girls. This is one of the few occasions that they have to socialize. Fuelwood is collected every three or four days, depending on the household's requirements. During the wet monsoon months, wood is stored in rafters above *chullahs*. An important source of fuelwood is the woody stems of *bani* which animals do not eat. The leaves are stripped and the twigs stored in bundles to dry near the homestead. Fodder is collected daily, except during the monsoons, when two trips are made to collect grass and leaves. Grass, at this time, has high water content and because of low nutritional value, must be fed to animals in larger quantities. Households with access to farm trees on their *chaan* lands and orchards, have an additional source of grass and fuelwood, which is a tremendous advantage to their womenfolk. Occasionally, other girls and women are invited to collect grass, a favour which is later reciprocated through labour or *gobar* exchanges.

Although forests, particularly those exploited by the mid-level villages, are relatively well endowed, fodder collection is a time-consuming activity, rarely taking less than four hours. Other areas in the uplands and towards the flatlands have poorer access to forest resources. One consequence of the displacement of fodder-producing crops in the flatlands, is that women are now compelled to go long distances along the road (often hitching a ride on buses) in order to exploit *banj* forests further to the south. Another related development in these areas is the cultivation of crops (e.g. *jaw*) specifically for use as green fodder.

The fodder cycle varies throughout the year, depending on the season and availability of different types of crop residues and their quality. Animals are fed a combination of green and dried grass such as agricultural residues and green leaves from fields and forest. Occasionally, farm trees (*bhimal*) are used during the winter in limited amounts for buffaloes, whilst *kharik* is used in the summer. Agricultural residues form an important part of animal feed: *jhangora* and *mandua* from December-March and *bhusa* (wheat straws) from May-July. Winter feed is supplemented with dry field grasses. By the middle of April-May, these agricultural residues begin to run out, coinciding with the wheat harvest and the regeneration of new oak leaves. These are considered excellent fodder because they are soft and palatable for livestock. This is however thought to be a time of scarcity, since *bhusa* is not considered a quality fodder. With the onset of the rains by the end of June, green grasses from the fields and forests are collected and

constitute the major source of fodder, until end September-early November when *jhangora* and *mandua* straws are once again available. Leaf fodder (mainly *banj*) is cut from end October to the beginning of the monsoon and is mixed with field residues and grasses.

According to older women of the area, each type of crop residue is imbued, with unique characteristics. *Banj* is the best all-round fodder, while other broad-leaved varieties such as *buras* and *morru* are used at certain times of the year. However, over-dependence on any one fodder is considered unhealthy and a mixture of fodders preferred as animal feed.<sup>26</sup> Those who can afford to do so, supplement bullock feed with *pindar*, a mixture of chaff from various grains.

### *Agricultural Work*

The growing intensity of agricultural work has not modified sexual division of labour. Whilst women have absorbed heavier workloads, by passing some of the burden to their daughters, the participation of men and boys in various agricultural tasks is actually declining. Intensive agriculture means that the greater part of women's time is spent in field work. In summer women often do not return from the fields before 7:30 p.m.

Women participate in all agricultural operations (with the single exception of ploughing), including all highly labour-intensive operations such as thinning out the young millet and potato crops, and rebuilding potato trenches. In tasks shared between the sexes, it is observed that women work more intensively, if, only because they feel they have less leeway to take time off than do men.

Men's agricultural work, apart from ploughing and harrowing, includes the building of irrigation channels (*guhls*) and bunding field terraces. This work is declining, however, due to the construction of permanent (cement) water courses and because hired labour attends to the maintenance of fields. Male assistance is limited to cash crops and generally restricted to planting, harvesting, and marketing activities.

### *Seasonality*

The extent, nature, and conditions of agricultural work is dictated by seasonality. The peak agricultural season extends from the wheat harvest at the end of May to early November. The days are longest at this time, and women's work days which begin before daybreak, include long hours of field work. Working conditions are hardest during the monsoon, when women spend long hours working in the rain, covered in little more than gunny sacking or plastic sheeting. Colds and flu are common at this time, but few women have the luxury to take time off to rest. The winter months (from November through February) are a lull period in the otherwise hectic agricultural season. The days are shorter at this time and the often extreme cold, accentuated by periods of rain and even snow, keeps most villagers in and around their homesteads. The main work at this time, apart from collecting fodder, is taking FYM to the fields in preparation for the upcoming potato season. This is done mainly by girls and young women; older women are permitted the luxury of sitting in the sun, exchanging news with family and neighbours.

The agricultural regime in terms of seasonality is as follows:

End of January through March. Preparations begin for the main potato season when seed potatoes are purchased by men from the market and brought up to the village either on ponies or, more commonly, by women. Cutting the potatoes is done primarily by men, although it is not uncommon for older women also to participate in this activity. Although there is no particular skill involved, comments are often passed if a girl or a young woman does this work.

Optimally, potato fields should be ploughed and harrowed three times. Once this is completed, usually during February, women spread manure over the fields. This is a time-consuming task, especially since most people put their largest lands under the crop. If chemical fertilisers are used (DAP), this is sprinkled by men. Women agree that there is nothing in the application of *khad* that they cannot learn, and yet few women-headed households use it. This is both a matter of women's lack of accessibility to the extension agent and lack of cash, for fertilisers cannot be bought on credit.

The next stage involves the participation of both sexes and draws on exchange labour (based on both sharecropping relationships or *padiyaal*) for digging troughs, planting seeds, and covering them with soil. The latter task, in particular, is very labour-intensive and requires considerable skill in coordination. Later, in March and April, the plants are thinned out and the troughs rebuilt. Both tasks are done by women.

February. A small pea crop is planted. The weather can be unpredictable at this time with rain and hail storms. Market prices are also considerably lower at this time than later in the year (Rs 3-5/kilo compared to Rs 9-11) and so not many households plant the crop.

April-May. Pea crop is harvested.

April-May. *Jhangora* and *mandua* are planted. Women break up large clods of soil with *kuddaals* or shovels after which the fields are ploughed and harrowed. The seeds are sown broadcast by men.

May-Early June. Millet seedlings are thinned out: twice for *jhangora* and once for *mandua*. This tedious and laborious work is done exclusively by women, household labour being supplemented by assistance from others. Initially, this entails squatting for long hours under the hot sun and, later, in the rain.

End June. Long beans are planted.

End of July and Continuing through August. The potato harvest is done collectively by women and men. The produce is taken to the market by men (or older boys) where it is sold to middlemen, or to traders, in payment for the seeds which were earlier purchased on credit. A smaller crop is planted in August and harvested in December and January.

End of August. A small potato crop is planted, mainly for home consumption, and only by those with large holdings.

End of August-September. Peas are planted following the potato harvest. This requires two ploughings, after which, both sexes dig trenches, plant the seeds, and cover them. Chemical fertilisers are applied by men. A few weeks later the seedlings are weeded by women. Both sexes harvest the crop from October to November. The marketing is done by men and boys.

September-October. Millet is harvested along with legumes that are intercropped. This is done only by women, and involves two stages: first the "head", containing the grain are cut and these are subsequently threshed either by hand or, more typically, with the use of bullocks; later the stalks are cut, collected into bundles, and stored on trees or on poles erected in fields and near homesteads. As noted above, this *nyar* (field straw) is a valuable source of fodder in the approaching cold season.

October-November. The planting of wheat takes place where the block variety, "Sonalika," is planted earlier and the traditional variety "lal mesri" later. Men sow the seeds by broadcast method after they have ploughed and harrowed the fields once. This is considered the easiest crop since it requires no further attention until the harvest.

December. A small potato crop for household consumption is harvested.

### *Isolation of Women's Work*

Although much of women's daily work, such as fodder and fuelwood collection is collective in nature, the conditions of agricultural labour are becoming more isolated. In the past, inter-village co-operation constituted an important element of field work, and exchange labour was used for labour-intensive tasks such as transplanting paddy, spreading manure preparatory to ploughing the fields, and for weeding and thinning out of millet. All women participated in *padiyaal*, taking turns to work on each others' lands.

This form of labour exchange is no longer as common as in the past because crops now command a monetary value so that everyone wants to maximise time on their own lands. Women say they can no longer rely on neighbours, friends, and even kin for assistance in the way they once could. Pressures of time make many reluctant to ask others for assistance, because they cannot afford to reciprocate such gestures. Assistance is now often predicated on a special bond of friendship or natal kinship (between women who come from the same *maite*) rather than as an expression of village tradition and affinity. Women admit that in the erosion of this form of social labour, they have lost an important context in which to share experiences and concerns, as well as important support networks. This in turn has resulted in a growing sense of isolation amongst them. An important aspect of the wider discussion of agricultural change and processes of social transformation focusses on the tendency of certain groups to withdraw their womenfolk from agricultural work. Is differential access to off-farm incomes in Saklana affecting the work of different castes and classes of women?

There is no evidence that some households have the means to purchase resources (such as fuelwood and fodder) and/or the services of poorer women in order to ease the work burdens of their womenfolk. As mentioned earlier, households which do have access to other women's labour draw on sharecropping relationships, and women from both the lessee and lessor households, perform the same types of work, labouring with the same intensity. In addition, greater purchasing power is meaningless in the absence of fuelwood and fodder markets. A small amount of *bhusa* is sold during the monsoons, but this does not constitute a significant portion of household requirements. It is, moreover, highly unlikely (given cultural perceptions of women and their work) that households would allocate scarce resources towards alleviating certain aspects of their work.

By the same token, it would be wrong to assume that levelling trends are emerging. The intensive work burdens carried by higher and scheduled caste women (the differences are a question of degree rather than kind) are not creating conditions for greater sense of camaraderie. Even if the economic context of caste is "attenuated", the ritual distinctions remain a powerfully divisive force.

### *Women as Resource Managers*

Are the increasingly time-consuming and labour-intensive conditions of women's work creating greater sensitivity to issues of resource depletion; to the need to mobilise for ecological regeneration? Again, there is no evidence that this is either happening or has any potential in the

future. To the extent that increased workloads have forced a certain restructuring in the division of labour (in that young girls often collect fodder and fuelwood), poor lopping practices are common, and arise as much out of ignorance as from the need to get an arduous job done as quickly as possible. Older women are often also very casual in their tree harvesting methods, even with trees on their personal lands. No efforts have been made to include women in afforestation initiatives. The disincentives created by heavy workloads, notwithstanding, women do not feel very strongly about their exclusion.

One important aspect of changing relationships with the natural resource base is the loss of traditional knowledge systems which used to be the preserve of women. Even today, older women are repositories of knowledge about different types of grasses, leaves, and seeds which, unfortunately, is not being transferred to younger women. This decline is in part due to changes in resource endowment and the loss of traditional diversity (such as the old varieties of wheat). Equally important is that such knowledge is gradually being devalued, as production strategies start to depend on new types of information.

### **Women and Decision-Making**

*"Those who earn the money should decide how it is to be spent".*

It has been noted that women have higher status in communities where they are able to participate in "wider spheres of society", in contrast to those where their economic inputs are restricted to non-market production, located within the household sphere.<sup>27</sup> Conventional criteria of women's status have focussed on their access to, or exclusion from community services such as education, health care, extension programmes, and political institutions. Equally critical components, however, are their participation in household (agricultural and domestic) decision-making, including farm management, domestic expenditures, and disposal of household resources. How have the new crops restructured gender relations in the way the sexes participate in decision-making processes? How is this related to the allocation and disposal of domestic resources? What implication does this have for production strategies?

### *Enhanced Presence of the Market Economy*

Until a few decades ago, the market economy played only a very minor role in the village economy. Subsistence agriculture was based entirely on inputs (seeds and farmyard manure) generated by the household unit or exchanged within the village community. Within this, women played a central role as "administrators of agricultural production" which included the selection and storage of seeds, and distribution of the agricultural product, the majority of which was kept for the household's internal consumption needs and, secondarily, for social and ritual exchange.

The locus of decision-making has now shifted from a joint venture between the sexes to one which is increasingly dominated by men. The emphasis on externally acquired agricultural inputs (initially new varieties of wheat seeds distributed by Block Development Offices, and now in the form of new crops) and, more recently, the marketing of produce has placed more power in men's hands, because of their key roles in all activities relating to the "outside" economy. Simultaneously, it has shrunk the participation of women, relegating their inputs to a more passive mode.

## *Limitations of Active Women's Involvement*

Three interrelated components of social organisation bar women from playing a more active role in the market economy, and from responding to the new opportunities and responsibilities emerging from the commercially-oriented agriculture. These include: a) migration patterns; b) the structure of the domestic unit; and c) an informal system of "*pardah*", which circumscribes women's mobility. Together these reinforce women's dependence on men, so that while women do participate in decision making, this is no longer a measure of autonomy, nor is it commensurate with their labour inputs.

Migration. Agriculture does not provide adequate returns, and most households have at least one, if not more, male members employed either locally or more typically outside the area. Saklana is easily accessible to many of the major towns and cities in the adjacent plains, where most migrants are employed (e.g. Dehra Dun, Delhi, and various places in Haryana and Punjab). This enables them to return to their villages fairly frequently and particularly at key junctures in the agricultural cycle (such as during the ploughing and harvesting seasons). As a result, all "male" designated activities such as the purchasing of inputs and household provisions, paying off credit and taking out loans, and marketing of produce, remain firmly in men's hands.

Domestic network. As de facto heads of households, many women are forced to play a more active role in the market domain. Nonetheless, in most instances, the structure of the domestic network intervenes, to limit the extent to which women are able to exercise their autonomy. Although there are a number of nuclear households, the majority are extended units, comprising three generations of family members. Thus, there is generally, at least one male relative present (a retired elder or a younger man who may be employed locally) who manages the household's financial affairs and market transactions. This effectively circumscribes women's involvement with the market economy. There is often considerable tension between women who are de facto managers of the land (because their husbands are away for long periods of time) and elderly in-laws, who may be too old and/or infirm to competently oversee agricultural matters; but who, nonetheless, keep control over such matters. Many women claim that they never see the money that is earned from the sale of crops, or through off-farm employment, because it is managed entirely by husbands, elder/younger brothers-in-law, or fathers-in-law.

Informal *Purdah*. The third aspect which shapes and limits women's independent access to the market domain, and reinforces their dependence on men, is in an informal rule of "*pardah*." Hill women have considerably more freedom of movement than their counterparts elsewhere. Nonetheless, where they go and what they do is regulated by "gender-structured spaces" that designate certain areas as appropriate for women and others as off limits for them. Thus, fields, forests, and the areas between these and the villages are "female", whilst commercial areas and roads are considered "male" domains. Many women obviously have no alternative but to move outside these "female" domains. However, access to markets, rather than being viewed as a source of autonomy or freedom, is seen as another pressure they can ill afford. Typically women prefer not to go into the commercial area, if there are other household members who can do this for them. A majority of the middle-aged and older women, and even some young married women, have never been into Satyon.

At the most superficial level, this stricture on mobility denies women an element of choice over matters seemingly small and insignificant. Thus, women more often than not, do not have a voice in selecting their own saris or bangles since these are purchased by their menfolk. A set of unspoken "rules" also bars women (who do go into commercial areas) from sitting at teashops or lingering after they have purchased their needs. The marketplace is an important centre for

social interactions amongst men, where local gossip and news are exchanged. Whereas men participate in the wider community of villages, as well as beyond, into the "outside" world, women are more confined to their limited worlds which extends no further than their own villages.

### *Gender Monopoly on Information*

At a more critical level, these constraints prevent women from gaining independent access to information that would enable them to play a more effective role as farm managers and producers. This gender monopoly on information relating to new inputs, the quality of different varieties of seeds, better cropping technologies and pricing differentials, means that female-headed households are generally more disadvantaged than their male counterparts. Most women who have to purchase their own inputs and market produce (admittedly very few) tend to rely on fellow (male) villagers for assistance and advice, and feel uncomfortable about dealing directly with traders. These constraints further legitimise and reinforce men's roles as mediators within the cash nexus and institutions of the outside world.

The devaluation of traditional crops in relation to cash crops has resulted in the erosion of important sources of traditional knowledge. However, this loss has not been replaced by new information, and few men (let alone women) know much about new inputs and effective techniques of agricultural production. Younger men who are in a position to serve as disseminators of new sources of information and production techniques, are becoming increasingly alienated from the land and often have even more imperfect knowledge than their older counterparts.

### *The Power of Money*

At the heart of the growing inequality between the sexes is the importance that money is assuming in the decision-making process. Even women who, as de facto heads of households, have to deal with money and credit on a day-to-day basis, claim that money is the responsibility of men, and that they do not "know" how to handle it. Women agree that they work very hard and that their work is central to subsistence strategies. Nonetheless, they always balance this against men's income-earning work, that provides the "oil and salt" without which their own work would be meaningless.

A generational component is implied in situations where old women who are actively involved in household decision-making tend nonetheless, to feel less comfortable with money matters. Conversely, younger women who may have less voice in decision-making are often responsible for dealing with money and credit matters. Another dimension which is becoming common is the deference to young men, not because they are income earners, but rather due to their educational qualifications.

## Women's Status

*"There is little difference between my and your generation of women: illiteracy has forced us to remain in this situation".*

*Our lives are no different from that of buffaloes".*

*"Men are superior to us".*

Hill women are called "*devis*" a title attached to married women's names and literally meaning "goddess". By their own reckoning, however, there is little to envy in their lives. Women's low status is reinforced by the interplay between cultural mores, the dominant Hindu ideology that sanctifies women's subordination to men, and a host of alien values introduced through greater involvement into the cash nexus.

What has monetisation of the agrarian economy and greater purchasing power meant for women? Specifically, has the generation of surplus provided the potential for changing certain aspects of women's lives? The sad reality is that at fundamental level, women's lives have neither changed nor are they likely to. Access to limited education and an increase in the age of marriage, notwithstanding, few options exist that would enable women and girls to entertain the hope that their lives may in some way be transformed.

### *Differential Entitlements*

Although in the past, women were accorded lower status relative to men, there was greater parity in sexual division of labour. Implicit in this was a recognition of each sex's contribution to the domestic and agrarian economy. As the village community has become increasingly interwoven into the cash nexus, however, new sets of values and expectations have widened. Notions of gender differential entitlements (the culturally defined expectations of who gets what and how much) are becoming more pronounced. Household resources are invariably allocated in such a way as to ensure that males get a larger share of the resources available whether it is in terms of access to education, less work, travel, greater opportunities, or consumer items.

The chasm between opportunities available to each of the sexes is widening. Education, employment, and the possibility to travel have given men far greater potential to transform their lives. Women recognise that their daughters' life options and expectations are not very different from theirs', a generation ago. An extreme, but powerful example of the disparities between male and female life options is the case of a young man who is studying for a Ph.D at Delhi University, whose equally bright sister can never hope to aspire to a life, other than that of a village woman.

Education is the one realm in which girls are beginning to participate and benefit. This is a relatively recent development. Few young women in their early twenties have had any schooling, whereas, now a great many girls go to school for at least a few years. Nonetheless, this is rarely to the same extent as that enjoyed by their brothers. Regardless of socio-economic status there is a tendency for households to withdraw daughters from school upon reaching an age in which they can contribute substantially to domestic and agricultural labour needs. This is most likely to occur between the ages of 13-15, when girls begin to participate in most or all of the activities that adult women perform. Younger girls also make an important contribution to the household economy, in terms of collecting fuelwood, fodder, field work, and child care. There are few girls who actually obtain an education much beyond the primary level. Whilst there are often equally

compelling reasons to withdraw boys (insufficient financial resources, lack of household labour), this is less likely to happen, except in the case of schedule caste families where boys are withdrawn from school very early.

### *Conspicuous Consumption*

As members of households, women share to some extent, the fruits of increased purchasing power. But households are not cohesive units, representing a unified set of interest and moves. Gender and generational hierarchies play a major role in defining precisely the allocation of household entitlements.

Limited opportunities for productive investment in agriculture have encouraged a pattern of conspicuous consumption which does not generally benefit women. Trends emerging in Saklana confirm to those noted in other monetised regions, where men's access to liquid cash, greater freedom of mobility, and contact with markets, encourage a level of "luxury" spending (on small items such as tea, snacks, *bidis* and, not infrequently, home-brewed alcohol) which means that the total cash returns from agriculture rarely percolate down to the level of the households. Even when the money comes into women's hands, implicit constraints on their mobility and interaction with men, in commercial areas, prevents them from enjoying the same opportunities to spend.<sup>28</sup>

### *Internalisation of Powerlessness*

*"Nothing can happen here without men".*

Gender disparities in life options and access to household resources are internalised by females at a young age. Differential entitlements are legitimised. Women and girls often say their work isn't as hard as what men have to do, that there is no need for girls to be educated since there are no opportunities for them. These sentiments are often expressed by saying that their increased labour inputs are adequately recompensed; that there are no imbalances in the way resources are allocated.

### *Dowry*

The practice of dowry is directly linked to the money-based prosperity brought in by cash crops. This is a disturbing trend which is likely to have further negative repercussions on women's status. Traditionally, both bride-price and the earlier form of dowry (which began about thirty years ago) explicitly recognised the loss of a valuable worker through marriage. This was symbolised in the exchange of vessels and animals, which were intended to help the young women in her home.

Contemporary practices, by contrast, are patterned completely on the urban form, based on the exchange of consumer items such as radios, watches, furniture, and increasingly, even televisions and, in some areas, videos, to which neither the young bride nor the other women in her home will have access. This is a tremendous drain on households' meagre financial resources, and marriage expenses easily range from Rs. 15,000 to as much as Rs. 50,000, depending on the family's status, savings, and access to bank and personal loans. A daughter's marriage is now a matter of great worry, and occasionally the cause of indebtedness. The status of girls is now defined in terms of this future drain on their families' resources, whilst their present roles as valuable domestic and agricultural workers are ignored.

Although women and men agree that this new custom is wrong, adherence to it has become a matter of *izzaat* (honour). Some older women with sons, even think it is a positive development towards capital accumulation. One side effect of dowry is that greater value is placed on girls education. Through this, their families are able to secure good marriages for them. However, this can be a mixed blessing since it often leads to demands by the groom's family for higher dowry payments. Given the absence of employment opportunities for women, and cultural constraints that prevent them from taking a paid job, the only rationale for educating girls much above the primary level is indeed influenced by the need to attract a "good" spouse.

Beyond the fact that social spending now far exceeds most households' capabilities, the practice of dowry in the hills is following the urban pattern of reducing women to expendable commodities that can be discarded at will. There are already several instances of young women in the villages of Upper Saklana who have been, or are being, harassed for not bringing in sufficient dowry. While some are able to return to their *maite*, others face an uncertain future. There are two unconfirmed reports of dowry related deaths in the Chamba region.

It is difficult to say whether marriages are less stable now than in the past. It is not unusual for a younger women to return to her *maite* if she is being treated badly by her husband and/or his family, even if this is temporary. Women are generally received back into their families with concern, and do not seem to suffer animosity from the rest of the village community. Apart from excessive dowry demands and ill-treatment, women's supposed infertility (or failure to bear a son) can be the cause for marital breakups, or the husband's remarriage. Older women say less respect is shown to women now, and that verbal abuse from men is more common than in the past.

#### *Widows*

*"I was blinded after his death".*

A revealing indicator of the status of women within a community is the treatment of widows. The plight of widows, particularly those, with no sons or very young children, can be unfortunate. Both their material situation and status depends closely on the type of relationship they are able to maintain with their in-laws which, in the absence of male heirs, can be indifferent if not overtly hostile. There are instances of widows who have been forced to return to their *maites*. In such situations, fellow villagers are unlikely to take a public stand of support, even though they might privately express their concern.

The extreme dependency of widows is reinforced by customary practices which, despite government legislation, giving daughters equal rights to inherit immovable property, view women's access to land and other productive resources as being mediated solely through their husbands, fathers, or sons. Even in instances where widows have managed to register land in their own names, they have been subjected to tremendous harassment by their estranged in-laws and are generally treated unsympathetically by fellow villagers and officials.

#### *Health*

Other important indicators of women's status centre on their physical and nutritional well-being. Women's health has probably not deteriorated. The situation used to be even bleaker before roads linked communities to medical services. Like their mothers and grandmothers before them, they give birth in cowsheds and it is surprising that the mortality rate isn't higher than it is. There are no professional *dais* (midwives) in the area, and women are usually assisted in childbirth by fellow-village women. Information about birth control is not available, and one of the biggest

concerns for the newly-married and often very young bride, is the fear of becoming pregnant too soon.

Increased purchasing power is not reflected in demands for improved social and health services. These are highly inadequate and are no different from those available in poorer hill areas. Conspicuous spending uses up a considerable portion of households' income, leaving relatively little for meeting medical requirements. In any case, women's access to doctors is mediated by men, and most are only given medical attention when their condition becomes serious. Women's ill-health is often attributed to spirit possession, whereas when men are sick they are likely to receive allopathic treatment more readily.

The biggest problem which defies solution is the sheer intensity of women's workloads, and the circumstances which prevent them, from taking time off from their daily chores to rest, during illness. Most women suffer from anemia and various other deficiencies. Toothaches, low-grade fever, headaches and, above all, fatigue are common complaints. The allopathic nurse, based in Satyon, is of the opinion that women should avoid carrying heavy loads, drink less tea, and eat more nutritious foods like *mandua* and *jhangora* - wellmeaning suggestions which are of little relevance to the contemporary reality of Saklana's women.

### People's Voices

How do villagers perceive the transformations that are changing social, economic and ecological relationships? Specifically, are there discernible gender and/or generational differences in attributing value to traditional subsistence foodgrains, on the one hand, and cash crops, on the other? This could reflect a combination of factors, including women's perceptions of the differential labour intensity of various crops, recognition that increased labour inputs are not being adequately recompensed, and the recognition that agricultural residues play an important role in animal husbandry strategies and, in facilitating other components of women's workloads.

The gender dichotomy of interests noted both for mountain and plains farming systems, is not apparent in Saklana. One reason is that the market economy has penetrated people's lives so completely and at so many levels, that it is both empirically and analytically problematical to think in these dichotomous terms, if only because it is no longer an accurate reflection of the way in which people think about their options.

Most women agree that their workloads have increased tremendously with the advent of cash crops and that these changes have affected their access to field fodders. Many admit that they do not get equal access to the money that is brought in from the sale of produce. They are equally aware, however, that the absence of income-generating opportunities in the area gives their households no alternatives, but to produce cash crops for the market. Thus, even though most women say that potatoes, *mandua* and *jhangora* are equally labour-intensive, and that millet provides an important source of fodder, a higher value is usually placed on potatoes which fetches cash. However, there is also a generational component which crosscuts gender interests. Although they see no alternative to cultivating cash crops, older women and men are more positive about traditional foodgrains. They recognise that the decline in fodder-producing foodgrains affects livestock quality, workloads, and the nutritional status of their families.

Younger men, on the other hand, openly disparage the traditional crops and try to persuade their womenfolk to devote more land to money-generating crops. Old men can be quite skeptical about the long-term viability of the new crops. High productivity is dependent on chemical fertilizers which, over time, decrease soil fertility, and are water-dependent. Whereas traditional sources of irrigation are drying up and rainfall is becoming less reliable.

Do people feel productivity has increased with new inputs? Many feel that land is actually less productive today compared to 10-15 years ago, and that increased yields are due to intensive landuse. Nonetheless, many men believe productivity has increased with the use of chemical fertilizers and high yielding wheat seeds, and that this could be further enhanced, if access to inputs and improved techniques of cultivation were provided. The inclination to pit contemporary hardships against a more golden past is inevitable, and it is difficult to evaluate people's responses. Perceptions reflect various factors: changes in objective ecological conditions, changes in demographic composition, etc. For instance, the observation that land was more productive in the past could mean:

- o that the extended family was still tilling the soil as one unit and so there was more available labour; and
- o that the ratio between producers and consumers allowed consumption needs to be met and so forth.

Increased productivity in present times might have less to do with the quality of inputs; and more with the ready availability of household labour. Loss of family labour due to migration of men is less.

### *Has Life Improved?*

The elderly talk about the deterioration of the quality of life, a consequence of diminishing natural resources and moral fiber, over the course of their lifetimes. The main problem, everybody agrees, is that there is no unity, or a sense of community spirit. The pursuit of money has taken over and people are only narrowly concerned with the well-being of their immediate families.

Life used to be easier in some respects because needs were simpler. There may have been less money, but there was less need for it. Expectations and demands have increased in proportion to the amount of money coming into the village economy. In the old days, people only wore *khadi* (home-spun cotton) and had one extra set of clothes. Whereas, now synthetic fabrics are becoming increasingly common. Dietary habits have also changed. In the past, people drank more milk and *lassi* and ghee was plentiful. Now people ruin their health and that of their children by drinking too much tea.

Nonetheless, advantages of the market economy and the cultivation of cash crops cannot be overlooked. Money is required not simply to meet household subsistence needs, but a whole host of other needs and aspirations such as clothing, medical care, education, travel expenses, marriage presentations, and other social and ritual obligations. For all its problems, the road affords a degree of mobility unheard of even fifteen years ago, which has gone a long way in improving the working and living conditions of most households. Medical care and education are more easily accessible. Shops provide virtually all requirements and even luxuries. There are other sources of food to fall back on, apart from total dependency on land, even if this means getting caught in an endless cycle of credit and debt.

Older women tend to be more positive about the changes that have taken place over the course of their lifetimes. They remember a time<sup>4</sup> when lack of services and inaccessibility meant that childbirth frequently resulted in death or serious illnesses. As recently as eighteen years ago, women badly injured whilst foraging on steep slopes for fuelwood and fodder, had to be carried by stretcher many kilometers over mountainous terrain for medical attention. Often people succumbed to the delay in receiving treatment. "Objective" changes, are the subjective

transformations that women experience within the household. Thus, they often talk about how much harder life used to be when they were young and how much heavier their workloads. As young *bahus* they carried the bulk of the work burden, whereas now as senior women, they are able to control the labour of younger women.

### Development Aspirations

How do aspirations for development reflect both constraints and opportunities? Are their significant differences in the way women and men define the problems they face as individuals, as members of households, and as part of a wider community? How are these articulated, and what do these suggest for the re-orientation of future hill development programmes?

Men are primarily concerned with the need to expand local employment opportunities. Daily wage labour is insecure and there are no local cottage (or other) industries which can absorb local labour. Small-scale factories for processing locally-grown fruits and vegetables are often cited as examples which would help to reduce growing dependence on external markets.

The education system comes under a great deal of criticism. These "factories of unemployment" neither prepare youth adequately for highly competitive external labour markets, nor provide them with knowledge that could benefit them as cultivators. There is also considerable resentment that virtually all local government jobs (such as the *Jal Nigam*, schools, health centers and so forth) are filled by outsiders, even though there is a sufficient body of local educated manpower to fill these positions. Apart from partially addressing the growing problem of unemployment and underemployment, this would foster a greater sense of involvement and responsibility in the maintenance of resource systems.

At present, input markets and credit structures are such that producers are forced to buy and sell their produce at terms highly disadvantageous to them. As a result, few producers benefit from a market-oriented form of agricultural production. There is also much resentment against the contractor system. Although the details are rarely discussed, men often talk about the possibility of setting up cold-storage facilities and cooperatives, as a possible way to protect producers.

And what about women's visions of development? Apart from a few young women who feel they would benefit from skills such as knitting and sewing, most are resigned to the realities of their life, and do not see how any improvement can be made. A revealing illustration of the internalisation of women's powerlessness is their inability, unlike their counterparts in many other hill areas, to articulate their concerns and visions for a better life. Women recognise the harshness of their lives and harbour few illustrations about what "agricultural prosperity" means for them, and often imply that their lives are sad and hold nothing for them.

Yet, women are skeptical about the benefits of organising collectively. When asked whether organized or informal women's groups could help improve their situation, most simply laugh it off. In this area, they say nothing can happen unless men take the initiative. When reminded that hill women have often been at the forefront of organising activities, they say in Saklana this is impossible because "*yahan subh log jalte hain*" (implying that people are jealous of one another and would never permit a situation to arise where one, or some would take up leadership positions). They say women are quarrelsome and even if one was willing to assume a leadership role, no one would listen to her.

## SUMMARY AND CONCLUSIONS

This case study underscores the extent to which gender differentials, implicit in enhanced monetisation of the local economy, need to be examined. It has done so by discussing some of the interrelated dimensions of women's low status and "invisibility", which serve as powerful constraints in their life options. These include :

- o **the cultural/ideological dimension** which, coupled with the physical dimension, limits their access to information, reinforces their dependence on men, and strengthens the element of isolation in their lives;
- o **the economic dimension** which undervalues the extent of their contribution to household (including agricultural) survival strategies; and
- o **the political dimension** through which they are denied a voice in traditional community structures, and informal parallel organisations.

Women are locked into **providing labour**, without necessarily gaining a commensurate voice in **defining** their work agendas. Identification of the interlocking factors that are simultaneously increasing their work burdens, whilst depriving them of active participation they once enjoyed in various spheres of agricultural and domestic decision-making, is crucial to a more informed and sensitive understanding of what women stand to gain or lose, under the present system.

### The Fruit Belt Zone

It can with justification be argued that Saklana's experience with cash crops is not, and cannot be representative of hill agriculture which, in the main, remains subsistence-oriented. Given the new policy orientation, however, it is likely that this independent valley initiative will be replicated in other resource-rich regions of the U.P. hills. As such, it offers a unique opportunity to examine the outcome of various policy interventions, both direct and indirect, on ecological and socio-economic relationships and structures.

If Saklana is a transitional area, where both traditional and newer patterns of agricultural production coexist, it is instructive to look at the "fruit belt zone" (along the northern limits on the Mussoorie-Chamba ridge) where the process of commoditisation is virtually complete. The designation of this area, as a horticultural zone, along the lines of the successful Himachal Pradesh model, is one of the major policy interventions in the region, in the last two decades. It serves as a classic example of how the privatisation of common lands (through the creation of horticultural *pattas* or holdings) has radically altered land utilisation and resource management patterns.<sup>29</sup>

The major ecological and socio-economic transformations initiated include:

- o Conversion of forests and other common lands for horticultural and agricultural purposes. As the value of land increases, illegal expansion of holdings is making further inroads into forest and grazing lands.<sup>30</sup>

- o Loss of predominantly oak and rhododendron forests has had serious ramifications for animal husbandry. Livestock holdings are diminishing, and reflect the increasingly arduous conditions of fodder collection. Many households no longer maintain animals, preferring to hire bullocks during the ploughing seasons, and to purchase milk for domestic consumption. Lack of animals has inevitably affected availability of farmyard manure which, in turn, is jeopardising fertility of the land.
- o There has been a perceptible decline in rain and snowfall since the late 1970s, and local water sources are drying up. Water has to be pumped up to a height of 8,000 feet from the valley. Land lying above this level requires additional pumping, which all but the most prosperous land holders cannot afford to install. A common sight all along the ridge are clusters of utensils -- jerry cans, tins and brass vessels -- surrounding dry or barely dripping taps.
- o Most poor grantees are unable to wait for the minimum of 7-10 years, before their orchards become economically viable. Responding to the economic incentives provided by close access to roads and markets, most *pattas* have consequently been converted to the **exclusive and continuous** cultivation of potatoes and peas. Fields have been cut out of steep slopes, contributing to high levels of soil erosion. Traditional foodgrains are only grown in the valley lands.
- o Despite proximity to roads, the marketing infrastructure is highly inadequate. No significant attempt has been made to set up local growers' co-operatives. Most cultivators are already caught up in the credit cycle and have no option, but to sell their produce at disadvantageous prices to contractors. Many people prefer to sell their harvests independently along the roadside. The few who organise their own marketing and transportation manage to do quite well.
- o Financial "prosperity" is visible in the form of conspicuous consumption (large cement houses with flat roofs, televisions, and so on). Very little appears to be channeled in either productive or social investment, although the potential and need in both spheres is possible and critical. Health care and education are low priorities, especially for older girls.<sup>31</sup>
- o Although *pattas* are unalienable, there is a growing market for land speculation and many plots have already been sold to the urban elite. There are already many indications of what the future holds in store for this area: advertising billboards, inappropriate "urban" style construction, easy access to home-brewed and "English" liquor. The latter is an attempt by the U.P. Government to encourage tourism. Increasing pressure is being placed on an already fragile resource base, to provide water and fuelwood to meet the needs of urban tourists.
- o Fragmentation of village communities into individual households' that have set up permanent residence along the road.<sup>32</sup>
- o Transformations in this commercialised zone have marginalised women at a number of related levels. The ridge represents a world dominated by men. Women, who are culturally constrained from participating in that domain, are for the most part, not much in evidence. Pressures on their lives take two forms. First, privatisation and the loss of common lands have affected both the intensity and conditions of women's daily work. Denied access to biomass which earlier was available along the ridge, they walk long distances along the road, (often accompanied by younger children of both sexes) to collect fuelwood and fodder. Orchard grasses, once freely available have become commodities, often selling for between

Rs. 500 - Rs. 1,000 per 5 acres. Theft is inevitably becoming common and a source of conflict. Second, the penetration of warped urban values and mores (e.g. prostitution which reduces women to mere commodities) is contributing to a deterioration in their status.

### **What Can Be Done?**

This case study does not argue against the introduction of cash crops into hill agriculture. Indeed, given contemporary realities and constraints, there seem to be few other opportunities for communities to gain access to locally-generated incomes. Nevertheless, the cultivation of off-season vegetables for sale in urban markets, as the proposed "solution" to underdevelopment in the hills, begs certain questions. Does it have the capacity to redress regional imbalances that have historically defined relations of dependency between the hills and the plains. Or is it exacerbating an already "lop-sided" relationship? As presently conceived, is this policy being effectively implemented, and if not, have these constraints been identified, and, what could be done to overcome them? If it is recognized that the longer-term costs might be too high, alternative approaches and strategies could be pursued?

The applicability of this commercial-oriented policy is restricted to ecologically well-endowed hill regions, which are already relatively well-connected to marketing and infrastructural networks. It does little for degraded and resource-poor regions. This raises the concern for these areas which may not only remain neglected, but become more marginalised in the years to come.

#### *Reorientation of Cash Crop Agriculture*

Two aspects regarding the present cash crop orientation need to be addressed. First, if the present approach is to remain intact, then it needs to be carried out more efficiently. At the moment, credit availability constraints, poor inputs, inadequate storage facilities, inadequate marketing and transportation infrastructure and information dissemination render it haphazard and ineffective. There is a pressing urgency for greater coordination between agricultural research institutes, extension services and the local inhabitants. Virtually no effort has been made to identify, monitor and evaluate the impact of various interventions on different groups within the community, nor to determine what their needs are. Farmers require location-specific information regarding the use of inputs. This can be only achieved if the research institutes and extension services are actively involved in the region, and have some understanding of the types of constraints and needs facing cultivators in specific areas. The issue is not one of "educating" villagers but, rather, of initiating a dialogue.<sup>33</sup>

The new trends focus on the inherent unviability of an export-oriented agricultural system at the cost of meeting local basic food needs. The present (all-India) trend points to the development of commercial agriculture (vegetables and so-called "superior" food grains, e.g. wheat, corn, and rice) at the expense of coarse cereals. These not only constitute staple food for the majority of poor rural households, but they play a vital role in animal husbandry strategies. The justification cited for this transition is that:

- o the "superior" cereals are cheaper than the production of "inferior" ones, and
- o changes in cropping patterns and production for the market, will provide the income for supplementing household consumption.

Millet which is hardy and highly adapted to conditions of low rainfall and manuring, must not be neglected in the rush to find "productive" alternatives which are water-dependent and require high chemical fertilizer input. What does this shift mean for poorer households, who have to purchase in the market, what they once grew on their own lands. Or what does this mean to people who do not have access to guaranteed adequate purchasing power to keep one step ahead of the "credit trap"?

Any effort to try to undo this inherent bias against coarse grains would involve considerable amount of "public relations" work. Despite the high nutritional and caloric value of millet, villagers favour wheat and rice which, along with refined sugar, are important indices of economic well-being. They would have to be motivated to devote more time to acreage to crops they now consider "unproductive". Agricultural researchers, too, must place emphasis on early and late-sowing varieties of millet, to allow cultivators more flexibility, in the event of early, late or no monsoon rains.<sup>34</sup> This would contribute to greater stability of farm incomes, create less dependence on markets, and fulfill important animal husbandry requirements, by providing adequate fodder straws.

More serious attention needs to be devoted to traditional agricultural practices and methods, recognising farming as an inherently integrated, rather than a fragmented process. There are, however, some inefficient management practices which, with minor modifications, could help cultivators realise significantly higher yields. A case in point is improper composting methods and the use of sub-quality organic wastes (farmyard manure) which lowers crop productivity. Typically, FYM is stored in open heaps, resulting in high loss of nutrients into the air and leaching into the soil. This could be easily redressed by storing in pits. Under-application of FYM also results in lower crop yields, often dictated by constraints in animal husbandry and the tremendously high labour intensity of the work, (rather than poor management practices). Intensive landuse is also leading to the use of FYM which is not properly matured.<sup>35</sup>

Finally, what does this agricultural orientation do about the high levels of unemployment and underemployment in hill communities? At present, virtually nothing, with the exception of the fruit belt zone where mainly migrant Nepali labour is absorbed to some extent. There is tremendous potential for channeling labour into eco-regeneration schemes involving irrigation, soil and water conservation, terracing and afforestation. Establishment of rural-based industries using local resources would also provide opportunities for employment.

### *Hill Development and Women*

Despite the rhetoric of sensitivity to gender issues, women's needs remain peripheral to hill development policy. There is little likelihood that gender relations will change in the future. Village communities are becoming more dependent on markets, (both as consumers and producers) and the off-farm incomes they provide. Men are increasingly withdrawing from agriculture, in order to participate in external labour markets. Education and employment are distancing youth from the land and setting in motion, a process of "incipient class differentiation." Consequently, in the longer-term, market-oriented agriculture can only be maintained by the continued exploitation of women's labour.

If the "fruits of prosperity" aren't percolating down to women, if their lives and work are increasingly being dictated by agendas into which they have little or no input, then what is to be done? Is it even viable to pose this as a problem of hill development, given that hill communities in general have virtually no say in decisions concerning their livelihoods?

If one accepts that certain processes are marginalising women economically, socially and politically, even as they are assuming an increasingly vital role in the agrarian economy, then the challenge is:

- o to identify what these processes are, and
- o to determine how they can be addressed.

Although it is vital to create the conditions under which women can assume a more active role in agricultural management and decision making, this is much easier said than achieved. However, the option of allowing present trends to continue unaddressed is untenable, if for the simple reason, that it will ultimately prove detrimental to social and ecological sustainability.

The biggest problem the women of Saklana face is lack of time. Given present conditions, the sheer labour intensity of their work, women would not be able to take advantage of training and extension programmes. Some potential avenues which could help to draw women into the mainstream of economic life are, nonetheless, listed below.

Improved Credit Facilities/Loan Guarantee Programmes. Organised banking has to become more sensitive to women's needs, and the constraints under which they operate. Since only men are considered heads of households, women cannot and do not apply for formal credit/loans on their own. Thus, women are totally dependent on men to initiate the agricultural cycle. The result is that widows and other female de facto heads of households are often compelled to be unproductive, because they lack adequate financial resources to hire labour to plough their fields.

Rural Training and Extension Programmes. At present no such programmes exist in Saklana even for men. Apart from instructions on agricultural production techniques, there is considerable potential for training and mobilising the community in adult education and primary health care. There is a considerable body of partially educated and certainly very bright young people who could be trained as *gram sevaks* and *gram sevikas* to work amongst local communities. Involving villagers in such work would also help to engender a greater sense of accountability between personnel and communities. Women's knowledge of traditional healing and childbirth techniques could also be effectively tapped to help fill the inadequacies of the existing allopathic medical system. There are a number of older women, in particular, who could be trained as *dais* and *balwadi* (childcare) instructors.

Sectoral Programmes. These include animal husbandry, agriculture, and resource conservation, including forestry. Evidence drawn from other case studies conclusively points to the failure of projects which ignore local people in general, and women, in particular. Given the lack, historically, of participatory involvement in this region, special emphasis would have to be directed to understanding how to involve women in such sectoral activities.

Non-formal Education/Income-generating Work. They could help women develop the confidence and skills required to interact with external institutions, such as government bureaucracies, credit institutions, and the market. This would allow women to perceive themselves as being less dependent on men. Elsewhere programmes of this nature have typically been most successful when integrated with practical training (such as income-generating activities). Although access to their own sources of income would boost women's self-confidence (if not lay the groundwork for possibly more equitable relations within the household) there is, however, no tradition of female entrepreneurship in this area. This is further aggravated by time constraints and lack of income-generating options (e.g. oil pressing, selling milk, and poultry farming) available to women in this

area. It is, however, an important issue since women, with no access to off-farm incomes, often find themselves in positions of extreme impoverishment.

Information Samitis. The absence of any informal or formal organisation for women and men is perhaps the singlemost important drawback for development work in this area. The impetus for collective action generally emerges out of both objective conditions and subjective perceptions of costs and benefits of such involvement. Despite the growing pressures on women's lives in this area, the imperatives clearly aren't strong enough yet. But mobilising women can only begin, once they perceive the need to demand changes in their lives and, more importantly, feel confident to participate in such efforts. Youth groups could also play an important role in involving young people in community and environmental issues.

### **Avenues For Future Research**

Despite the tremendous florescence of research on women's roles in agriculture over the past decade, the vast majority of literature maps out patterns on a macro-level, and within the context of "green revolution" agriculture. Less attention has been devoted to detailing micro-trends which could provide critical information regarding women's work and responses to changes in hitherto neglected agro-ecological zones (e.g. rain-fed and coarse grain mountain farming systems). There is, consequently, considerable scope for exploring women's work and the implications of various types of interventions, on their lives. Application of a self-consciously gender-sensitive perspective would facilitate redefinition of hill development policy and strategies, by detailing the constraints women face, and focusing on their specific needs.

Areas for further research include:

- o Detailed disruptions of women's and men's roles in various agricultural operations and time allocation studies. This would provide better understanding of how different forms of technological changes effect participation by sex, within the agrarian economy.
- o Utilisation of the farming systems approach, to develop a framework for understanding interrelated components of household survival strategies. This would need to include traditional patterns of natural resource utilisation and conservation, agricultural production, women's roles in firewood, water, and fodder collection, forestry, as well as documentation of traditional systems of knowledge. There is also a pressing need to clarify, through more empirical research, some of the well-meaning but often misplaced conceptions of women's actual/potential roles in resource management. Greater attention must be directed to examining how specific agro-ecological, political, and economic imperatives help to shape people's responses and serve as constraints or catalysts for eco-regeneration.
- o Identification and analysis of constraints (legal, socio-cultural, and economic) which prevent women's access to control and/or ownership of the means of agricultural production. This would help in articulating the means by which to channel resources and services more effectively towards women.

## NOTES

1. For examples of how economic criteria are used to the exclusion of others, see various articles in Chadha, ed. (1988), Pandey and Tripathi (1986), and Tripathi (1987).
2. A tendency symptomatic of much of the Himalayan literature is to telescope very different agro-ecological, geo-morphological, and socio-economic milieus into generalised statements about "the" problem(s) facing the Himalayas. For discussions of the problems inherent in the implied homogeneity underlying the "Himalayan dilemma", see Ives and Messerli (1989) and various articles in Ives and Pitt, eds. (1988).
3. Much of the research draws on a fragmented and sectoral approach that leaves out other equally critical parameters such as erosion of the natural resource base, intensification of work burdens, differentiation within the household, class polarisations, and other multi-faceted implications of increasing participation in the market economy.
4. The valley is geographically demarcated into upper and lower Saklana and consists of over forty villages in thirteen *gram sabhas*. The main focus of fieldwork was in four villages of Upper Saklana, with in-depth work conducted in one.

According to the 1981 Census this region has a total population of 4,208 persons, with 2,052 males and 2,156 females. The total scheduled caste population is given as 476, with 251 males and 225 females.

Information from the Block Development Officer, Jaunpur, Tehri Garhwal, cites income distribution for a total of 932 households, including 133 scheduled caste and 54 female-head households as follows:

Below Rs. 2,265	:	6 households
Rs. 2,265-3,500	:	230 households
Rs. 3,501-4,800	:	120 households
Rs. 4,801-6,400	:	91 households
Above Rs. 6,400	:	485 households

Land utilisation (cf. Block Development Officer) is as follows. Information is not available for forest, pasture, and horticultural areas. Details of acreage devoted to specific crops were also incomplete and therefore not included.

Total geographical area	:	1,378 ha.
Barren and waste land (unfit for cultivation)	:	386 ha.
Barren land (fit for cultivation)	:	197 ha.
Unused land	:	92 ha.
Cultivated area	:	703 ha.
Kharif Crops	:	703 ha.
Rabi Crops	:	388 ha.

5. Apart from Pujar, some data was also collected from Jard. The two villages form a single *gram sabha* and, because of the latter's substantial scheduled caste population, a variety of labour-sharing arrangements are entered into. However, for various reasons it was difficult to develop a rapport with the Jard inhabitants, and so various important aspects of the caste/class relationship remain muted.
6. Some excellent discussions and reviews of issues can be found in Agrawal (1988); Bardhan (1986); Duvury (1989); and Papanek (1989).
7. Very little research has been done on hill women in the Indian Himalaya. Sharma's (1980) comparative study of women and work in a Punjabi and Himachal village is the only one of its kind for the hill areas of north-western India. See also Bhati and Singh (1987). For an exhaustive bibliography of women in Indian agriculture, see Prasad (1988). The Nepal context provides some useful conceptual perspectives and empirical insights to fill in these lacunae. See in particular Bennett and Acharya, eds. (1981). For an overview of these findings see Acharya and Bennett (1983) and Pradhan and Bennett (1981); Pradhan and Rankin (1988); and Shrestha (1988).
8. See selected bibliography for ethnographic citations.
9. See selected bibliography for citations on the Chipko Movement. Most of this writing is descriptive, discussing specific mobilisational events. Some pieces seek a more analytical approach by raising the tension between gender and class, micro-macro linkages, etc. There has, however, been regrettably little discussion about the risks women bear in the course of forging a role for themselves in the "public" domain. Another neglected dimension is the role of external institutions which, whilst purporting to be rooted in the lives of "the people" and speaking for them, in actuality are detached from them. This process of "appropriation" is of tremendous importance in understanding the ebbs and flows (or complete absence) of collective action in various hill regions, and offers a partial explanation for women's (and men's) sense of alienation from many grassroots initiatives.
10. See Guha (1983 and 1989) for excellent discussions on the historical context of forest policy and peasant movements in the hills.
11. The absence of regulatory mechanisms and structures is in contrast to the situation in more ecologically fragile areas such as the depleted areas of the rain shadow of the Bhagirathi valley. This area has traditionally had a high degree of environmental consciousness, the existence of both formal and informal organisations and a tradition of collective action. Nonetheless, even here these traditional institutions for the collective management of scarce resources, are being eroded partly as a consequence of the state stepping in to claim responsibility over what was earlier a communal activity. Knowledge of hitherto well-defined boundaries for the collection of fodder and firewood is being lost, and the villagers talk of increasing inter-village tensions due to theft. See Guha (1989) for a discussion of earlier traditions in various parts of the Garhwal and Kumaon districts, including Tehri Garhwal.
12. Guha (1989, 27-28) suggests that "The absence of sharp class cleavages within village society .... clearly owes its origins to the ecological characteristics of mountain society." He relates this as "major ecological constraints to the generation of surplus and consequently to the emergence of social classes in hill societies. In Uttarkhand ...

agrarian society has had a more or less uniform class structure, composed almost wholly of small peasant proprietors, and with a marginal incidence of big landlords and agricultural labourers."

Land records are at best approximations since they do not reflect sales and purchases over time. Most people also do not know how much land they own. The traditional unit of land is the *nali* (20 *nalis* = 1 acre), which designates the area that can be sown using grain in a standard size tube of bamboo. See Moench, 1985.

13. There are four *Harijan* sub-castes in this region: *Kohlis* (weavers), *Lohars* (metal workers), *Darzis* (tailors) and *Charmars* (leather workers). Within the fairly rigid wider system of stratification, they observe their own hierarchies. Thus, the first two sub-castes occupy the highest positions and intermarry, whilst the *Charmars*, at the bottom of the ladder, live in a separate enclave within the village.

14. The initial surveys conducted in four villages revealed the following distribution of landholdings. (It is, however, important to bear in mind that official land records do not reflect land sales and purchases).

5 acres and above	:	3 households
4-5 acres	:	4 households
3-4 acres	:	6 households
2-3 acres	:	6 households
1-2 acres	:	11 households
Below 1 acre	:	26 households

15. Access to education, although available to everyone, reveals a strong gender and caste bias. Village surveys indicate that 63% males and 39% females have received some form of schooling, with education level for males and females substantially higher amongst Brahmins, than either Rajputs or scheduled castes. Very few girls from scheduled caste households receive any exposure to schooling, and even boys are rarely kept in school much beyond the primary level.

16. In 1988, field labour cost was Rs 10/- a day plus one meal, tea and *bidis*. Women were paid less in both cash and grain than men, even for the same tasks. Public Works Department (PWD) contracts, such as road clearing and maintenance, commanded a much higher rate at Rs 22/- per day, but these were typically of short duration and, hence, could be relied upon as regular sources of income.

17. Surveys, however, indicate that the size of animal holdings has not changed considerably over the past twenty or so years: 29 households say their holdings have remained stable over a period of 10-20 years; 20 say they are smaller because, they no longer keep goats and sheep; and 6 have considerably larger holdings now.

18. This situation is quite different in areas closer to the roadhead with proximity to hill urban centers. See Moench (1985) for some discussion of the burgeoning market for milk in recent years in the Aglar watershed.

19. Goat manure is considered excellent fertilizer and villagers compare its productivity to that of chemical fertilizers.

20. These points are raised by Moench (1985) and substantiated by this fieldwork.
21. The cultivation of two or more crops, with legumes growing over the *mandua* stalks, provides some protection against diseases and serves as a potential security in the event that one crop is lost to disease. Villagers' responses to the reason why this practice of mixed cropping is observed, however, was invariably "*ye hamara rivaa j hai*" (it is our custom).
22. The country-wide potato glut of 1988 affected the wholesale price of local produce. In addition to this, heavy rains too early in the season, spoilt a considerable part of the harvest. In October of the same year, a truck drivers' strike seriously affected transportation of essential commodities and raised prices. Had the strike not ended in time, it would also have affected the pea season which begins at this time.
23. This trend towards permanent settlement dispersal was first noted by Berreman (1963, 61-62). It is also becoming common in areas participating in the milk trade near Musssoorie and Chamba.
24. Dispersal of communities is particularly apparent in the "fruit belt zone" along the northern ridge.
25. Pradhan and Bennett (1981,7)
26. Moench (1985, 63) concludes from similar findings that "the mixture of fodder types fed is not dependent just on availability, but also on the specific characteristic of the fodder".
27. Based on the findings in *The Status of Women in Nepal*, Acharya and Bennett, eds, (1981).
28. Differential access to consumer goods is particularly noticeable amongst the younger generation. Young men who work elsewhere and school-going youth, frequently purchase items such as toothpaste, toothbrushes, and soap which other household members, particularly women and girls, do not have access to. Whilst watches, radios and fancy clothes bought by relatives or friends living in towns, are also becoming more commonplace.
29. Over 500 plots ranging between 3-5 acres have been allotted to both locals (including scheduled castes) and absentee grantees (many of whom are retired army personnel).
30. Old revenue records indicate that less than one percent of the land currently being used for horticultural and/or agricultural purposes used to be fields (personal communication, Mr. S. Singha, April 1989).
31. During my trip a young man committed suicide by taking an overdose of pesticide. That he was unable to be taken to a hospital in time to have his stomach pumped out, was cited as an example of how backward the area still is.
32. In the late 1970s there were only a handful of "*permanent chaans*" along the roadhead, whereas now most households live on the ridge all year round and maintain only cursory contact with their villages in the valley (Mr. Singha, personal communication, April 1989).

33. The lack of communication between research centers and villagers is illustrated by the fact that neither the High Altitude Crop Research Centre at Ranichauri, approximately 30 kilometers from Saklana, nor the Dhanolti Potato Farm, have made any attempt to become involved with the villages of Saklana.
34. Using traditional farming methods and seeds, *jhangora* yields 5-6 quintals/hectare. With improved management practices this rises to 10-15 quintals/hectare. However, even though agricultural research centers have developed improved varieties of millet, dissemination of information and inputs is poor if not non-existent (Dr. G.K. Dwivedi, personal communication, 17 April 1989).
35. Research conducted by the Hill Campus suggests that the recommended application is 10-15 tonnes/hectare (1 hectare = 50 *nalis*) whereas most households apply between one and three tonnes/hectare (personal communication, Dr. Dwivedi).

## SELECTED BIBLIOGRAPHY

### I. HIMALAYAN STUDIES

#### A. GENERAL

- ASHISH, M., "Agricultural Economy of Kumaon Hills: Threat of Ecological Disaster". In O.P. Singh, ed. *Himalaya: Nature, Man and Culture*. New Delhi: Rajesh Publications, 1983.
- BAJRACHARYA, D. "Deforestation in the Food/Fuel Context: Historical and Political Perspectives from Nepal." In *Mountain Research and Development*, 3(3), 1983.
- BHATI, J.P. "Problems of Small-scale Farming: a Case Study of Tribals in Uttar Pradesh." In *Indian Journal of Agricultural Economics*, 30(3), 1975.
- BLAIKIE, P. "The Explanation of Land Degradation in Nepal." In Ives, J. and Pitt, D.C., eds. *Deforestation: Social Dynamics in Watersheds and Mountain Ecosystems*. London: Routledge and Kegan Paul, 1988.
- BOSE, S.C. *Geography of the Himalaya*. New Delhi: National Book Trust (second revised edition), 1976.
- CHADHA, S.K., ed. *Himalayas: Ecology and Environment*. New Delhi: Mittal Publications, 1988.
- DEWAN, M. L. "State of Himalayas - Ecology, Environment, Geography, Resources and Population: A Call for Action." In Chadha, ed., op. cit.
- DHASHMANA, M. M. "Changing Milieu and Development Strategies in Garhwal." In M. K. Raha, ed., *The Himalayan Heritage*. Delhi: Gian Publishing House, 1987.
- GUILLET, D. "Toward a Cultural Ecology of Mountains: The Central Andes and the Himalayas Compared." *Current Anthropology*, 24(5), 1983.
- GUPTA, K. M. and BANDHU, D., eds. *Man and Forest: A New Dimension in the Himlaya*. New Delhi: Today and Tomorrow Printers and Publishers, 1979.
- GUPTA, R. K. "Report on Operational Project Water Management." Fakot (Bhaintan Watershed), Dehra Dun: Central Soil and Water Conservaion Research and Training Institute, December, 1987.
- GUPTA, R.K. *The Living Himalaya. Vol. 1: Aspects of Environment and Resource Ecology of Garhwal*. New Delhi, 1983.
- GUPTA, R.K. "Some Aspects of Himalaya Ecosystems vis a vis Maldeota Phosphotemine Operations." In *Ecology and Development*. New Delhi: Indian Environmental Society, 1979.

- GUPTA, R.K. "Farming Systems in Hill Areas." In *Indian Journal of Agricultural Economics*, 33(3), 1978.
- GUPTA, R.K. and SHARMA, M.K. (unpublished paper) "Remote Sensing and Ecofloristic Classification of Doon Valley" (n.d.)
- HOFFPANIR, R. "Subsistence Strategy and its Ecological Consequences in the Nepal Himalaya." In *Anthropos*, 73(1-2), 1978.
- IVES, J. and MESSERLI, B. *The Himalayan Dilemma: Reconciling Development and Conservation*. London: Routledge and Kegan Paul, 1989.
- IVES, J. and PITT, D.C., eds. *Deforestation: Social Dynamics in Watersheds and Mountain Ecosystems*. London: Routledge and Kegan Paul, 1988.
- JOSHI, D. P. "Evolution of Forest Conservancy and Panchayat Forest System and Their Contribution to Forest Development in Uttar Pradesh." In Gupta and Bandhu, eds. op. cit. 1979.
- KISHOR, V. and Gupta, R. K. (manuscript) "Socio-Economic Aspects for Land-use Planning: Eco-development in Garhwal Himalaya." Dehra Dun: Central Soil and Water Research and Training Institute (n.d.).
- LALL, J. and MODDIE, A. D. eds. *The Himalaya: Aspects of Change*. New Delhi: Oxford University Press, 1981.
- MELKANIA, N.P. and TANDON, J.P. "Design for Rehabilitation and Conservation of Environment in Himalaya." In Chadha, ed. op. cit..
- MESSERSCHMIDT, D.A. "Ecological Change and Adaptation Among the Gurungs of the Nepal Himalaya." In *Human Ecology*, 4(2), 1976.
- MOENCH, M. "Resource Utilisation and Degradation: An Integrated Analysis of Biomass Utilisation Patterns in a Garhwal Hill Village, Northern Uttar Pradesh, India." M.A. Thesis in Energy and Resources. Berkeley: University of California, 1985.
- MOENCH, M and BANDYOPADHYAY, J. Local Needs and Forest Resource Management in the Himalaya. In Bandyopadhyay, J. et al., eds., *India's Environment: Crises and Responses*. Dehra Dun: Natraj Publishers, 1985.
- MOENCH, M and BANDYOPADHYAY, J. "People-Forest Interaction: a Neglected Parameter in Himalayan Forest Management." In *Mountain Research and Development*. 6(1), 1986.
- PANDEY, V.K. and TRIPATHI, R.S. *A Perspective of Development of Hill Agriculture in Tehri District*. Ranichauri: G.B. Pant University of Agriculture and Technology, 1986.
- PAPOLA, T.S., et al. eds. *Development of Hill Areas: Issues and Approaches*. Bombay: Himalayan Publishing House, 1983.
- PITT, D.C. "Crisis, Pseudocrisis, or Supercrisis? Poverty, Women and Young People in the Himalaya." In *Mountain Research and Development*, 6(2), 1986.

- SAH, V.K., et al. "Problems and Prospects of Development In U.P. Hills: An Integrated Approach." Paper Presented at National Symposium on Environmental Problems in Hill Development, 15-17 February, in Sikkim Sci. Soc., 1988.
- SINGH, J.S. *Environmental Regeneration in the Himalaya: Concepts and Strategies*. New Delhi: Natraj Books, 1985.
- SINGH, J.S. et al., eds. *Science and Rural Development in Mountains: Ecological, Sociological, Socio-Economical and Technological Aspects*. Nainital: Gyanodaya Prakashan, 1981.
- SINGH, O.P. ed. *The Himalaya: Nature, Man and Culture* (with Specific Studies on the U.P. Himalaya). New Delhi: Rajesh Publications, 1983.
- SINGH, T.V. and KAUR, J. *Integrated Mountain Development*. New Delhi: Himalayan Books, 1985.
- THOMPSON, M and WARBURTON, M. "Uncertainty on a Himalayan Scale." In *Mountain Research and Development*, 5(2), 1985a.
- THOMPSON, M and WARBURION, M. "Knowing Where to Hit It: A Conceptual Framework for the Sustainable Development of the Himalaya". In *Mountain Research and Development* 5(3), 1985b.
- TRIPATHI, R.S. *Investment, Income and Employment Pattern of Hill Farming in Tehri Garhwal Himalaya*. Ranichauri: G.B. Pant University of Agriculture and Technology, 1987.
- TURNER, B.L. and BRUSH, S.B., eds. *Comparative Farming Systems*. New York: Guilford Press, 1987.
- VIDYARTHI, L.P. and JHA, M. eds. *Ecology, Economy and Religion in the Himalayas*. Delhi: Orient Publications, 1986.
- WHITTAKER, W. "Migration and Agrarian Change in Garhwal District, U.P." In T. Bayliss and S. Wanmali, eds., *Understanding Green Revolutions: Agrarian Change and Development Planning in South Asia*. Cambridge: Cambridge University Press, 1984.

## B. HISTORY

- ATKINSON, E.T. *The Himalayan Districts of the North Western Provinces of India*. Allahabad: (1882-1886). Reprinted as *The Himalayan Gazetteer* (in three volumes). New Delhi: Cosmo Publications, 1979.
- BAHADUR, R.P.R. *Garhwal, Ancient and Modern*. Simla: Army Press, 1916.
- GUHA, R. "Forestry and Social Protest in British Kumaon, c. 1883-1921." In Ranajit Guha, ed., *Subaltern Studies, 4*. Delhi: Oxford University Press, 1985a.
- GUHA, R. "Scientific Forestry and Social Change in Uttarakhand." *Economic and Political Weekly, Special Number*, 20(45-47), 1985b.

- GUHA, R. "Forestry in British and Post-British India: A Historical Analysis" (parts 1 and 2) In *Economic and Political Weekly, Special Articles*, 18(44-45), 1983
- PANT, G.B. *The Forest Problem in Kumaon: Forest Problems and National Uprisings in the Himalayan Region*. Nainital: Gyanodaya Prakashan, 1922.
- RAWAT, A.S. *History of Garhwal, 1358-1977*. New Delhi: Indus Publishing House, 1989.
- SAKLANI, A. *The History of a Himalayan Princely State: Change, Conflicts and Awakening*. New Delhi: Durga Publications, 1987.
- TUCKER, R. "The British Colonial System and the Forests of the Western Himalayas, 1815-1914". In R. Tucker and J.F. Richards, eds., *Global Deforestation and the 19th Century World Economy*. Durham, North Carolina: Duke University Press, 1983.
- WALTON, H.G. *Almora: A Gazetteer*. Allahabad, 1911a.
- WALTON, H.G. *British Garhwal: A Gazetteer*. Allahabad, 1911b
- C. ETHNOGRAPHY
- BENNETT, L. *Dangerous Wives and Sacred Sisters: Social and Symbolic Roles of High Caste Women in Nepal*. New York: Columbia University Press, 1983.
- BERREMAN, G.D. "Culture, Variability and Drift in the Himalayan Hills." In *American Anthropologist*, 62(5), 1960.
- BERREMAN, G.D. *Hindus of the Himalayas*. Berkeley: University of California Press, 1983a.
- BERREMAN, G.D. "People's and Cultures of the Himalayas." In *Asian Survey* 3 (6), 1963b.
- BERREMAN, G.D. *Hindus of the Himalayas: Ethnography and Change*. Berkeley: University of California Press, 1972.
- BERREMAN, G.D. "Ecology, Demography, and Social Strategies in the West Himalaya: A Case Study." *Colloques Internationaux du CNRS*, No. 268, 1977.
- BHANDARI, J.S. "Structure and Change Among the Border Land Communities of the Kumaon Himalaya." In Lall and Moddie, eds. op. cit.
- CHANDRA, R. "Sex Role Arrangements in the Northwestern Himalaya." in C. von Furer-Haimendorf, ed. *Asian Highland Societies in Anthropological Perspective*. New Delhi: Sterling Publishers, 1981.
- FANGER, A.C. "Brideprice, Dowry and Diverted Brideprice Among the Rajputs of Kumaon." In Raha, ed., op. cit.
- FISHER, J. F. *Trans-Himalayan Traders: Economy, Society and Culture in Northwest Nepal*. Berkeley: University of California Press, 1986.

- FISHER, J.F. ed. *Himalayan Anthropology: The Indo-Tibetan Interface*. The Hague: Mouton Publishers, 1978.
- FRICKE, T.E. *Himalayan Households: Tamang Demography and Domestic Processes*. Ann Arbor: University of Michigan Research Press, 1986.
- FURER-HAIMENDORF, C. von. *Himalayan Traders*. New Delhi: Time Books International, 1975.
- GROSS, P. H. *Birth, Death and Migration in the Himalaya*. New Delhi: Bahri Publications, 1982.
- JOSHI, L.D. *Tribal People of the Himalayas*. Delhi: Mittal Publications, reprinted 1984.
- PANT, S.D. *Social Economy of the Himalayan*. London: George Allen and Unwin, 1935.
- PARRY, J. *Caste and Kinship in Kangra*. London: Routledge and Kegan Paul, 1979.
- SANWAL, R.D. *Social Stratification in Rural Kumaon*. New Delhi: Oxford University Press, 1976.

## II. WOMEN'S WORK AND STATUS

### A. GENERAL

- AFSHAR, H., ed. *Women, Work and Ideology in the Third World*. London: Tavistock Publications, 1985.
- AGARWAL, B., "Patriarchy and the 'Modernising' State: An Introduction." In B. Agarwal, ed. *Structures of Patriarchy: State, Community and Household in Modernising Asia*. New Delhi: Kali for Women, 1988.
- AGARWAL, B., "Neither Sustenance nor Sustainability: Agricultural Strategies, Ecological Degradation and Indian Women in Poverty." In Agarwal, op. cit.
- AGARWAL, B., "Under the Cooking Pot: The Political Economy of the Domestic Fuel Crisis in Rural South Asia." In *IDS Bulletin*, 18 (1), 1987.
- AGARWAL, B., *Cold Hearths and Barren Slopes: The Fuelwood Crisis in the Third World*. New Delhi: Allied Publishers, 1986.
- AGARWAL, B., "Work Participation of Rural Women in Third World: Some Data and Conceptual Biases." In *Economic and Political Weekly*, 20 (51-52), 1988.
- ARENS, J., and van BEURDEN, J., *Jhagrapur: Poor Peasants and Women in a Village in Bangladesh*. New Delhi: Orient Longman, 1977.
- BARDHAN, K. "Women's Work, Welfare and Status: Forces of Tradition and Change in India". In *South Asia Bulletin*, 6(1), 1986.

- BJORKMAN, J.W., ed. *The Changing Division of Labour in South Asia*. New Delhi: Manohar Publications, 1987.
- BOURQUE, S.C. and WARREN, K.B. *Women of the Andes: Patriarchy Social Change in Two Peruvian Towns*. Ann Arbor: University of Michigan Press, 1981.
- DUBE, L., et al. eds. *Visibility and Power: Essays on Women in Society and Development*. New Delhi: Oxford University Press, 1986.
- DUBE, L. and PALRIWALA, R. "Structures and Strategies: Women, Work and the Family". In *Women and the Household in Asia*, 3. New Delhi: Sage, 1990.
- EPSTEIN, T.S. "Cracks in the Wall: "Changing Gender Roles in Rural South Asia." In Bjorkman, ed., op. cit.
- FERNANDES, W., et al. *Forests, Environment and Tribal Economy: "Deforestation, Impoverishment and Marginalisation in Orissa"*. New Delhi: Indian Social Institute, 1988.
- FERNANDES, W. and MENON, G. *Tribal Women and Forest Economy: Deforestation, Exploitation and Status Change*. New Delhi: Indian Social Institute, 1986.
- GRAY, J.N. and MEARNS, D.J. *Society From the Inside Out: Anthropological Perspectives on the South Asian Household*. New Delhi: Sage, 1989.
- GULATI, L. *Profiles in Female Poverty*. Delhi: Hindustan Publishing Corporation, 1981.
- PAPANNEK, H. *Socialisation for Inequality: Entitlements, the Value of Women, and Domestic Hierarchies*. Boston: Centre for Asian Development Studies and Department of Anthropology, Boston University, 1989.
- SHIVA, V. *Staying Alive: Women, Ecology and Survival*. New Delhi: Kali for Women, 1988.

## B. WOMEN AND AGRICULTURAL CHANGE

- AGARWAL, B. "Rural Women, Poverty and Natural Resources: Sustenance, Sustainability and Struggle for Change. In *Economic and Political Weekly, Review of Women's Studies*, 24 (43), 1989.
- AGARWAL, B. "Women, Poverty and Agricultural Growth in India". In *Journal of Peasant Studies*, 13 (4), 1986.
- AGARWAL, B. "Women and Technological Change in Agriculture: The Asian and African Experience". In I. Ahmed, ed., *Technology and Rural Women: Conceptual and Empirical Issues*.
- CHEN, M. "Women's Work in Indian Agriculture by Agro-Ecologic Zones; Meeting Needs of Landless and Land-Poor Women." In *Economic and Political Weekly, Review of Women's Studies*, 24 (43), 1989.

- DUVVURY, N. "Women in Agriculture: A Review of the Literature." In *Economic and Political Weekly, Review of Women's Studies*, 24 (43), 1989.
- HOROWITZ, B. and KISHWAR, M. "Family Life - The Unequal Deal: Women's Condition and Family Life Among Agricultural Labourers and Small Farmers in a Punjab Village." In *Manushi*, No. 11, 1983.
- JEFFREY, R., et al., "Taking Dung Work Seriously: Women's Work and Rural Development in North India." In *Economic and Political Weekly, Review of Women's Studies*, 24(17), 1989.
- JETLEY, S. "Impact of Male Migration on Rural Females." In *Economic and Political Weekly, Review of Women's Studies*, 22(44), 1987.
- MENCHER, J. "Women's Work and Poverty: Women's Contribution to Household Maintenance in Two Regions of South India." In D. Dwyer and J. Bruce, eds., *A Home Divided: Women and Income Control in the Third World*. Stanford: Stanford University Press, 1987.
- MIES, M. et al. *Indian Women in Subsistence and Agricultural Labour*. New Delhi: Vistaar Publications, 1986.
- MIES, M. "Capitalist Development and Subsistence Production: Rural Women in India." *Bulletin of Concerned Asian Scholars*, 12(1), 1980.
- PRASAD, C., et al. *Review of Research Studies on Women in Agriculture: Implications for Research and Extension*. New Delhi: Indian Council for Agricultural Research (ICAR), 1988.
- SHARMA, M. "Caste, Class and Gender : Women's Role in Agricultural Production in North India." Michigan State University, *Working Papers on Women in International Development*, No.57, 1984.
- SHARMA, M. with VANJANI, U. "Women's Work is Never Done: Dairy Development and Health in the Lives of Rural Women in Rajasthan." *Economic and Political Weekly, Review of Women's Studies*, 24(17), 1989.

#### C. WOMEN IN HILL AGRICULTURE

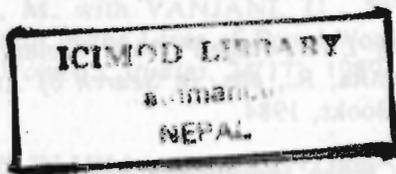
- ACHARYA, M. and BENNETT, L. *Women and the Subsistence Sector*. World Bank Staff Working Papers, No. 526, Washington D.C, 1983.
- BENNETT, L. and ACHARYA, M. "The Rural Women of Nepal: An Aggregate Analysis and Summary of 8 Village Studies". In *The Status of Women in Nepal*. Vol 2 Part 9. Kathmandu: Tribhuvan University, Centre for Economic Development and Administration, 1981.
- BHATI J.P. and SINGH, D.V. "Women's Contribution to Agricultural Economy in the Hill Regions of North-West India." In *Economic and Political Weekly, Review of Women's Studies*, 22(17), 1987.

- PARMAR, S. "Saga of Women in the Hills." In *Indian Farming*, 25(8), 1975.
- PRADHAN, B. and BENNETT, L. "The Role of Women in Hill Farming Systems." Paper Presented at the Seminar on Appropriate Technology for Hill Farming Systems, 22-26 June, 1981.
- PRADHAN, B. and RANKIN, K. "Conceptual Perspectives on Women's Roles in Resource Management." Kathmandu Centre for Women and Development, 1988.
- SHARMA, U. *Women's Work, Class and the Urban Household*. London: Tavistock Publications, 1986.
- SHARMA, U. *Women, Work and Property in North-West India*. London: Tavistock Publications, 1980.
- SHARMA, U. "Segregation and Its Consequences in India: Rural Women in Himachal Pradesh." In P. Caplan and J. Bujra, eds. *Women United. Women Divided*. Bloomington: Indiana University Press, 1979.
- SHRESTHA, N. "Women as Environmental Managers in Nepal: The Case of Kakani Village Panchayat". Kathmandu: Tribhuvan University, Centre for Economic Development Administration, 1988.

#### D. CHIPKO MOVEMENT

- BAHUGUNA, S. "The Chipko Movement - A People's Movement" in Raha, ed., op. cit.
- BAHUGUNA, S. "People's Response to Ecological Crisis in the Hill Areas" in Bandyopadhyay, J. et al., eds. op. cit.
- BAHUGUNA, S. "Protecting Sources of Community Life: Women's Non Violent Power in the Chipko Movement." In Kishwar, M. and Vanita, R., eds. *In Search of Answers: Indian Women's Voices from Manushi*. London: Zed Books, 1984.
- BAHUGUNA, V. "Contribution of Women to the Chipko Movement." *Indian Farming*, 25 (8), 1975.
- BANDYOPADHYAY, J. and SHIVA, V. "Political Economy of Ecology Movements". In *Economic and Political Weekly*, 33(24), 1988.
- BANDYOPADHYAY, J. and SHIVA. "People's Control Over Forest Resources in the Himalayas." In *Appropriate Technology*, 15 (1), 1988.
- BANDYOPADHYAY, J. and SHIVA. "The Evolution, Structure and Impact of the Chipko Movement." *Mountain Research and Development*. 6 (1), 1986.
- BANDYOPADHYAY, J. and SHIVA. "Ecological Sciences: A Response to Ecological Crises." In Bandyopadhyay, J. et al., eds, op. cit.

- BERREMAN, G.D. "Uttarakhand and Chipko: Regionalism and Environmentalism in the Central Himalays." In Raha, ed., op. cit.
- BERREMAN, G.D. "Identity: Definition and Assertion in the Central Himalaya". In A Jacobson-Widding, ed., *Identity: Personal and Socio-Cultural*. Uppsala, 1983.
- BHATT, C.P. "The Chipko Movement: Strategies, Achievements and Impacts" In Raha, ed., op.cit.
- GUHA, R. *The Unquiet Woods: Ecological Change and Peasant Resistance in the Himalaya*. New Delhi: Oxford University Press, 1989.
- GUHA, R. "Sociology of Chipko: A Study of the Badyargarh Andolan". In Raha, ed., op. cit.
- JAIN, S. "Women and People's Ecology Movement: A Case Study of Women's Role in the Chipko Movement." In *Economic and Political Weekly, Special Article*, 19(4), 1984.
- JOSHI, G. "Protecting the Sources of Community Life: Slandered by the Community in Return." In Kishwar and Vanita, eds. op. cit.
- MISHRA, A. and TRIPATHI, S. *Chipko Andolan: Uttarakhand Women's Bid to Save Forest Wealth*. New Delhi: People's Action for Development and Justice, 1978.
- SHARMA, K., PANDEY, B., AND NAUTIYAL, K. "The Chipko Movement in the Uttarkhand Region, Uttar Pradesh, India: Women's Role and Participation." In Muntemba, S. ed., *Rural Development and Women: Lessons from the Field*, Vol.2. Geneva: International Labour Office, World Employment Programme, Technical Co-operation Report, 1985.



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