

Biodiversity Conservation and Rural Livelihood Improvement Project

Social & Environmental Assessment of Askot Landscape

Draft Final Report



Ashoka Trust for Research in Ecology and
the Environment
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Abbreviations

ATREE	Ashoka Trust for Research in Ecology and the Environment
BCRLIP	Biodiversity Conservation and Rural Livelihoods Improvement Project
BSA	Biologically Significant Areas
BSI	Botanical survey of India
CCF	Chief Conservator of Forest
DFO	Divisional Forest Officer
FD	Forest Department
FES	Foundation for Ecological Security
FPC	Forest Protection Committee
GEF	Global Environment Facility
IDA	International Development Association
ITBP	Indo-Tibetan Border Police
JFM	Joint Forest Management
MoEF	Ministry of Environment and Forests
NFP	National Forest Policy
NGO	Non Governmental Organization
NHEPC	National Hydro Electric Power Corporation
NR	Natural Resources
NTFP	Non-Timber Forest Product
PA	Protected Area
PAD	Project Appraisal Document
PCCF	Principal Chief Conservator of Forest
PTO	Project Tiger Office
RF	Reserved Forest
RLEK	Rural Litigation and Entitlement Kendra
SC	Scheduled Caste
SDO	Sub Divisional Officer
SEZ	Special Economic Zone
ST	Scheduled Tribe
STZ	Special Tourism Zone
TCA	Tiger Conservation Authority
TERI	The Energy Research Institute
UP	Uttar Pradesh
VFJM	Village Forest Joint Management
VP	Van Panchayat
WII	Wild life Institute of India
WLS	Wild Life Sanctuary
WP	Writ Petition
ZSI	Zoological Survey of India

1. Introduction

The Government of India has received credit from the International Development Association (IDA) and a grant from the Global Environment Facility (GEF) towards the design and implementation of a new project titled the Biodiversity Conservation and Rural Livelihood Improvements Project (BCRLIP). The Ministry of Environment and Forests (MoEF), India, is implementing the BCRLIP. Based on experiences from earlier projects, the MoEF is scaling up the current initiative to the landscape level.

The proposed BCRLIP aims to conserve biodiversity in selected landscapes, including wildlife protected areas/critical conservation areas while improving rural livelihoods through participatory approaches. Joint Forest Management (JFM) and ecodevelopment in some states are models of new approaches that provide benefits to both conservation and local communities. The project intends to build on these models and extend the lessons to other globally significant sites in the country in order to strengthen linkages between conservation and improving livelihoods of local communities that live in the neighborhood of biodiversity-rich areas as well as to enhance the local and national economy. The Askot landscape in the Uttranchal is one such landscape selected for this project.

The Askot Landscape as defined for the BCRLIP is as follows. The landscape lies between the Longitudes 80°10'0"E and 81°0'0"E, and Latitudes 30°35'0"N and 29°35'0"N, at the tri junction of the borders of Nepal, India and Tibet (China). The northern boundary of the Landscape faces NNE and extends in a straight line above Nabhidang near Lipu Lekh and goes west to the head of the Lissar Yangti river in the Darma basin. The high passes of Lowe Dhura, Nuwe Dhura and Lampiya Dhura fall within this northern boundary. The Eastern boundary is formed by the true right bank of the Kali River, from Nabhidang to Jauljibi along the Indo-Nepal boundary, moving in a south-westerly direction. The Western boundary runs along the Gori River on the true left bank, from Jauljibi, till it crosses the Ralam Gadh and follows the ridge to Harsling peak. Thereon it follows the ridge further past Burjikang Dhura, to include all of the Ralam basin, and goes along the ridgeline till it meets the Bhamba Dhura peak, and follows it further along the boundary of the Askot WLS to Kalgangdhura and on till it meets the Tibet border again at the head of the Lissar basin.

Table 1.1: Villages included within the landscape

Region	No of villages
Dhaulti high altitude (Darma valley)	13
Kuti high altitude (Byans valley)	7
Kuti low altitude (Chaudans valley)	16
Dhaulti low altitude (above Tawa ghat)	12
Kali low altitude (above Tawa ghat)	14
Gori left bank (low altitude)	12
Ralam river left bank	1
Gori Left bank mid altitude	11
Madkani both banks (mid to low altitude)	8
Gori left bank mid altitude	4
Paina gadh both banks	7
Gori left bank low altitude	4
Total	109

Situated in the north-eastern part of the newly created state of Uttarakhand, the landscape lies wholly within the district of Pithoragarh. It borders China (Tibet) in the north and Nepal in the east. The landscape is physiographically a mix of lower, mid and higher Himalayas and is a catchment for the river Kali, which defines the international border between India and Nepal. Rivers Kuti, Dhaulti and Gori are the three main tributaries of river Kali that lie in the landscape. Bio-regionally it is an outstanding site for endemism and regionally important site for species richness and biological distinctiveness. A wide altitudinal variation supports over 2300 plant species, 29 species of mammals and 225 bird species including three critically endangered bird species (Satyr Tragopan, Monal Pheasant and Cheer Pheasant). It is also a high diversity site for orchids, containing over 47% of the North Western Himalayan Orchid Flora. A scheduled tribe community called Bhotia predominantly inhabits the landscape while Ban Rajis have been classified as a "primitive tribe" of the area.

Askot Wildlife Sanctuary is currently under the process of re-notification. Accordingly while it is proposed that the total area of the sanctuary would remain unchanged, its boundaries would get revised to exclude all human habitations. The landscape area will also be increased to include some areas that are closer to the Nanda Devi biosphere reserve to the west.

2. Project Description

The Project Tiger office (PTO) (now the National Tiger Conservation Authority - NTCA) of the MOEF is in charge of the project's management. The TCA recruited government agencies such as the Wild life Institute of India (WII), Botanical Survey of India (BSI) and Zoological Survey of India (ZSI), and along with state level consultations, arrived at six landscape sites.

The project's development objective reads thus: "*to strengthen and mainstream biodiversity conservation at the landscape level by improving rural livelihoods, learning and its replication, through participatory approaches.*" The project's objectives are fourfold, namely,

- Strengthening Biodiversity Conservation in selected landscapes- Involves conservation mapping of landscape units; strengthening of management in Protected Areas; improving conservation outcomes in biodiversity sensitive sites outside Protected Areas; improving conservation outcomes in biodiversity sensitive sites outside Protected Areas.
- Biodiversity Conservation practices mainstreamed in production landscapes, in consonance with improved rural livelihoods- Involves integration of biodiversity consideration in production areas; mainstreaming biodiversity considerations in regional development; participatory interventions for improving conservation and livelihood outcomes.
- Improved learning and replication of Participatory Approaches to Conservation- Entails promotion of selected Protected Areas as learning centers to concept of participatory conservation; documentation and dissemination of practices in participatory conservation; extension of learning from national and international experiences; scaling up of participatory conservation approaches.
- Improved National level capacity for coordination and promotion of landscape conservation approaches- Entails strengthening and building capacity within the Ministry of Environment and Forests (MOEF).

The TCA selected through a competitive process a consortium of organizations such as PEACE, ELDF, Samrakshan Trust and NR International, all represented by PEACE, as the consultants for assisting the MOEF in designing the BCRLIP. The contract commenced in November 2005. The consortium assisted a World Bank Project

Preparation team in February 2006 in drafting GEF-PAD. Latter, landscape level biological and socio-economic surveys were held. Subsequently the selection of the landscapes was confirmed.

ATREE signed a contract of consultancy with the TCA on August 2006. The consultancy services include social and environmental assessments in the six confirmed landscapes. Subsequently a team of social and environmental experts began consultations in the Askot landscape on 11 November 2006.

The Askot wildlife Sanctuary in Uttaranchal and the landscape in which it is located is one of the six sites selected for the project. The Askot Project Landscape was defined through a multi-level consultative process involving state forest officials and wildlife scientists. The Askot landscape, encompassing 3326 square kilometers, lies in eastern Kumaon and shares international boundaries with the Tibetan Autonomous region in the north and Nepal on the South East, the latter's boundary being demarcated by the Kali River. The western and northwestern boundaries are demarcated by the left banks of the Gori River. The basins of Kuti Tangti and the Lissar-Darma Yangti rivers lie within the landscape. The landscape is characterised by an altitudinal variation ranging from 560 meters at the banks of the Gori in the township of Jauljibi to 6905 meters at the Panchachuli's summits. This variation in altitude in tandem with the topography has influenced climatic conditions specifically micro attributes. The altitudinal zones range from subtropical to alpine to nival (permanent snow). Subsequently the climate conditions range from subtropical to extreme polar. The PEACE consortium, in its *Draft for the State Level Consultation Workshop*, mentions biodiversity values that it has inferred from studies on the Askot Sanctuary by scientists from the Wild Life Institute of India (WII). 16 vegetation types have been categorized. Evidence for a rich diversity in species diversity has been provided. This includes a 2359 species inventory. Of this 40% of fauna are native or of Himalayan origin. Faunal species diversity is provided in an inventory that lists 37 species of mammals, 265 bird species and 23 herpetofaunal species. Of this 12 mammalian species constitute endangered Himalayan taxa and 3 bird species have been listed as endangered. Rivers provide critical ecological services and are crucial in linking the landscape as they originate and flow from glaciers to alpine, temperate and tropical terrains.

The landscape contains 121 Revenue Villages located across diverse vegetational zones ranging from sub-tropical to alpine. These villages fall under the revenue jurisdiction of Dharchula and Munsiri Tehsils. 34% of the landscape falls under Van Panchayats or Village Forests, 55% under Civil and Soyam Revenue lands, 8% under Reserve Forests and 3% under agriculture. Of the mentioned Biologically Significant Areas (BSA), 6 fall in Alpine terrain, of which 4 wholly or substantially encompass Van Panchayats. 4 BSAs wholly or substantially encompass Civil Soyam lands. This spatial statistic points to significant anthropogenic interactions within a diverse landscape. The consortium thus assesses land use patterns by identifying proximate and non-proximate causes for the loss of diversity. The former includes "livestock based land use", "trade in wild plants", "removal of wild animals", "fish catch by local communities", "hydroelectric projects on the various rivers in the landscape", "urban settlements and military installations", and "mining and quarrying". The non-proximate causes include "alienation of local communities from the Askot Sanctuary", "impulses and pulls from distant markets", and "the push of poverty and the lack of alternative livelihood options".

It is in this context that the consultations commenced.

3. Regulatory, Legal and Policy Issues

This chapter is categorized according to certain issues identified as being of legal and regulatory concern. These are classified as Core Issues, Settlement of Rights, Van Panchayats, Access and Ownership of NTFP, Securing Rights of Ethnic Minorities, and, finally, Recommendations.

3.1. Core Issues

3.1.1. Settlement of Rights

The landscape has one Protected Area of 600 sq. km. Under the realigned boundary of the PA there is only one village, Teejam, in the subtropical belt that would be inside the sanctuary. According to some Forest Department staff, since the village is located in subtropical conditions it lies in a biologically rich area of the park and one needs to make sure the impact of this village is minimal on native biodiversity. There are, however, several other villages that will be essentially outside the boundary of the sanctuary but will depend on the sanctuary area for use of forest produce and grazing of livestock. This cannot be stopped as long as it is for subsistence purpose. The space used for these activities by villages close to the sanctuary boundary belongs, in some places as in Dar, to the village Van Panchayat and people have traditional rights to use these areas. This should be respected by the PA management, which will help foster a better relationship between Forest Department and people. Alienation of people by the Forest Department needs to be avoided in such places as people could be used as important informers with regard to poaching and vandalizing of the forest landscape by people from outside the landscape. Both the Forest Department and the local people welcomed re-alignment of the sanctuary boundary.

The settlement of rights within the areas demarcated as sanctuary has in fact not taken place. Despite this the restrictions on use of natural resources within this Protected Area have been enforced, in some cases even without the physical relocation of the impacted communities. This has had the obvious impact of hindering developmental activities, where a multi-tiered permission process is required to construct even such basic requirements as water pipelines or roads. As a result, within the landscape very few habitations are covered by roads and only 55% of villages electrified, and there are just 3.13 primary health centers for every

100,000 people in the landscape. This has led to a lot of resentment against conservation efforts. This situation has not been helped by the enforcement of one of the orders of the Godavarman case in the Supreme Court, which has in fact been responsible for restricting livelihood options for village communities within the sanctuary.

This issue would be resolved through the implementation of the requirements of the Forest Rights Act. Given that the rights of these communities have not been settled, the same would have to be done in accordance with Section 6 of the Act, which requires the recognition, vesting and mapping of the various rights enumerated under the Act.

Subsequent to this process, it would be possible for the basic developmental facilities to be extended to these village communities, as long as the requirement for land is not more than one hectare for each developmental project and as long as the Gram Sabha recommends such a move.

Further, the impacted communities would be able to claim for rights as displaced groups, since even though they have not been geographically displaced, their access to the resource base has definitely been impacted. This falls within the broad understanding of displacement, which is not restricted to geographical displacement. This is in tune with global legal discourse that currently broadens the meaning of displacement from physical dislocation to loss of resource access. Such a trend is evident in the World Bank's Operational Policies on Involuntary Resettlement¹.

A further issue that emerges is the classification of the lands within the landscape. As has been indicated in the preceding chapters, 34% of the landscape falls under Van Panchayats or Village Forests, 55% under Civil and Soyam Revenue lands, 8% under Reserve Forests and 3% under agriculture. However, it is being claimed on the basis of a Supreme Court ruling that all the Civil and Soyam revenue lands are also to be treated as forest lands under the control of the Forest Department. In addition to further aggravating the resentment over the Forest Department's intrusion into their daily functioning, this re-classification would also impinge on the rights of the local population. However, in the context of the recognition of the rights of Forest

¹ Operational Policy (OP 4.12), The World Bank Operational Manual, December 2001.

Dwellers, it is possible that regardless of the classification, as Revenue or Forest, the individuals would be able to maintain the current level of dependence on natural resources and traditional practices.

3.1.2. Van Panchayats

The present project seeks to mainstream biodiversity by adopting a landscape-level conservation approach, as against earlier approaches that fundamentally concentrated on Protected Areas (PA), and twine these conservation concerns with livelihood concerns. In this landscape the Van Panchayats would be the socio-economic arena within which these concerns would be played out.

The Van Panchayats were initially instituted in 1931 under the Van Panchayat Act of 1931, which followed as a result of the local protests and violence subsequent to the assertion of the colonial State's monopoly over the forests in the region and the ensuing restrictions on their use by the local populations. This Act empowered village communities to create Van Panchayats and bring under their own control forestlands that were managed by the Revenue Department as Class I and Civil Forests. Interestingly a majority of these Van Panchayats were constituted prior to 1947, subsequent to which till 2002 no Van Panchayats were constituted at all.

It appears though that there was no definite policy that governed the extent of lands granted as Van Panchayats, with the result that there are over 23 Van Panchayats in the landscapes that have thousands of hectares of land under Van Panchayats, while there are those with either no Van Panchayat whatsoever, and those with just 2 hectares of land as a village forest. We can be sure, however, that this system was not based on the recognition of extent of traditional common lands since the Panchayat Forest Rules 1976 restricted the area eligible for new Van Panchayat formation to that falling within the new village boundaries drawn under the revenue settlement of the early 1960s, instead of the traditional boundaries of the commons.

Recently the state government has through the Uttaranchal Panchayathi Forest Rules of 2005 substantially altered the nature of the Van Panchayats. These changes in the Van Panchayat Rules will, in effect, result in a number of major changes.

- The Rules fundamentally dismantle the longstanding and very progressive arrangement of the Van Panchayat as a Commons by reinterpreting and breaking up the community or “owners” of the Van Panchayat into various other designations such as self-help-groups, the general body, and right-holders (the latter from terminology for prevailing or unsettled rights in Reserve Forest areas, where the owner is the state), and also by re-designating the Panchayat or governing body as just a “management committee”²; and
- They set up communities to change the land-use of the Panchayat Forest from only local and subsistence use to business enterprise.

Van Panchayat lands cover 46.5% or almost half of the entire landscape, and hold some of the most biodiverse and pristine areas within this landscape, so the implications for inclusive participation and land-use trajectories can be very significant.

It appears that the intention of these rules has been not only to limit the possibility of the assertion of ownership over these natural resources by the local populations but also, in the current economic context, to exploit these resources under the aegis of the Forest Department for commercial purposes, continuing in the long tradition for which the forests of the sub-continent were originally monopolized by the State.

The Forest Rights Act would substantially impact on these Rules, however. To begin with, it recognizes the ownership of the forest dwelling communities over the forest resources in line with their traditional uses. This frustrates the possibility of looking at the Van Panchayats as mere managerial groups since the Act recognizes the legal existence of common property resources. In addition, the Act also places a cap on resource consumption by the holders of these rights to sustainable and traditional limits. This compromises to a significant extent the ability to engage in industrial level exploitation of these resources.

² Analysing Van Panchayats through World Bank OP on Indigenous People (4.10), it will be plausible and reasonable to conclude that these village commons provide the geographical context to culturally classify communities as “indigenous”, i.e., as “generically” required by the OP (sec 4 -b) to consider a community as “indigenous”. Communities here, it can be argued, have “collective attachment” to the “geographically distinct habitats”, viz. Van Panchayats, “and to the natural resources in these habitats and territories”.

The placing of ownership in the hands of the local communities impacts not only on the legal status of the Van Panchayats but also on the entire system that has been built up regarding the sale of NTFP. A variety of legislations like Uttaranchal Tendu Patta Adhiniyam 1972, which restricted the sale, purchase and transport of Tendu leaves to the state government or an authorized officer of the state government or an agent in respect of the unit in which the leaves have grown, and the Uttaranchal Resin and Other Forest Produce (Regulation of Trade) Act, which regulated the sale of resin in a manner similar to the Tendu Patta, will now have to be reviewed as the central presumption of state ownership of the forests and its produce has now been overturned by the Forest Rights Act.

A further question that emerges in the context of the newly accrued rights to the forest dwelling communities is: what will now be the relationship between the Van Panchayats and the Panchayats? Subsequent to the Panchayat Forest Rules of 1976, the Van Panchayats have some relationship to the Panchayats. And yet the Forest Rights Act, while recognizing the central role of the Gram Sabha, does contemplate the recognition of traditional rights of forest dwelling communities. It appears therefore that while the Van Panchayats may continue to exist, they would have to be aligned towards the recognition and respect for traditional rights of the local population.

This respect and recognition of traditional rights within Gram Panchayats cannot be overemphasized in the context where many of the Van Panchayats have been monopolized by dominant groups within the unit. While this has been aggravated by the legal regime that allowed the Forest Department to assert control over the forest lands, we cannot discount the existence of dominant groups within village communities. It is for this reason, as stated before in the case of the Ban Raji community, that the mapping of rights will ideally have to be done individually for each village hamlet with special emphasis, as already evident in the Forest Rights Act itself, on the rights of the Scheduled Tribes and those who depend on the forest and forest produce for their livelihood needs.

3.1.3. Access and Ownership of NTFP

However, as has been indicated in the preliminary legal overview of the implications of the Forest Rights Act, the entire legal relationship between the Forest Department and the populations living in Forest Areas has been changed through the

enactment of the Act. The Act places a cap on extended exploitation of the forest areas by the forest dwellers, but while doing so, also gives them ownership over NTFP. A reading of the Act would indicate that the forest rights holders would also have a right of extraction of timber for livelihood purposes. Further, it is the Gram Sabha that has explicitly been identified as the monitoring agency for implementation of these rights. To this extent, therefore, the relationship between the local populations and the Forest Department would have drastically been altered as the Forest Department does not have any ownership rights over the land and other natural resources within these forest lands.

It has to be pointed out that the Forest Rights Act, in placing this authority in the Gram Sabha, has in this particular landscape only strengthened existing regulations regarding the powers of the local Panchayats. Under the Panchayat Raj Act, 1947 the Gram Panchayat could also function as a Land Management Committee (Bhumi Prabandhak Samiti) on behalf of the Gaon Sabha and this Samiti is charged with the general superintendence, management, preservation and control of all land entrusted to a Gaon Sabha. In addition, the function of the Samiti includes the settling and management of land, development of agriculture, preservation, maintenance and development of forest and trees, maintenance and development of abadi sites, development of cottage industries, maintenance of fisheries and tanks, and, finally, consolation of holdings. This legislation would only go to support the overall trend that we have been showing to empower the PRI system in matters of governance and management of local lands vis-à-vis the Forest Department and to an extent the Revenue Department, which should now adapt to their new roles as expert bodies in a consultative relationship with local communities.

While access to most NTFP can proceed along traditional lines it appears that the extraction of the species *Cordyceps sinensis* poses a challenge in the landscape. *Cordyceps sinensis* is a fungus caterpillar that has a market demand in China and no local or national use. Huge quantities are being collected and smuggled across the border by agents. It has become a livelihood issue as people who collect this caterpillar get considerable amount in return. *Cordyceps* grows close to glaciers and are harvested when people go to their high altitude villages in summer. The ecological requirements of the species are completely unknown and some people in the area consider that the species will become extinct soon if the volume of collection continues at the current level.

In the case of this species it appears that there is a need for a study that ascertains the population status of the species and its place in the ecological system. Following such a study, it may be suitably notified as endangered or otherwise. Subsequently, attempts should be made to develop a regulation mechanism for the extraction of what is obviously an important resource.

3.1.4. Securing Rights of Ethnic Minorities

Having stressed the role of the Gram Panchayats, it has to be pointed out that this role is not without problems. The local governments are not automatically the sites for democracy as will be seen in the case of the Ban Raji community.

The Ban Raji has been essentially collectors and foragers from the wild, and till about 65 years ago, were not sedentary or settled in permanent habitations. Sometime in the colonial period they were settled on pieces of land leased to them from the Reserve Forests. Subsequently with the notification of the sanctuary they have been prevented from foraging for NTFP within the forests, which has resulted in their impoverishment. This has not been the only problem they face, though. Given that village-level Panchayats are invariably formed through the clubbing of two or more traditional hamlets, the Ban Raji, as a pastoral community, are struggling to become an agrarian community. They have been clubbed with the more settled non-tribal agrarian communities who see themselves as superior to the Ban Raji. This has very real implications for the livelihood opportunities of the Ban Raji since even though the village forest is located next to their hamlets, they are denied any rights to them. It is for this reason, therefore, that we suggest that a prior and independent process of the mapping of their rights and livelihood requirements take place prior to the process of recognition and vesting of forest rights envisioned under the Forest Rights Act.

This process should be conducted by an independent agency so as to ensure that when the rights are mapped out and determined this group is not left wanting. Given that this community has been fairly recently settled and lies at the bottom of the social hierarchy, they would have difficulty in making claims to customary rights. In this context, greater weightage would have to be given to their livelihood requirements than traditional rights, which would most probably clash with those of the settled agrarian communities in the landscape.

3.2. Recommendations

In light of the discussion above we make the following recommendations:

1. It is imperative that one of the first few activities under the project be the settlement of rights of the population within the landscape.
 - (a) In this regard the illegal restrictions that have been placed on its usage of natural resources must also be stopped immediately.
 - (b) The Forest Department should actively support the process of the recognition and vesting of Forest Rights under the Act.
2. Following the enactment of the Forest Rights Act, we recommend that
 - (a) The mapping of the rights under the Act be initiated as soon as possible.
 - (b) This process of mapping must, however, be initiated at a habitation level before being concluded at the Gram Panchayat level so as to ensure that marginalized communities get an opportunity to independently state their traditional uses and rights.
 - (c) This mapping process must be entrusted to an independent body.
3. The Van Panchayats present a peculiar situation since it appears that in demarcating their boundaries there is lack of consistency with the boundaries of commons traditionally tied to villages.
 - (a) It is for this reason that we recommend that the mapping of rights under the procedure laid down in the Forest Rights Act be initiated at the habitation level and these then be collated and where necessary reconciled at the Gram Sabha level.
 - (b) Where it appears that a village's commons are in the Van Panchayat of another village, a division will have to necessarily take place to recognize the traditional access of the till now-deprived village.
 - (c) Following from this recommendation, we believe that the Van Panchayat rather than being a separate body should be made a sub-committee of the village PRI.
 - (d) Further, the Van Panchayat Rules are clearly at odds with the new rights regime introduced subsequent to the enactment of the Forest Rights Act and must be reviewed to be brought in line with this new legislation.
4. We have pointed out that the rules and legislation governing NTFP extraction and usage are based on the premise that the State owns these resources. The Forest Rights Act has overturned this premise and hence all such rules and legislations will have to be appropriately reviewed and amended.
5. Special emphasis must be given within the project to protecting and securing the rights of the Ban Raji community, especially in the mapping of their rights under the Forest Rights Act, so that they are not further marginalized.

4. Methodology Adopted

A preliminary social and environmental analysis was undertaken in a participatory manner to assess potential socio-environmental impacts of likely activities and assessment of adequacy of safeguards built into designs of similar projects. Recommendations were later framed after wide ranging consultations for adoption of appropriate measures to strengthen social and environmental management within the project and establish of a sound monitoring program.

13 independent consultations were held and the parties ranged from Forest Department staff to members of migratory villages in the landscape. The consultations also varied across the most marginalized communities—from the Ban Rajis to the fairly affluent Bhotia people in the landscape. They also spanned from the most illiterate to the well-educated villagers who have experienced life beyond the villages. Within the consultations the team talked independently with several people who were less inclined to talk in groups. Consultations overlapped with some villages that the BCRLIP team had visited but also included villages and people who use the landscape but with whom the BCRLIP team did not consult.

Consultations were based on criterion. Such criterion was spatially and temporally conditioned by logistical circumstances. The nature of assessments was rapid and they were to be completed in a period of 12 days beginning 11 November 2006. Within what was a little more than a fortnight the team had to consult villages that were demarcated according to landscape conservation and livelihood issues, in addition to intervention criteria in respect of villages that fall within the Askot sanctuary, present and proposed, and the those in the landscape possessing or in proximity to Van Panchayats. Further, as the consultations commenced in early winter, villages in alpine and sub-alpine altitudes could not be accessed on account of snowfall and the fact that migration to villages at lower elevations had already occurred. The consultations due to logistical plans began with villages lying in the Gori basin in the west, moving to those that lie in the central Darma valley and finally to those that lie in the Kuti valley in the east. This linear progression disallowed any detour or digression in travel plans. Also, the consultations involved traveling to convenient points and a substantial level of trekking to villages that did not have road access. Since it was winter most village folk, especially women were collecting grass for fodder-stock. So most consultations either took a lot of time in mobilization or had to be done late evening. This resulted in a maximum of two

consultations per day and also a situation where women's participation was scanty because of daytime and nighttime chores. Such landscape and livelihood factors were anticipated and experienced.

The consultations were specifically designed to select villages with the following characteristics:

1. Villages within the current 2900 sq. km Askot sanctuary boundary and those that would continue to remain within and around even after realignment to the proposed 600 sq. km.
2. Villages that are located in or around areas classified as "Biologically Significant".
3. Villages that fall within each of the three main valleys/ basins.
4. Selection of communities according to their cultural identities such as Scheduled Tribe, Scheduled Caste, etc.
5. Resource User Profiles - Agriculturists, Migrant Graziers, Fishermen, Medicinal Plant gatherers.
6. High altitude villages whose members had migrated to lower altitudes as result of winter conditions and thus also lower elevation villages to which such villagers had migrated.
7. Villagers whose members were on the migratory cycle.
8. To the extent logistically possible, those villages were selected that were not part of preceding consultations.

The consultations were held in culturally appropriate contexts. Village elders and headmen were informed of the nature of the visit upon arrival and people were mobilized. The need for gender participation was stressed and attempted. Youth were similarly attempted to be recruited. Consultations were held in schools, household compounds and other locations that were suggested by villagers and/or were convenient to them. The medium of consultations was in the local dialect.

The biodiversity in the landscape was recorded through direct observations such as actual sightings of plants and animals and also from indirect evidences such as animal droppings, scratch marks, hoof marks, resting areas, sound, etc; but this had to be limited in extent given the vastness of the area, the winter/snow conditions at the higher latitudes and the time spent in traversing the mountainous landscape. We also recorded the condition of the forests around villages and in Van Panchayats.

5. Personnel of the Consultation

- Dr. T. Ganesh, Fellow- Scientist, ATREE
- Dr, Siddhartha Krishnan, Post Doctoral Fellow, Sociologist, ATREE
- Jason Keith Fernandes, Legal Specialist
- Jahnvi Pai, Research Associate, ATREE.
- Rakhi Rai, Research Associate, ATREE.

6. Social and Ecological Lessons from Previous and Ongoing Projects

6.1. Social Lessons

The Askot landscape that lies in the conjunction of the western and eastern Himalayas contains biodiversity elements of both these regions. The great vertical altitudinal gradients, from 560 m to over 7000 m yield an exceptionally high habitat diversity that ranges from subtropical *shorea robusta*, to alpine meadows locally called bugyals (Rawal, R and Dhar U, 2001). About 58% of the landscape also falls under alpine conditions that are characterized by moist alpine habitats in the Greater Himalaya and dry alpine habitat in the Trans Himalaya sections of the landscape. In spite of this great diversity in the landscape there have been few studies on the floral and faunal elements in the region. Some of the earliest explorations were by British botanists and egg collectors. In the 1990s, the Botanical Survey of India made collections in the region. However, of late, the surveys and explorations for floral and faunal elements are mostly made by scientists from the Wild Life Institute of India (WII) and members of local NGO Himal Prakriti.

The floristic diversity in the landscape is immense. Angiosperms alone account for 2258 species, gymnosperms 7 species and pteridophytes 94 species. Of this over 40% are endemic to the area (Murthy et al, 2000). Among taxonomic groups, species richness in the family Orchidaceae (120 species) is exceptionally high, and represents 62.5% of those species found in Kumaon (Uniyal and Ghosh, 2000) and 50.8 % of the entire Northwest Himalaya. The Gori basin in the landscape is said to be an orchid hyper diversity centre in the Western Himalaya (*ibid*) and is host to about 121 species of orchids belonging to 44 genera. These include 78 species that are epiphytic, 42 ground and one saprophytic species. The whole represents over 47 % of the NW Himalayan orchid flora in just about 0.67 % of its geographical area. The list is nevertheless incomplete and more species are likely to be encountered with more explorations.

The species richness varies across the great elevation range, with its maximum diversity in the alpine life-zone (3500m to 5500m above sea level). The sub-alpine forests of *Betula utilis* and *Abies spectabilis* were found to be by far the richest in mycoflora. Over 265 species of birds and 37 species of mammals are reported from the region. Among birds the area is also home to three endangered bird species: the Tragopan Satyra, the Lophophorus impejanus and the Catreus wallichi pheasants.

Among mammals, the snow leopard, musk deer, and the bharal are just a few in the endangered list. A list of the fish fauna studied in the main trunk of only the Kali River by scientists from Nepal indicates the presence of 73 species. Himal Prakriti is presently pursuing similar studies in the gori river basin. The landscape is also known for its high crop diversity. Over 211 different local varieties of food crops were identified as grown in the landscape .

The present project seeks to mainstream biodiversity by adopting a landscape-level conservation approach as against precedent approaches that fundamentally concentrated on Protected Areas (PA). The resultant livelihood implications are manifest. A larger rural constituency emerges with idiosyncratic economic circumstances. The terms of participation require mediation at more complex scales. In Askot the unique and pervasive socio-economic context that provides both participatory and contradictory potential for conservation, and that has been subject to decades of academic and popular scrutiny, emerges in the institutional context of Van Panchayats. By itself this institution historically epitomizes participation in the "production" landscape in that villages have used and managed these forests as commons through rules and regulations.

6.2. *A Brief Instructive History of Conflict for BCRLIP*

The Van Panchayat institutions, which can be conceived as forest protection committees or colonial precursors of Joint Forest Management (JFM), were first notified in lower Kumaon around 1931. In the project landscape they have been notified since 1947. A chronology of the institution must begin at an earlier period of colonialism, when the institution existed in a more culturally nascent form. Since 1815, but more specifically since the 1870s, customary forest commons of the Kumaon region within which the present landscape can be subsumed were usurped by the colonial state for predominantly commercial and partly military reasons under the garb of scientific forestry. The colonization of customary space was legitimized and operationalised through the Forest Act of 1878 and its various provisions. About 2,500 sq. km of forests was transferred between 1910 and 1917 to the Imperial Forest Department and new rules were enacted specifying strict restrictions on lopping and grazing rights, prohibition of cultivation, regulation of fire, etc. The new rules led to widespread protest. Neither the rules nor the fundamental presumption of state monopoly was accepted by the people despite the government's best efforts. The incessant, often violent, protests by village

communities forced the government to appoint the Kumaon Forest Grievances Committee to look into the local disaffection. The Committee examined over 5,000 witnesses from all parts of *Kumaon* in 1921 and on the basis of its recommendations the government passed the Van Panchayat Act of 1931. This Act empowered village communities to create Van Panchayats and bring under their own control forestlands that were managed by the Revenue Department as Class I and Civil Forests. (Agrawal, 1998).

Conflicts ensued over claims of subsistence, custom and political control over commons. These material and ideological undertones remain and manifest themselves whenever the state tries to gain control over forests under Panchayats.

6.3. *Contemporary Conflict Milieu*

This conflict situation prevails presently in the landscape and was palpable during consultations. The conflict context that prevailed during consultations pertains to the legal milieu circumscribing the Van Panchayats, specifically the Uttaranchal Panchayathi Forest Rules of 2001 and 2005. The 2001 Rules had previously replaced the Village Forest Joint Management Rules, 1997. Some of these rules, made under the aegis of the Indian Forest Act, have attempted to redefine forest Panchayats, install new management regimes and hierarchies, convert collective rights into individual rights, etc. The forest Panchayat was sought to be relegated from being an institution, or at least a body with institutional implications and potential, to a “committee” that would need fresh rules for managing its commons. In Uttaranchal the “Composite Management Plans” prepared by the Forest Department was to provide guidelines for the forest committees to prepare “micro plans”. Various authorities in the Forest Department ranging from the Conservator to the Ranger were involved in approving and implementing such plans.

6.4. *Conflict Realities in the Project Landscape*

While the BCRLIP is an exercise in JFM, albeit in spirit and not so much as a scheme officially conceptualized as such, it needs to learn from a history of local conflicts that arise when even such “well intended” schemes as JFM are perceived and experienced by the people as attempts by the Forest Department to gain control. Here it is instructive to read from studies on Van Panchayats regarding their community credentials in conservation, continued impetus for conflict, and the subsequent resistance to forestry attempts even as the term “forestry” has

progressed to more scientific and sustainable paradigms from a purely commercial paradigm. Along with perceptions that arose from consultations, such studies constitute essential social learning for the project. The consultations revealed some conflict contours.

Consultations with Non-Governmental Organizations (NGO) in the landscape revealed that many villages wanted nothing to do with the project as it involved the Forest Department besides also involving the contentious Askot Sanctuary issue. Referring to a history of conflicts over forest commons, they mentioned that the current rules were a slow institutional process to take over Van Panchayats. As was the case in the rest of the country, JFM in this region involved the state asking the community to participate to gain stakes *but* in their own forests. JFM in Uttaranchal, in as much as it involves Van Panchayat, must necessarily involve the reverse and the Forest Department must seek participation in village forests. But even in this situation Van Panchayats will be reluctant to involve the Forest Department because of to its history of detachment from Van Panchayats. For instance, people from the *Pangu* village in *Jodhas* valley said that the condition of their VPs was declining and there was no help from the Forest Department. Consultations in *Ucheti* located in the *Gori* basin reveal that the Forest Department has not helped much. According to Mr. Shankar Singh Tolia, the Sarpanch of *Tola*, near the *Ralam* glacier, Van Panchayats were not functioning efficiently. In *Kultam* people said that forests have been protected by them without any help from the Forest Department.

Referring to the new Van Panchayat rules, NGO stakeholders say that Van Panchayats were supposed to make annual management plans and seek permission for collection pursuits. This has strained people's attitudes towards the Forest Department. People were of one view in this regard during consultations. There was the general apprehension that if Van Panchayats are controlled by the Forest Department, the forest might slowly acquire the status of a civil forest. In *Kultam*, despite accountability (all accounts being audited), the new VP rules are creating problems. The Forest Department interventions have caused a sense of insecurity among the villagers. They feel the Sarpanch has lost control and authority. However, it was the very matter of auditing that was creating apprehensions. For instance, the villagers from *Tola* said they were not happy about the new Van Panchayat rules as they have to show their accounts to the Forest Department.

Officials in the Forest Department are aware of such antagonism. The SDO of Askot Sanctuary mentioned that there was an “anti-feeling”. The Conservator of Pithoragarh division pointed to “misgivings” about the 2005 rules. Specifically it was the proposed micro plans that were the main source of such misgivings, especially as a system of monitoring was in place. Countering popular sentiment that the *Sarpanch’s* authority was being diluted, the Conservator claims that the 2005 Rules in fact enhance such authority as they endow the *Sarpanch* with powers of forest officials and power to hold auctions. He mentions that this anti-feeling is the work of *netas* (politicians). Their vested interests have to do with the dilution or enhancement of the *Sarpanch’s* power. Micro plans now need to be “whetted” by the Forest Department. People “rue” this.

The SDO referred to legal contexts of the conflict in the forest. Definitions had changed as per the Supreme Court’s interlocutory orders in the *Godhavarman* case (WP 202/95) and it was stated that that the forests need to be managed scientifically as Reserve Forests. The SDO was in favour of conflict resolution. This entailed livelihood assistance to the people through the BCRLIP, which would foster people’s participation in conservation of Van Panchayats.

6.5. A Review of Representative Literature on Van Panchayat-JFM Conflicts

The Van Panchayats in Uttranchal represent one of the largest and most diverse experiments in decentralized common property management in collaboration with the State (Arnold and Stewart, 1991). These Panchayats are better-known examples of early co-management. The concept of community management captured academic and development imagination since the mid 1990s. India’s Joint Forest management offered a “good example of an attempt to turn this concept into reality” (Jeffery and Sundar, 1999).

Van Panchayats have been subject to extensive study especially in conjecture with the concept of JFM. This is because, as mentioned earlier, Van Panchayats have been precursors to community conservation, a concept that is in consonance with JFM, specifically with regard to participative dimension. Also, both the concepts evolved through a process of conflict and subsequent attempts to seek consensus against a background of ecological change. As the literature is vast, a representative albeit multidisciplinary sample of analytical and policy studies by academicians,

NGOs, policy experts and officials on linkages and conflicts between Van Panchayats and JFM specifically in legal and policy contexts, is consolidated below.

Agrawal (1998), in his study of the organizational dynamics of Van Panchayats of Kumaon, argues that JFM, which supposedly constituted a break in terms of continuity with colonial forestry, introduced changes that were far more timid than the British Van Panchayat Act of 1931. JFM and other similar state policy statements allow local populations only a partial share in the benefits from protecting forests and do not involve them in crafting the rules whereby the forests would be managed. Provisions of adequate support from enforcement officials and local mechanisms to ensure adequate protection is mostly absent from JFM pronouncements and so prospects of success for the policy may remain bleak.

According to Mukerjee (2003), Van Panchayats are facing new challenges and threats in the form of target-driven policies imposed from above. The content of the JFM rules in Uttaranchal suggest loss of decision-making space for local villagers. Despite claims to empower local forest users, the rules do much to achieve the opposite. An externally funded forestry project has provided an average of Rupees 15 to 20 lakhs for implementing a micro plan in each village brought under Village Forest Joint Management (VJFM). Besides promoting inequity between neighboring villages, the sudden offer of large sums of money to selected villages with high unemployment and limited opportunities for cash incomes, however, had led to the eruption of major conflicts to gain control over the funds. Even where existing Van Panchayats were functioning well, small groups of elite men, with the least dependence on the forest, had often made alliances with Forest Department field staff to distort the requirement that general body resolutions accepting VFJM should be passed. The majority of the genuinely forest dependent women and men were neither aware of the content of the VFJM Rules nor of the fact that the Van Panchayat Rules had become inapplicable. Their main involvement had been reduced to that of wage labourers.

Such shortcomings and contradictions of JFM have not only been ignored but the JFM rules themselves have been replaced by another set of rules that further diluted people's powers and participation. According to Kumar (2002), although Van Panchayats are given legal status and have powers to protect and manage their forests, they are under the control of state bureaucracy. The amended rules of 2001 further strengthen the control of the District administration and the Forest Department over

them. The micro plan under JFM for the development and management of the forest area has to be approved by the Forest Department. In almost all decisions, the prior approval of the Forest Department has been made essential.

The study also mentions that there has been a sudden increase in the number of newly created Van Panchayaths after an externally funded JFM programme. This is corroborated by another study quoted by the Rural Litigation and Entitlement Kendra (RLEK). This particular study mentions that Van Panchayats were "hastily formed" in Uttaranchal to secure and use external funds under JFM. It says that the Uttaranchal Panchayati Raj Rules 2001 are "interventionalist" and that a hierarchy of plans including the composite Management Plan, Micro Plan and Annual Implementation Plan has been introduced along with the stipulation that bureaucratic approval is mandatory before each of these plans is implemented. The study also mentions the fact that people's rights of use of forest resources have been severely curtailed. Composite Management Plans are based on silvicultural principles that contradict people's resource-use profiles. A study by RLEK says that in many villages Van Panchayats have been taken over by the JFM. Through JFM, community organizations are being made dependent upon external support. The study corroborates Mukerjee's contention of "conflicts due to fund-flow". It claims that the involvement of a considerable sum of money through the JFM has led to disputes and conflicts at the village level and also created mistrust among community members.

According to a study in Uttaranchal by TERI, which had earlier facilitated JFM in 60 villages in Harayana, "policies in legislation have to be drafted which facilitate rather than impede conservation of resource. The security of tenure and benefits accruing from VP forests ought to be safeguarded by the operational regulations. Revisions of rules on the basis of the current ground realities is necessary in order to develop the VP towards self-sufficiency."

Balabh and Balooni (2002) provide further insight into the decline of Van Panchayats. Comparing such Panchayats with Forest Protection Committees (FPC) of West Bengal, they state that both the institutions were formed in response to colonial and postcolonial social movements although JFM based institutions such as FPCs were also mandated by an environmental condition. Once vibrant institutions, the Van Panchayats are losing their organizational traits because of increasing control by Revenue and Forest Departments and their new rules. Along with poor

support systems this factor has led to conflicts within Van Panchayats. Administrative delay in resolving conflicts has led to encroachments and pilferage. Overall the loss of local autonomy has led to conflicts between and within Van Panchayats. Even as people's participation is curtailed through Van Panchayats, FPCs are formed through JFM ironically to secure participation. The problematic experiences of FPCs are similar to the Van Panchayat experience. The Forest Department's control over allocation and demarcation of forestlands, over micro plans and over the disposal of forest produce leaves no room for participation. Centralization of silvicultural decisions and working plans does not allow adoptive management to suit specific sites. This seriously hampers the successful implementation of programs. Allocation of resources and benefits without the participation or consultation of the communities involved are either ignored by the communities or lead to conflicts. To make VPs and FPCs more dynamic, it is vital that they be given autonomy.

A case study of the collapse of the Van Panchayat system due to the JFM scheme in Uttaranchal is presented by Sarin (2001) as part of her study of 16 Van Panchayats to see whether impact of devolution policies (in this case of VFJM) have led to increasing local control over forest management decisions, enhancement of livelihoods and improvement in forest quality. The 240 Hectare *Pakhi* Van Panchayat was formed in 1958 to meet the livelihood needs of itself and neighboring *Jalgwad*. There was strong gender participation in this village, which was associated with the Chipko movement. As a result of the women's involvement with Chipko, they have a strong and active *Mahila Mangal Dal* (women's welfare association) that established effective control over management of the village forest, given their roles in the collection of fuelwood, fodder and water. The VFJM was introduced under a World Bank funded forestry project in August 1999. The project specifically emphasized the roles of women and the poor during participatory micro planning. However, *Pakhi's* women were neither consulted nor their existing management system taken into account while deciding to introduce VFJM with the Van Panchayat. The sudden offer of a generous budget for the village forest, however, led to a rapid gender-based shift in power and control as men sought acres and control over funds. Men also lost out as the Van Panchayat council and *Sarpanch* had experienced a similar loss in local decision-making control to the Forest Department. According to the *Sarpanch*, VFJM had reduced the villagers' role from being responsible for forest management to providing information for preparation of the micro plan and working

as paid labour for forestry operations. Despite the imposition of bureaucratic controls on their functioning, a large number of Uttarakhand's Van Panchayats have survived as community forestry institutions. Diverse and informal institutional arrangements for community management on all legal categories of forest lands, many led by forest dependent women, co-exist with and within the formal Van Panchayats. Through VFJM as introduced under a World Bank funded forestry project, the Forest Department is being empowered to reassert control over Van Panchayat forests and civil/*soyam* lands, the only surviving village commons. Instead of validating the rich diversity of indigenous knowledge and management systems developed for supporting livelihoods and ecological security, VFJM reinforces the Forest Department's monopoly over technical forestry knowledge and makes forestry the best land use even for the remaining commons. Forest users continue to resist intrusions by the Revenue and Forest Departments through non-cooperation and withdrawal. There are, however, declining incentives for community management in the changing macro context and policy environment.

6.6. Conclusion

Based on consultations and relevant literature, this chapter took stock of contentious realities in the project landscape. Official views were juxtaposed with popular sentiments. A brief history of continued contentions was provided. What emerge are a few pointers for the project to which it would be expedient for the project to pay attention. In the recent history of the landscape and of the wider region of which it is a part, attempts on the part of the state at participative conservation and conflict redress through JFM have generated skepticism and have also been largely unsuccessful. JFM has popularly been viewed as another attempt by the Forest Department to gain access and establish control over Van Panchayats. This was the majority opinion that emerged during consultations. For instance, there was general apprehension that if Van Panchayats are controlled by the Forest Department, it might slowly acquire the status of a civil forest.

There are two antagonistic angles to the possible popular disinterest in the project as evidenced by scant participative potential. One is the fact that people could at worst refuse to participate or at best participate whimsically because they resent any project that involves the Forest Department. Secondly, even discounting the larger historical cynicism towards the Department, it is possible that people could

perceive, or even experience, circumstances where the project facilitates the Van Panchayat management provisions such as micro planning, etc.

The project, instead of feeding into JFM efforts—though ideally under more socially benign circumstances this would have been desirable—needs to learn from the scheme’s turbulent experience in the landscape and Uttaranchal. To reiterate, JFM sought to impart devolution and empowerment as part of efforts to render conservation a participative effort. It also sought to resolve local conflicts. But it has been the popular sentiment in Uttaranchal that JFM through its management rules attempted centralization, gradual if not abrupt, and in the process inhibited local autonomy. Thus, paradoxically, it fostered conflicts rather than addressing them.

The BCRLIP, if it is to attempt and achieve landscape-level biodiversity conservation through participation, should aim to address this conflict between local institutions and the Forest Department. This is of practical importance as many Van Panchayats are loosing organizational potential and thus face resource depletion due to the above mentioned and other socio-economic processes. Many Van Panchayats that are facing organizational crisis could be part of zones that have been demarcated as “biologically significant”. This calls especially for management capacity building and also for conservation capacities. Consultations reveal an explicit refusal to work with Forest Department although the people seemed more positive towards the project *per se*. To address such circumstances one needs to refer to efforts in the country in participative ecological restoration and monitoring whereby scientists and scientific organizations work with communities in monitoring and conserving resources. While this can specifically be attempted, the project needs also to work on reducing tensions between the Van Panchayats and the Forest Department. Socially, the alienation of communities (in their Van Panchayat roles) needs to be dealt with. Legally, exercises need to be undertaken to seek wider policy and legislative space in order to address access and control conflicts between Van Panchayats and the Forest Department. There are also some villages, such as those that were consulted during this phase of the project, that are tolerant towards projects involving the Forest Department and thus towards collaboration with the department itself. Officials also mentioned that some Van Panchayats have already been brought under the JFM and that micro plans are being implemented. Here there is a need to analyze community participation or receptivity towards JFM. A study or reasons for communities either willing to participate in official schemes or are already participating can shed comparative perspectives on the prevailing conflicts.

7. Status - Baseline, Stakeholder Analysis and Participation Framework

As is usually required in projects, baselines are a device to measure progress and achievement against conditions prevalent during inception. With regard to environmental baselines, apart from surveys and enumeration of species richness and diversity, there have been few ecological or population level studies in the landscape. There is no clue about the populations of the endangered species in the region nor about how their populations are changing on account of the developmental processes and other human activities in the region. Baseline information in the form of population status is available only for few taxa such as herbs in the Bungyal region. The other taxa such as birds, mammals, amphibians, reptiles and fishes are very poorly known in terms of their populations. Thus, as part of the BCRLIP, it is recommended that a research component be installed and under it detailed population and disturbance studies be conducted. Socially, the BCRLIP needs to take cognizance of the trends and circumstances to be described below, which have implications for conservation, and assess project progress and achievement.

7.1. *Baseline: Development Indices*

Uttaranchal till recently was part of India's largest state, Uttar Pradesh. In comparison to some other states in India, Uttar Pradesh does not fare very well on conventional development indices. Now Uttaranchal is a state created out of its own political will³. Here one needs to pay attention to an interesting combination of physical and policy circumstances. Uttaranchal is a hill state and is currently experiencing a boom in development activity characteristic of India's current neo-liberal phase. Historically, the topographical contours of Uttaranchal have rendered infrastructure development such as roads, electricity, etc. difficult. People have faced difficulties but now are aware of development policy and possibilities (especially in the wake of numerous regional hydel-based power projects) and this has influenced their rightful aspirations. This makes them both a problematic and potential community for conservation. The following is an analysis of some of the development-related issues mentioned during consultations in the landscape. How the project or implements progresses on some of the development issues forms the initial baseline.

³ In the course of this report elections have been held and results declared in Uttaranchal. The incumbent government lost. It needs to be noted that development aspirations of hill people in the state, including those specifically formed vis-a-vis development events in the plains, have been the main electoral issue.

7.1.1. Development Issues in Production Landscape

Villages such as *Tola* that lie in high altitudes complain about lack of irrigation and road facilities. Such facilities have not been provided possibly, and paradoxically, because of inaccessibility of the landscape and forest rules. Lack of road facilities renders transportation costs very high as was mentioned by people from *Jowar*. Villagers also complained about an absence of vigilance mechanisms in winter as a result of which poachers hunt musk deer, set grass on fire and thereby facilitate the domination of certain species of grass. Poachers also steal stored grain. Van Panchayats also do not function efficiently. Villages such as *Tola* that benefited due to trade with Tibet have experienced economic setbacks due to the cessation of trade and closure of routes. Crop raids and predation are regular events here. But the difficulties arise when villagers suffer from a lack of compensation or ill-functioning mechanisms for compensation, the latter usually marked by corruption. Similar experiences and difficulties could be noted in consultations. In *Kultam*, people mention that they do not usually claim compensations as each time it would take a day to reach *Munsaiyari* and return. This involves expenditure of money. Added to the economic burden to be borne due to crop and livestock loss, such expenses cause a lot of hardship. The fact of Van Panchayats not functioning efficiently on account of new state rules also contains socio-economic implications such as inter-village conflict and physical labour, the latter similar to the compensation-seeking experience where people have to lose a whole day and spend money to get, as in this instance, felling permits even for a single tree. Villagers of *Kultam* also mentioned about the loss of private and agriculture lands due to landslides. Consultations with villagers of *Byas* valley also revealed the prevalence of landslides. Villagers of *Vasanth Kot*, a lower altitude village in the region, also mentioned a reduction of agriculture lands due to landslides. Land erosion is also mentioned by villagers from the high altitude village of *Sipu*. Consultations with its people revealed high altitude difficulties in accessing schools. Villagers from *Kuti* and *Ralam* say that life is very difficult without electricity, drinking water and irrigation facilities.

Villagers from *Duktu* and *Bidan* point to the issue of manpower. Despite the government's provision of a primary school, teachers sub contract their responsibilities to local persons. Some other villages such as *Ucheti* also face drinking water shortages besides irrigation issues. Villagers here complained about the absence of roads in the context of constant promises by politicians. Even

Vasanth Kot faces difficulties in transporting produce to markets due to lack of road facilities.

Unemployment also emerges as an issue. In Ralam few venture to cities in the plains and most of those who do return because of lack of employment opportunities. Villagers here also refer to other villages in terms of capacities. For instance, Johar's ability to have a vernacular daily is referred to as also its ability to generate "influential people".

Felt needs by and large pertain to roads, water, irrigation infrastructure and schooling facilities. And needs are felt far more intensely by villages at sub-alpine and alpine altitudes. The main issues are: the time and physical labour expended in availing of official assistance usually for everyday but also for more pressing economic reasons; transportation and sale of produce; attending school, etc. The project's redressal of such access-to-infrastructure issues either through practical implementation, recommendation to or coordination with line department, or in sensitizing people about the impracticalities, economic or ecological, would constitute the progress against development baselines. However, some of the issues are resolvable or at least addressable. These are: mapping and disaster management plans and local capacity building for landslides; installation of participatory vigilance mechanisms at high altitudes during winter; and water access and other hydraulic mechanisms in villages that lack or have difficulty in accessing water for drinking and irrigation.

7.1.2. Baseline: Conflict Resolution

Conflict realities in the project landscape and in Uttarakhand state, along with the critical literature and policy opinion they have generated, have been privileged in the previous chapter (Social Lessons) as the predominant circumstance that contains or forms social lessons with direct ecological implications. In this chapter, such realities also constitute a social baseline in that project progress and success, however defined, hinges on their resolution. The origins and character of conflicts over access to and control over Van Panchayats have been spelt out in the previous chapter. In this chapter a precise delineation of conflict circumstances and the possible ways of resolving them within the project will be provided.

The production landscape is also the conflict landscape because of attempts to regulate and manage production. Van Panchayats have been managed fundamentally for production. The material implications of altering the terms of management and thus resource access are manifest. Van Panchayats were created as a result of resistance over attempts to statise. And besides material expediency, the reasons of resistance were also customary. Despite the fact that management systems and capacities have eroded over the years partly because of persistent state attempts and partly because of economic exigencies, the fact that numbers have increased, and the fact that spatial asymmetries persist with regard to resource base sizes, Van Panchayats remain a strong and viable institutional option to manage production sustainably. In a region where continuities between agriculture and forests are crucial in terms of biomass and energy, attempts to dislodge such continuities through management plans and approval hierarchies are and will continue to be resisted. Consultations reveal that people welcome the BCRLIP *per se*, i.e., as a source of funds that would flow into a *development landscape* (the production landscape). They also mention requirements that constitute conservation elements in managing their resource base, viz. fencing of the Van Panchayat, or portions thereof, funds to pay watchers, sapling requirements, etc. But what most villages unanimously averred is the fact that they will not participate in a project that involves the Forest Department. However, a caveat is in order. Not all villages consulted were against participating in a project involving the Forest Department. Certain villages at higher altitudes such as *Tola*, *Nigalpani* and *Jowdas* stated willingness to participate in the BCRLIP along with the Forest Department. It also needs to be noted that some of these villages agreed to Forest Department involvement despite having stated their grievances against it. For instance, villagers from *Tola*, including its Sarpanch, were unhappy over the new Van Panchayat rules. People from *Nigalpani*, a village near *Dar*, which falls in the existing (notional) Askot Sanctuary boundary, were willing to collaborate with the Forest Department for the project. It is notable that this village does not have its own Van Panchayat and perhaps is not perturbed by the new rules. People from villages such as *Jowdas*, whose Van Panchayats were subject to degradation, were willing to collaborate with either NGOs or the Forest Department.

What emerges is a situation where villages perceive loss of autonomy in terms of making and implementing rules, due to new rules by the state, and do not want to be part of BCRLIP if the project is to be implemented in participation with the

Forest Department. In consultations, officials admit to the prevalence of “resentment”, “anti-feeling”, “misgiving”, etc. They hope to reverse these sentiments through the project, which they hope will gain people’s “participation” and “cooperation” in conservation. . Livelihood interventions are seen as the medium towards this end. What thus emerges is an official conception of the project as also being a conflict-resolution exercise. To sum up, what the BCRLIP terms the “production landscape” is also the landscape of conflict (over production access and control), besides being the “landscape of development aspirations”. The indices of progress against the baseline, i.e., access and control conflicts, that the project can refer to here are the resolution of such conflict (e.g., cynicism and apathy) ideally through establishing or retrieving organizational and conservation capacities through facilitation of partnerships, as desired by the people, with scientific bodies and organizations with similar scientific capacities. This can serve as a confidence-gaining exercise in such situations of alienation. More contextually, conflict can be addressed through an exploration of legal spaces. Here further policy analysis emerges as a baseline study/requirement. A sample of *soft* legal and policy regimes that need to be referred to are the National Forest Policy (NFP), 1988 that has, for instance, “meeting the requirements of fuel wood, fodder, minor forest produce and small timber of the rural and tribal populations” as one of its “Basic Objectives”; and the Govt. of India Guidelines for Participatory Forest Management (1990)⁴, which was the precursor to JFM in India. Referring to the NFP, these guidelines say that “people’s involvement in the development and protection of forests” and “the treatment of the requirements of tribals and other villagers living in and near forests, are to be treated as first charge on forest produce”.

The Guidelines for Strengthening of Joint Forest Management (JFM) Programme refer to the earlier mentioned guidelines⁵.

With regard to legislation that explicitly seeks to provide individual and collective rights over land and resource access to tribals and traditional forest dwelling and dependent communities, the recent “Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006” needs to be assessed especially

⁴ Vide No. 6-21/89-P.P, Govt. of India, Ministry of Environment and Forests.

⁵ Circular No. 22-8/2000-JFM (FPD), Forest Protection Division, Ministry of Environment and Forests, Govt. of India, dt 21-2-2000. These guidelines state that the JFM programme in the country is structured on the broad framework provided by the guidelines (on Participatory Forest Management) issued by the Ministry.

for its consonance with the constitutional provisions for Panchayati governance and for its far reaching implications.

7.1.3. Baseline: Gender Roles

During consultations two factors relating to gender roles were observed. One was that women were predominantly and visibly involved in production in the landscape. Most domestic chores were their charge. Secondly, besides their lesser visibility as productive actors, men were observed as being more involved in leisure and unproductive activity.

As consultations were held during the onset of winter, it was common to encounter women outdoors, either cutting grass, transporting them on back or head, or stacking them in villages. This was a daily routine involving more than one cycle of collecting, gathering and stacking. With regard to domestic roles, women such as those consulted in *Kultam* say that most of the household work is done by them. This includes cooking, cleaning, collecting firewood and grass, and looking after children and livestock. In case of women from communities such as the *Ban Rajis* that remain at the margins, the burden of economic and domestic roles is more intense. Consultations in Kim Kholā revealed that women go to forests to collect firewood and grass and sell them in bazaars. The trips to bazaars such as those in *Jauljibi* were numerous. Men do not go to bazaars. For such strenuous efforts the worth of firewood collected everyday is a paltry Rs 30 to 40. In the landscape, along with fodder collection, women were noticed fetching fuel wood, fetching water over distances, and grazing, feeding and herding cattle. An interesting issue mentioned during consultations in a few villages including *Kim Kholā* was that older women (including the middle aged ones) are illiterate. This points to a felt incapacity and thus need.

The project could take this gender base line into account, i.e., disproportionate gender performance in terms of physical labour and responsibilities and decision-making capacities both in domestic and resource production. While through studies and experiments the workload involved in fodder or fuel wood collection can be moderated along sustainable parameters, decision-making spaces need scrutiny. Women are predominantly engaged in productive activity in village forests and have good sense of the physical status of such commons. More institutional space for decision making and management of commons needs to be devolved.

7.2. Stakeholder Analysis

7.2.1. Community Identities

This section delineates the demographic, social, cultural and political characteristics of people that were discernible during consultations. It shall concentrate upon the more vulnerable of the communities. The broad cultural contours of the landscape have been traced in the consortium's draft report of September 2006. Of 70,460 people residing in 121 villages, 16.91 % belong to the category of Scheduled Castes and 15.7 % to the Scheduled Tribe category. The rest of the population is composed of those belonging to the *Jimdaar* or *Thakur* caste and *Pandits*. People from the *Ban Raji* community have been notified as belonging to the Primitive Tribal category⁶. There are 318 of them residing in four villages in the landscape. Besides the *Ban Rajis*, there are four tribal groups such as the *Rang* (made of varied lineages), the *Bhotia* or *Shauka* and the *Barpattia*. The *Thakur* caste is mainly agricultural. The *Rang*, whose varied kinship groups largely inhabit the Darma, Byans and Chaudans valleys, are pastoralists and traders. The *Bhutia*, who inhabit the Gori basin, are also traders and pastoralists. The Scheduled Castes or *Shilpkars* usually provide skilled and agricultural labour. Communities belonging to the Scheduled Tribe are also commonly referred to as the *Bhutia*. The following are a few social and cultural traits observed and learnt about during the consultations with people. For convenience, they will be referred to with the common appellation of the *Bhutia*. The other communities are the *Thakur* and the *Ban Raji*.

7.2.2. Cultural Identities: Community Relations

All except one consultation revealed tolerance among Scheduled Tribes and Castes towards each other generally, or more specifically towards each other's presence, within a village. Consultations with villagers from *Nigalpani* revealed the presence of Scheduled Tribes and Castes in their village. No communal issues were mentioned. People from *Ralam* said there were around 70 families belonging to both Scheduled Tribes and Castes. But there were no explicit hierarchies between them. In *Kultam* villagers mentioned that all communities had equal access to the village forests. The *Thakurs* from *Byas* valley mentioned that they do not get along with the *Bhotias*. The *Himal Prakruthi* claims in a similar vein that the *Bhutia* have become a

⁶ This "derogatory" classification, however, has been subject to special attention in the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2007. Here there is a special provision for *rights over community tenures of habitat*, which could be used to the advantage of this powerless constituency.

political and economic elite due to their Scheduled Tribe status. In the context of the landscape they warn against any naïve cultural perception in the context of dealing with Scheduled Tribes. The *Bhutias* were savvy traders and managed to get themselves notified as Scheduled Tribes. People's surnames are usually based on their villages. For instance, a person from Tola had *Tolia* as his last name. Those from Sipu similarly had *Sipal* as their last name. Anthropologically, this adopting of village names could be an effect of the presence of manifold kinships whereby village names indicated descent (lineage). This was a premise referred to by officials in their consultations. The premise was political in that people's attachment to, and pride over, their native lands was being alluded to.

7.2.3. Demographic Trends in Migration

Demographically, certain spatial patterns were discernable. People living in sub-alpine and alpine altitudes migrate to lower elevations during winter. For instance, some families from *Tola* in *Johar* Valley come down to Sharmauli during winter and sell woollens to tourists. But there are changes. People from *Tola* mentioned that fewer families migrate currently. Only the poorest that have no other source of income or land elsewhere migrate now. Such trends are corroborated by consultations with people from Nigalpani near Darma, who say that earlier a hundred families migrated whereas now only thirty families migrate. Smaller villages migrate in whole. People from Duktu say that there are about 30 families in the village. They live in their village for a period of four to five months during summer and migrate to lower altitudes during winter. Thakurs from a village in Byans valley claim that they migrate with their livestock to lower altitudes during the winter in search of fodder for the cattle. Two members of each family migrate with the livestock. Women do not migrate these days and stay in the village. Men are in the village only 2 to 3 months of the year. Some trends in employment-related migration emerged during the consultations. In Ralam a few youth emigrated to towns and cities but a good number returned. In Kultam a few people have migrated in search of employment. They either stayed back or returned unable to find jobs.

7.2.4. Political Identities: (Power Relations between Van Panchayats and the Forest Department)

Discontent among people over the new rules was obvious during consultations. This was especially so in the context of people having managed village forests autonomously and the fact that the Forest Department has historically been

apathetic towards and neglected Van Panchayats. People from Tola, who claim to possess the largest forest in the valley, are not happy about the new Van Panchayat rules as they have to show their accounts to the Forest Department. They also mention that occasionally Snow Leopards are poisoned, as retaliatory or preemptive measures, by nomadic shepherds. In Kultam the new Van Panchayat rules are creating problems. These forests have been protected by people without any contribution from the Forest Department. There is resentment over the inability to procure compensations over crop raids and livestock kills by leopard, bear, porcupine, etc. Despite management systems involving grazing regulation, timber quota, felling penalties, etc., the Forest Department has intervened and has caused a sense of insecurity among the villagers. They feel the Sarpanch has lost control and authority. People of Ucheti mention that the Forest Department has not helped much. There is a general apprehension that if the department gains control over Van Panchayats, the lands might slowly acquire the status of a civil forest.

Officials corroborate the presence of discontent among people. The Pithoragarh DFO says that there is "resentment" among people. This was more evident in villages lying in and around the Askot sanctuary. For instance, during an earlier BCRLIP consultation people gheroad the officials including the Chief Wildlife Warden. He sees the need to "bridge gaps" with them and increase attachment. Similarly, in the context of Askot, its SDO says there is an "anti-feeling". The Conservator attributes such sentiments to "misgivings" about the 2005 Rules. Within the rules the micro plans are the main source of misgivings. And people "rue" the fact that such micro plans are to be approved by the Forest Department.

In assessing the conflict scenario, the Himil Prakruthi says that many villages wanted to have nothing to do with the BCRLIP as it was a Forest Department project and included the Askot area. Pointing to a history of resistance to forest rules, the Prakruthi claims that the need to make annual and management plans along with the need to seek constant permissions for collecting produce has strained people's attitudes towards the Forest Department.

7.2.5. Vulnerable Communities

An interesting circumstance prevails in the landscape with regard to vulnerability. Despite marginal agricultural production, people's subsistence levels appeared strong on account of good agricultural diversity prevailing though gradually curtailed forest

access for energy and biomass, and supplementary incomes from livestock rearing. In most villages, the collection of medicinal plants for trade, including the lucrative *cordyceps*, forms another substantial source of income. Such trade has in most villages replaced livestock rearing as the main source of income and in villages such as Ralam led to an increase in livestock. Some approximate estimates were gained during consultations. In Tola a family collected an average of 700 grams of *Cordyceps*. In Kultam a family earned anywhere from Rs 10,000 to Rs 12,000 through collecting and trading in *Cordyceps*. This situation characterised by people finding comfort at subsistence levels, which they supplement through traditional income from livestock rearing and emergent markets such as the medicinal plant trade, is officially interpreted with statements such as "people are not needy" and that "they are in between rich and poor". Accessibility, according to the Conservator, remains the main issue.

Vulnerability can thus be traced along two contours. One is at the subsistence level. This entails dependence on marginal and fragmented lands for basic diet and nutrition and on livestock grazing for the main source income. External circumstances such as market penetration or even possible project interventions that have repercussions for livestock rearing or forest-field interfaces can disrupt subsistence. The other vulnerable identity of people arises from the fact that people lack basic infrastructure such as roads that facilitate fulfilment of other basic needs such as health, education, administration and market. This curtails people's everyday requirements and emergency requirements such as reaching produce to the market or seeking medical help. Vulnerability also emerges through natural occurrences such as landslides. People from villages such as *Kultam*, *Vasanth Kot* and *Duktu* expressed worries about landslides.

People are thus susceptible to shocks to their subsistence and also remain susceptible to everyday experiences of physical inaccessibility to essential services. However, there are some communities that are more vulnerable because of an absence of basic subsistence endowments such as land or livestock. The *Ban Rajis* are an instance of such an incapacitated community. They have been privileged within the project as a social component that will get targeted assistance. Consultations with officials and NGOs confirmed the same.

Consultations with the *Banrajis* of *Kim Khol*a near *Jauljibi* revealed that they used to barter firewood for essentials. No one possessed lands. A few among the 36 families owned goats and cattle. The main source of income continues to be selling

firewood and grass at the bazaar. As elsewhere in the landscape, women are solely involved in collection of grass and fuelwood and their sale. Villagers still foraged the forest for tubers, etc. Unemployment was very high. Children usually do not pursue school after class 5 in an Anganwadi school as it is unaffordable. People claim that they do not get enough provisions from the fair price shop. There are no proximate hospital facilities. People also stated an inability to get government jobs. They do not enquire about unfair practices in various government services, as they cannot afford traveling far distances to do so.

NGOs opine that the *Ban Rajis* truly deserve the designation of Tribals. But the community remains dispirited with high incidence of alcoholism. Four *Ban Raji* villages exist within the Askot sanctuary (even in post realignment). The existing vulnerability of the villages will intensify after the proposed realignment. But officials claim that these villages will be given more attention during the project.

7.2.6. Non-Governmental Organizations (NGOs)

Many NGOs work in the landscape on livelihood issues. A few work on conservation issues too. The name of one NGO that constantly emerged during consultations with people and officials was the Himat Prkruthi. Earlier, consultations were also held with the Prkruthi. While villages were familiar with the Prkruthi, most of them having personally been the beneficiaries of and collaborators with the Prkruthi's activities, officials were also in the know of the same and adopted an approving tone in the context of project logistics including planning and implementation. Consultations with the Prkruthi disclosed that they have been part of the project as "a conscious stakeholder who had an inside perspective". They have worked for nearly 15 years in the landscape, especially with 88 villages in the Gori basin. The Prkruthi possessed good insights on the development aspirations of the people, the institutional aspects of Van Panchayats including organization and management, the conflict milieu circumscribing Van Panchayats, and the economics and ecological impacts of the medicinal plant trade. Environmentally, the Prkruthi possesses capacities in the ecological assessment of rivers and fish, herb studies (species listing), birds (listing and correlating of birds (e.g. pheasants) to habitats), and grazing ecologies.

7.2.7. The Uttarkhand Forest Department

By the very nature of the project the Forest Department is intrinsically involved in designing and implementation. Within the landscape, the department exercises absolute control over the Askot Sanctuary. As a result of incorrect border

demarcation, a vast expanse of nearly 2900 sq. km has been included as sanctuary area. The department now proposes to realign the boundary to its original area of 600 sq. km. Some legal complications exist after the Supreme Court's interim orders in writ petition 202/95, where it banned conversion of forests to non-forestry purposes. With the realignment plans falling under the order's jurisdiction, the Supreme Court has been approached. The Court has subsequently referred the matter back to the state government. Around 15 villages along with some Van Panchayats will remain in and around the realigned boundary. The department, inasmuch as the sanctuary is concerned, hopes to initiate livelihood activities, especially among the 4 Ban Raji villages through the project.

In the production landscape, the Forest Department possesses contentious stakes. However, going by strict legal interpretations, the Department seems to hold more jurisdictional stakes than is popularly contested. The Department claims that the definition of forests (Van Panchayat) has changed after the Supreme Court's orders in W.P. 202/95. The Court had stated that the word "forest" be understood according to the dictionary meaning and include any area recorded as forest in government records irrespective of the ownership. Along with the Van Panchayat rules of 2001 and 2005, the Department appears to have clamped its authority over Van Panchayats. Through the project the Department hopes to assuage the consequent antagonism generated among communities,

7.3. Participation Framework

Stakeholder consultations revealed willingness to be part of the project although the terms of participation emerged complicated. Most villages were positive towards the project but were preferential about stakeholders with whom they would collaborate. It was mentioned in various preceding sections that besides three villages, the remaining seven who were consulted expressed reservation or plain refusal to partner with the Forest Department in implementing and managing the project. It was also mentioned that in consultations the Forest Department and the Prakruthi mentioned resentment, discontent, etc. among the people about the department's Van Panchayat rules. This makes people suspicious about the project. However, they feel that the management provisions including the micro plans could be financially and logistically supported by the project. People are generally willing to work to implement potential and favourable interventions of the project along with organizations such as the Prakruthi. The Prakruthi in turn has stated its

willingness to be part of monitoring of social and environmental activities of the project. It suggests the involvement of the Van Panchayats in monitoring and implementing. Gram, Shetra, and Zilla Parishads can also be involved. There is also the VP *sangatans*. Officials while recommending the involvement of Van Panchayats also refer to the lack of manpower and therefore capacities available with the Forest Department.

Table 7.1: Analysis of stakeholder identities and participation incentives

Stakeholder	Identity and Landscape Stakes	Participation Framework (Willingness/Incentive)
Forest Department	Managerial jurisdiction over Askot Sanctuary through the Indian Wildlife Protection Act; attempting to wrest control over Van Panchayats through new state rules (2001/2005), and Civil/Soyam lands through Supreme Court interlocutory orders (WP 202/95); and as State/local bureaucratic wing of the nodal ministry (MoEF), the chief local implementing actor of BCRLIP.	Incapacitated, in terms of personnel, to manage Reserve Forests and the Askot Sanctuary, historical disengagement (and thus ambivalent control over) with Van Panchayats despite historical and current attempts to wrest control. Similar ambivalence over civil/Soyam lands. Department states incapacity to monitor or implement livelihood and environmental schemes in landscape. Requires percentage of project funds to facilitate own official conservation mandate.
NGO	15 year old experience in working with villages, namely in the Gori basin, over livelihood and conservation issues. Good insights into popular aspirations, organizational issues faced by Van Panchayats, state-Van Panchayat conflicts, and economics of medicinal plant trade, etc. Possesses conservation capacities in ecological assessment of rivers and fish, herb studies (species listing), birds (listing and correlating of birds), and grazing ecologies. Enjoys popular goodwill.	Willing to monitor social and ecological studies and schemes in the landscape. Stated unwillingness to be part of implementation.
Community (demographic,	Dominated numerically by Caste Hindus. Four-fold	People generally welcome the BCRLIP for its potential

<p>cultural and political)</p>	<p>Scheduled Tribe populace; Ban Rajis, classified “primitive”, being most poor and powerless. Seasonal migration continues as cultural and economic strategy, albeit in low proportions. Employment oriented migration to plains nascent due to scant job opportunities, especially in state government offices. Bhutias, through ST status, are the economic and political elite. Some Scheduled Castes express distrust of Bhutias. Most villages in conflict with the Forest Department over access and control of Van Panchayat. Also inter-village conflicts.</p>	<p>development scope. But besides a few villages, the majority state unwillingness to be part of a project involving the Forest Department. Explicitly state refusal to participate in the project if the department is involved.</p>
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8. Identification of Site-Related Key Social and Environmental Issues.

8.1. *Environmental Issues*

As mentioned, environmental /ecological studies are very limited. Except for inventorying plants, birds and mammals and to some extent fishes, there has been no attempt to do any ecological research nor any population level studies of taxa. Though considered as a low profile area, the landscape harbours a high diversity of orchid and other epiphytes, as could be observed along the *Gori* River during consultations. This is especially true in the subtropical altitudes where one could observe a high number of plant species. Bird diversity was also high in these forests. The temperate and alpine forests harbour unique plants and wildlife and hold the flagship species such as the musk deer.

From a landscape point of view there are several key issues that need to be examined in detail. The forests in the landscape are naturally fragmented but the intervening landscapes need to be free from encroachments or intensive cultivation. Fragmentation could affect movement patterns of species that migrate between the alpine forests and subtropical forests in winter and summer. Currently this connectivity exists and should be maintained especially in the current scenario of climate change in the mountainous regions—allowing species to move across the altitude and adapt to abrupt changes in the weather. With a high percentage of land under Reserve Forests, Van Panchyats and with civil and private lands, conservation can happen only if there a collective mandate among all of these stakeholders to protect the forests and grazing grounds and maintain connectivity.

The quality of forests and grasslands in Van Panchyat lands is highly variable. While they appear well maintained in villages such as *Kultam*, they are highly degraded in the neighbouring *Uchheiti* village. One needs to take care that Van Panchyat forests and grasslands retain the diversity of trees in them even though only a portion of them will be directly useful for the people. Some villages are keen to protect their Van Panchayats and are ready to include species of trees that are not directly valuable to them. Such social dispositions need to be encouraged within the BCRLIP and beyond.

8.1.1. Human-Animal Conflict

Such conflicts do not appear as a major issue in the landscape. The Forest Department mentioned wildboar raiding crops as one conflict, which is restricted to the lower reaches of the landscape. This is because of increase in wild boar

population in those regions. In high altitude areas there is loss of livestock to bear and leopard but people more often have accepted this as a natural way of life in such areas. People from *Tola*, in the *Johar* valley, even mentioned that they do not differentiate, in the strict sense that the team was following, between livestock and ungulates that graze in their alpine grasslands. Although in some places the population of snow leopard has increased (as in *Sipu* in *Darma* valley and in other places such as *Johar* valley and *Ralam*), the villagers consider it as a rare sightings these days. The compensation from the Forest Department for loss of livestock is a long drawn expensive process and and this has lead to no reporting of such losses at all.

8.1.2. Invasive Species

Though *eupatorium* is a major invasive species in the landscape, kala gass is a very prominent invasive species everywhere. This is currently confined to high human density areas and around major disturbance regions such as roads, dams, etc. However, many high altitude villagers from Rallam and Kuti report seeing this shrub in their villages and they consider this invasion to be due to increase in tourism in the region. Most lower altitude villages are completely invaded by these species and according to people of Basankot, they are suppressing native vegetation in the undergrowth. Not much attention is given to this species; though several measures such as uprooting, burning and clearing have been implemented, the species always comes back. One could see this species all along the roads in the landscape and in much of the sheltered and moist valleys they showed very luxuriant growth.

8.1.3. Poaching

Poaching occurs mostly in the high altitude regions, which are also sparsely populated. The major species hunted are bear for bile and musk deer for musk. As mentioned earlier, *Cordyceps sinensis* and other medicinal plants are being harvested in increasing numbers. Much of the market for animal product is across the border in China and Tibet. Most of the poachers are non-locals who come from Nepal during the winter, stay in vacant high altitude villages and poach. In the process they also consume the stored grains and use the wooden parts of the houses for fire, thereby destroying houses as well.

8.1.4. Grazing

There is a huge number of livestock in the landscape that move between the high altitude *Bugyal* grasslands and the *Terai* regions. Though some villagers say their

livestock population has come down because of fewer families migrating, the collective number of livestock remains high as people usually allow their sheep for grazing by few people who take them to better pastures. Grazing can have significant effect on grass cover and on the wild herbivores dependent on the same fodder. There is no study detailing the effect of such grazing on wild ungulates in the landscape, and this needs to be done.

8.1.5. Large Dams

There is the possibility of 2 to 3 dams being constructed across the rivers Gori and Dauliganga. There is considerable survey work going on for these projects. One survey is being carried out by Reliance Energy, a private agency, and another by the NHEPC. The environment impact assessment for these projects has not been done. These dams are going to be on the migration routes of people and in higher altitudes. These dams might not submerge large expanse of forests or grasslands because of the steep valleys but will alter the flow in the river and might influence the fish migration in the Himalayan rivers. Along with dams, the associated construction activities such as blasting, tunneling, boring, and road laying will significantly affect the landscape. The landscape is susceptible to landslides as seen in *Kultam*, where part of the land under the village slipped and fell in the Gori river, and construction activities could aggravate these. The site around the NHEPC dam across Dauliganga is a clear example of how fragile the landscape is. Huge landslides dot the landscape around the dam and along the road that leads to the dam. These are also areas with high density of invasive species and poor local diversity. Dams will allow more people who have no stake in the landscape to move in, which could culturally and socially alienate local people. There would be more poaching and felling, facilitated by road networks.

8.2. Social Issues

The wider social contours of the region have been presented in Sections 7 and 8, viz. Social Lessons and Base Lines. To recapitulate these are Development Aspirations, Conflict and Gender Roles. In the following section, a summary of each of these issues shall be presented along with a categorization of concrete problems mentioned by people during consultations. Official conceptions of these issues shall also be incorporated.

8.2.1. Development Aspirations

As part of the recently created state of Uttarakhand, the people of the landscape have high aspirations. People are becoming increasingly aware of their development rights as they experience enhanced development activity such as hydel power projects, which are being designed, assessed or implemented in the many river basins of the region. Trade such as the one in *Cordyceps* has made markets lucrative for them. While the latter is indicative of possibilities, the hydel projects aimed at domestic and industrial consumption in the plains have created rightful aspirations among people, who have till now been incapacitated on account of a combination of landscape impediments and regional underdevelopment. The development needs as stated variedly by people are water for irrigation and drinking, roads, landslide and disaster management, pest management, winter grass for cattle, capacities and machinery for woollen production, schools, electricity, and hospital and medical facilities. Officials generalize these needs under the broad issue of “inaccessibility”, where both rural and administrative actors are physically unable or constrained in accessing each other especially to address the former’s needs.

8.2.2. Conflict

The production landscape is also the landscape of conflicts that have persisted since colonial times over access to and control over village resource production commons, the Van Panchayats. The project seeks to enhance its efforts across what it terms the production landscape. The unique feature within the Askot landscape is that Van Panchayats are village forests that cater to people’s production needs, viz. energy and biomass. There are two conflict types, one between the Forest Department and Van Panchayats and the other between villages over Van Panchayats. Conflicts with the Forest Department relate to Van Panchayat Rules of 2001 and 2005, specifically the requirements to implement management provisions and get them approved. The Forest Department claims that while rights remain, control, especially within a legal regimen, is determined by the Supreme Court’s Interlocutory Orders in WP 202/95. The “definitional” clause requires the treatment of Van Panchayats as Reserved Forests and thus they are subject to scientific management. The Van Panchayat Rules, perhaps intently or just complementarily, make provisions for such management through micro plans.

Conflicts between villages emerge from two related factors. One is the collapse of organizational rules over boundary maintenance. Thus any two villages would be in

conflict over grazing, biomass collection, etc. This is an effect of spatial asymmetries in Van Panchayat sizes. Some villages would have disproportionately large forest reserves and some may have disproportionately small reserves. Not to mention villages that do not have their own reserves and have usufruct understandings with other villages. Another factor for the organizational malfunction among some Van Panchayats is their creation in the recent past ostensibly to access JFM funds. Various aspects of such conflicts that were communicated during consultations have been spelt out in previous Sections 7 and 8. To recapitulate these are:

- (a) Van Panchayats are not functioning efficiently.
- (b) People are not happy with the Van Panchayat rules as they have to show accounts to the Forest Department (an anti-'accountability' factor, which in fact emerges more from a perceived loss of autonomy than any resistance to the principle *per se*).
- (c) New rules are creating problems as forests have traditionally been managed by people without any contribution from the Forest Department. For instance, *chaukidars* are appointed to monitor forests, all accounts are audited, etc.
- (d) Existing conflicts between villages over Van Panchayats have not been resolved.
- (e) If Van Panchayats are controlled by the Forest Department, the forests may slowly assume the status of civil forests.

The content of conflicts can be located along a popular sentimental continuum ranging across indifference, cynicism, apprehension and suspicion. More overtly, responses to both the department's long-term policies and the BCRLIP could range from plain non-cooperation to a host of direct and collective action repertoires that are retrievable from the landscape's histories.

8.2.3. Gender Roles

Besides their domestic roles as housekeepers and mothers and agricultural roles in sowing, tending, harvesting, and livestock rearing, women are also actors intrinsically involved in productive activities in Van Panchayats. Winter, as mentioned, was a good opportunity to observe gender roles. During consultations women were observed as being most involved in the cutting, transporting and

stacking of grass for winter fodder. During consultations in villages, it was difficult to mobilize women who privileged domestic chores such as cooking and cleaning over discussing such issues with an outside team.

In contrast men were noticed to indulge in leisure activity such as sporadic gathering, playing cards, etc. But alcoholism seemed rampant. This was noticed in normal non-event circumstances and during social events such as marriages and funerals. During consultations the team was privy to a marriage in the villages located around Dharuchula. Offering local brew was a hospitality ritual.

Gender roles are disproportionate in terms of production and domestic activities and in terms of decision-making. The project should consider addressing everyday domestic and productive drudgery by designing sustainable alternatives. Also women's participation can be enhanced in project implementation and monitoring by building respective capacities.

8.2.4. Social Inequality and Justice

Even as inequalities can be attributed to various socio-economic and political relations across the landscape and justice can be advocated as a measure to redress such inequalities, such political options are being used here exclusively to address the circumstances of the *Ban Rajis*. As the most poor and powerless community in the production landscape, the community holds the least productive stakes. Bereft of endowments such as land or livestock, the *Ban Rajis* subsist in selling fuelwood and grass. The *Ban Raji* villages within the Askot Sanctuary would face more intense livelihood exigencies given the operation of strict wildlife laws. As the least endowed and powerless community, their vulnerabilities emerge most prominent in the landscape, which as already mentioned is characterized by underdevelopment and physical impediments.

9. Social and Environmental Impact Evaluation and Implications for Project Design

To recapitulate, three of the project's more pertinent aims are: I. Strengthening biodiversity conservation management in Protected Areas and other eco-sensitive Areas; II. Mainstreaming biodiversity conservation practices in production areas; and III. Improving learning and replication of participatory conservation approaches. Thus an impact assessment in terms of implications for project design needs to be done keeping in mind the overall objectives in general and the specific interventions that are officially conceived within the scope of the objectives.

9.1. Environmental Impact Evaluation

Environmentally, the major interventions with potential impacts can be broadly categorized under the four heads of horticultural activities, medicinal plant cultivation, ecotourism, and improving veterinary services. All these activities in some way or the other are linked to developmental programmes such as building roads into the hinter land. Though people would in all cases like such development, they need to be alerted to the far more potential negative effects of such activities on their life and lifestyle. Such activities will also facilitate invasion by exotic species that could threaten native flora and fauna. For instance, *Sinarundinaria anceps*, which is a native forage for the endangered fauna of the area, could be lost if *eupatorium* invades into the higher reaches. The geologically fragile landscape is not suitable for extensive road network. The frequent landslides due to rain or snow could make maintenance of this network prohibitively expensive. It is better if one provides for a better and broader network of paths to make villages accessible to outside markets or big villages; roads can be laid after due consideration of ecological factors. Provisioning of better mules and horses would be more environmentally friendly.

9.2. Social Impact Evaluation

With regard to social issues, it is instructive to delineate the interventions proposed by the Forest Department and the logic or reasoning behind the proposed interventions. The official conception of the social situation (livelihood needs) of the landscape can be deduced from the views of the Conservator, DFO and the Sanctuary SDO. They claim that people are currently hostile. There is opposition against the Forest Department (an 'anti-feeling') and people have developed

scruples (“misgivings”) over its schemes and functioning. Within the landscape these sentiments have developed on account of resource management guidelines and accountability hierarchies mandated by the Van Panchayat Rules, and more direct access restrictions imposed through the Wild Life Act on villages that were notified along with the Askot Sanctuary. There is thus the need to increase attachment with people and gain their participation. Better cooperation would be the “end result”. Realities within the landscape have thus shaped the BCRLIP as an effort to resolve conflicts.⁷ The specific means or interventions have been conceived to try and address what has also been officially defined as an “inaccessibility” problem due to physical impediments in the landscape, i.e., infrastructure to access basic needs, administrative facilities and markets, and also to address the very creation of some needs and facilities. The landscape, in addition to the physical impediments it poses, also offers scope for eco-tourism, including outdoor recreation and adventure.

There is official cognizance of social circumstances, namely, development needs, aspirations, and conflict. However, despite such sensitivity, if the proposed interventions are not implemented, or implemented unilaterally, or even implemented in other ways that alienate people ostensibly in the name of conservation and control, then the BCRLIP is bound to fail. For instance, if the more basic of development facilities such as roads and hospitals are not provided in regions where the needs are greater and where such provisions are environmentally feasible, then there is bound to be alienation and resistance to participative conservation. Development would remain a “mainstream” deficiency and biodiversity would not be “mainstreamed”. Conflicts over management of Van Panchayats need to be addressed very sensitively through the project. Given people’s reluctance to either participate in a Forest Department project or reluctance to cooperate with the department *per se* in implementing the project, it would be detrimental to attempt to implement provisions of the Van Panchayat rules through the BCRLIP. The gender situation, characterised by disproportionate productive and domestic roles, nevertheless indicates women’s dependence on and knowledge of the landscape, especially with regard to the village forest reserves. Such women experience landscape impediments and resource restrictions as much as or more than men. So any disinterest towards development needs on the project’s

⁷ In retrospect the social impacts seem already to have been created due to Van Panchayat rules, and interventions proposed under BCRLIP could be designed and implemented sensitively and participatively to assuage such impacts, taking cognizance of the overall social circumstances.

behalf or its contribution towards exclusive conservation schemes, will affect women more intensively.

10. Analysis of Mitigation of Adverse Impacts and Enhancement of Positive Impacts

The project proposes to increase the stake in protecting the environment on the part of the community in exchange for provision of livelihood opportunities. The interventions are mainly to provide access to basic facilities and increase per capita income in the households in the landscape without much impact on the environment. One aspect the project needs to guard against is alienation of people from the landscape by making them completely dependent on a market-based economy. If this happens then the stake in conserving the landscape might decrease. One needs to thus build a conducive partnership between the Forest Department and the villagers. A mechanism needs to be formulated based on existing rules that clearly demarcate the role of each institution in attaining the overall goal.

In previous sections the social circumstances pertaining to development, conflict, and gender have been elaborated. Here adverse and positive impacts of potential and proposed activities on people will be examined more closely, in the context of these overall social circumstances. Proposed and potential activities are those mentioned by officials and people during consultations.

10.1. Activities

In terms of development facilities, people mention water for irrigation and drinking, roads, landslide and disaster management, pest management, schools, employment, electricity, and hospital and medical facilities. The BCRLIP was welcome if it provided assistance for development infrastructure. In the context of Van Panchayats, requirements pertain to access and control of resources and their restoration and regeneration. Conflicts persist with the Forest Department and in some cases conflicts emerge between villages over resource collection, grazing, etc. In such circumstances, management weakens and forests degrade. Here most villages solicit expertise in restoration and management from actors other than the Forest Department. A few villages also solicit partnership with the Department, but more in the context of development needs. People from high altitude villages also mentioned the need for vigilance mechanisms during winter to monitor poaching and foodstock theft.

Officials refer to a host of activities catering to basic infrastructure and services and employment. The development schemes envisaged are road network, husbandry of animals that can be stall-fed, and marketing of agricultural products for their organic value. Paramedical training is also envisaged. Ecotourism emerged as some kind of a consensual choice among officials. Three factors are responsible for the consensus. One as mentioned is the natural advantage provided by the mountainous landscape especially for outdoor activity. The second is the existence of ecotourism enterprise (home stays) among five Van Panchayats and thus an awareness and interest among other villages over the enterprise. The third is the presence of an ecotourism policy in Uttarakhand. Officials mention these factors in support of their promotion of ecotourism.

These interventions reflect both a positive understanding of and response to social circumstances of underdevelopment and conflict, and a potentially rational approach to gain people's participation. As stated in the previous paragraph, the consequences, good and detrimental, both depend on the manner and sincerity of implementation. The following are potential ways to enhance positive impacts, followed by ways to mitigate potentially adverse impacts.

10.2. *Enhancement of Positive Impacts*

The BCRLIP has potentially positive impacts as activities officially proposed seem to be based on sound social surmise. If implemented substantially, interventions will generate goodwill. Road networks can be installed connecting significant market and administrative centers to the most feasible (accessible) village; such networks can be accessed easily by people from other remote villages, usually high altitude. Where motorable roads are not feasible due to altitude and aspect, proper pathways (e.g. 5-7 feet wide) can be carved. This will help people generally in terms of safety and time and, more specifically, to access the nearest village that has motorable transport facilities. During consultations some villages at the warm to cool temperate altitudes along the *Ralam/Gori* valley mentioned difficulties in terms of time to reach lower transport junctions such as *Bhangapani* and *Madkot*. During consultations in this region and in villages near Dar such as *Baungling* in the *Darma* Basin, it was noticed that pathways were usually narrow. In the latter region it was reported to the team that livestock and occasionally humans fell off steep precipices.

With regard to medical facilities, there seems a need for more primary health centers and human resources to provide such services even during hostile winters. Where manpower is difficult to recruit, then paramedical training as suggested by officials is an option. With regard to schools, where pertinent, similar training can be imparted. In some villages people mentioned that school staff paid a percentage of their salaries to local people rather than appearing in person. Local capacities to anticipate landslides and manage aftermaths are a must. Studies are also required to assess the causes of landslides. Here it is pertinent to analyze the impacts of dam construction activities upon slopes.

The suggestion of promoting stall-fed animals needs the assent of people—especially long ranging pastoralists, whose spatial habits are temporally conditioned. The cultural consequences of “stalling” their traditional “ranging” habits need to be given utmost attention. Here gradual (and voluntary) experimentation is suggested. The creation of markets for organic produce is a good option but needs to be enhanced with proper “organic certification” and “geographic indication”, as such provisions would render the enterprise more sustainable in terms of practice and profit.

People also require assistance in managing Van Panchayats and regenerating them. This, as largely desired by people, can be beneficially done through partnership with the NGO sector. Social and ecological studies of Van Panchayats can be implemented, respective statuses assessed, and capacities built for management and participatory ecological monitoring. Within a prevailing atmosphere of alienation and cynicism, partnerships with scientific and social organizations with regard to management and monitoring of resources and conflicts will install goodwill among people in the production landscape and also facilitate the mainstreaming of biodiversity. There are successful efforts in participative ecological monitoring wherein scientific and ethno methodologies are combined to monitor NTFP produce and harvest. The legal framework for institutionalizing such partnerships including the Forest Department is present in the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2007. This Act can enhance potential positive impacts of building partnerships between organizations and Van Panchayats through the BCRLIP.

3There is both social and natural capital in the region to pursue ecotourism (i.e., good business potential and people's awareness about the enterprise). But enterprise and policy will work for people only if they are involved in formulation and they are made the main beneficiaries. An examination of Uttarakhand's tourism policies and the sense one got during consultations is that ecotourism is a centralized and celebrated scheme that will cater more to the tourists and generate revenue (largely to investors) than being of any sustainable benefit to people. Such interventions may not be able to solicit people's participation in biodiversity conservation. This conjecture will be examined in more detail in the following section on mitigation.

10.3. *Mitigation*

Social safeguards in terms of implementation have already been suggested for development activities in the previous sections. As mentioned, the identification of people's development needs and aspirations is empathetic. For instance with regard to "accessibility", the success of any related effort lies in properly mapping needs in terms of basic health, education and administration, while planning road networks. Any irrational provision of roads based exclusively on the official, class and caste profiles of the village and its residents will be unfair. A feasible transportation service in newly established networks needs to be assessed.

With regard to interventions in Van Panchayats, management and restoration-related activities must be done through new schemes designed under BCRLIP. Any attempt to restrict such efforts within the management plans provided for by the Van Panchayat Rules could prove detrimental. In villages that are willing to accept Forest Department cooperation within the BCRLIP, caution needs to be taken if micro plans, etc. under the management rules are pursued. The Department needs to use opportunities provided by people and BCRLIP to build true conservation partnerships rather than to pursue statist aspirations.

10.4. *Ecotourism - A landscape Intervention Means and Regional State Policy*

Ecotourism is a preferred ecodevelopment intervention. Such interventions find official support presently in the Askot landscape because of some wider policy contexts. This context was also referred to by the Conservator and requires a short

examination here⁸. The policy mentions that the state's "strength" is its "enormous resources for cultural, adventure, wildlife, nature and leisure tourism and a wide variety of entertainment and sporting activities which attract the modern tourist". Accordingly, the vision statement has the following goals: "To place Uttarakhand on the tourism map of the world as one of the leading tourist destinations, and to make Uttarakhand synonymous with tourism" and "To develop tourism as a major source of employment and income / revenue generation and as a pivot of the economic and social development in the State".

Tourism is expected to be the state's main development driver. According to the policy, efforts will also be made to bring out the manifold tourism attractions in "close cooperation" with the "private sector". This sector's participation will be "encouraged" in a "big way" to build infrastructure facility. Adventure (skiing, trekking, water sport, etc.) and wildlife tourism are seen as being separate from ecotourism. The latter's potential arises from its *biodiversity*, i.e., flora and fauna, and facilitates activities like jungle safaris, mountain trekking, angling, etc. Such activities promote environmental awareness.

Challenges to the state's "tourism as development" vision are outlined in the policy. To make the state an international tourism destination and to cater to the specific needs of tourists of all categories, "efficient, modern and state-of-the-art infrastructure need to be created". With regard to catering to a diverse tourist profile, facilities will be provided according to the requirements of such a profile. In this context the policy states that "'for instance, the nature lover needs facilities which are quite different from those of a pilgrim".

Related to this tourist-inclined approach but also posed as another separate challenge is tourism's conquest of seasonality. Here, in Uttarakhand, tourism, confined as it is to summer, needs to be made possible in winter also since in winter activities such as skiing, ice-skating and hockey, etc. can be promoted. Towards this end, the state government seeks to make the installation of "world class infrastructure facilities" its "highest priority". For this, besides other institutional resources, private sector investment will be mobilized. Resorts, restaurants, adventure sports, etc. provide attractive investment opportunities. Investment

⁸ Policy text accessed through <http://gov.ua.nic.in/uttaranchaltourism/index.html>

would be solicited from both Indian and foreign investors especially for the construction of star hotels, resorts, golf courses and winter sports projects.

As a critical summary of the tourism policy it can be said that the state of Uttarakhand hopes to hinge its development growth upon tourism. Given the region's natural endowments, such tourism is of the outdoors variety, viz. adventure and wilderness. Here it needs to be noted that a partitioning of the landscape between forest and meadow is made, instead of bringing all activity under 'eco-tourism', given the dynamic continuities between fields, forests, alpine meadows and glaciers, and the need to ensure the protection of such continuities. Though the policy mentions the installation of facilities based on the needs of various types of tourists, it is moneyed foreigners and Indians patrons whose needs will be the thrust area. Here it is pertinent to recall a statement from the policy: "the nature lover needs facilities which are quite different from those of a pilgrim". A cursory examination of nature lovers who patronize other high altitude resorts, especially their winter facilities, in first world countries would betray deep-ecology and elitist profiles. By disposition such a constituency would require spaces sanitized of local productive activity or even locals themselves. Thus in such a postulated scenario, Bhutias and Ban Rajis, for instance, would have no stakes. Even if stakes, say, in winter resorts, are provided, they could be of the subservient low return variant.

The establishment of outdoor and winter resorts requires huge investments and plausibly attracts private investments given the lure of profits. By its very nature such tourism will need to be high-end.

Despite token references to locals, such a policy based on a first world tourism model has all the potential to exclude people from lucrative revenue to the state treasury and profits to private investors. If BCRLIP involves more of micro planning or feasibility studies as part of this grandiose state plan to make Uttarakhand an international high altitude and winter destination,⁹ then people will neither benefit nor will they participate in conservation. As most of the landscape is constituted by Van Panchayats, people need to be consulted and the most culturally sensitive ecotourism model needs to be evolved. There are as mentioned a few Van

⁹The concept of Special Tourism Zone (STZ) has emerged in policy circles and concomitantly its criticism that it could be exclusive and repressive in its installation and operation has also emerged. Criticisms compare STZs with Special Economic Zones (SEZ).

Panchayats in the landscape who are already providing home stay facilities. In some villages families take turns in hosting guests. In other villages common spaces such as schools, etc. provide stay facilities. Income goes to a common pool or, in case of home stays, is shared with families who are part of the enterprise. Such community models need to be examined and privileged over big private options.

Ecotourism initiatives as part of the BCRLIP need to be sensitive to international and national policies, which can serve as normative safeguards. The Quebec declaration (2002) requires that “national, regional and local eco-tourism policies and development strategies are consistent with the overall objectives of sustainable development”, and they do so through a “*wide consultation process with those who are likely to become involved in, affect, or be affected by eco-tourism activities*”. India’s Eco-tourism Policy and Guidelines (1998) stresses upon “*activities that do not disturb the ecosystem*” and “*positive involvement of local communities*”. The Guidelines also postulate certain “cardinal” principles, namely, that ecotourism should: *involve the local community* and result in overall economic development of the area; *identify potential conflicts with local livelihoods and attempt to minimize them*; ensure the compatibility of tourism model with local environmental and cultural characteristics; and be guided by an *integrated land-use plan*.

Table 10.1: Mitigation and enhancement framework for environmental impacts

Intervention	Intended “positive”	“Unintended” adverse	Mitigation/Enhancement
Horticulture development.	Less dependence on livestock economy and more secure livelihoods from a wider basket of alternative options. Organic certification will add value.	Transportation costs may be too high and demand for more roads might gain strong hold. Risk of market-based monoculture could arise.	Better mules and horses could be used for transportation and existing ones could be strengthened. Cold storage facilities could be provided at some places.
Medicinal plant cultivation	Increase in income and lesser dependence on wild collection.	If found remunerative can decrease cultivation of traditional crops. Vegetables would be brought from outside. Increased demand	Niche products. No family should completely depend on

		could lead to over harvesting from wild and increase in area under cultivation. Some species such as <i>Cordyceps</i> could be harvested more under the guise of medicinal plant.	medicinal plant cultivation as a source of livelihood. A regulatory body needs to oversee the cultivation and extraction.
Tourism	Employment of local guides and families.	May not employ many people and may not also include all villages in the landscape. Seasonal	Develop community management systems to assess and manage this effort. Employ capable people from several villages. Home stays need to be improved. More frequent short duration tourism for 2 days or so and fewer longer ones for a week and 10 days and more spread across the landscape. Need to diversify tourism base so that it respects culture, society and nature.
Veterinary services	Better health of livestock; could maintain quality animals.	Better care could lead to population boom of livestock resulting in greater demand for fodder, resulting in overgrazing.	Population needs to be checked and excess livestock should be sold off. Local breeds to be encouraged.

Table 10.2: Mitigation and enhancement framework for social impacts

Social Interventions	Intended "positive"	"Unintended" adverse	Mitigation and Enhancement
Horticulture	Alternative and better income opportunities.	Market risks and loss of livelihood security due to disengagement (forced/loss of traditional incentive) from customary pursuits such as livestock rearing.	Promote horticulture as a complementary livelihood pursuit among those interested.
Ecotourism	Alternative livelihood and income source.		

		<p>Potential cultural and economic ramifications, i.e., emergence of a model that could dilute community identities and assets. Could lead to disengagement of customary livelihoods and also create a culture of dependency within this service sector.</p>	<p>Culturally sensitive enterprise that ensures equal community stakes.</p>
Road Network	<p>Transportation facilities to markets and better access to essential services.</p>	<p>Usual risks related to providing new access to localities, e.g., market access could change the organic farming practices of mountain communities to more intensive agriculture or monoculture. Combined with road networks, tourism could change the landscapes character culturally and ecologically.</p>	<p>Build roads based on felt needs of villages (in clusters) and environmental feasibility. Include a good network of safe pathways. Do not promise roads where unfeasible, as this could replicate state's electoral promise routine and thus generate distrust.</p>
Restoration of ecology and organizational capacities of Van Panchayats	<p>Improving quality of material/production base and imparting ability and autonomy to communities' management base.</p>	<p>Productively and ecologically improper or disparate vegetative restoration. Also, in guise of capacity building, enhancing state presence could lead to loss of autonomy and access to material base. Conflicts</p>	<p>Positive intervention. Proper partnership between Van Panchayats, NGOS and Forest Department can enhance intervention.</p>

Animal Husbandry	Enhancing a livelihood culture through veterinary services, increased incomes through value addition to animal produce (e.g. wool), etc.	could intensify. Unanticipated consequences could emerge in the form of strengthening of traditional livelihoods in liberal economic era. But negative consequences are certain if long range pastoralism is forced into a stall-fed culture.	Promotion of stall feeding must be based on sound consultation and consent. In terms of support systems to current pastoral cultures, breeding and nurturing of native species should be encouraged.
Basic Infrastructure (schools, paramedical training)	Progressive attempt to meet development goals.	Disjointed or disparate provision of such services or amenities will adversely condition public goodwill.	Assess felt and feasible needs. They should be realistic.

11. Institutional Managements for Effective Implementation of Social and Environmental Issues.

With regard to implementation of environmental issues, Van Panchyats need to be involved in conservation. The example of Himal Prakruthi in using Van Panchyat members to protect Monal habitat needs to be replicated. For this one needs to build a working relationship between the Forest Department and Van Panchyat members that would facilitate conservation and guard livelihood options. Both institutions need to scale down perceived differences and work together for conservation. One also needs to involve a third institution, namely, creditable NGOs in the area such as Himal Prakruthi, to help in building a good working relationship between people and government.

The social issues that are pertinent to the project are basic infrastructural amenities and better physical access to them; prevailing conflicts over access to and control of village commons between villages and between villages and the Forest Department; and disparate gender roles. With regard to institutional options, consultations with people and officials reveal a preference for Van Panchayats and partnerships between Van Panchayats and NGOs to manage social interventions as part of the BCRLIP. Villages preferred to partner with NGOs having good credentials. For instance, people mentioned the Himal Prakruthi's earlier and ongoing activities that generated employment through the provision of saplings, fencing and planting in forests, etc. In this context, it is important to recollect the Conservator's candid claim that that the Department was not equipped to monitor and survey and therefore a dedicated NGO could participate.

The Himal Prakrithi in turn claims that the Van Panchayats must be involved in monitoring and implementation of activities. This includes Gram, Shetra and Zilla Parishads. The Prakruthi desires to confine its role within the project to social and ecological monitoring.

Officials concur with the institutional option of Van Panchayats. The DFO of Pithoragarh mentions that they are the *basic ground level* institutions. The forest Panchayat was also a "legal and constitutional body". Since most of the production landscape and biologically significant areas fall under the existing institutional setup of Van Panchayats, it would be self-defeating to install another institutional

structure. There is a need, at the least, to thoroughly assess the suitability of Van Panchayats to implement and monitor social interventions through requisite capacity building. Such capacity building is also officially envisaged as the Conservator mentions that through the BCRLIP the Forest Department would like to strengthen the Van Panchayats. The Van Panchayats are part of a wider Panchayati structure of local governance. These bodies are constitutionally mandated to be involved in the preparation of plans for economic development and also the implementation of schemes for economic development¹⁰.

¹⁰ Vide Article 243-G of Part IX of the Constitution of India.

12. Current Conservation/Social Practices and Strategies Suggested for Better Biodiversity Conservation/Social Mobilization

The landscape currently does not have a proper conservation strategy. The Forest Department is ill equipped and will need substantial inputs in the management of the Askot WLS alone.¹¹ It cannot and does not want to manage the project. There are few capable organizations working in this region that can help with the conservation of the landscape. More inputs will be needed from outside the district and even from the state. Not only do local communities and line organizations need to be involved from the initial planning of the project, but their voices also need to be heard and recognized and used to develop strategies for conservation. Realigning the boundary of the sanctuary to keep villages out will not help much with conservation in the landscape. This can hypothetically facilitate bigger players such as Reliance and NHPC to get easier clearance for their projects and degrade the landscape biologically, culturally and socially.

There has been some thought among Forest Department officials to make migration cease in the future. This should not happen. It's not only a social and cultural issue, but also an important way for officialdom to be in touch with those remote areas. The Forest Department agrees that it is practically impossible to monitor the landscape through its poorly equipped personnel. Migrant communities could help the department get primary information about poaching and illegal trade in remote landscapes and some indication on the quality and quantity of biodiversity in these areas. The Forest Department should work more closely with these migrating peoples to make them effective informers instead of trying to alienate them from their traditional landscape and further incur their wrath.

One would need a socially and ecologically empowered committee that is fairly autonomous from the pull and push of the government to manage conservation issues in the region. This committee should oversee the effectiveness of the implementation and periodically monitor its progress.

A strong sense of community prevails in the landscape, politically in terms of mere identity but more normatively in the form of reciprocity, etc. Even amongst a single

¹¹ This lack of capacity could be perceived from consultations with forest officials and ongoing strikes by subordinate forest personnel who were basically protesting insufficient recruitment at their levels. The management implications, viz. asymmetrical *watcher/guard-forest area* ratio, were pointed out to the consultation team by some personnel.

community people recall with pride their village of residence. Symbolically, such pride manifests itself usually in the form of surnames. Though criticized for its power and political implications, the unity among Bhutias, for instance, also points to strong community identity. Such social circumstances can be utilized for mobilizing people to participate in various future stages of BCRLIP such as micro planning or in the very implementation of interventions. However, the project needs to take cognizance of the distrust among Scheduled Caste populations of the Bhutias. Further, despite the near effusive patronization that brought on the Scheduled Tribe status, it needs to be noted that Bhutias are not very accommodating towards Ban Rajis.

It was also noticed during consultations that people either made it a point to inform and fetch the Sarpanch during the team's arrival in a village or, if the Sarpanch was initially encountered, he ensured good participation of people. This respect for the village head was complemented in certain villages by people's expression of worries regarding the loss of the Sarpanch's authority over Van Panchayats. The office of the Sarpanch needs to be engaged with due respect in planning, monitoring and implementation.

With regard to gender, women's involvement in agricultural activities, fuel and fodder collection, etc., along with domestic chores, combined with the seriousness with which such outdoor and indoor chores are pursued, makes it pertinent to carefully choose seasons when they can be consulted or involved in implementation activities.

Finally, the Van Panchayats by themselves are realms within or around which communal efforts come to play. It is also common practice that certain management customs entail the sanctification of common forests and thus restrictions in their use. As zones of customary and normative practice (at least as they used to exist), it is understandable why Van Panchayats have also emerged as zones of conflict when external controls were sought to be implemented. It is in this customary and normative sense that it is suggested that social mobilization could occur well when schemes to improve the condition of Van Panchayats are implemented through the BCRLIP.

13. Cost Implications

The cost implications can be qualitatively anticipated by juxtaposing interventions, both officially proposed and as elicited from consultations, to the four-part project cost components. These components are: 1. Strengthening Biodiversity Conservation Management in Protected Areas and Other Eco-sensitive Areas; 2. Mainstreaming Biodiversity Conservation practices in Production Areas; 3. Improving learning and replication of Participatory Conservation Approaches; and 4. Improving National and State level capacity for coordination and promotion of landscape conservation approaches. The first focuses on PA management, the second on sectoral capacity building, threat identification and participatory conservation across the wider production landscape, the third component entails learning and scaling up of lessons learned from the previous components on PA management and landscape level conservation, and the fourth on building the ministry's capacities to monitor and implement such landscape level conservation approaches. Consultations with communities, NGOs and forest officials revealed issues and interventions that can be plotted along such components. The consultations also revealed percentage-wise official requirements of the project along with a professed absence of official capacities, both of which when compared to the felt needs of people allow for a percentage-based proportioning. Forest officials said the department would require approximately 15 % of funds allocated to the landscape for building infrastructural capacities that would facilitate their conservation mandate. Though such a requirement can theoretically be seen as relative to all four project components, more realistically, going by local socio-ecological realities, it needs to be seen as part of the first component, i.e., strengthening conservation within the PA. This scenario could allow for the channelling of the rest of the funds for planning, monitoring and implementing of interventions. As consultations revealed, these interventions largely relate to development and essential infrastructure, ecotourism, and restoration of village commons. Although these ultimately feed into component four, for the moment they fall under the second component of mainstreaming biodiversity, both through vegetative restoration and through provision of development infrastructure that would generate and revitalise landscape stakes.

14. Training and Capacity Building on Social Issues.

People need to be involved in development planning and implementation of related schemes such as road laying, provision of infrastructure to access water for drinking, irrigation, disaster management, etc. This requires the building of capacities either to monitor implementation or to be recruited directly into implementation itself. With regard to implementing interventions in Van Panchayats, in the contexts of prevailing access and control conflicts, such interventions constitute a process of institutionalization of conflict. This means that where interventions are organizationally designed, i.e., to install, strengthen or recover new, existing or discontinued Van Panchayat rules, they would essentially be involved in participative resource arbitration. So interventions in Van Panchayats need to be participatively designed, implemented and monitored and organizational and scientific capacities built with regard to resource (use) management, ecological monitoring, etc. NGOs and other scientific and management organizations need to be recruited into this partnership to build management and ecological capacities. Gender performance in the landscape needs to be mapped participatively with regard to domestic and economic roles. Factors such as time, effort and the outcome of each of such activities need to be established. Techniques to perform domestic and productive roles more efficiently need to be imparted through association with gender-based NGOs and organizations. As women are actively involved in productive activities in forest commons, their capacities in ecological monitoring of harvest and production need special attention. The active production roles of women in forest reserves also require that their opinions on the management of Van Panchayats be solicited and concomitantly their management capacities be built with regard to Van Panchayats.

15. Monitoring and Evaluation Framework

15.1. Framework for Environmental Issues

The flagship/focal species that have been indicated in the BCRLIP report for the landscape are *Panthera uncia*, *Moschus chrysogaster*, *Nemorhaedus sumatraensis*, *Tragopan satyra* and the *Ophiophagus hanna* as faunal elements. Among the floral species, *Sinarundinaria anceps* is found only in Uttaraanchal in the Indian subcontinent, and the Musk Deer, the Serow, the Satyr Tragopan and the Monal pheasant all depend critically on this species for winter forage. There is currently no baseline information for any of these species. One therefore needs to do a survey of the landscape to see where one could set up a regular monitoring programme for these species. Such monitoring can be done inside the sanctuary and also in civil and Van Panchayat lands where the species are found. Apart from these we need to set up monitoring of orchid species that appear to be abundant in the Gori river basin. One also needs to set up habitat monitoring of important grazing areas (Bugyals). There is already existing information on Bugyals and one could base the monitoring on this. Similarly, the warm temperate and subtropical forests need to be monitored as these are inhabited or surrounded by relatively large human populations.

Monitoring needs to be done by an independent agency with help from the Forest Department and other stakeholders in the region. Such an agency should have the expertise to monitor both animal and plant populations and also do a preliminary survey to locate monitoring stations. Frequency of monitoring will depend on the species and the logistics and purpose of monitoring. The cost for monitoring will again depend on the frequency and the time spent in the landscape. It is better to do a statistically sound monitoring once in the early part of the project and another at the end. Considerable time and effort should be devoted for this to get reliable estimates of the populations and detect any changes in them. A minimum of Rs 10-12 lakhs should be kept aside to cover all costs of monitoring as part of the project.

One could set up monitoring across the matrix of habitats/institutions and interventions. This should be an essential component of the monitoring protocol. The reference areas could be inside the Askot sanctuary, which will serve as a benchmark for restoration efforts. Some of the high altitude areas outside the PA could also be considered as benchmark areas.

15.2. *Framework for Social Issues*

Socially, access to development and essential infrastructure such as hospitals, schools and markets remains the focus along with the enterprise component of ecotourism. The design and implementation of road networks and ecotourism require sufficient monitoring. The planning and design of road networks require proper negotiation and dialogue between the respective Public Works Department, geologists, habitat experts and people as represented by various Panchayat levels. Ecotourism requires extensive consultations between communities and the Forest Department before any particular model can be conceived of.

Members, especially women and youth, of Van Panchyats could be trained to monitor social and conservation schemes. It is important that the FD take people into their confidence first before initiating a programme with them. A capacity building and monitoring body needs to be set up for training the participants in the work. An autonomous body that has social and conservation capacities and is resistant to the pull and push of varied departmental and institutional interests needs to be identified or facilitated.

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Annexure I - Field Notes from Consultations in the Askot Landscape

13th November, Pithoragarh

Consultation: Mr. Ram Gopal Verma, DFO,

About the Sanctuary

- Tribal belt. 4 major valleys: Dharma, Johar, Rallam, Byas.
- High literacy rate.
- Migration during winter months along with cattle and livestock. Very few buffalos.
- When trade prevailed, people in these valleys were very prosperous. After the trade stopped, they have grown poor.
- Dharma valley still prosperous. They never depended on trade.
- Crops grown: phalti, mustard, layi.
- Grass is a major source of livelihood.
- Biodiversity rich areas include four valleys: Vyas, Dharma, Mellam, Allam. Species richness at higher altitudes.
- ITBP forces active in the villages. Tidang is the last major check point of the forces.
- Medicinal Plants are not many in Askot PA. There are plants outside of the PA but as monitoring is not possible, there is illegal trade. There is big market for medicinal plants in Tibet and China through Nepal. Discussions are on with ITBP. A few Van Panchayats allow medicinal plant collection.
- Van Panchayats started in 1930. Every village has one.
- 4 types of forests:
 - a. RF
 - b. Van Panchayat Forest
 - c. Civil forests
 - d. Private forests
- There is a lot of scope for joint conservation. But there is a negative factor, i.e. the involvement of 'weak soldiers' (barely 12th pass, etc). Separate unit in VPs. Need landscape management. FES has been the best.

Issues

- 85 thousand ha agricultural land included.
- 111 villages in the present sanctuary.

- Impractical boundary.
- Re-alignment is a welcome idea for the villagers and Forest Dept.
- Hunting mostly by Nepalese.
- Not much forest fires.
- Grazing is not much of a problem.
- Destruction of crops by wild boars.
- No proper irrigation facilities or drinking water supply.
- Ground survey, natural resource based research lacking.
- *Cordyceps* collection is a problem. Few Van Panchayats allow the extraction but in most places it is illegal.
- Poaching by Nepalis with the support of local people to cater to the demands of the international market.
- Demarcation of the boundaries between forests under the govt as well as the Van Panchayats exists only on paper. No practical, tangible boundaries.

Suggestions/Interventions

- Medicinal facilities should be provided. Rural youth should be trained in paramedics.
- Provide subsidized transport.
- Set up road network.
- Partnership: Forest Panchayats should be given the powers to carry the implementation process of the project and also act as a possible source of link between the Forest Dept and the local people.
- Horticulture inputs.
- Medicinal plants.
- Animal husbandry.
- Medical aid, training students as medical practitioners.
- Transportation expensive, road development.
- Ecotourism, home stay facilities, guides, trekkers, rafting have a lot of potential.

Limitations of FD: lack of personnel, resources for implementation

NGO participation: FD willing to participate with various NGOs towards implementation of the project. Regards the work of FES as commendable. However, apart from FES, no other NGOs have been able to achieve much.

14th November, Tola, Johar Valley (in Sharmauli)

Consultation: Netar Singh Toulia, Nandi Devi, Pushpa Shumtiar, Ganga Devi Shumtiar.

About the Village

- Summer in Tola in Johar Valley; winter in Sharmauli.
- Netar Singh Toulia has lands in both the villages.
- Crops: Kala Jeera, Ooth, Jimbu.
- Woollen products are sold to tourists. No markets to sell them.
- Migration: Earlier about 500 families migrated, now only about 15 do. The new generation is educated and prefers to settle down. Only the poorest that have no other source of income or land elsewhere migrate now.
- They collect about 700 gm of *Cordyceps* every year.
- Availability of grass and herbs depends on rainfall.
- Dowry system prevalent.

Problems:

3 main problems:

- Lack of irrigation facilities.
- Lack of roads.
- Poachers: Musk deer hunted during winters when villages are uninhabited. Poachers also rob the houses of stored grain. Their origin is unknown. Poachers also set fire. After fire, certain species of grass grow in abundance.
- Van Panchayats not functioning efficiently.
- Earlier they depended on Tibetan trade. Now that source of income is lost.
- They also have problems in agriculture due to pests.
- Thurva (wolves), black bear, predate on livestock. They do not claim compensation as they have to bribe and lose a lot of money in the process.
- Snow leopard encountered more often earlier. They are killed through poisoning by nomadic shepherds.
- High levels of unemployment.

Sense of Biodiversity

- Forests have not changed much in the valley. But in Munshiari it has degraded considerably.

- Birds species: monal, crow, pauva, malyar, chokda (partridge?), cough.
- Mammals: jackal, snow leopard, black bear, wolves.
- Grass types: dhan buji, dudh buji, safed roll, gulab roll, komal patti, etc.

Expectations

- Irrigation facilities:
 - Millum has a different kind of soil and requires irrigation unlike many other villages in other valleys.
 - With proper irrigation, at least 50 quintals of medicinal plants can be harvested.
- Seeds from the government at a subsidised rate.
- Project should provide employment to at least one person in each family.
- Fencing of the VP. Theirs is the largest forest in the valley.
- Co-operation with the FD possible.
- Not much faith in politicians as they are interested only in personal gains.
- Require roads.
- Solution to problems by poachers.
- In a similar vein, FES had undertaken fencing, planting along with providing employment.

Forest Department

- Patrolling done only on roads.
- DFO and CF just visit.
- They are not happy about the new VP rules as they have to show their accounts to the FD.

14th Afternoon

Consultation: Himal Prakruthi (Mallika, Ram and Theo)

- Bhutias are major political stakeholders, educated, rich and powerful. Other tribal communities are not so prosperous.
- Survey of the area (mapping) not done, except for the agricultural lands within the area.
- Most areas are densely populated. Dams, mining, quarrying in large numbers within the sanctuary.

- Resentment among the people with the sanctuary status.
- FD is not involved in any form of patrolling activities and is irresponsible, though it holds possession of more than 90 percent of the forest. Poor governance of resources.
- Extraction of wild medicinal plants as well as other species increasing in number.
- Poaching increasing especially during the winter season.
- Local use limited, cater to international demands, especially from China. Musk, bear bile, medicinal plants, *Cordyceps*, etc. are among the major extracts.
- Banrajees are the poorest among the tribes. Brahmins are also poor. They don't own much land and are not supposed to till the land.
- Women run the household and have a difficult life. Engage in hard agriculture labour. However, are not empowered.
- Sacred groves don't exist.
- Conflicts between various Van Panchayats. VPs are few but dependence is extremely high.
- FD: No trust.

Interventions:

- Van Panchayats should be given the power to monitor, manage the project.
- Studies, research on the flora, avifauna, grazing ecologies, etc. of the region needed.
- Good quality indigenous seeds required.
- Improving fields, subsidies, grants needed.
- Six years of implementation time is just too little.

15th November, Rallam (in Talla Dummar)

Consultation: Lakshman Singh

- 90 families in his village in Rallam.
- Rallam has highest availability of *Cordyceps*. Everyone in the village goes to collect it. They get enough income to sustain themselves. This trade has resulted in a sudden increase in income. This has resulted in an increase in

livestock. Other sources of income are goats, wool from sheep. These are also used for transportation.

- Few youth emigrate to towns and cities but a good number either stay back or return unable to find jobs.
- Johar has a newspaper, Rallam doesn't. Influential people from Johar.
- There has been a reduction in hunting.
- He is open to the idea of dams being built since they provide electricity and employment.

15th November, Consultation with Himal Prakruthi

- Political considerations played a role in demarcating landscape boundaries. Other considerations include the PCCF's ancestral village. He is a Bhutia. Initial deliberations involved the Block Pramik (Tolia) connected to the then Chief Secretary. Through their ST status the Bhutias have become an economic and political elite. FES has consulted over the last 15 years. FES got into the project as a conscious stakeholder who had an inside perspective. Many villages wanted nothing to do with the project as it was an FD project and it included the Askot area. Also suspected inclusion as part of the area. Original classification 600 sq. km but included 2900 sq. km. Demarcated area without any geographical sense. No cadastral survey of alpine areas. No mapping of civil and soyam lands. Included all mining and army zones.
- Let villagers decide if they want to be part of the project. People were even wondering why FES was involved. Neither FES nor ATREE has the *locus standi* to select or decide which villages to select.
- Restrictions against people as part of the Askot sanctuary. People did not want to do anything with natural resource-based livelihoods (project) in case of realignment. They wanted development activity. They referred to mining and shelling interests being excluded. People ask how much money for what activity.
- A big issue is the collection of *Cordyceps*. Villages outside sanctuary are regulated by Van Panchayats. They do not allow others to enter their VP for collection. Now after the *Cordyceps* movement, people have also begun prospecting for more frogs and other rare species. At a bureaucratic level the FD is the Malik of 96 % of land. They claim that all VPs come under the Forest

Act. Civil and Soyam lands are being branded as Forest lands in accordance with some SC ruling.

- In the context of historical conflicts between FD and RD, the recent attempts to bring civil and soyam lands under Forest Act is a big victory. There is a history. Incendiary activity in 1800s and 1930. Now the state is attempting the same thing. As per the new rules the VP are entirely under the control of the FD. Slow institutional process to take over VP. JFM - the state asking community to participate to gain stakes in their forests (the reverse of JFM experience elsewhere in the country). There is a secretary in govt for VPs. Supposed to make annual plans and management plans and seek permission for collection pursuits. This has strained people's attitudes towards the FD.
- Wouldn't be a department implementing it. An institutional setup including intellectuals and activists. Actors with interests not stakeholders. At the village level the institutions are the Van Panchayats. Not just a largesse dishing project, but one which takes conservation and livelihoods seriously.
- In 1992 FES was set up. It packed up due to political problems. Calling the bluff on medicinal plant issue, the changing VP rules. Himal Prakruthi is a group of people who brought the project to Munsaiyari. The Himal Prakruthi will be interested in monitoring, not implementation. There are a lot of NGOs without funds. They will jump at any offer by the FD. E.g. micro plans.
- Lot of biodiversity potential. Also people's well being. Some members interested in more than one aspect.
- As part of its outreach, took 88 villages in the Gori basin. Large part of the team are locals from the Vaws villages. Work with and for nature and with and for people. Mallika-community level; Theo, etc. - technical level.
- Questioning policy such as NTFP, new VP rules of 2001, etc. People want money (BCRLIP, etc) but not at the cost of alienation. Keep alive issues. Forming a VP Sangatham. When a signature campaign against VP rules was being conducted people from Askot came on their own and participated. Then came the Godhavarman case and posters saying that collection is banned.
- There is high dependence in the landscape. Grass needed for livestock. Questions arise when people notice large development works are happening, while they have been denied fruits of development. 13 dams are proposed in 2 basins.

- Culture - There is hype about Scheduled Tribe status. Bhutias, etc. are savvy traders. Managed to get themselves notified as ST. Very clannish. Shaukas - only 40 % of population. 17-18 % SCs. Ban Rajis are designated as true tribals. The region has a lot of caste history. Non-Bhutias got together and voted against Bhutias in the last elections.
- Bhutia women earn from Paschmina. The Ban Rajis are a dispirited lot. Heavy drinking prevails. There are 135 individuals in the landscape. 4 Ban Rajis in the Askot landscape. Khetts need fodder and fuelwood. Women do most of the interfacing with the forests. But collection of medicinal plants and participation in governance is poor. Women have an acute sense of diversity.
- Mirg Vihar. Everything is market driven. Grazing conflicts between Van Panchayaths over boundary demarcation, people count, use, etc.
- JFM encouraged commercial trees telling people it is about better livelihoods.
- A neo-liberal economy prevails Open to the markets. Van Panchayats in revenue villages. Strengthening hands of VPs. Good diversity in VPs. Alpine, subalpine regions - high biodiversity values. In subtropical areas there are orchids. Biodiversity loss is due to distant market rather than local use. Look at market drivers, push and pull.
- Monitoring - State or any of its departments will not be able to monitor. Illegal activity will not be divulged by people. Deep research study done in Gori village basin. Malika collected data for 131 households. Hunting estimation done by Theo. People divulged information if kept confidential. Facilitate real conversation with people. Monitoring of any species will not be participated in by the Himal Pracruthi or people due to institutional reasons, i.e. due to FD presence.
- People have been put on the chor list- the other side. So participatory monitoring is ruled out. Political equations need to change (for participatory monitoring).
- Khajeej pheasants are hunted.
- There is deep cynicism.
- Mitigation/Safeguards
- FD has not really applied themselves on interventions. They have thought about training and infrastructural development. But the CF can say something about ecotourism, agriculture, etc. Involve the VP in monitoring and

implementing. Cluster level to landscape level. Gram, Shetra, Zilla Parishad to be involved.

- Also VP sangatans. First level Nyaya Panchayats; 2nd level broader. Himal Prkruthi can be involved in both environmental and social monitoring. In ecological assessment, rivers and fish, herb studies (species listing), birds such as pheasants (listing and correlating to habitats), grazing ecologies.
- Prioritization of villages where heavy inputs are planned. Agriculture, animal husbandary, vegetable seeds (people are very hungry for food types from other parts of western Himalayas). Improvement of stocks. Stud bulls, yaks, etc. Villages keep common stud bulls.
- People will commonly talk about jadi booti, i.e. medicinal plants. Also, protection works to protect crops from pigs.

16th November, Kultham

Consultation: Durga Singh Mehra, Kundan Singh Bagdi, Rudra Singh Mehra, Lachhan Singh

About the Village

- 35 families. The number of families has increased. Each family consists of an average of 6 people.
- Few people have emigrated.
- Sources of Income: Agriculture, labour, medicinal plants. Rs 10,000- 12,000 earning by *Cordyceps*.
- Agricultural Practices: Sowing in March/ April
- Crops: Wheat, mudwa, jowar, rajma, potato.
- The village has a primary school; High School is 5-6 km away.
- Most people are literate including women. Only very old ladies are illiterate.
- Agricultural lands are under private ownership.
- They store approximately 6 quintals of wheat for winters.
- Chira oil extracted for medicinal purposes.

Problems

- They collect wood, stones, grass, and mulch from forests. New VP rules are creating problems. These forests have been protected only by them without any contribution from the FD. For every tree to be cut, they have to take

permission from the FD and lose one whole day and spend money on this. Protests have been of no use.

- Conflicts between VPs haven't been solved for years. Forests have degraded because of this.
- Half of the agricultural lands and some private lands have been lost due to landslides.
- Wild animals like langurs, leopard, bear, and porcupine raid crops. They also kill domestic animals. Unable to claim compensation since it takes 24 hours to reach the FD office in Munshiari.
- Corruption among the govt. officials has hindered many development projects like the construction of a bridge across Gori.
- Less water now because of depletion of forests.

Management of Van Panchayats

- Started by the UP Govt. to protect forests. Forests were allotted according to land owned by villagers. 105 acres of forest was allotted to Kultham.
- When they have money, they spend it on planting. They plant only trees that are of use to them. If other species grow on their own, they are not removed.
- Planted areas within the forest are closed for 5 years for grazing.
- All communities have equal stake in the forest.
- Each family has a quota for timber. There are penalties for cutting extra trees. Penalty depends on the size of the tree. Maximum up to Rs 500. If the person cannot afford the penalty, the case goes to the court.
- Chowkidars are appointed to accompany people who go to cut trees. They ensure that people do not cut more than what is allowed. They also keep a watch over the forest.
- All accounts are audited.
- They are open to the idea of planting trees that are of no direct benefit.
- Certain Van Panchayats are very prosperous. Plots are auctioned to outsiders for removal of grass for a year. The money is used for weddings and other purposes that benefit the entire village.
- Now the FD intervention as caused sense of insecurity among the villagers. They feel the Sarpanch has lost control and authority.

Suggestions

- They are used to the way FES worked. They are welcome to the idea of similar projects. They had provided employment and financial support and there was absolutely no corruption.
- Forests can be protected only if villagers are involved and they are satisfied.
- Certain areas in the forest should be closed for grazing.
- There should be a newsletter published that could provide information about the village, which could help tourists.

Expectations

- Check dams
- Tin-shed as an emergency shelter
- Apiculture
- Sericulture
- Poultry
- Aquaculture
- Cattle of better breeds
- Growing seasonal grass for cattle and employment
- Weaving woolen products for women

Consultation: School Teacher at Kultham

About the Village

- Most of the household work done by women. Includes cooking, cleaning, collecting firewood and grass, looking after children and livestock.
- Since most women can weave woolen products like Dan and Thulma, the project should encourage cottage industries.
- There has been less agriculture since landslide in which many lost agricultural lands.
- There is one school in the village with 13 girls and 14 boys.
- Older women here are mostly illiterate.

Sense of Biodiversity

- She can name only those trees that are of use.
- Does not know about the Forest Department/ NGOs.

- Forests have degraded. More planting has to be done.
- There is a need to educate children about environment and forests.

16th November, (School)

Consultation: Hari Singh Koushali, Dayali Singh Koushali, Khayali Singh Joshi,

Problems

- Facing water problems - both drinking and irrigation.
- Van Panchayat area 8-10 ha. It is inadequate. No trees grow in this VP. They use it only for grass. They have to buy timber from other villages. The VPs are not functioning properly. There is no one appointed to watch for cattle or illegal removal of grass. The influential ones do not follow rules.
- All agriculturalists. They grow just enough for personal use. The rest like vegetables and grains have to be bought.
- They use cattle for ploughing and manure.
- Firewood from forests.
- Roads were promised. No visits by politicians/ govt. officials after elections
- 300- 400 people in village. No SCs/ STs.
- Villagers go for collection of *Cordyceps*. They camp near glaciers for about 2 months. They are aware of the possibility of the depletion of *Cordyceps* due to unmanaged extraction.
- A medicinal herb *Salam Panja* has almost gone extinct.
- They have to spend a lot of money (Rs 200-300) to sell their produce or buy provisions.

Expectations

- Roads, employment schemes, medicinal plant cultivation. They have been unable to grow any so far.
- Apple cultivation was tried in a neighboring village. But apples died of some disease.
- Oranges are cultivated and sold for Rs 130/quintal.
- Fencing for the Van Panchayat forest.
- If VP gets funds like Gram Panchayat does, it would be helpful. They want to appoint a person to keep watch. His salary should be paid by the govt.

Others

- They were provided sapling by FES. Forest Department hasn't helped much. There is a general apprehension that if VPs are controlled by the FD, they slowly might acquire the status of civil forests.
- 10- 5 cattle/ family; 50-100 sheep/family and only 6/7 families to rear sheep.

16th November, Basanthkot

Consultation: Sarpanch, 6 men and 4 women present

About the Village

- Agriculture, livestock important sources of income.
- Poaching non-existent. Possession of rifles or any other weapon is illegal.
- Forest department non-existent.
- Have not seen wild bears or snow leopards.
- Old agricultural practices are slowly dying. Sugarcane cultivation has disappeared from the valley.
- Increase in population.
- Van Panchayats' conditions are deteriorating. Diversity of tree species as well the faunal numbers declining.
- Lack of govt initiatives in providing assistance or some form of support for the Van Panchayats.
- Utish is a major invasive species. Destroying the understory.

Problems

- More population and landslides have resulted in lesser land availability.
- They still follow old methods of agriculture.
- Lack of roads makes it difficult to transport produce to markets. There is a lack of market for crops grown. Transportation costs high hence no profit made.
- Earlier sugarcane was grown but after the opening of fair price shops, they have stopped growing it. Other agricultural activities have also been reduced.
- Growth of *Utees* trees only since 1980s.
- Forests have degraded.
- Landslides a major issue. No compensation from govt.
- Lack of medical facilities, no hospitals, doctors.

- Unemployment high.
- Horticulture inputs nil from the govt. No facilities for storage, pulping, etc. for fruits like oranges.
- Problems caused by langurs, rhesus monkeys, and porcupines.

Suggestions/Interventions

- Facilities for cold storage.
- Roads required.
- They are willing to co-operate in tree planting/reforestation.
- Sarpanch has tried growing some trees in greenhouse.
- Horticulture inputs for growing bananas, oranges, ginger and cinnamon.
- Pulping facilities.
- Better markets.
- FES has a good reputation. Don't mind working with the Forest Department as well as NGOs in the implementation of the project.

16th November, Uchyati

Consultation: 3 old men, one schoolteacher

- Agriculture practiced. But the produce is not sold, goes only for self-consumption.
- *Cordyceps* collection.
- All the villagers own land. Exact numbers not given.
- Pastoralist society too. Each family owns land.
- Engage in manual labour whenever possible.

Problem:

- Landslides are a major problem. Mitigation efforts needed.
- Forest Department is irresponsible and has not done much.
- Money doesn't reach the villagers. Government is not doing much to improve their conditions.
- Demand for protection of their forests. FD did bring in some projects with respect to reforestation, but after completion there have been no efforts to manage them and they have deteriorated.

Interventions

- Roads
- Employment
- Inputs for growing medicinal plants
- Protection of seedlings, boundaries, and planted plants
- Need of Chowkidar(s)
- Horticulture inputs as well as efficient means of storage, transportation and markets for the produce.
- Electricity
- Irrigation facilities

17th November, Askot

Consultation: S.S. Vaish, Senior Division Officer

About the Sanctuary

- In 1986, when the state was still part of UP, the initial notification of 600 sq. km happened. This happened on paper. Viability was not seen. On land it is 2000 sq. km. From 1986 all development activity stopped. *Kasthuri* lives at altitudes. But the PA included river basins, etc. So conceptually Chowdha/Pandhra migratory villages included in the new sanctuary. The BCRLIP plan will look into these villages. (4 Ban Raji villages are there).
- 3 types of forests
 - A. Reserve Forest
 - B. Private land
 - C. State land (under which VP come)
- All wildlife has been decimated in Nepal. Now our wildlife is being targeted. This project will help agriculture, horticulture.
- Infrastructure for FD. If 10-20% of the money from BCRLIP comes to the department, then infrastructure will improve.
- If villages are helped in the project, then there will be participation of people. There is an anti-feeling. There is a lot of awareness among people about wildlife. But there is a lack of management capacities. The dams will not affect the sanctuary as it lies at a higher elevation.
- Ban Rajis are an extremely backward tribe. They live basically in 4 villages: Kimkhola, Ghana Gaon, Chipalthara and Bhagartirwa.

Proposed Interventions

- Interventions - Forest protection-based intervention. We talk to people. Provide for needs such as fuel and fodder. People are not needy. They are in between rich and poor. As they are ST, there are jobs reserved for them. There are PCCFs and Chief Secretaries among them. The problem is not poverty but of access. China has developed access well by road train and what not. We are still in the Middle Ages.
- Van Panchayats have been established early. But management has changed. Definitions have also changed after SC rules. So they need to be managed as RF (in terms of scientific management). Ultimately all lands belong to the Indian government.

About the Change in VP rules

- Only rules and definitions have changed.
- Rights remain the same.

Consultation with Mr. Rasaily, Conservator of Forests

- There are 12,000 VPs in Uttaranchal. Cannot expect the FD to switch gear and become NGO (in talking to VPs). There are misgivings about 2005 rules. New rules, contrary to what is believed, give more power to local Sarpanch. FD withdrawn from management. Powers of forest official given to Sarpanchs. Hold auctions, etc. Earlier collector used to distribute money. But money used to accumulate. 10% to Zilla Parishad and 80% to kitty. Only in cases of technical assistance, the FD got into the picture (nursery, etc). Now micro plans in place and monitoring by the DFO. Micro plans are the main source of misgivings. This anti-feeling is the work of netas. Their vested interests have to do with Sarpanch's power (dilution or enhancement). Micro plan has to be whetted by the FD. People rue this. Through BCRLIP we would like to strengthen VPs. We are not equipped to monitor and survey and so a dedicated NGO could participate.
- Basic problem is inaccessibility. So people would ask for roads from remote valleys. But most people reside for only 3 months in a year. So asking for roads is unreasonable. Trucks coming back with potatoes or medicinal plants are fine. But trucks going up will worsen things.

- The USP of hill products is organic produce. This is why they fetch a good price. People are proud of their tradition. A person will carry the name of his village to which he goes for only 3 months in a year. Given their hard labour, the output that people get from growing jadi bhooti is less. Training can be imparted to improve productivity. Marketing alone with mountain USP could be helpful.
- Cattle are generally for the dung. Very little milk production. So animal husbandry will be helpful. We are not keen on range-feeding livestock. We cannot say no to livestock as then people will not associate with us. Yes to stall-fed animals. A nodal agency will attract development programmes (schools, etc.).

About Askot sanctuary

- Nobody gave a thought that the area notified could be so big (600 sq. km is 2900 sq. km). Though notification can attract development schemes from the state and Centre. But latter Wild Life Amendment made this difficult. 111 villages completely excluded from any benefit. Few villages on the left bank of the Dhauli Ganga river.
- Govt. of India put the realignment under the SC purview. The court has referred it back to the state.
- People say that the musk deer lives at 12,000 feet and so why should villages below 6000 feet suffer? Small migratory villages will be part of the sanctuary. In Tejam and Kanar, high orchid and fish diversity. Species-wise, these sub-tropical forests are rich. There is hardly anything one can do for these small migratory villages. Before we take their help, we must help them. Better cooperation could be an end result. The means could be livelihood interventions. Dependence would also reduce. These places are water tanks. They are the source of rivers. So some ecosystem pavement can be envisaged - this is a big demand in Uttaranchal. CCF looking after ecotourism. Uttaranchal has an ecotourism policy.

Interventions

- Micro plan making, agriculturization of medicinal plants, ecotourism and cold water fishery. No change of status of VPs within sanctuary. Though there will be restrictions according to SC and Govt of India regulations. Right now sparse habitation helps animals recuperate. But through interventions if the

villages are made habitable even in cold seasons, this will be detrimental to wildlife. Ecotourism is the main part of the project. By its very definition it needs healthy and good environment.

- ATREE can ascribe biological significance (i.e. TGs sense of diversity and landscape/habitat). In Askot PA the livelihood issue could be loss of access, tenurial insecurity. So parallel to states' move to realign (remove whole villages or only villagers?) boundaries, the report can suggest monitoring/grievance redressal mechanisms. Management plans for VPs, i.e. regulatory grazing and collection of medicinal plants. Rural employment guarantee schemes (conservation works). Suggest protocols (Sathya Kumar, etc.) to estimate mask deer. Theo says they are in the 100s according to Sathya Kumar's methods.

18th November, Sipu, Dharma Valley (in Nayabasti)

Consultation: Kushal Singh Sibal, Mohan Singh Sibal, Sundar Singh Sibal

About the Village (Sipu)

- 15-16 families migrate.
- 50- 60 individuals in the village. More women than men.
- 40-50 livestock in total. 2-3 sheep/ family. Wool for carpets for their own sheep. They remove wool once in Aug and again in Jan/Feb.
- Bhutia community. (Sibal Surname)
- Sipu is the last village in Dharma Valley.
- For those who remain here, woolen products are the main source of income.
- No *Cordyceps* collection.
- From May to Oct in Sipu; Nov to May in Nayabasti.
- There is a primary school. Teachers also migrate.

Problems

- Land erosion threatens village.
- They don't have a flour mill. They are unable to construct a water mill due to the force of river
- No problem of *Kala Ghas*.
- Schools far away.
- No problems due to the sanctuary as such.

Sense of Biodiversity

- Snow leopards, musk deer have increased in number.

Suggestions

- High levels of unemployment.
- Medicinal plant cultivation should be encouraged.
- Rock-climbing, tourism can be promoted.
- Loss of feed for livestock. Hence very few families migrate.
- Horticulture can also be introduced.
- Irrigation facilities not required.
- Growing of *Bhrama Kamal*, around which snow melts and has a very good fragrance, can be grown.

About Nayabasti

- No one has lands here.
- Those who have found jobs elsewhere and do not depend on agriculture are the ones settled here. There are doctors, engineers and other highly educated people from this village.
- Village has electricity.

Suggestions

- More schemes required for Sipu than for Nayabasti.
- Better Van Panchayat with fencing required.
- There is a kind of *Amla* that grows here. Cultivation of this should be encouraged by providing saplings.

18th November, Kuti and Rallam

Consultation:

- Kuti is a high altitude village in the Vyas valley.
- Rallam has around 70 families with a population of around 700 people. Different communities live in the village. Men outnumber women. No hierarchy between the castes/ communities.
- Primary schools providing education till the third class. For further education one would have to go to other places and cities. Literacy rate high but there are no employment opportunities.

- Life is difficult with the basic amenities not available. There is no electricity. Drinking water needs to be fetched. No irrigation facilities.
- Source of livelihood includes agriculture. Crops include potatoes, papad, mustard, raagi, etc. All the families do own some land though the area owned by each family differs.
- Agriculture season persists for 6 months, in winters they migrate.
- Women work with wool knitting basically for own use, not sold.
- Medicinal plants are collected.
- Yak trade.
- Don't trust the FD. Prefer working with NGOs like FES.

Interventions:

- Ecotourism: Guides, trekkers, porters should be taken from their village.
- Ban tourists during the migration periods as the porters destroy houses, steal household items and cause nuisance.
- Invasive species (kala grass). Need assistance in destroying this invasive species. Especially in de-weeding. This weed is destroying the native flora. Animals find no use for this weed. Burning doesn't help. Seeds of these plants are wind dispersed.
- Assistance for yak trade
- Mules needed.
- Agriculture inputs: irrigation facilities.

19th November, Nigalpani, Dharama Valley (in Dhar)

Consultation: Bhagat Singh Dhuktal, Soban Singh Dhuktal

About the Village

- Earlier 100 families migrated, now only 30 families.
- 50-55 individuals. More or less same number of men and women.
- There is only one community. 2 sub-classes. One belongs to SC and the other to ST. They have no communal problems.
- There are 50-60 sheep in the entire village. 15,000 from outside the village graze here. They also have 1 yak. One person appointed to graze the cattle.

- 6- 7 types of trees.
- Agriculture practiced. Each family owns about 2-3 nali. Aloo, Muli, Phapad grown chiefly. They grow everything except green chillies.
- Earlier they used to start migrating by Sept/Oct (now Oct end/Nov) as there were no roads.
- For agriculture, within 3 months, the crops are ready for harvest.
- They sow Aloo in June.
- Medicinal plants grown/ extracted only for personal use.
- For storing food, they dig a 10 ft deep hole in which they store food during winters.
- They do not have a Van Panchayat.
- Primary school up to 5th standard. Teacher appoints one person from the village to do his job. The teacher's salary can be up to Rs 15,000 per month.
- There is a hospital.
- No Van Panchayat. They go to forests for medicinal plants, firewood and timber.
- The Van Panchayat forest is fenced. One person from the village is appointed to keep watch during the winters.
- No permits required to go to the sanctuary. They can even cut trees.
- They had better crops this year.
- 4-5 temples. Mela in August. They get Rs 10,000 from the govt for this. Hariyali festival in August, when everything is in bloom.
- Culturally attached to this place.

Suggestions

- Medicinal plant cultivation.
- Horticulture: Apple, Khumani, Albhori, Phulam.
- Willing to work with the FD.
- Problems due to black bear.

19th November, Tejam

Consultation: 2 men from Duktu and 1 from Bidan

- There are about 30 families in the village. They live in their village for a period of four to five months during summer while they migrate to lower altitudes during winter.
- It takes them 3-5 days to reach Tejam.
- They have a chowkidar who stays in the village during winter to keep watch of the village when the villagers are in migration. The villagers pay his salary collectively.
- Agriculturists as well as pastoralists. There are no irrigation facilities. They don't grow fruits. During the migration period they store food in a cold storage made from digging the earth.
- Engage in collection of medicinal plants. *Cordyceps* is collected.
- There is electricity in the village but expensive. Solar energy not popular.
- Do have a RSS run hospital and staff.
- The village has a school that provides education till the 5th standard. However, the government appointed teachers don't engage in teaching, instead sub-contract the teaching to localites. If the teacher earns Rs 15,000, the sub-contractor gets 3000 Rupees. The literacy rate among the people is high. Most of the high ranked government officials come from this village.
- Yak trade seen.
- Land slides are a major issue
- Livestock killed by bears.
- Forest Department is irresponsible.

Interventions:

- Improve road networks
- Irrigation facilities
- More area for agriculture
- Suggestions and inputs for horticulture
- Animal husbandry
- Protection and improvement of Van Panchayat

20th November, Byas Valley

Consultation: Biran Singh, Devander Singh Negi, Prem

- There are about 45 families in their village, which has a population of about 360. The share of males equals that of females. They are Rajputs and call themselves Takurs. The Takurs don't get along with the Bhutias.
- They are basically pastoralists and migrate with their livestock to lower altitudes during the winter season in search of fodder for the cattle. Two members of each family travel or migrate with the livestock. Women don't migrate these days and stay in the village. Men are in the village only 2-3 months of the year.
- They go to Nepal to a place called Mahinder Nagar. More grasses for the cattle to feed in Nepal. They generally pay the border guards around 10 Rupees/sheep and also have to pay the Nepal govt.
- Agriculture not lucrative. All the families own some land, which is used to grow potatoes, rajma, wheat, and some vegetables. No irrigation facilities. Women indulge in agricultural activities while men migrate with the livestock.
- No electricity.
- They serve as porters carrying rations and other goods for the ITBP forces stationed in the villages as well as for the pilgrims. For every quintal carried they get paid 700 Rupees. For every horse hired they get 2000 Rupees for the whole trip, which is exclusive of food.
- No idea of medicinal plants or its sale.
- Instances of cattle killed by snow leopards. Around 11-12 killed in one season.
- No poaching.
- School providing education till the 8th standard. Literacy rate high.
- Unemployment among youths. Prefer govt services.
- Area of Van Panchayats small. There isn't much grass for the cattle. Pay the other Van Panchayats for fodder. Condition of Van Panchayat deteriorating.
- Forest Department hasn't done anything and is virtually non-existent.
- No yaks.
- Landslides are a major issue in this village too.

Interventions:

- Loans and subsidies
- Vet facilities

- Mules
- Employment

20th November, Jowdas (Pangu)

Consultation: Gagan Singh Rowtala, Krishan Singh Rowtala, Harshu Singh Rowtala, Jasu Devi, Santi Devi

- Their village has around 44 families with a population of around 1200 people belonging to different communities. They are basically agriculturists. Each family owns at least some land for agricultural purposes. The crops they grow include potatoes, wheat, rajma, corn, ginger and some lentils. However, most of the families don't sell their produce, as the production is low. There is a control shop in the village where food grains are sold at subsidized rates. Don't use any form of insecticides or pesticides.
- Not much of medicinal plants extraction. No market for these plants here.
- Lack of roads and transportation is expensive.
- The village has no electricity.
- Neither hospitals nor any kind of medical services offered by the government.
- Veterinary services non-existent.
- High rates of unemployment.
- The condition of Van Panchayats is deteriorating. No help from the government.
- Though this is a route that the pilgrims take, the porters as well as guides are hired from other places and hence don't provide any livelihood opportunities.
- Don't mind working with the FD or various NGOs.
- The requirements are similar to those of other villages.

21st November, Kim Khola

About the Village

- 36 families, 200 people. 8-10 individuals in a family.
- No sheep. Only cattle and goats.
- More men than women.

- They were nomadic earlier, exchanging firewood for necessary provisions from other villages.
- There is only Anganwadi. Primary school in Jauljibi.
- Income only by selling firewood and grass from the forest especially during the mela.
- Food: *Kandmool* from forests. In winters (Jan- June/ June, this is the only food.) It includes plants like *Taru*, *Geeta*.
- Village has electricity.
- Women go to forests to collect firewood, grass and sell them in bazaars. Everyday Rs 30-40 worth of firewood is collected. Men do not go to bazaars. Unemployment levels very high. They get paid well for grass.
- Income is about Rs 1000-12000/person/family/month. The number of earning members varies.

Problems

- Forests have degraded due to large scale timber extraction by outsiders.
- Lands on lease. They do not own lands.
- Very less agriculture. No irrigation facilities. They have received pipelines and a bridge from the Block.
- Children are sent to school till 5th standard. They cannot afford education after this.
- They do not get enough provisions from the fair price shop.
- Leopards, black bear, wild boar in forest. They don't destroy crops. Kakar (similar to goats... barking deer?) raid crops.
- No hospital. Doctor and Vets in Jauljibi.
- Unable to get govt. jobs. They do not enquire about unfair practices as they cannot afford traveling far distances to do so.
- Women do not weave. No woollen products.
- Very few people migrate to other places. Some go out to do furniture work.
- Other Ban Raji villages have fewer families.