POLITICAL ECOLOGY OF TIMBER RIGHTS IN THE WESTREN HIMALAYAS

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I. INTRODUCTION

Timber Distribution (T.D.) is a unique policy in the colonial history of forest management. It is a policy in the state of Himachal Pradesh in India that provides every landowner with the right to harvest timber for the construction and repair of their houses. This policy while providing for a basic need of the local population is also the single largest reason for timber harvest in the western Himalayan region. It results in the harvest of 100,000 cubic meters of prime timber worth over twenty million dollars annually[1]. T.D. provides a singular example of provision of valuable rights to local society by the state. Although this policy also represents restriction of rights through regulation by the state, it is a unique case where local people have managed to retain rights to coveted resources over a century of social, economic and political changes. Ecologically, T.D. is significant as it represents the single largest reason for legal timber harvest in the middle and upper hills of the Indian Himalayas. This policy is also vital since user rights are recommended in most new participatory forest policy initiatives around the world. Timber distribution is a policy that has survived over a century and provides a good case to understand the impact of social, economic and political changes on a user rights policy.

Timber distribution has been policy of the forest department since the last century. Rights of local people to use state forests have been codified by forest settlements undertaken by officers of the colonial era. For instance in Kullu district of Himachal Pradesh, the Anderson's settlement[2] completed in 1886 still defines the forest rights of local people. This provides all landowners of the region with rights to:

- timber for building and repairing houses;
- grazing cattle, sheep and goats;
- wood for agricultural and domestic implements;
- grass and leaves for fodder;
- manure;
- fuel wood, splinters, torches, wood for funerals;
- medicinal roots, flowers, fruits, bamboo;
- several species of dry fallen wood.

All these rights are appended to agricultural land. The right holders are described in the settlement not by individual name, but by the name of the hamlet.

The rights of landowners of each hamlet are specified in particular forests and the detailed rights in each forest are also delineated in the settlement. With landlessness at less than 2% in this state, T.D. ensures timber for practically every family. The right to timber, previously unlimited, has now been restricted to only one or two trees once every five years. But the villagers still pay the same nominal amount fixed in the last century by the settlement. The rates for T.D. were fixed at 20% of the market rates at the time of the initial forest settlements, for all species that had a market value at that time. Today T.D. rates have become insignificant compared to current market rates.

Existing Ratio of T.D. Rates to Market Rates (1993):

Deodar1:	12328
Kail1:	29167
Fir1:	56083
Chil 1:	15132

The effective subsidy provided by the forest department under T.D. in 1992-93 was Rs. 795,600,000[3].

II. STUDY SITE

My study was conducted in Kullu district of Himachal Pradesh in India. Himachal Pradesh is a small state in the Western Himalayan region of India with 35.3% of its geographical area classified as forest area. There are three ago-ecological zones in the state - the lower sub tropical region, the middle moist temperate belt and the higher alpine, and snow covered areas. Ecologically it serves as the watershed region for several major national rivers, and faces all the travails of a fragile mountain ecology. Kullu district, in the moist temperate zone was selected as the main field site. Kullu has a population of about 301,000 persons, with a density averaging 55 persons / km^2. The annual population growth since 1981 averages 2.6% (the highest rate in the state), mainly due to in-migration of labor. Ninety six percent of the population in this district is Hindu by religion, and 2.9% are Buddhist.

Kullu district has an average land holding size of less than one hectare. The average land holding size declined from 1.16 ha to 0.94 ha from 1980 / 81 to 1987 / 88[4]. This decrease is attributed mainly to partition at inheritance. The economy of Kullu has seen considerable changes in the last three decades mainly due to commercial apple production and tourism. The main occupation cited by majority of the respondents was agriculture. Wheat, maize and barley are the main crops, although intercropping with pulses and beans is common. Cash crops such as garlic and off-season vegetables are increasingly being adopted by local people, and half the households in the study sample owned at least a few apple trees.

III. METHODS

The research was conducted over a period of one and one-half years, using a combination of methods. Political ecology, a research framework that combines ecological concerns and a broadly defined political economy (Blaikie and Brookfield, 1987; Neumann, 1992)[5] was used as a guiding tool. The study incorporates both individual and village level data with broader state and national level data. Within this framework, I used participatory rural appraisal tools to familiarize myself with the field and to define and refine the research questions. I used participant observation to collect data on relationships and activities. I surveyed individuals in two hamlet clusters in one district of Himachal Pradesh for much of the demographic and perception data. To further refine this data I interviewed key personnel. Finally archival research and department records help me trace the forest management aspects as well as the history of the policy.

IV. RESULTS AND DISCUSSION

In this discussion I will focus on one particular aspect of my study. I will discuss the issues that arise during implementation of the policy. This is a crucial phase that is often neglected by policy makers. But even well designed policies depend on proper implementation for their success.

Timber distribution policy is implemented by the Department of Forest Farming and Conservation (DFFC) of Himachal Pradesh. This is an organization similar to the Forest Department in other states of India. It is headed by officers from the Indian Forest Service (IFS) who are selected through an all India selection process. These IFS officers are charged with managing the forest and adapting policy at the state level. Below them are the Range Officers who are selected through a state level selection process. Next are the deputy rangers and lowest in the hierarchy are the forest guards (FIGURE 1).

Attitudes, problems and strengths of the higher level officers have been analyzed by some studies in the context of social/ community forestry, as these are the people who design the policy and decide if it will be implemented. However, the attitudes of the lower level staff has often been assumed rather than studied or analyzed. The actual field implementors of a policy are below the rank of the range forest officer. These people are recruited from the local area and interact on a daily basis with the local people for whom the policy is being implemented.

Forest guards are often faced with the dilemma of being both a forester and a villager. They are employed by the department and often expected to implement forest policies that restrict forest use of local people, they are also part of the local society. They are however an integral part of local society and are constrained by the various relations and obligations imposed by the local social code. They are unlike the higher officials who have less contact with local society and its customs. The higher officials are in many senses "outsiders" - they are recruited from other parts of India, are trained outside the state, and often live within forest colonies

separated from the local villagers. Their friends and relatives are distinct from their clients. Forest guards have a harder time keeping the two separate and this definitely affects the implementation of forest policies. Forest guards are enmeshed in the local politics. Hierarchies and divisions in local society like caste, class, gender, social and political power affects them as much as the villagers. To live in the villages they often have to follow the local customs and traditions and are bound by the social rules of kinship, friendships, and obligations. For instance, although a forest guard is expected to check the genuineness of applications of

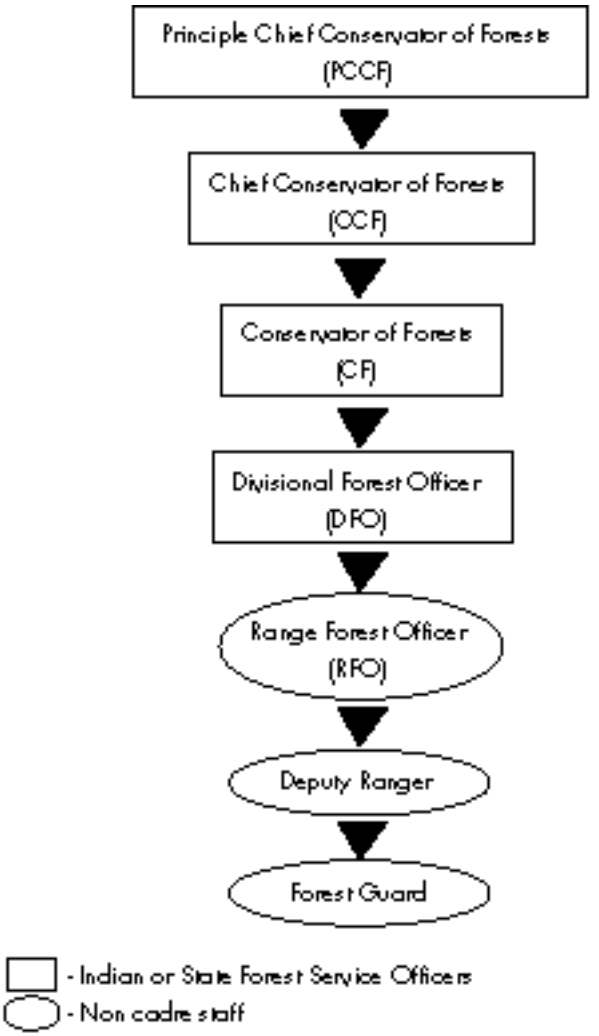
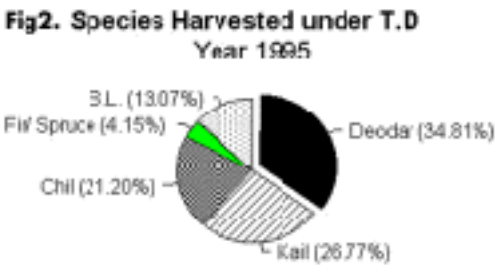


FIGURE 1 : Organizational Structure of the Department of Forest Farming and Conservation, Himachal Pradesh

timber, in reality it may not be socially possible for him to refuse the timber application of a powerful villager. They have to be provided the power, equipment, training and institutional support required to implement the policy. Is it possible for an unarmed single forest guard to stop gangs of illegal smugglers? Is it practical to raise plantations within project financial years, irrespective of seasonality? These are questions that need to be raised by policy makers. Before forest policies are made it is necessary to check if it is physically, financially and socio-politically possible / advantageous to implement a particular policy. Especially crucial are questions that are often neglected like what impact does the policy have on the workload of lower level staff, their power equation in the department and in local society, and their professional and personal identity.

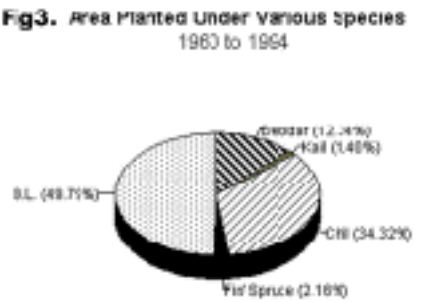
The other aspect of policy implementation is the integration of various policies and projects so that the over all combined outcome is desirable. This implies integration both within the sector as well as between different sectors. I will deal with the intra sectoral integration first as this is relatively easier. The Department of Forest Farming and Conservation has over a dozen different projects and several policies that it implements. Timber distribution is one of them that results in the harvest of a large amount of timber. The timber harvested however is only of particular species (FIGURE 2). For instance cedar (*Cedres deodara*) and blue pine (*Pinus excelsa*) account for over half of all the timber harvested every year under the timber distribution policy. These woods are best suited for house construction in this area, and are most durable.



Plantation projects generally are carried out independent of any analysis of harvests. Plantation is done within forests to supplement regeneration, and also in community land and wastelands. It is done under specific projects, many of which are funded by various donor agencies. Large areas have been planted, usually with the species planted depending on the particular project under which plantation is undertaken. (FIGURE 3).

Overall chil (*Pinus longifolia*) is the single largest species that has been planted by the department (about a third of the area planted in the last 30 years). A large number of broad leaved species including oaks, sal, walnut, etc., have been planted under various projects in recent years. Deodar forms only 12 % of the planted area. Management of plantation, regeneration and harvest in consonance with one another is important to maintain the tree species balance in these forests. This

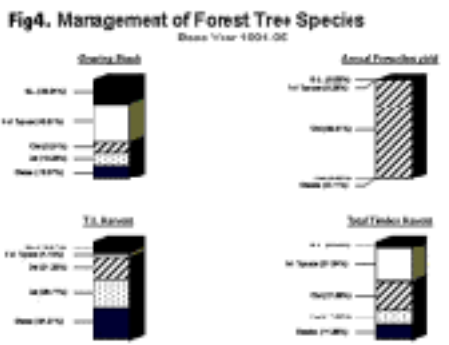
seems to have been neglected. There is significant gap between what is being planted and species that are being harvested in the state. Fir and spruce have been harvested on a large scale by the forest corporation, but plantation has not focused on these species.



Many of the more recent plantation projects have focused on planting broad leaved species. Although they are not harvested for timber, they are heavily used by local people for non-timber products. Hence this plantation is a good strategy. But simultaneously, there is a need to plant other species that are being heavily used. For instance plantation of deodar is essential if the future need for T.D. and house construction in this region has to be met.

Chil forms almost the entire annual silviculturally prescribed yield in the forests of Himachal Pradesh(FIGURE 4). However, neither the T.D. nor the commercial harvests can, or do correlate with this prescribed yield, which is too low for all other species. This is a serious gap in the management of these forests that need to be addressed.

The profile of the forest is likely to change drastically if harvesting and plantation policies are not seen an integrated whole. The growing stock that is available for the species that are so much in demand is very low, and likely to cause problems in the near future.



Timber harvested under the timber distribution policy has increased steadily over the years due to factors that are often external to the forestry sector. The increase in population and migration to town centers and the improvement in the economy have been major factors. With increase in disposable incomes and the growth in tourism the price of timber has increased considerably. Another factor is the change in lifestyle that accompanies these above factors. Land is divided among nuclear families and land fragmentation is common. Timber rights are appended to land ownership, and

hence number of right-holders has also increased.

Inter-sectoral integration is perhaps even more difficult as it involves different competing implementation agencies. For instance in Himachal Pradesh, tourism is being promoted as a major revenue earner. Manali town in Kullu district has emerged this decade as a major tourist center for Indian and foreign tourists, and at least 300 hotels and guest houses have been built in this decade. This makes economic and political sense as the state is rich in natural resources and scenic beauty that should be effectively utilized. However, as is evident in the Manali region, this industry has not been conscious of the need for protecting the environment. Apart from pollution and urbanization problems, hotels have also utilized a tremendous amount of local wood in construction. The demand and the price for timber in the local area has shot up considerably, resulting in the increase in local illegal trade in timber.

Horticulture is the other major revenue earner in the region. This affects forests in two direct ways, more land is converted to orchards and wood is utilized for packing cases. The later problem has been solved to an extent in this region by importing soft wood from neighboring states. Both horticulture and tourism have resulted in the increase of average incomes in the region, which is generally desirable. Increased income has an indirect effect on forests. Generally more affluent people build larger houses. Even in cases where people have moved away from houses built entirely of wood, a large amount of wood is used in paneling and other embellishments. Hence wood use for construction has increased overall. However, with affluence fuel wood use decreases drastically which is favorable to forest management in this area.

V. CONCLUDING COMMENTS

Holistic management: Sustainable forest policy has to be based on very localized facts but it also needs to have a broad perspective. For instance while local social and ecological factors should provide the basis for species selection, the overall landscape of the region and the future need of the population should be factored in to decide where harvests should take place and where and what plantations are undertaken. This is particularly important in a state like Himachal Pradesh where different projects have different funding sources and different priorities and goals. These projects need to be integrated to meet the need of the region and people.

Inter-sectoral cooperation, as discussed above is crucial for sustainable management of forests. Competing and contradictory goals of agencies planning for the same region can cause more damage than good. Although this is difficult to achieve in well entrenched traditional bureaucracies as in India, it should be emphasized as far as possible.

Focus on Implemetors: Finally, it is essential to consider the lowest level of contact between the implementing agency and local clients before formulating any policy. The policy needs to be palatable to them, as well as easy to implement

and monitor. Some policies that sound sustainable to policy makers are almost impossible to implement in the existing social and political conditions. But lower level staff are simply expected to implement it at all costs. This is an unrealistic demand and often results in successful reports and unsuccessful projects. Lower level implementors should be considered and consulted when policies are designed for sustainable management of natural resources.

NOTES

[1] Forest Department. 1996. Himachal Pradesh. H.P. Forest Statistics.

[2] Anderson, A. 1886. Report on the Demarcation and Settlement of Kullu Forests. Reproduced in 1975. Forest Department, Himachal Pradesh.

[3] Department of Forest Farming and Conservation. 1994. Himachal Pradesh. Annual Administrative Report.

[4] Government of Himachal Pradesh. 1998. Census of Agriculture.

[5] Blaikie P. and H. Brookfield. 1987. Land Degradation and Society. Routeledge, New York; Neumann, R. 1992. Political ecology of wildlife conservation in Mt. Meru area of Northeast Tanzania. Land Degradation and Society 3: 85-98.

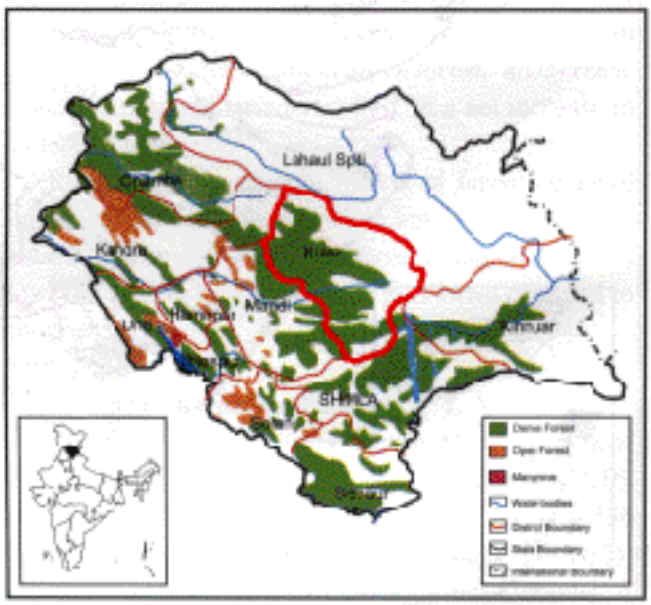


Fig 3.6 Forest Cover of Himachal Pradesh