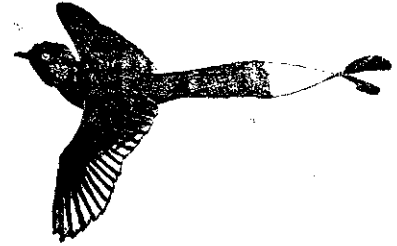


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**STATE FORESTRY AND SOCIAL CONFLICT  
IN BRITISH INDIA : A STUDY IN THE  
ECOLOGICAL BASES OF AGRARIAN  
PROTEST**



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INTRODUCTION : THE ECOLOGICAL PERSPECTIVE

Geographically speaking, India is a land of tremendous diversity - from bare and snowy mountains in the north to tropical rain forests in the south, from arid desert in the west to alluvial flood plain in the east. Although the United States has, arguably, a comparable range of ecological regimes, what is especially striking about India is its diversity of human cultures, corresponding to different agro-climatic and vegetative zones. These cultures exhibit diverse technologies of resource use and also of social modes of resource control, spanning the entire range of productive activities known to humans. These range from stone age hunter gatherers- at one end of the spectrum - through shifting cultivators, nomadic pastoralists, subsistence and cash crop agriculturists, planters, and finally to every form of industrial enterprise- from artisansal production to the most modern electronic factory- at the other. There is, too, a great variety of property relations that match different techniques - private, communal, corporate or state management of resources, as the case may be.

An awareness of this diversity is heightened by the acute natural resource crisis faced by the country in recent years : shortages of prey for hunters and fishermen, of land for shifting cultivators, of grazing for pastoralists, of fuel, fodder and manure for subsistence plough agriculturists, of power and water for cash crop agriculturists, and of power, water, and raw materials for industry. These shortages have generated a variety of conflicts - and collusions

- as different segments of Indian society exercise competing claims over scarce resources. Inevitably, such conflicts, which show no signs of abating, strongly affect the quality of human life, and of course, of the natural environment as well.<sup>1</sup>

These contemporary concerns have led several scholars, including the present writers, to try and reconstruct Indian history using insights derived from recent debates in human ecology. It has been suggested that British colonial rule marks an important watershed in the ecological history of India. The encounter with a technologically advanced and dynamic culture gave rise to profound dislocations at various levels of Indian society. However, the essential interdependence of the ecological and social changes that came in the wake of colonial rule has not been accorded due recognition. The agrarian history of British India has focused almost exclusively on social relations around land and conflicts over the distribution of its produce, to the neglect of the ecological context of agriculture - e.g. fishing, forests, grazing land and irrigation - and of state intervention in these spheres.<sup>2</sup> Thus the second volume of the Cambridge Economic History of India, an impressive and in many ways valuable survey of colonial agrarian history, has no section devoted to the management and utilization of the forest; leaving out of its purview over one-fifth of India's land area, controlled and monitored by the state in ways that crucially affected agrarian social structure. It shows little awareness of the existence of this vast wooded estate of the government - let alone of the elaborate bureaucratic and technical apparatus that governed it - and mentions only in passing the bitter and intense conflicts around forest resources between the state and its subjects. However, as a synthetic

review of colonial economic history, the Cambridge volume is here only reflecting a more general deficiency in the literature. As indicative of this gap, it may be mentioned that of the many reviews of the volume to the best of our knowledge not one has mentioned what to the present writers is its most obvious flaw.<sup>3</sup>

It is beyond the scope of this study to investigate the reasons for the almost universal neglect of Indian ecological history, though it is quite clear that it stems from both methodological and theoretical limitations. Suffice it to say that as far as this article is concerned, what are ostensibly "social" changes need to be viewed against the backdrop of concomitant changes in the patterns of natural resource utilization. Here, the significance of the British intervention lies in the novel modes of resource extraction, induced by its political superiority and the availability of technologies of resource use previously foreign to India, that it brought about.

The increasing intensities of natural resource use fostered by colonialism were accompanied, too, by equally dramatic changes in forms of management and control. By far the most significant of these changes was the takeover of woodland by the state. While state management had not been unknown in the precolonial period, it was usually restricted in its applicability and oriented towards highly specific ends - e.g. the reservation of elephant forests in the Mauryan period or later edicts affirming a state monopoly over commercial species such as teak and sandalwood.<sup>4</sup> Now, state control, notably over forests, was extended over large tracts and throughout the subcontinent. Further, while asserting formal rights of ownership over various natural resources, the colonial government

brought to bear on their management a highly developed legal and administrative infrastructure.

It is by now well recognized that the imperatives of colonial forestry were essentially commercial. Its operation were dictated more by the commercial and strategic utility of different species than by broader social or environmental considerations. For what follows, it is important to understand the mechanisms of intervention - i.e., the institutional framework that governed the workings of state forestry in British India.<sup>5</sup>

In the early decades of its rule, the colonial state was markedly indifferent to forest conservancy. Until well into the nineteenth century, forests were viewed by administrators as an impediment to the expansion of cultivation. With the state committed to agricultural expansion as its major source of revenue, the early decades of colonial rule witnessed a "fierce onslaught" on India's forests.<sup>6</sup> The first show of interest in forestry - the reservation of teak forests in Malabar in 1806 - was dictated by strategic imperial needs. With the depletion of oak forests in England and Ireland, the teak forests of the Western Ghats were utilized for shipbuilding. Indian teak, the most durable of shipbuilding timbers, was used extensively for the Royal Navy in the Anglo - French wars of the early nineteenth century and by merchant ships in the later period of maritime expansion.<sup>7</sup>

These isolated and halting attempts at the systematic and sustained production of roundwood, however, did not constitute a general policy of forest management : that had to await the building of the railway network in the last decades of the nineteenth century. It was the pace of railway expansion (from 7,678 km in 1870 to 51,658 km in 1910) brought home forcefully the fact that India's forests were

not inexhaustible. The writings of forest officials of the time are dominated by the urgent demands for "sleepers" (or ties). Dubbing early attempts at forest working a "melancholy failure" the Governor General, Lord Dalhousie had in 1862 called for the establishment of a department that could meet the enormous requirements (nearly 1 million sleepers annually) of the railway companies. Impending shortages, Dalhousie observed, had made the "subject of forest conservancy an important administrative question".<sup>8</sup>

As Britain itself had no tradition of managing forests for sustained timber production, the Forest Department was started with the help of German foresters in 1864. However, the task of reversing the deforestation of the past decades required the forging of legal mechanisms to curtail the rights of user being exercised by village communities. After an earlier Act had been found wanting, state monopoly over forests was safeguarded by the stringent provisions of the Indian Forest Act of 1878. This was a comprehensive piece of legislation - later to serve as a model for other British colonies - that by one stroke of the executive pen attempted to obliterate centuries of customary use of the forest by rural populations all over India. Several officials within the colonial administration were sharply critical of the new legislation, calling it an act of confiscation and predicting (as we shall see, accurately) widespread discontent at its application. Their objections, however, were swiftly overruled.<sup>9</sup> Essentially designed to maintain strict control over forest utilization, from the perspective of strategic imperial needs - at the time, the supply of large timber for the railways - the Act did, however, enable the sustained working of compact blocks of forest

for commercial timber production. The framework of the 1878 Act provided the underpinnings for the scientific management of the forests. A logical corollary of the combined operations of law and "scientific" management was, however, sharp restrictions on customary use. For rationalized timber production could only be ensured through the strict regulation of traditionally exercised rights. Under the provisions of the 1878 Act, each family of "rightholders" was allotted a specific quantum of timber and fuel, while sale or barter of forest produce was strictly prohibited. This exclusion from forest management was, therefore, both physical, i.e., by denying or restricting access to forests and pasture, and social, i.e., by allowing "rightholders" only a marginal and inflexible claim on the produce of the forests.<sup>10</sup>

Insofar as the main aims of the new department were the production of large commercial timber and the generation of revenue, it worked willingly or unwillingly to enforce a separation between agriculture and forests. This exclusion of the agrarian population from the benefits of forest management had drawn sharp criticism from within the ranks of the colonial intelligensia. In the words of an agricultural chemist writing in 1893, the forest department's objects

were in no sense agricultural, and its success was gauged mainly by fiscal considerations; the Department was to be a revenue paying one. Indeed, we may go so far as to say that its interests were opposed to agriculture, and its intent was rather to exclude agriculture than to admit it to participate in its benefits.<sup>11</sup>

While advocating the creation of Fuel and Fodder Reserves in order that forests more directly serve the interests of the rural population, Dr. Voelcker used the characteristic justification that

the increased revenue from land tax that such a reorientation would enable would more than compensate for any loss of revenue from a decline in commercial timber operations. As the writings of other contemporary critics also suggest, by bringing about an escalation in the intensity of resource exploitation and control, state forestry sharply undermined the ecological basis of subsistence cultivation, hunting and gathering.<sup>12</sup> It must be stressed however that the ecological and social changes that came in the wake of commercial forestry were not simply an intensification of earlier processes of change and conflict. Clearly many of the forest communities (especially hunter-gatherers and shifting cultivators) described in this paper, had for several centuries been subject to the pressures of the agrarian civilizations of the plains. However, while these pressures themselves ebbed and flowed with the rise and fall of the grain based kingdoms of peninsular India, they scarcely matched in their range or scope, the magnitude of the changes that were a consequence of the state takeover of the forests in the late nineteenth century. Prior to that, the commercial exploitation of forest produce, was largely restricted to commodities such as pepper, cardamom and ivory, whose extraction did not seriously affect either the ecology of the forest or customary use. It was the emergence of timber, as the major commodity that led to a qualitative change in the patterns of harvesting and utilization of the forest. Thus when the colonial state asserted control over woodland earlier under the contract of local communities, and proceeded to work these forests for commercial timber production, it represented an intervention in the day to day life of the Indian villager unprecedented in its scope. As, by 1900, over 20% of India's land area had been taken over by the



Forest Department, the working of state forestry could not fail to affect almost every village and hamlet in the subcontinent. Secondly, the colonial state radically redefined property rights, imposing on the forest a system of management and control whose priorities sharply conflicted with the earlier systems of local use and control. Lastly one must not underestimate the changes in forest ecology that resulted from this shift in management systems. For a primary task of colonial forestry was to change the species composition of the largely mixed forests of India in favour of component species that had an established marketable value. Silvicultural techniques for example, attempted with success to transform the mixed coniferous - broad leaved forests of the Himalayas into pure coniferous stands, and convert the rich evergreen vegetation of the Western Ghats into single-species teak forests. While these induced changes in forest ecology, have in the long term had a slow but imperceptible effect on soil and water systems, in a more immediate sense they ran counter to the interests of surrounding villages insofar as the existence of several species rather than one could better meet the varied demands of subsistence agriculture. Significantly, the species promoted by colonial foresters - pine, cedar and teak in different ecological zones - were invariably of very little use to rural populations while the species they replaced (e.g. oak) were intensively used for fuel, fodder and small timber.

In these varied ways, colonial forestry marked an ecological, economic and political watershed in Indian forest history. The intensification of conflict over forest produce was a major consequence of the changes in patterns of resource use it initiated.

The present article analyzes some of the evidence on conflict over forests and pasture in colonial India. While it does not pretend to be comprehensive in its coverage, it attempts to outline the major dimensions of such conflict, by focussing on the genesis, geographical spread, and the different forms in which protest manifested itself. As a contribution to the sociology of peasant protest under colonialism, it is intended to provide a set of preliminary findings and hopefully to initiate more detailed research on the ecological history of different parts of the subcontinent.

#### HUNTER-GATHERERS : THE DECLINE TO EXTINCTION

Till the early decades of this century, almost a dozen communities in the Indian subcontinent depended on the original mode of sustenance of human populations, viz. hunting and gathering. Their distribution encompassed nearly the entire length of India, with the Rajis of Kumaun in the north to the Kadars of Cochin in the south. The abundant rainfall and rich vegetation of their tropical habitats facilitated the reproduction of subsistence almost exclusively through the collection of roots, fruit, and the hunting of small game. While cultivation was largely foreign to these communities, they did engage in some trade with the surrounding agricultural population, exchanging forest produce such as herbs and honey for metal implements, salt, clothes, and very occasionally, grain. With minimal social differentiation, and restraints on overexploitation of resources through the partitioning of territories between endogamous bands, these hunter-gatherers, if not quite the "original affluent society"<sup>13</sup> were, as long as there existed sufficient areas under their control, able to subsist quite easily on the bounties of nature.

Predictably, state reservation of forests sharply affected the subsistence activities of these communities, each numbering a few hundred, and with population densities calculated at square miles per person, rather than persons per square mile. The forest and game laws affected the Chenchus of Hyderabad, for example, by making their hunting activities illegal and by questioning or even denying their existing monopoly over forest produce other than timber. The cumulative impact of commercial forestry and the more frequent contacts with outsiders that the opening out of such areas brought about virtually crippled the Chenchus. As suspicious of mobile populations as most modern states, in some parts the colonial government forcibly gathered the tribals into large settlements. Rapidly losing their autonomy, most Chenchus were forced into a relationship of agrestic serfdom with the more powerful cultivating castes. Further south, the Chenchus of Kurnool, almost in desperation, turned to banditry, frequently holding up pilgrims to the major Hindu temple of Srisailam.

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Like the Chenchus, other hunter-gatherer communities were not numerous enough to actively resist the social and economic changes that followed state forest management. Forced sedentarization and the loss of their habitat induced a feeling of helplessness as outsiders made greater and greater inroads into what was once an undisputed domain. Thus the Kadars succumbed to what one writer called a "proletarian dependence" on the forest administration, whose commercial transactions and territorial control now determined their daily routine and mode of existence. In this manner, the intimate knowledge of his surroundings that the Kadar possessed was now

utilized for the collection of forest produce marketed by the state. In the thickly wooded plateau of Chotanagpur, meanwhile, the commercialization of the forest and restrictions on local use had led to a precipitous fall in the population of the Birhor tribe - from 2,340 in 1911 to 1,610 in 1921.<sup>15</sup>

While the new laws restricted small scale hunting by tribals, they facilitated more organized shikar expeditions by the British. From the middle of the last century, a large scale slaughter of animals commenced, in which white shikaris at all levels, from the viceroy down to the lower echelons of the British Indian army, participated. Much of this shooting was motivated by the desire for large bags. While one British planter in the Nilgiris killed 400 elephants in the eighteen sixties, successive viceroys were invited to shoots in which several thousand birds were shot in a single day in a bid to claim the "world record". Many Indian princes sought to emulate the predatory instincts of the British. The Maharaja of Gwalior for example, shot over 700 tigers early in this century.<sup>16</sup>

Although it is difficult to estimate the impact of such unregulated hunting on faunal ecology, the consequences of shikar were apparent by the time India gained independence, as reflected in the steadily declining populations of game species such as the tiger and elephant. More relevant to this study is the disjunction between the favours shown to the white shikar and the clampdown on subsistence hunting. While there were few formal restrictions on the British hunter until well into the twentieth century, hunter gatherers as well as cultivators for whom wild game was a valuable source of protein found their hunting activities threatened by the new forest laws.

The Baigas of Central India, for example, were famed for their

hunting skills - "expert in all appliances of the chase", early British shikaris relied heavily on the "marvelous skill and knowledge of the wild creatures" that the Baiga possessed. Yet the stricter forest administration, dating from the turn of the century, induced a dramatic decline. Writing in the 1930's, Verrier Elwin noted that while their love for hunting and meat persisted, old skills had largely perished. There remained, however, a defiant streak, and as one Baiga said, "even if Government passes a hundred laws we will do it. One of us will keep the official talking; the rest will go out and shoot the deer".<sup>17</sup> In the Himalayan foothills, too, where there was an abundance of game, villagers continued to hunt despite government restrictions, taking care to be one step ahead of the forest staff - a task not difficult to accomplish given their familiarity with the terrain.<sup>18</sup>

Among shifting cultivators, there was often a ritual association of hunting with the agricultural cycle. Despite game laws, the Hill Reddis of Hyderabad clung to their ritual hunt - called Bhumi Devata Panduga or the hunt of the earth god - that involved the entire male population and preceded the monsoon sowing. The reservation of forests also interfered with the movement of hunting parties across state boundaries. In 1929, a police contingent had to be called in to stop a party of Bison Marias from Bastar state, armed with bows and spears, from crossing into the British-administered Central Provinces. This, of course, constituted an unnatural intervention, as the ritual hunt was no respecter of political boundaries. Nevertheless, in later years the authorities were successful in confining the Maria ritual hunt to Bastar, the game caught steadily declining in consequence.<sup>19</sup>

## THE "PROBLEM" OF SHIFTING CULTIVATION

Shifting or "jhum" cultivation was the characteristic form of agriculture over large parts of northeastern India, especially the hilly and forested tracts where plough agriculture was not always feasible. Jhum typically involves the clearing and cultivation of patches of forest in rotation. The individual plots are burnt and cultivated for a few years and then left fallow for an extended period (ideally, a dozen years or longer), allowing the soil to recoup and recover lost nutrients. Cultivators then move on to the next plot, abandoning it in turn when its productivity starts declining. It was usually practiced by "tribal" groups for whom jhum was a way of life encompassing, beyond the narrowly economic, the social and cultural spheres as well. The corporeal character of these communities was evident in the pattern of cultivation, where communal labour predominated and with different families adhering to boundaries established and respected by tradition. The overwhelming importance of jhum in structuring social life was strikingly manifest, too, in the many myths and legends constructed around it in tribal cosmology.

As in many areas of social life, major changes awaited the advent of British rule. For almost without exception, colonial administrators viewed jhum with disfavour as a primitive and unremunerative form of agriculture in comparison with plough cultivation. Influenced both by the agricultural revolution in Europe and the revenue generating possibilities of intensive (as opposed to extensive) forms of cultivation, official hostility to jhum gained an added impetus with the commercialization of the forest. Like their counterparts in other parts of the globe, British foresters held jhum to be "the most

destructive of all practices for the forest". There was a very good reason for this animosity - if "axe cultivation was the despair of every forest officer",<sup>24</sup> it was largely because timber operations competed with jhum for territorial control of the forest. This negative attitude was nevertheless tempered by the realization that any abrupt attempt to curtail its practice would provoke a sharp response from jhum cultivators. Yet the areas cultivated under jhum<sup>25</sup> often contained the most valued timber species. In the circumstances, the curbing of jhum was an intractable problem for which the colonial state had no easy solution.

A vivid account of the various attempts to combat jhum<sup>26</sup> can be found in Verrier Elwin's classic monograph on the Baiga, a small tribe of the Mandla, Balaghat, and Bilaspur districts of the present-day Madhya Pradesh. The first serious attempt to stop shifting cultivation, in the 1860's, had as its impetus the civilizing zeal of the Chief Commissioner of the province, Richard Temple. In later years, though, it was the fact that the marketable value of forest produce "rose in something like geometrical proportions" which accounted for the "shifting of emphasis from Sir Richard Temple's policy of benevolent improvement for their own sake to a frank and simple desire to better the Provincial budget". A vigorous campaign to induce the Baiga to take to the plough culminated in the destruction of standing jhum crops by an overenthusiastic Deputy Commissioner. When many tribals fled to neighbouring princely states, the government advised a policy of slow weaning from axe cultivation.

In fact, such difficulties had been anticipated by the Settlement Officer in 1870, who observed that "it has been found quite impracticable, as well as hard and impolitic, to force the Baigas to

give up their dhya (jhum) cultivation and take to the plough". He advised a limiting of jhum rather than a total ban. A more cautious policy was dictated, too, by the dependence of the Forest Department on Baiga labour, who were most proficient in wood cutting and the collection of forest produce. As a consequence, the government established the Baiga "chak" (reserve) in 1890, covering 23,920 acres of forest, where they planned to confine all jhum cultivators. The area chosen was described as "perfectly inaccessible (and) therefore useless as a timber producing area". While permitting jhum within the Reserve, the administration stressed an overall policy of discouraging it elsewhere. In this they were partially successful, as Baiga villages outside the chak, faced with the prospect of leaving their homes, accepted the terms of plough cultivation. While many Baigas continued to migrate into neighbouring princely states, within the chak itself the population of jhum cultivators steadily dwindled.

Baiga opposition took the form of "voting with their feet", and other forms of resistance that stopped short of open confrontation, such as the non-payment of taxes and the continuance of jhum in forbidden areas. The new restrictions inculcated an acute sense of cultural loss, captured in a petition submitted to the British Government in 1892. After jhum had been stopped, it said,

We daily starve, having had no food grain in our possession. The only wealth we possess is our axe. We have no clothes to cover our body with, but we pass cold nights by the fireside. We are now dying for want of food. We cannot go elsewhere, as the British government is everywhere. What fault have we done that the government does not take care of us? Prisoners are supplied with ample food in jail. A cultivator of the grass is not deprived of his holding, but the Government does not give us our right who have lived here for generations past.

In some areas tribal resistance to the state's attempt to curb



jhum often took a violent and confrontationist form. This was especially so where commercialization of the forest was accompanied by the penetration of non-tribal landlords and moneylenders who came to exercise a dominant influence on the indigenous population. Elwin himself, talking of the periodic disturbances among the Saora tribals of the Ganjam Agency, identified them as emanating from two sources : the exactions of plainsmen, and the state's attempts to check axe cultivation. Thus Saoras were prone to invade reserved forests and clear land for cultivation. In the late 1930's, several villages endeavoured to fell large areas of reserved forests in preparation for sowing. The Saoras were ready for any penalty - when the men were arrested and put in jail, the women continued the cultivation. After returning from jail, the men cleared the jungle again for the next year's crop. As repeated arrests were unsuccessful in stopping Saoras from trying to establish their right, the Forest Department forcibly uprooted crops on land formally vested in the state.<sup>27</sup>

Perhaps the most sustained resistance, extending over nearly a century, occurred in the Gudem and Rampa hill tracts of the present-day Andhra Pradesh. Inhabited by Koya and Konda Dora tribesmen, dominantly jhum cultivators, under British rule the hills were subject to a steady penetration of the market economy and the influx of plainsmen eager to exploit its natural wealth. Road construction led to rapid development in the marketable trade of tamarinds, fruit, honey and other forest produce that were exported to urban centres and even to Europe. Traders, from the powerful Telugu caste of Komatis, also took lease (from local chiefs) tracts of forest as well as the

trade in palm liquor. As in other parts of India, they were actively helped by the colonial government, which had banned domestic brewing of liquor (an important source of nutrition in the lean season) and farmed out liquor contracts in a bid to raise revenue. Simultaneously, commercial forest operations were commenced on a fairly large scale, and as elsewhere, the creation of forest reserves conflicted with the practice of jhum. Slowly losing control over their lands and means of subsistence, many tribals were forced into relations of dependence with the more powerful plainsmen, either working as tenants and sharecroppers in the new system of market agriculture or as forest labour in the felling and hauling of timber.

Among the many small risings or fituris documented by David Arnold, several were directly or indirectly related to forest grievances. The Rampa rebellion of the 1879-80 arose in response to the new restrictions concerning liquor and the forest regulations. Complaining bitterly against the various exactions, the tribals said that "as they could not live they might as well kill the constables and die". Breaking out in March 1879, the rebellion rapidly spread to neighbouring areas. The rebels, led by a minor tribal chieftain, Tamnam Dora, attacked and burnt several police stations, executing a constable in an act of ritual sacrifice. While Tamnam Dora was shot by the police in June 1880, the revolt had spread to the Golconda Hills of Vishakapatnam and the Rekepalle country in Bhadrachalam. The latter territory had earlier been part of the Central Provinces, and its transfer to Madras led to greater restrictions on the practice of jhum. Here, protest emanated directly from forest grievances, and as in other fituris, police stations, as a highly visible symbol of state

authority, were frequent targets. It took several hundred policemen and ten army companies to suppress the revolt, a task not finally accomplished till November of 1880.

The last recorded fituri was, like its predecessors, closely linked to restrictions on tribal access to the forest. This occurred in 1922-23 and was led by a high caste Hindu from the plains called Alluri Sita Rama Raju, who was able to transform a local rising into a minor guerilla war. Including dispossessed landholders and men convicted for forest offences, Rama Raju's men were actively helped by villagers who gave them food and shelter. After raids on police outposts had netted a haul of arms and ammunitions, Raju's band was able to evade the police by its superior knowledge of the hilly and wooded terrain. Unsuccessful in his attempts to spread the rebellion into the plains, Rama Raju was finally captured and shot in May 1924.

Interestingly, as the Indian princes sought to emulate their British counterparts in realizing the commercial value of their forests, they too came in conflict with shifting cultivators. Regarding the state takeover as a forfeiture of their hereditary rights, in several chiefdoms tribals rose in revolt against attempts to curb jhum. A major rebellion took place in Bastar State in 1910, directed against the new prohibitions concerning jhum, restrictions on access to forests and its produce, and the begar (unpaid labour) exacted by state officials. The formation of reserved forests had resulted in the destruction of many villages and the eviction of their inhabitants. In order to draw attention to their grievances, some tribals went on hunger strike outside the king's palace at Jagdalpur. Mostly Marias and Murias, the rebels, affirming that it was an internal affair between them and their ruler, cut telegraph wires and

blocked the roads. Simultaneously, police stations and forest outposts were burnt, stacked wood looted, and a campaign mounted against "pardeshis" (outsiders), mostly low caste Hindu cultivators settled in Bastar. Led by their headmen, the rebels looted several markets and attacked and killed both state officials and merchants. In a matter of days, the rebellion engulfed nearly half the state, or an area exceeding 6000 square miles. Unnerved, the king called in a battalion of the 22nd Punjabis (led by a British officer) and detachments of the Madras and Central Province police. Armed with bows, arrows and spears, the rebels unsuccessfully engaged the troops in battle. In a decisive encounter near Jagdalpur, over 900 tribals, of all ages from 16 upwards, were captured.

In 1940, a similar revolt broke out in Adilabad district of Hyderabad State. Here, Gonds and Kolams, the principal cultivating tribes, were subjected to an invasion of Telugu and Maratha cultivators who flooded the district following the improvement of communications. Whole Gond villages fell to immigrant castes. In the uplands, meanwhile, forest conservancy restricted jhum, with cultivated land lying fallow under rotation being taken into forest reserves. Following the forcible disbandment of Gond and Kolam settlements in the Dhanora forest, the tribals, led by Kumra Bhimu, made repeated but unsuccessful attempts to contact state officials. After petitions for resettlements were ignored, the tribals on their own established a settlement and began to clear forests for cultivation. An armed party who came to burn the new village was resisted by Bhimu's Gonds, who then took refuge in a mountain fastness. When the police asked them to surrender, they were met with

the counter demand that Gonds and Kolams should be given possession of the land they had begun to cultivate. The police thereupon opened fire, killing Bhimu and several of his associates.<sup>30</sup>

Elsewhere in Hyderabad State, the Hill Reddis of the Godavari Valley were also at the receiving end of the new forest laws. The restriction of jhum to small demarcated areas forced the Reddis to shorten fallow cycles, or to prolong cultivation on a designated patch until deterioration set in. Interestingly enough, as forest laws were not quite as stringent across the Godavari in British territory, tribals moved across in response to a ban on jhum - returning to Hyderabad when the ban was lifted. While not resorting to open protest, the Reddis thus made evident their dislike of the ban.<sup>31</sup> An ingenious method of protest, that likewise questioned forest policy without quite attempting to combat the state, is reported from several coastal districts in Madras Presidency where cultivators, supported by several officials, insisted that the ban on jhum had resulted in a greater incidence of fever.<sup>32</sup>

These repeated protests had a significant impact on government policy. In some parts of Madras Presidency, certain patches were set aside for tribals to continue jhum. For although "the Forest Department would welcome the complete stoppage of podu (jhum) it is not done for fear of fituris (tribal uprisings)".<sup>33</sup> Elsewhere the state found a novel way of pursuing commercial forestry without further alienating tribal cultivators. This was the "taungya" method of agro-silviculture - developed in Burma in the nineteenth century - where jhum cultivators are allowed to grow food crops in the forest, provided they grow timber trees alongside. Thus after a few years, when the cultivator moves on to clear the next patch, a forest crop

has been established on the vacated ground. Taungya, which rendered possible at a "comparatively low cost" the establishment of the labour force necessary for forest works, is still widely in operation. It helped to forestall the very real possibility of revolt if tribals were to be displaced by a prohibition of their characteristic form of cultivation (sometimes, though, even taungya cultivators thwarted the state - e.g. by planting up only those areas likely to be inspected by touring officials). Ironically enough, its success has even led to the reintroduction of jhum in tracts where it had died out or been put down at an earlier stage.

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More commonly, the cumulative impact of market forces and state intervention forced the abandonment of jhum in favour of the plough or wage labour. Even where the practice continued, the disruption of the delicate balance between humans and forests, initially through the usurpation of forests by the state, and later through a secular rise of population, has led to a sharp fall in the jhum cycle. A form of agriculture practiced for several millenia has become unsustainable in the face of external forces over which it had very little control.

#### SETTLED CULTIVATORS AND THE STATE

Notwithstanding the spatial separation between field and forest, over the most part of India plough agriculturists (mostly caste Hindus) were scarcely less affected by forest reservation than jhum cultivators. For they too depended on their natural habitat in a variety of ways. An adequate forest cover was ecologically necessary to sustain cultivation, especially in mountainous tracts where terrace farming predominated. And with animal husbandry a valuable appendage to cultivation, the forest were a prime source of fodder, in the form

of grass and leaves. The forests also provided such essential inputs as fuel, leaf manure, and timber for construction and agricultural implements.

Here too state reservation enforced changes in the traditional pattern of resource utilization, even if these changes were not quite as radical as in the case of shifting cultivators. Under the provisions of the 1878 Act, the takeover of a tract of forest involved settling the claims of surrounding villages. Under the new "legal" (i.e., codified) arrangements, the previously unlimited rights of user were severely circumscribed. These restrictions affected two distinct classes of agriculturists, and in somewhat different ways. In areas dominated by cultivating proprietors, and where differentiation was not too marked, those affected by state forestry primarily consisted of middle to rich peasants, many of whom were graziers rather than agriculturists. On the other hand, in tracts exhibiting more advanced forms of class differentiation, it was a different social stratum that was at the receiving end. These were "adivasi" (tribal) and low caste communities, who supplemented their meagre earnings as tenants and sharecroppers with the extraction and sale of fuel, grass and other minor forest produce.

An example of the first form of deprivation comes from the Madras Presidency. There, several decades after forest reservation, villagers had vivid memories of their traditional rights over the forest, continuing to adhere to informal boundaries demarcating tracts of woodland claimed and controlled by neighbouring villagers. The tenacity with which they clung to their rights was visibly manifest too, in the escalation in forest offences (averaging 30,000 per

annum), with the killing of forest personnel a not infrequent occurrence. A committee formed to investigate forest grievances was puzzled to find that villagers interpreted the term "free grazing" quite differently from the committee itself. While quite prepared to pay a small fee, peasants understood "free grazing" to mean "the right to graze all over the forests" i.e., the continuance of the territorial control over the forest that they formerly enjoyed.<sup>36</sup> Thus the demand for grazing was accompanied by the demand for free fuel, timber and small timber, in effect "for the abolition of all control and for the right to use or destroy the forest property of the state without any restriction whatever". Commenting on the widespread hostility towards state forest management, the committee observed that "the one department which appears at one time to have rivalled the Forest Department in unpopularity is the Salt Department, which, like the Forest Department, is concerned with a commodity of comparatively small value in itself but an article for daily use and consumption".<sup>37</sup>

In the state of Travancore, bordering Madras on the Malabar coast, restrictions on village use of the forest stemmed from two sources - the desire to commercialize the forest and the sale, at extremely low prices, of vast expanses of woodland to European planters. These processes were interrelated. The development of a road and railway network to facilitate the export of tea, coffee, and rubber also served to hasten the pace of timber exploitation. As a consequence, agriculturists faced acute distress, through the loss of green manure (extensively used in paddy cultivation) and other forest produce. Denied access to pasture, the population of sheep and goat declined precipitiously in the years following forest reservation. While there were no incidents of large scale protest, the peasantry



refused to cooperate with the Forest Department or submit to the new  
38  
regulations.

Not surprisingly, the opposition to state forestry was far more intense among lower castes and tribals. In the Thane district of coastal Maharashtra, an important source of income for tribal households was the sale of firewood to Koli fishermen. This trade was severely affected by the stricter control exercised over the forest since the later decades of the nineteenth century. Typically, the early manifestations of discontent were peaceful, e.g., petitioning the local administration. When this had no impact, collective protest turned violent. Surrounding the camp of a Deputy Collector, a group of villagers demanded that "the forests be thrown open, palm tax be abolished, country liquor (be sold) at one anna a seer, salt at one anna a paili, rice at Re 1/1/4 per maund and that the Government should redeem their mortgaged land and restore it to them". In another incident, a large number of tribals carrying firewood to the market were intercepted by the police. In protest, the adivasis stacked wood on a nearby railway line and refused to allow a train to pass. Sensing the prevailing mood of defiance, the officer in charge  
39  
of the force allowed them to proceed to the market.

A similar turn of events is reported from the Midnapur district of Bengal Presidency. In one area called the Jungle Mahals, land owned by the Midnapur Zamindari Company (MZC) - an associate of the important British managing agency firm of Andrew Yuile - and other large landlords, was cultivated by Santhal tribal tenants. While early lease needs clearly specified that all land was to be handed over to the lessee, the coming of the railway and consequently of a thriving

timber trade influenced the zamindars to impose sharp restrictions on the Santhals. Again, the tribals first tried the courts and other means of legal redress. However, the conditions of economic distress prevailing in the aftermath of World War I provoked a more militant response. Thus in 1918 the forest dwelling Santhals proceeded on a campaign of haat (market) looting, their principal targets being upcountry cloth traders, who were moneylenders as well.

Some years later, and after the intervention of Congress nationalists, the Jungle Mahals witnessed a movement more sharply focussed on the question of forest rights. In early 1922, Santhals working as forest labour went on strike. Following a scuffle between employees of the MZC and the strikers, the Congress directed the Santhals to plunder the forests. Further incidents of haat looting (including the burning of foreign cloth) and attempts to restrict the export of paddy were also reported. In one sub-division, Silda, Santhals began to plunder jungles leased to timber merchants. When a police party tried to confiscate the newly cut wood, they were beaten  
40  
up.

Another form of assertion of traditional rights was manifest when Santhals began to loot fish from ponds controlled by individual zamindars. In April 1923, there was a wave of fish pond looting and breaches of the forest law over an area of 200 square miles, from Jhargram in Midnapur to Ghatshilka in the Singhbhum district of Bihar. While recognizing this to be "illegal" act, the tribals argued that tank-raiding would force the zamindars to concede their customary rights over forests. The Santhals, the District Magistrate commented, "will let you know in his father's time all jungles were free, and bandhs (ponds) open to the public. Sometimes he is right.....". When

the protests were supported by a dispossessed local chieftain, even the belief that their acts were illegal were abandoned. Indeed, as alarmed officials reported, 90% of the crowd believed that through their acts they were merely bringing back a golden age when all jungles were free.

Defiance of forest regulations also formed part of the countrywide campaigns led by the Indian National Congress in 1920-22 and 1930-32. Gandhi's visit to Cudappah in southeastern India in September 1921 was widely hailed as an opportunity to get the forest laws abolished. In nearby Guntur, peasants actually invaded the forests in the belief that "Gandhi-Raj" had been established and the forests were now open. Ten years later, during the Civil Disobedience movement, the violation of forest laws was far more widespread. In Maharashtra, where women played a significant part, nearly 60,000 villagers in Akola district marched into government forests with their cattle. In Satara district, peasants, arguing that grazing restrictions deprived the sacred cow of its daily food, resolved not to pay the grazing fee. Encroachment on reserved forests was followed by the felling of teak trees, and the hoisting of the national tricolor on a teak pole and in front of a temple dedicated to the Hindu god Shiva. Women also played a key role in a similar campaign in the coastal district of North Kanara (in present - day Karnataka), garlanding and smearing ritual paste on men who went off to the forest to cut the valued sandal tree. There too, the timber was loaded onto carts and stacked in front of a local temple. The arrests of men inspired the women, invoking the God Sri Krishna who had gone to the forest, to symbolically breach the rules themselves. In the Central

Provinces, meanwhile, tribals had come forth in great numbers to participate in the organized violation of forest laws. While formally conducted under the rubric of the Congress, these movements actually enjoyed a considerable degree of autonomy from that organization - moreover, the many violent incidents were clearly in defiance of nationalist leaders, wedded as the latter were to an ideology of non-violence.

Perhaps the most sustained opposition to state forest management was to be found in the Himalayan districts of present-day Uttar Pradesh. Dominated by magnificent stands of coniferous species, the hill forests have been, as the only source of softwoods, the most valuable forest property in the subcontinent. At the same time, the forests have also played a crucial role in sustaining agriculture in the mountainous terrain-this role being strikingly reflected in the traditional systems of resource conservation evolved to inhibit over-exploitation of village forests.

In the period of colonial rule, this region was divided into two distinct socio-political structures - the princely state of Tehri Garhwal and the British administered Kumaun Division. However, as the forests of Tehri Garhwal came under commercial management even earlier (c.1865), in both areas peasant resistance to this encroachment on customary rights was remarkably sustained and uniform. In Tehri, important if localized movements occurred in 1904, 1906, 1930 and 1944-48, in all of which forest grievances played an important and sometimes determining role. Through the collective violation of the new laws and attacks on forest officials, the peasantry underscored their claim to a full and exclusive control over forests and pasture. As in other precapitalist societies where the ruler relied on a

traditional idiom of legitimacy, protest was aimed at forest management and its back-up officials, and not at the monarch himself. In Kumaun Division, on the other hand, social protest was aimed directly at the colonial state itself, and at the most visible signs of its rule - viz. the pine forests under intensive commercial management and government buildings and offices. It reached its zenith in the summer of 1921, when a wide ranging campaign to burn forests controlled by the Forest Department virtually paralyzed the administration, forcing it to abolish the much disliked system of forced labour and to abandon effective control over areas of woodland. Largely autonomous of organized nationalist activity, (as represented by the Congress), the movements of 1916, 1921, 1930 and 1942 in Kumaun Division brought to the fore the central importance of forests in peasant economy and society. Notwithstanding differences in the social idiom of protest - not unexpected in view of the somewhat different socio-political structures and styles of rule - in both Tehri Garhwal and Kumaun Division forest restrictions were the source of bitter conflicts, unprecedented in their intensity and spread, between the peasantry and the state.

44

#### EVERYDAY FORMS OF RESISTANCE : THE CASE OF JAUN SAR BAWAR

In a penetrating study of rural Malaysia, the political scientist James Scott has observed that while most students of rural politics have focused on agrarian revolt and revolution, these are by no means the characteristic forms of peasant resistance. Far more frequently, peasants resort to methods of resisting the demands of non cultivating elites that minimize the element of open confrontation - e.g., non-cooperation with imposed rules and regulations, the giving of false

and misleading information to tax collectors and other officials, and  
45 migration. In colonial India, too, the peasantry often resorted to  
violent protest only after quasi-legal channels - e.g., petitions and  
peaceful strikes - had been tried and found wanting. Whereas the  
historical record is heavily biased towards episodes of violent revolt  
- times when the peasant imposes himself rather more emphatically on  
the processes of state - it is important not to neglect other forms of  
protest that were not overtly confrontationist in form.

Often, these other forms of resistance preceded or ran  
concurrently with open conflict. Thus in many areas the breach of  
forest laws was the most tangible evidence of the unpopularity of  
state management : the available evidence showing that typically the  
incidence of forest "crime" followed a steadily escalating trend.  
While this would be true of regions where sustained protest did occur  
(such as those described above) the absence of an organized movement  
quite evidently did not signify an approval of state forestry.

That the conflict between villagers and colonial forest  
46 management did not always manifest itself in open revolt is clearly  
shown by the experience of Jaunsar Bawar, the hilly segment of Dehra  
Dun district that bordered Tehri Garhwal on the west. From the early  
1860's, the forests of Jaunsar Bawar had attracted the attention of  
the state. These forests were important for three reasons - as a  
source of wood for the railway, as "inspection" forests for training  
students at the Forest School in nearby Dehra Dun town, and for  
47 supplying fuel and timber to the military cantonment of Chakrata. In  
the ensuing settlement of 1868, the state divided the forests into  
three classes. While Class I forests were wholly closed for

protection, villagers had certain rights of pasturage and timber collection in the second class. The third class was to be kept for the exclusive use of the peasants with the caveat that they were not allowed to barter or sell any of the produce.

Early protests were directed at this government monopoly. The confused legal status of the Class III forests, village leaders argued (it was not clear who held actual proprietary right, the state or the village), was compounded by the refusal to allow rightholders to dispose of their timber as they pleased. If peasants believed that they could not dispose of the produce of the Class III forests as they liked, their control was only a formal one, the government on its part was loth to give up its monopoly over the timber trade. Extending over three decades, and conducted through a series of petitions and representations, this was in essence a dispute over the proprietary claims of the two parties. As the Superintendent of the district observed, villagers were concerned more with the legal status of the Class III forests than its extent - indeed, "they would be contented to take much less than they have now, if they felt it was their own".

The unsettled state of the forest boundaries had made the peasantry suspicious that the government would slowly take over the Class III forests and put them under commercial management. On a tour of the district, the Lieutenant Governor of the province encountered repeated complaints concerning the "severity of the forest rules, dwelling chiefly on the fact that no forest or wasteland was made over to them in absolute proprietary right, and so they were afraid that at some future period government might resume the whole of it and leave them destitute". As one hill man succinctly put it, "the forests have

belonged to us from time immemorial, our ancestors planted them and have protected them; now that they have become of value, government steps in and robs us of them". The official urged for a revision of the forest boundaries and the confirming of village proprietorship in class III forests, as "nothing would tend to allay the irritation and discontent in the breasts of the people so much as giving them a full proprietary title to all lands not required by government".<sup>49</sup>

At the level of everyday existence, the restrictions on customary use under the Forest Act were regarded as unnecessarily irksome. Thus the government tried, not always with success, to restrict the use of deodar (cedar, the chief commercial species) by villagers, arguing that while the peasants were "clearly entitled to wood according to their wants, nothing is said about its being deodar". This legal sleight of hand did not always succeed, as villagers insisted on claiming deodar as part of their allotted grant - the wood being extensively used in the construction of houses.<sup>50</sup> Again, the takeover of village grazing lands and oak forests to supply the fuel and grass requirements of Chakrata cantonment were grievances district officials acknowledged as legitimate, even if they could do little about it within the overall structure of colonial administration. Particularly contentious were proposals to regulate and ban the traditional practice of burning the forest floor before the monsoons for a fresh crop of grass. While this closure was regarded by the Forest Department as essential for the reproduction of timber trees, it led to the drying up of grass, and consequently, a shortage of green fodder, as well as a proliferation of ticks.<sup>51</sup> Pointing to deodar forests where numerous young seedlings had sprung up despite the



constant grazing and even occasional fires, villagers were openly skeptical of the department's claim that closure was "scientific".<sup>52</sup>

An additional reason for the persistent hostility towards grazing restrictions was the liberal allowance extended to nomadic cattle herders from the plains. Important as suppliers of milk to the cantonment and to lumbermen working in the forest, these herdsmen (belonging to the Muslim community of Gujars) were, it was pointed out, allowed access to forest pasture even in areas where sheep and cattle belonging to the local peasantry were banned.<sup>53</sup>

The Forest Department also banned the use of the axe by peasants in claiming their allotment of timber. Villagers demurred, arguing that the saw was too expensive, that they were not familiar with its use, that split wood lasted longer than sawn, and finally, that since their forefathers had always used the axe, so would they. As a consequence, attempts to insert a clause in the land settlement of 1873, prohibiting the use of the axe, came to naught. Although the settlement had considerably enhanced the land revenue, the main grievance expressed continued to be the infringement of village rights over forest. Village headmen first asked for a postponement of the settlement, and then drove a hard bargain, agreeing to the new revenue rates and the continuance of forest restrictions only on condition they were allowed the use of the axe in obtaining their grants of timber from forest land.<sup>54</sup>

If such petitions represented an appeal to the "traditional" obligations of the state,<sup>55</sup> the peasants of Jansaur Bawar also resorted to extra legal forms of protest that defied the government's control over forest extraction and utilization. Before an era of motorized transport, commercial forestry depended on the fast-flowing

hill rivers to carry felled logs to the plains, where they were collected by timber merchants and sold as railway sleepers. The floating logs were considered the property of the Forest Department - nearly 2 million sleepers were floated annually down the Yamuna and its chief tributary, the Tons. Although villagers dwelling on the river banks had been "repeatedly warned that Government property is sacred", thefts were endemic. As "every Jaunsari knows well all about the working of the Government forests and the floating of timber", officials tried to stop pilfering by levying heavier sentences than those sanctioned by the forest act. Thus while each sleeper was worth only Rs. 6, it was not unknown for villagers caught in possession of a sleeper to be sentenced to 2 months rigorous imprisonment or a fine of Rs. 30. Stiff sentences needed to be enforced, magistrates argued, as "river thieves are pests and a deterrent fine is necessary". Such measures failed to have the anticipated effect, and as late as 1930- i.e., a full sixty years after the state takeover of woodland, the Superintendent of the district was constrained to admit that "pilfering, misappropriating and stealing Government and State timber" was "a chronic form of crime in Jansaur Bawar".<sup>56</sup>

As in eighteenth century England, while the infringement of forest laws was viewed as "crime" by the state, as an assertion of customary rights it represented an incipient form of social protest.<sup>57</sup> In Jaunsar Bawar, the theft of floating timber and the defacement of government marks was accompanied by other forms of forest "crime" wherein the peasantry risked a direct confrontation with the authorities - notably, the infringement of the laws preventing forest fires. In a fascinating incident, the head priest of the major temple

of the area, dedicated to the god Mahashu Devta at Hanol, organized a firing of the pine forest to get rid both of the dry grass and the insects it harboured. The tall grass also attracted deer who were a hazard to the adjoining croplands. Under the direction of the priest, Ram Singh, several villagers set fire to the forest on the night of 13th July 1915. Under section 78 of the forest act, villagers were liable to inform the forest staff of any fire in their vicinity - this they proceeded to do, but only several hours after the fire had been started. Ram Singh then advised a low caste labourer, Dumon Kolta, to call the forest guard, but to go slowly.

While early enquiries clearly revealed that the fire was not accidental, its occurrence near the Mahashu Devta temple and the involvement of its priest made it difficult for the state to convict those accused. Indeed, several prosecution witnesses, after a meeting with village headmen at the Hanol temple, suddenly retracted their confessions in the court. Looked upon by the state to act as a bulwark of the administration, the headmen underlined their partisan stance by appearing en masse for the defence. One elder, Ranjit Singh (whose fields were closest to the forest that was fired), expressed his disavowal of the wajib-ul-arz (record of rights), whereby headmen were personally required to put out fires and collect other villagers for the same purpose. As he defiantly told the Divisional Forest Officer, "such a wajib-ul-arz should be burnt and that his ancestors were ill-advised to have agreed to such a wajib-ul-arz with the Government".

Such organized and collective violations were hardly as frequent, of course, as the numerous acts of individual "crime". In Jaunsar Bawar, centuries of unrestricted use had fostered the belief that the forests were open and accessible to all villagers. Not surprisingly,

the demarcation of forest land as Government property aroused a "great  
<sup>61</sup>  
cry". What differentiates Jansaur from other forest areas where  
protest took a more open and militant form is the reliance on  
individual and largely "hidden" forms of resistance. What is worthy of  
note is that this was an equally effective strategy in thwarting the  
aims of colonial forest administration. As an official reflecting on  
the history of state forestry in Jansaur Bawar remarked, "prosecutions  
for forest offences, meant as deterrents, only led to incendiarism,  
which was followed by more prosecutions and the vicious circle was  
<sup>62</sup>  
complete". Clearly, these ostensibly individual acts of violation  
relied on a network, however informal, of consensus and support within  
the wider community. With all strata of village society uniformly  
affected by commercial forestry, every violation of the forest act  
could draw sustenance from a more general distrust of state control.  
And as individuals could quite easily be subject to the due processes  
of colonial justice, this resistance could hardly "hope to achieve its  
purpose except through a generalized, often unspoken complicity".  
<sup>63</sup>  
This complicity is strikingly evident in the refusal to testify or  
alternatively, the giving of false and misleading information to  
officials - as in the case of Ram Singh and the Hanol temple discussed  
above.

#### THE DECLINE OF ARTISANAL INDUSTRY

Apart from its all too visible impact on cultivating classes,  
state forest management, by restricting access to traditional sources  
of raw material, also contributed to the decline of various forms of  
artisanal industry.  
<sup>64</sup>  
Chief among these was bamboo, a resource vital  
to many aspects of rural life. Extensively used in house construction,

basketweaving, for the manufacture of furniture and musical instruments, and even as food and fodder, this plant of enormous local utility was initially treated as a weed by colonial foresters - and early management plans advocated its removal from timber producing areas. With the discovery in the early decades of this century that bamboo was a highly suitable raw material for papermaking, there was a radical shift : foresters now encouraged industrial exploitation while maintaining restrictions on village use. Many weavers were now forced to buy bamboo from government run depots or the open market. Limited availability also led to new forms of social conflict within the agrarian population. Thus the Baigas, who had earlier supplemented slash and burn agriculture with bamboo weaving, lost this subsidiary source of income when the Basors, an artisinal caste specializing in basket work, asserted their "trade union" rights to a monopoly of bamboo supplied by the Forest Department.

While bamboo, whether obtained surreptitiously from the forest or bought in the market, continues to play an important role in present day village society, one form of indigenous industry that collapsed under colonial rule was the manufacture of charcoal based iron. Again, we are indebted to Verrier Elwin for a sensitive study of the industry in its declining years. In his book on the Agaria, an iron smelting tribe of the Central Provinces, Elwin describes in chilling detail how the high taxes on furnaces and diminished supplies of charcoal had led to a sharp fall in the number of operating furnaces - from 510 to 136 between 1909 and 1938. Although peasants preferred the soft, malleable ores of village smelters, the changing circumstances had virtually forced the Agaria out of business, especially as improved

communications had made local iron uncompetitive when compared to imported British metal. Deeply attached to their craft, the Agarias resisted as best they could, by defying forest laws concerning charcoal burning or alternatively, migrating to nearby chiefdoms where they were accorded more liberal treatment. In an extensive survey of Madras Presidency, the first Inspector General of Forests, Dietrich Brandis, provided confirmatory evidence of this decay, due to limited fuel supplies and foreign competition, of an industry that was formerly very widespread.

Significantly, proposals to set-up iron works controlled by European capital did briefly evoke an interest in the conservation of trees for charcoal. Pointing out that the metallic content of Indian ores was nearly twice that of European ores, several administrators urged the reservation of large tracts of forest for the benefit of European-owned and managed works using the latest technological processes. Here, the expansion of charcoal-based iron production was predicated on the assumption that "iron-making by hand in India will soon be counted among the things of the past". Brandis, while acknowledging that the abundance of wood in presently inaccessible areas made the promotion of charcoal iron a potential source of forest income, advocated a different form of utilization. Articulating an early version of "intermediate" or "appropriate" technology, he believed that any such attempt must build upon, rather than supplant, traditional forms of manufacture. In the event both proposals came to naught, and the industry died an inevitable if slow death.

Other forms of artisanal industry, too, declined under these twin pressures—the withdrawal of existing sources of raw material and the competition from machine-made, largely foreign, goods. Thus the

"tassar" silk industry, that depended on the collection of wild cocoons from the forest, experienced a uniform decline through most of India from the 1870's onwards. Here too decay could be attributed to the new forest laws; specifically, the enhanced duties levied on weavers collecting cocoons from the forest. Although, much later, the tassar industry experienced a revival under official patronage (chiefly in response to a growing export market), the household industry was in no position to compete with the newly formed centres of production operating from towns. A parallel case concerns the decline of village tanners and dyers, likewise denied access to essential raw materials found in the forest.

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## CONCLUSION

### THE SOCIAL IDIOM OF PROTEST

As we had indicated at the outset, in the absence of detailed studies on the socio-ecological history of different regions, the present study provides a preliminary mapping of the various dimensions of forest based conflict in British India. Through a synthesis of the available existence from both primary and secondary sources, we have tried to indicate the quite astonishing range of conflicts over access to nature, a range entirely consistent with the wide variety of ecological regimes, and correspondingly, of social forms of resource use, prevalent in the Indian subcontinent. Yet even this initial survey reveals some interesting regularities in the form in which protest characteristically expressed itself, notably against the state's attempts to abrogate traditional rights over the forest.

In essence, state monopoly and its commercial exploitation of the forest ran contrary to the subsistence ethic of the peasant. To adapt

a contrast first developed by E.P. Thompson in his study of the eighteenth century food riot, if the customary use of the forest rested on a moral economy of provision, scientific forestry rested squarely on a political economy of profit. <sup>73</sup> These two sharply opposed notions of the forest were captured in an insightful remark made by Percy Wyndham, Commissioner of Kumaun during the uprising of 1921, when he observed that the recurrent conflicts were a consequence of the "struggle for existence between the villagers and the Forest Department ; the former to live, the latter to show a surplus and what the department looks on as efficient forest management". The same duality, too, was invoked by someone ranged on the opposite side of the fence. This was Badridutt Pande, the leader of the movement, who said that with state management tins of pine resin had replaced tins of ghee (clarified butter) as the main produce of the forest - a transition with telling consequences for the village economy. <sup>74</sup>

If state monopoly severely undermined village autonomy, then, what is striking about social protest is that it was aimed precisely at this monopoly. In many areas, peasants first tried petitioning the government to rescind the law regulations - when this had no visible impact, they issued a direct challenge to state control, in the form of attacks on areas controlled by the Forest Department and worked for profit. Whether expressed covertly, through the medium of arson, or openly, through the collective violation of forest laws, protest focussed on commercially valuable species - pine, sal, teak, and deodar in different geographical regions. Quite often, these species were being promoted at the expense of tree varieties less valuable commercially but of greater use to the village economy. While



challenging the proprietary right of the state, peasant actions were remarkably discerning. Thus in the Kumaun movement cited above, the "incendiary" fires of the summer of 1921 covered 320 square miles of exclusively pine forests. In other words, by design rather than accident, the equally vast areas of broad leaved forests also controlled by the state, were spared as being of greater use to hill agriculture. As in peasant movements in other parts of the world, arson as a technique of social protest had both a symbolic and a utilitarian significance - the latter by contesting the claim of the state over key resources, the former by selectively choosing targets where the state was most vulnerable.

75

Historical parallels with other peasant movements far removed in time and space are evident, too, in the close association of protest with popular religion. The ideology of social protest was heavily overlaid with religious symbolism. As expressed through the medium of the famous Hindu epic, the Ramayana, for example, the British government was portrayed as a demonic government (Rakshas Raj) and the King Emperor equated with the very personification of evil, the demon king Ravan.

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A religious idiom also reflected the sense of cultural deprivation consequent on the loss of control over resources crucial to subsistence. In many areas, the customary use of nature was governed by traditional systems of resource use and conservation that involved a mix of religion, folklore, and tradition in regulating both the quantum and form of exploitation. The suppression and occasionally even obliteration of these indigenous systems of resource management under colonial auspices was acutely felt by different communities, albeit in somewhat different ways. The Baigas, for

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example, resisted attempts to convert them into plough agriculturists by invoking their myth of origin, in which they had been told specifically not to lacerate the breasts of Mother Earth with the plough. As Elwin observes, "every Baiga who has yielded to the plough knows himself to be standing on papidharti, or sinful earth". Even if not entirely a willing one, this conversion was not without divine retribution - and as one Baiga put it, "when the bewar (slash and burn) was stopped, and we first touched the plough....., a man died in every village".<sup>78</sup>

The Gonds, aboriginal plough cultivators, were similarly afflicted by a melancholia or what Elwin has elsewhere called a "loss of nerve".<sup>79</sup> Gonds were convinced that the loss of their forests signalled the coming of Kaliyug, an Age of Darkness, in which their extensive medical tradition was rendered completely ineffective. So insidious and seductive was the power of modern civilization that even their deities had gone over to the camp of the powerful. Unable to resist the changes wrought by that ubiquitous feature of industrial society, the railway, "all the gods took the train, and left the forest for the big cities"-where with their help the urban dweller prospered.<sup>80</sup>

The belief that traditional occupations were sanctioned by religion was evident, too, in the obvious reluctance of the Agaria to abandon iron smelting. According to their myth of origin, both slash and burn and plough cultivation were sinful. In the old days, when they were faithful to iron, the Agaria believed they had enjoyed better health- now that government taxes and scarcity of charcoal had forced many iron workers to take to cultivation, their gods no longer

provided immunity from disease. The real point of conflict with authority concerned charcoal burning - vividly reflected in the numerous dreams that hinged on surreptitious visits to the jungle, and which often culminated in the Agaria being intercepted and beaten up by forest officials.

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#### THE MECHANISMS OF PROTEST

Researches over the past two decades have quite convincingly demonstrated that while the peasant operates in a world largely composed of "illiterates" and consequently, many peasant movements lack a written manifesto- his actions are imbued with a certain rationality and internally consistent system of values. It is the task of the scholar, therefore, to reconstruct this ideology- an ideology that informs the peasant's everyday life as much as episodes of revolt- even where it has not been formally articulated. In this article, too, we can discern, from a reconstruction of different episodes of social protest, a definite ideological content to peasant actions. Protest against enforced social and ecological changes clearly articulated a sophisticated theory of resource use that had both political and cultural overtones.

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Of especial significance is the wide variety of strategies used by different categories of resource users to oppose state intervention. Hunter gatherers and artisans, small and dispersed communities lacking an institutional network of organization, were unable to directly challenge state forest policies. They did, however, try and continue their activities by breaking the new regulations, resorting chiefly to what one writer has called "avoidance protest" i.e., protest that minimized the element of confrontation with the

state (for example, migration and petty crime). In the long term though, these groups were forced to abandon their traditional occupation and eke out a precarious living by accepting a subordinate role in the dominant system of agricultural production. Both slash and burn and plough agriculturists were able to mount a more sustained opposition. Their forms of resistance ranged from individual to collective defiance, from passive or "hidden" protest to open and often violent confrontation with instituted authority. Tightly knit in cohesive "tribal" communities, the characteristic response of jhum cultivators to forest laws was militant resistance, one that was almost wholly outside the stream of organized nationalism. The fate of this protracted resistance varied greatly across different regions. Occasionally, the colonial state capitulated, allowing the continuance of traditional forms of cultivation. More frequently the state reached an accommodation with these communities, restricting but not eliminating jhum cultivation. The resultant shrinkage of forest area available for swidden plots, when coupled with rising population, led gradually to a reduction in fallow cycles and declining yields. A large proportion of jhum cultivators, therefore, have also had no alternative to becoming landless labourers.

Settled cultivators have perhaps been more successful in retaining some degree of control over forest resources. The new laws, while sharply limiting access, did not, unlike in the cases instanced above, seriously threaten the livelihood of agriculturists and graziers. With subordinate forest officials often hailing from the same castes, the peasantry was often able to obtain forest produce through bribing rangers and guards. In such cases, while the cost of access may have increased significantly, the deprivation of forest

resources was very rarely total. Moreover, Hindu peasants protesting forest restrictions were more successful in using the resources and strategies of modern nationalism (petitions, litigation) in advancing their own interests.

Whatever the specific modalities of protest in different time periods, and across different regions and forms of resource use, it was in its essence "social"- reflecting a general dissatisfaction with state forest management, and resting heavily on traditional networks of communication and cooperation. It is noteworthy that almost uniformly, traditional leaders of agrarian society - e.g., clan and village headmen - played a key role in social mobilization and action. As the colonial state looked upon them as local bulwarks of power and authority, such leaders were subjected to conflicting pressures - however they usually decided to throw in their lot with their kinsmen. Secondly, one may indicate the tenuous hold exercised by the premier nationalist organization, the Congress, over most of the movements described in this paper. Although individuals like Gandhi may have recognized the importance of natural resources such as salt and forest produce in the agrarian economy, even protests formally conducted under the rubric of Congress often enjoyed a considerable autonomy from its leadership. Social protest over forests and pasture predated the involvement of the Congress : even when the two streams ran concurrent, they were not always in tune with each other. Finally, these conflicts strikingly presaged similar conflicts in the post colonial period. Thus contemporary movements asserting local claims over forest resources have, if unconsciously, replicated earlier movements in terms of their geographical spread, in the nature of

their participation, and in the strategies and ideology of protest.

A study of colonial history, then, may have more than a fleeting relevance to contemporary developments. Nowhere is this more true than in the highly contentious sphere of forest policy. Here, a vigorous debate amongst intellectuals, policy makers and grassroots organizations has in recent years brought to the fore two opposed notions of property and resource use : communal control over forests being paired with subsistence use on the one hand, state control with commercial exploitation on the other. Yet this duality merely mirrors, albeit in a more formal and institutionalized fashion, the popular opposition to state control over forests that was endemic during the period of colonial rule. The movements described in this paper may have been shortlived and unsuccessful, yet their legacy is very much with us today.

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CENTRE FOR  
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## NOTES AND REFERENCES

1. For an overview, see Centre for Science and Environment, India : the State of the Environment 1984-85 : a Citizens Report (New Delhi, 1985)
2. A partial exception is irrigation, for which some good studies exist. See especially Elizabeth Whitcombe, Agrarian Conditions in Northern India : Volume 1 : The United Provinces under British Rule, 1860-1900 (New Delhi, 1971); Nirmal Sengupta, "The Indigenous Irrigation Organization of South Bihar", Indian Econ. and Social Hist. Rev., xvii, (1980).
3. Dharma Kumar (ed.) The Cambridge Economic History of India, Volume II (Cambridge, 1983). Major review symposiums appeared in the two premier journals in the field, Modern Asian Studies and Indian Econ. and Social Hist. Rev.
4. For Mauryan elephant forests, see Thomas R. Trautmann, "Elephants and the Mauryas", in S.N. Mukherjee (ed.) India : History and Thought : Essays in Honour of A.L. Basham (Calcutta, 1982).
5. For a detailed analysis of colonial forestry science, legislation, and management, see Ramachandra Guha, "Forestry in British and Post British India : a Historical Analysis", in two parts, Econ. and Polit. Weekly, 29 Oct., 5-12 Nov., 1983; idem, "Scientific Forestry and Social Change in Uttarakhand", Econ. and Polit. Weekly, Special Number, Nov. 1985; M. Gadgil, "Forestry with a Social Purpose", in W. Fernandes and S. Kulkarni (eds.) Towards a New Forest Policy (New Delhi, 1983).

6. E.A. Smythies, India's Forest Wealth (London, 1925), p.6
7. R.G. Albion, Forests and Sea Power (Cambridge, Mass., 1926), pp.35-6,363-8.
8. Dispatch from Government of India to Secretary of State, November 1861, quoted in C.G. Trevor and E.A. Smythies, Practical Forest Management (Allahabad, 1923), p.5. The railways were built to facilitate both troop movement and trade.
9. See Minute by W. Robinson, dt. 3 Feb. 1878, and Minute by Governor of Madras, dt. 9 Feb. 1878 in D. Brandis, Memorandum on the Demarcation of the Public Forests in the Madras Presidency (Simla, 1878), pp. 41-2.
10. "Rightholders" denote those villagers who were conceded to have legal right of use.
11. J.A. Voelcker, Report on Indian Agriculture (2nd edn., Calcutta, 1897), pp.135-6.
12. See for example, Jotirau Phule, Shetkarya Asud : The Whipcord of the Farmer (1882-83), reprinted in D.Keer and S.G.Malshe, The Collected Works of Mahatma Phule, in Marathi (Pune 1969).
13. The phrase is Marshall Sahlins. See his Stone Age Economics (Chicago, 1971).
14. C. Von Furer Haimendorf, The Chenchus : Jungle Folk of the Deccan (London, 1943), pp. 57, 295, 311-2, 321, etc.; A. Aiyappan, Report on the Socio-economic Conditions of the Aboriginal Tribes of the



Province of Madras (Madras, 1948), p.32

15. U.R. Ehrenfels, The Kadar of Cochin (Madras, 1952), pp.8, 13-24, 47-8, etc; S.L. Roy, The Birhors : a Little Known Jungle Tribe of Chota Nagpur (Ranchi, 1925), p.549.

16. Scott Bennet, "Shikar and the Raj", South Asia, N.S., vii (1984), pp.72-88; J.G. Elliott, Field Sports in India, 1800-1947 (London, 1973); R. Sukumar, Ecology and Management of the Asian Elephant (Cambridge, forthcoming), ch. I.

17. H.C. Ward, Report on the Land Revenue Settlement of the Mundlah District of the Central Provinces (1868-9) (Bombay 1870), p. 37; J.W. Best, Forest Life in India (London, 1935), pp. 123-24; Verrier Elwin, The Baiga (London, 1939), p. 84.

18. See 'Gamekeeper', "Destruction of Game in Government Reserves During the Rains", Indian Forester, xiii (1887), pp. 188-90. Cf also Jim Corbett, My India (Bombay, 1952).

19. C. Von Furer Haimendorf, The Reddis of the Bison Hills : A Study in Acculturation (London, 1943), pp. 191-93; W.V. Grigson, The Maria Gonds of Bastar (London, 1938), pp. 158-9.

20. Cf Michael Eden, "Traditional Shifting Cultivation and the Tropical Forest System", Trends in Ecol. Evol. ii, Nov. 1987. Shifting cultivation is known by various names - jhum/podu/dhyal/bewar, etc. We shall use jhum here.

21. In India, "tribal" is a legal rather than social category, encapsulating those ethnic groups believed to be autochthonous and which are economically and socially distinct (to a lesser or greater

extent) from the "caste" society of settled agriculture.

22. For a fine ethnographic study of one of the last communities of shifting cultivators in peninsular India, see Savyasachi, Agriculture and Social Structure : the Hill Maria of Bastar, mimeo, World Institute of Development Economics Research, Helsinki, January 1987.

23. C.F. Muhafiz-i-Jangal (pseud), "Jhooming in Russia", Indian Forester, ii (1877), pp. 418-19.

24. V. Elwin, The Aborigines, Oxford Pamphlet on Indian Affairs, No. 14, (Bombay, 1943), p.8.

25. As the Chief Commissioner of Central Provinces put it, "the best ground for this peculiar cultivation is precisely that where the finest timber trees like to grow". Sir Richard Temple, quoted in J.F. Dyer, "Forestry in the Central Provinces and Berar", Indian Forester, i (1925), p. 349.

26. Elwin, Baiga. The following account is drawn from this source (as are all quotations) Chapter II, esp. pp.111-130. See also Ward, Land Revenue Settlement of the Mundlah district, pp. 35, 38-9, 160, etc.

27. V. Elwin, "Saora Fituris", in Man in India, xxv (1945), pp. 154-7; A.L. Bannerjee, "A Note on the Parlakamadi Forest Division", Indian Forester, Ixviii (1942), pp.71-2.

28. This account is largely based on David Arnold, "Rebellious Hillmen : the Gond and Khamra Rebellions (1832-1914)", in Ranajit Guha (ed.) Subaltern Studies I (Delhi 1982), supplemented by C. Von Furer Haimendorf, "Aboriginal Rebellions in the Deccan", Man in India, xxv

(1945).

29. National Archives of India, New Delhi, Foreign Department, Secret - I Progs Nos. 34-40 for August 1911, and Nos. 16-17 for September, 1910, Grigson, Maria Gonds, pp.16-17; Clement Smith, "The Bastar Rebellion, 1910", in Man in India, xxv (1945). For a fuller treatment of the 1910 Bastar revolt, see Ramachandra Guha, "Raja/Praja as Pita/Putra : Forms of Customary Rebellion in Princely India" (forthcoming).

30. Hamendorf, "Aboriginal Rebellions", pp.213-16.

31. idem, Reddis of Bison Hills, pp. 307-8, 318-9; idem, Tribal Hyderabad : Four Reports (Hyderabad, 1945, pp.3,11,etc.

32. Anon, A Selection of Despatches....on Forest Conservancy in India. Part II : Madras (London 1871), pp. 148-50.

33. Aiyappan, "Report on Aboriginal tribes of Madras", pp. 16-17.

34. See H.R. Blanford, "Regeneration with the assistance of Taungya in Burma", Indian Forest Records, xi, pt.iii, (Calcutta, 1925); B.H. Baden-Powell, The Forest System of British Burma (Calcutta, 1874), p. 36; H.G. Champion and S.K. Seth, General Silviculture for India (Delhi, 1968), esp. pp.315-16.

35. On traditional systems of communal resource management in Madras, see source cited in fn.9.

36. Under commercial forest management, blocks with small saplings are completely closed to grazing. Grazing is thus restricted to specific blocks of forest where it cannot harm the reproduction of commercial

timber species. See for details, Guha, "Scientific Forestry". See also J. McKee, "On Grazing", Indian Forester, 1 (1875).

37. Anon, Report of the Forest Committee, Volume I (Madras 1913), pp. 2-3, 8, etc. Cf also C.J. Baker, An Indian Rural Economy, 1880-1955 (Delhi, 1984), pp. 157-61

38. See MSS Pandian, "Political Economy of Agrarian Change in Nanchilnadu : the late Nineteenth Century to 1939", unpublished Ph.D. thesis, University of Madras, 1985. The impact on local ecology of the massive expansion of tea plantations in northeast India is yet to be studied. Apart from the widespread deforestation they entailed, these plantations also displaced communities of huntergatherers and shifting cultivators.

39. Raajen Singh, "Dawn of Political Consciousness : Riots of Kalve-Mahim (1896)" in Background Papers in Forestry, BUILD Documentation Centre, mimeo (Bombay n.d.). For attempts to enforce state monopoly over firewood trade in the southwestern coastal districts, see D. Brandis, Suggestions Regarding Forest Administration in the Madras Presidency (Madras, 1883), pp. 313-15.

40. Swapan Dasgupta, "Local Politics in Bengal : Midnapur district 1907-1923", unpublished Ph.D. thesis, School of Oriental and African Studies, University of London, 1980, pp. 127-44.

41. Sumit Sarkar, "The Conditions and Nature of Subaltern Militancy: Bengal from Swadeshi to Non-Cooperation", in Ranajit Guha (ed.) Subaltern Studies III (New Delhi, 1984), pp.302-07.

42. idem, "Primitive Rebellion and Modern Nationalism : A Note on Forest Satyagraha in the Non-Cooperation and Civil Disobedience Movements", in K.N. Pannikar (ed.) National and Left Movements in India (New Delhi, 1980); G.S. Halappa, History of Freedom Movement in Karnataka, Volume II (Bangalore, 1964), pp. 110-12; Sulabha Brahme and Ashok Upadhyaya, A critical Analysis of the Social Formation and Peasant Resistance in Maharashtra, mimeo, Gokhale Institute of Politics and Economics (Pune, 1979), Vol. II, pp.153-54, Vol. III, pp.679-80; DEU Baker, "A 'Serious Time': Forest Satyagraha in Madhya Pradesh, 1930", Indian Econ. and Hist. Rev., xxi (1984).

43. For a detailed treatment of forest management and social protest in these districts, see Ramachandra Guha, "Forestry and Social Protest in British Kumaun, c. 1893-1921", in Ranajit Guha (ed.) Subaltern Studies IV (New Delhi, 1985); idem, The Unquiet Woods : A century of Protest in the Indian Himalaya, forthcoming from Oxford University Press.

44. Since 1973, these hill districts have been the epicentre of the Chipko (Tree Hugging) movement, possibly the best known environmental movement in contemporary India.

45. J.C. Scott, Weapons of the Weak : Everyday Forms of Peasant Resistance (New Haven, 1986).

46. As yet unpublished work on forest "crime" by three Indian historians should help further clarify some of these issues : that of Neeladri Bhattacharya on Kulu and Kangra, Prabhu Mahapatra on Chotanagpur, and Gopal Mukherjee on Chathisgarh.

47. For the compulsions behind the state takeover of forests in this area, see N. Hearle, Working Plan of the Derban Range, Jaunsar Forest Division, Northwestern Provinces (Allahabad, 1889), and D. Brandis, Suggestions Regarding the Management of the Forests included in the Forest School Circle, Northwestern Provinces (Simla, 1879).

48. Uttar Pradesh Regional Archives, Dehra Dun (hereafter UPRA); Post Mutiny Records (hereafter PMR); File No. 71, Dept. XI, List No. 2 (hereafter, L2); Memorandum by H.G. Ross, Superintendent of Dehra Dun, on verbal complaints made to the Lieutenant Governor by Syanas (headmen) of Jaunsar and Bawar, n.d. (prob. 1871 or 1872)

49. UPRA, PMR, File No. 2, Dept. I, L2, Superintendent, Dehra Dun, to Commissioner, Meerut Div., (no. 340, dtd. 15 Sept. 1873). Cf also C. Bagshawe, "Forest Rights in Jaunsar", in D. Brandis and A. Smythies, eds. Report on the Proceedings of the Forest Conference Held at Simla, October 1875 (Calcutta, 1876), p. 33.

50. G.F. Pearson, "Deodar Forests of Jaunsar Bawar", in Selections from the Records of the Government of the Northwestern Provinces, 2nd series, vol. II (Allahabad, 1870).

51. UPRA, PMR, L2, File No. 244, note by C. Streadfield, Supdt., Dehra Dun, dtd. 1/11/1898. Cf also Guha, "Scientific Forestry", for attempts to resolve this conflict.

52. See E.C. McMoire, "Cattle grazing in Deodar Forests" Indian Forester, viii, (1882), p. 276-77.

53. B.D. Osmaston, Deputy Conservator of Forests, Jaunsar Div., to Asst. Supdt., Jaunsar Bawar (No. 483, dtd. 19/3/1899) in source cited

in fn. 51. This clash between the peasantry and Gujars, with the Forest Department trapped in between, has persisted to this day. See Bharat Dogra, Forests and People (Rishikesh, 1980).

54. UPRA, PMR, L2, File No. 244. Report on Forest Administration in Jaunsar Bawar, submitted by Supdt., Dehra Dun, to Comm, Meerut Div. (No. 520/244 dtd. 10/12/1900); L2, UPRA., PMR., L2, Dept. XXI, File No., 244, E.C. Buck, Offg. Secy. to Board of Revenue, NWP, to C.A. Elliot, Secy. to Govt. of NWP; UPRA, PMR, L2, File No. 2, No. 47 dtd. 17/2/1872, from Settlement Officer, Jaunsar Bawar, to Comm. Meerut Div.

55. i.e., What James Scott has called the key reciprocal duty of non-cultivating elites in peasant societies, the guaranteeing of subsistence. See his The Moral Economy of the Peasant (New Haven, 1976).

56. See Trials No.'s 98 of 1925, 36 of 1927, 53 of 1930, and unnumbered trials dated 1/5/1922, 15/6/1922, 7/4/1923, all in Basta (Box) for 1927-30 for Chakrata Tehsil, in Criminal Record Room, Dehra Dun Collectorate.

57. See the fine studies by Douglas Hay and E.P. Thompson in Albion's Fatal Tree (Harmondsworth, 1976), and Thompson's Whigs and Hunters (Harmondsworth, 1976).

58. For the importance of the deity in the social and cultural life of the area, see the sensitive study by Jean Claude Galey, "Creditors, Kings, and Death", in Charles Malamud, ed, Debts and Debtors (New

Delhi, 1983).

59. The oath in the court of Jaunsar Bawar was taken in the name of Mahashu Devta.

60. See Criminal Case 98 of 1915, in source cited in fn. 56. Ram Singh and five others were sentenced to terms of imprisonment ranging from 3 months to a year.

61. See E.T. Atkinson, The Himalayan Districts of the Northwestern Provinces of India, Volume I (1882, rpt Delhi, 1981), p.870.

62. M.D. Chaturvedi, "The Progress of Forestry in the United Provinces", Indian Forester, li, (1925), p. 365.

63. J.C. Scott, "Resistance Without Protest and Without Organization : Peasant Opposition to the Islamic and the Christian Tithe", Comparative Studies in Society and History (forthcoming).

64. There is an extensive literature on the decline of Indian handicrafts under British rule. An early statement of the "deindustrialization" thesis is D.R. Gadgil, The Industrial Evolution of India in Recent Times (Oxford, 1922).

65. See S. Kurz, "Bamboo and its Use", Indian Forester, i (1876).

66. Cf. S.N. Prasad and M. Gadgil, Conservation of Bamboo Resources in Karnataka, mimeo, Karnataka State Council of Science and Technology (Bangalore, 1981).

67. Elwin, "Baiga", p.80.



68. Verrier Elwin, The Agaria (Calcutta, 1942), pp. XXIV-V, 31-2, 39, 121-2, 241-3, etc. Cf also S. Bhattacharya, "Iron Smetlters and the Indigenous Iron and Steel Industry of India : from Stagnation to Atrophy" in S. Sinha, ed, Aspects of Indian Culture and Society (Calcutta, 1972). As is evident, this article draws heavily on the contemporary writings of anthropologists. Elwin and Von Furer Haimendorf, in particular, have portrayed with great sensitivity and skill the processes of economic and cultural deprivation whereby different communities lost control over nature and of their means of subsistence. As detailed and first-hand accounts of socio-ecological changes under colonialism, their writings should qualify as authentically "primary" sources.
69. Brandis, "Suggestions", pp. 53, 157-58, 182.
70. Anon, "Iron-making in India", Indian Forester, vi (1880), pp. 203.
208. Cf also H. Warth, Notes on the Manufacture of Iron and the Future of the Charcoal Iron Industry in India (Simla, 1881).
71. Brandis, "Suggestions", pp. 53-59, 136, 153-55; idem, "The Utilization of the Less Valuable Woods in the Fire Protected Forests of the Central Provinces, by Iron-Making", Indian Forester, v (1879). The vision of a modern charcoal-fired iron furnace finally came to fruition in Karnataka. See M. Visveswaraya, Memoirs of My Working Life (Bangalore, 1951), pp.. 92-5.
72. This paragraph is based on information kindly supplied to the authors by Mr. Tirthankar Ray of the Centre for Developmental Studies, Trivandrum, who is doing research on handicraft production during the colonial period. Fishing communities were also affected by forest

laws, being forced to use inferior wood for canoes owing to the heavy duties levied on teak by the Forest Department. See Grigson, "Maria Gonds", pp. 163-64. Among other artisanal castes, evidence from Khandesh in Western India suggests that banglemakers were almost ruined by the fee imposed on fuelwood. See Maharashtra State Archives Revenue Department File 73 of 1884, (Personal communication from Dr. Sumit Guha, St. Stephen's College, Delhi).

73. E.P. Thompson, "The Moral Economy of the English Crowd in the Eighteenth Century", Past and Present, No. 50, 1970-71.

74. Uttar Pradesh State Archives (UPSA), Forest Department (FD), File 109 of 1921, D.O. No. 67/II/21, dtd. 27/2/1921, from Percy Wyndham to HSCrosthwaite; UPSA, FD file 157/1921, Criminal Case No. 7 of 1921, dtd. 7/7/1921, in the Court of W.C. Dible, District Magistrate, Almora.

For an insightful study of alternate notions of property and resource use among English colonists and native Indians in North America, see William Cronon, Changes in the Land: Indians, Colonists, and the Ecology of New England (1983; rpt New York, 1985), esp. Chapter IV.

75. Interestingly, modern environmentalists concerned with the abuse of nature for profit have also considered using forms of directed arson or "ecotage" (i.e. ecological sabotage). Thus a group in the Western United States that had earlier fixed spikes in trees to thwart logging has now threatened burning forests marked for felling, justifying such acts on the grounds that while fires were "natural", logging brought in roads and more felling. Radical environmentalists see "ecotage" as a last resort, to be used only when lobbying,

pétitions, and litigation all fail. See Nicholas D. Kristof, "Forest Sabotage is Urged by Some", New York Times, 22/1/1986, p. A-21.

76. Ramachandra Guha, "Forestry and Social Protest", p. 92. On the religious idiom of peasant protest, see the important work by Ranajit Guha, Elementary Aspects of Peasant Insurgency in Colonial India (New Delhi, 1983). Religion was sometimes invoked to stall attempts to take over forests. Thus the manager of a temple grove in Malabar refused to lease the forest to the Government, in the grounds that the temple deity had threatened him with dire consequences if he entered into such an agreement. See Source cited in fn 32, pp. 213-15.

77. For a review of traditional conservation practices in India, see Madhav Gadgil, "Social Restraints on Resource Utilization: the Indian Experience"; in D Pitt and JA Mcneely, Culture and Conservation (Dublin, 1985).

78. Elwin, "Baiga", pp. 106-07. Cf also RN Datta, "Settlement of Tribes Practicing Shifting Cultivation in Madhya Pradesh (India)", Indian Forester, lxxxii (1955), p. 371. Drawing a prallel with attempts to settle American Indians, Elwin quotes Smohalla, prophet of a "messianic" cult of the Columbia River Basin, who told his followers in 1870: "You ask me to plough the ground. Shall I take a knife and tear my mother's bosom ? You ask me to dig for stone. Shall I dig under her skin for her bones ? You ask me to cut grass. But how dare I cut of my mother's hair ?"

79. Elwin, "Aboriginals".

80. Idem, Leaves from a Jungle (1936; rpt London 1958), p. 58; idem,

A Philosophy for NEFA (Delhi, 1960), p. 80; Shamrao Hivale and Verrier Elwin, Songs of the Forest: the Folk Poetry of the Gonds (London, 1935), pp. 16-7.

81. Elwin, "Agaria", pp. 264, 267-8.

82. One may cite in this connection the work of Rodney Hilton, Eric Hobsbawm, George Rude, Jim Scott, and E.P. Thompson, and in India, the writings of the "Subaltern Studies" school.

83. Michael Adas, "From Avoidance to Confrontation: Peasant Protest in Precolonial and Colonial Southeast Asia", Comp. Stud. Soc. Hist., xxiii (1981), pp. 217-47.

84. Madhav Gadgil and Ramachandra Guha, "The Two Options in Forest Policy" Times of India, 12 and 13 September, 1984.