STATE FORESTRY AND SOCIAL CONFLICT IN BRITISH INDIA*

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 agriculturalists, and planters, to every form of industrial enterprise — from artisanal production to the most modern electronic factory — at the other. There is, too, a great variety of property relations which 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 agriculturalists, of power and water for cash-crop agriculturalists, 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 both of human life and of the natural environment.¹

These contemporary concerns have led several scholars, including ourselves, to try to reconstruct Indian history using insights derived

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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 — for example, fishing, forests, grazing land and irrigation — and of state intervention in these spheres. 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; it thus leaves 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. One indication of this gap is the fact that, to the best of our knowledge, not one of the many reviews of the volume has mentioned what to us is its most obvious flaw.

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 patterns of the utilization of natural resources. Here the significance of the British intervention lies in the novel modes of resource extraction made possible by the

2 A partial exception is irrigation, for which some good studies exist. See especially Elizabeth Whitcombe, Agrarian Conditions in Northern India, i, 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).

MAJOR FOREST CONFLICTS IN BRITISH INDIA

Jaunsar Bawar
Tehri Garhwal
Kumaun

Mandla
Bilaspur
Balaghat
Adilabad
Bastar
Gudem Rampa
Ganjnad
political dominance of the raj and the availability of technologies previously foreign to India.

The increasing intensity of natural-resource use fostered by colonialism was accompanied, too, by equally dramatic changes in forms of management and control. By far the most significant of these was the takeover of woodland by the state. While state management had not been unknown in the pre-colonial period, it was usually restricted in its application and oriented towards highly specific ends: the reservation of elephant forests in the Mauryan period, for example, or later edicts affirming a state monopoly over commercial species such as teak and sandalwood. Now state control, notably over forests, was extended over large tracts and throughout the subcontinent. Moreover, 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 established that the imperatives of colonial forestry were essentially commercial. Its operations 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 — the institutional framework which governed the workings of state forestry in British India.

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. 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

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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.7

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 kilometres of line in 1870 to 51,658 kilometres in 1910) which 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 demand for sleepers. 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 of the railway companies (nearly a million sleepers annually). Impending shortages, Dalhousie observed, had made the “subject of forest conservancy an important administrative question”.8

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 exercise of use rights 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 — which 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 (accurately, as we shall see) widespread discontent at its application. Their objections, however, were swiftly overruled.9 Essentially designed to maintain strict control over forest utilization from the perspective of strategic imperial needs, the Act also enabled the sustained working

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8 Dispatch, government of India to secretary of state, Nov. 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 movements and trade.
of compact blocks of forest for commercial timber production. It provided, too, the underpinnings for the scientific management of the forests. But the logical corollary of the combined operations of law and "scientific" management was 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 — denying or restricting access to forests and pasture — and social — allowing "rightholders" only a marginal and inflexible claim on the produce of the forests.\textsuperscript{10}

In so far 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 intelligentsia. 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".\textsuperscript{11}

In order that forests should more directly serve the interests of the rural population, Dr. Voelcker advocated the creation of fuel and fodder reserves, using the characteristic justification that the consequent increased revenue from land tax 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.\textsuperscript{12} It must be stressed that the ecological and social changes that came in the wake of commercial forestry were not simply an intensification of earlier

\textsuperscript{10} "Rightholders" denote those villagers who were conceded to have legal right of use.


processes of change and conflict. Clearly many of the forest communities (especially hunter-gatherers and shifting cultivators) described in this article had for several centuries been subject to the pressures of the agrarian civilizations of the plains. Yet 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 which had earlier been in the hands of local communities, and proceeded to work these forests for commercial timber production, it intervened in the day to day life of the Indian villager to an unprecedented degree. First, since by 1900 over 20 per cent 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 whose priorities sharply conflicted with earlier systems of local use and control. Lastly, one must not underestimate the changes in forest ecology that resulted from this shift in methods of management. 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 market value. Silvicultural techniques, for example, attempted with success to transform the mixed coniferous/broad-leaved forests of the Himalaya into pure coniferous stands, and to 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, they immediately ran counter to the interests of surrounding villages, since 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 (such as oak) were intensively used for fuel, fodder and small timber.
In these various 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 analyses some of the evidence for 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 focusing on its genesis, its 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 to encourage more detailed research on the ecological history of different parts of the subcontinent.

I

HUNTER-GATHERERS: THE DECLINE TO EXTINCTION

Until the early decades of this century almost a dozen communities in the Indian subcontinent depended on the original mode of sustenance of human populations, hunting and gathering. They were distributed over almost the entire length of India, from 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 and 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 over-exploitation of resources through the partitioning of territories between endogamous bands, these hunter-gatherers, if not quite the "original affluent society", were able to subsist quite easily on the bounties of nature, as long as there existed sufficient areas under their control.13

Predictably, state reservation of forests sharply affected the subsistence activities of these communities, each of them 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

13 The phrase is that of Marshall Sahlins. See his Stone Age Economics (Chicago, 1971).
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 places the colonial government forcibly gathered tribal peoples 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.14

Like the Chenchus, other hunter-gatherer communities were not numerous enough actively to 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 way, the intimate knowledge of their surroundings that the Kadars possessed was now utilized for the collection of forest produce marketed by the state. In the thickly wooded plateau of Chotanagpur the commercialization of the forest and restrictions on local use had meanwhile led to a precipitous fall in the population of the Birhor tribe — from 2,340 in 1911 to 1,610 in 1921.15

While the new laws restricted small-scale hunting by tribal peoples, they facilitated more organized shikar expeditions by the British. From the mid-nineteenth century there began a large-scale slaughter of animals, 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 four hundred elephants in the 1860s, 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 seven hundred tigers in the early 1900s.\textsuperscript{16}

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, 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 \textit{shikari} and the clamp-down 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 \textit{shikaris} relied heavily on their “marvellous skill and knowledge of the wild creatures”. Yet the stricter forest administration, dating from the turn of the century, induced a dramatic decline. Writing in the 1930s, Verrier Elwin noted that while their love for hunting and meat persisted, old skills had largely perished. There remained, however, a defiant streak: 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”.\textsuperscript{17} 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.\textsuperscript{18}

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 — which involved the entire male population and preceded the monsoon sowing. The reservation of forests also interfered with the movement of hunting


\textsuperscript{18} See “Gamekeeper”, “Destruction of Game in Government Reserves during the Rains”, \textit{Indian Forester}, xiii (1887), pp. 188-90. Cf. also Jim Corbett, \textit{My India} (Bombay, 1952).
parties across state boundaries. In 1929 a police contingent had to be called in to prevent a party of Bison Marias from the state of Bastar, 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 amount of game killed steadily declining in consequence.19

II

THE "PROBLEM" OF SHIFTING CULTIVATION

Shifting or jhum cultivation was the characteristic form of agriculture over large parts of north-eastern 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 burned 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.20 It was usually practised by "tribal"21 groups for whom jhum was a way of life encompassing, beyond the narrowly economic, the social and cultural spheres as well. The corporate character of these communities was evident in the pattern of cultivation, where communal labour predominated and where different families adhered 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.22

As in many areas of social life, major changes accompanied the advent of British rule. For, almost without exception, colonial admin-


20 See Michael Eden, “Traditional Shifting Cultivation and the Tropical Forest System”, Trends in Ecol. Evolution, ii (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 a 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 Savvasach, Agriculture and Social Structure: The Hill Maria of Bastar (mimeo, World Inst. Development Economics Research, Helsinki, Jan. 1987).
istrators 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 good reason for this animosity: “axe cultivation was the despair of every forest officer”, 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 the practice would provoke a sharp response from *jhum* cultivators. Yet the areas cultivated under *jhum* often contained the most-valued timber species. Here was an intractable problem for which the colonial state had no easy solution.

A vivid account of the various attempts to combat *jhum* 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 1860s, had as its impetus the civilizing zeal of the chief commissioner of the province, Sir Richard Temple. In later years, though, it was the fact that the market 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 over-enthusiastic deputy commissioner. When many tribal people fled to neighbouring princely states, the government advised a policy of slow weaning from axe cultivation.

Such difficulties had in fact been anticipated by the settlement

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25 As the chief commissioner of the 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*, 1 (1925), p. 349.
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 for 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 it 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 it was partially successful, as Baiga villagers outside the chak, faced with the prospect of leaving their homes, accepted the terms of plough cultivation. As many Baigas continued to migrate into neighbouring princely states, within the chak itself the population of jhum cultivators steadily dwindled.

The Baigas' opposition took the form of “voting with their feet” and other means 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 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 money-lenders who came to exercise a dominant influence on the indigenous population. Elwin himself, talking of the periodic disturbances among the Saora tribal people 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 1930s 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 gaoled, the women continued the cultivation. After returning from gaol, 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.27

Perhaps the most sustained resistance, extending over nearly a century, occurred in the Gudem and Rampa hill tracts of present-day Andhra Pradesh. Inhabited by Koya and Konda Dora tribes, predominantly jhum cultivators, the hills were subjected under British rule to a steady penetration by the market economy and the influx of plainsmen eager to exploit its natural wealth. Road-construction led to the rapid development of trade in tamarinds, fruit, honey and other forest produce exported to urban centres and even to Europe. Traders from the powerful Telugu caste of Komatis took over from local chiefs the leases of 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. At the same time commercial forest operations were begun 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 tribespeople were forced into relations of dependence on the more powerful plainsmen, either working as tenants and share-croppers in the new system of market agriculture or as forest labourers in the felling and hauling of timber.28

Several of the many small risings or fituris documented by David Arnold were directly or indirectly related to forest grievances. The Rampa rebellion of 1879-80, for example, arose in response to the new restrictions concerning liquor and the forest. Complaining bitterly against the various exactions, the tribespeople said that “as they could not live they might as well kill the constables and die”. Led by a minor tribal chieftain, Tammam Dora, the rebels attacked and burned


28 This account is largely based on David Arnold, “Rebellious Hillmen: The Gudem Rampa Rebellions, 1829-1914”, in Ranajit Guha (ed.), Subaltern Studies, i (Delhi, 1982); supplemented by C. Von Furer Haimendorf, “Aboriginal Rebellions in the Deccan”, Man in India, xcv (1945).
several police stations, executing a constable in an act of ritual sacrifice. Although Tammam Dora was shot by the police in June 1880, the revolt spread to the Golconda Hills of Vishakapatnam and the Rekepalle country in Bhadrachalam. The transfer of the latter territory from the Central Provinces to Madras had led to greater restrictions on the practice of jhum there. Protest emanated directly from forest grievances and, as in other fituris, police stations — highly visible symbols of state authority — were frequent targets. It took several hundred policemen and ten army companies to suppress the revolt, a task not finally accomplished until November 1880.

The last recorded fituri, in 1922-3, was, like its predecessors, closely linked to restrictions on tribal access to the forest. Its leader, a high-caste Hindu from the plains called Alluri Sita Rama Raju, was able to transform a local rising into a minor guerrilla war, recruiting dispossessed landholders and offenders against the forest laws, and gaining help from villagers who gave them food and shelter. After raids on police outposts had netted a haul of arms and ammunition, Raju’s men evaded capture thanks to their superior knowledge of the hilly and wooded terrain. Unsuccessful in his attempts to spread the rebellion into the plains, Rama Raju was finally taken and shot in May 1924.

When 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, tribespeople in several chiefdoms rose in revolt against attempts to curb jhum. A major rebellion took place in Bastar in 1910, directed against the new prohibition of the practice, restrictions on access to forest 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 tribespeople went on hunger strike outside the king’s palace at Jagdalpur. Affirming that it was an internal affair between them and their ruler, the rebels — mostly Marias and Murias — cut telegraph wires and blocked the roads. At the same time, police stations and forest outposts were burned, stacked wood looted and a campaign mounted against pardeshis (outsiders), most of them 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, an area exceeding 6,000 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. In a decisive encounter near Jagdalpur, over nine hundred tribesmen armed only with bows, arrows and spears, and of all ages from sixteen upwards, were captured.29

In 1940 a similar revolt broke out in the Adilabad district of Hyderabad. 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 tribespeople, led by Kumra Bhimu, made repeated but unsuccessful attempts to contact state officials. After petitions for authorized resettlement were ignored, the tribespeople established their own settlement and began to clear forests for cultivation. An armed party sent to burn the new village was resisted by Bhimu’s Gonds, who then took refuge in the mountains. 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.30

Elsewhere in Hyderabad, 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. They made their feelings plain by moving across the Godavari to British territory, where the forest laws were not quite so stringent, returning to Hyderabad when the ban on jhum was lifted.31 An ingenious method of protest, similarly questioning 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.32

These repeated protests had a significant impact on government policy. In some parts of Madras Presidency, certain patches of land were set aside for tribespeople 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]”. 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 — in which jhum cultivators were allowed to grow food crops in the forest, provided they grew timber trees alongside. When, after a few years, the cultivator moved on to clear the next patch, a forest crop had been established on the vacated ground. Taungya thus made possible the establishment of the labour force necessary for forest works at a “comparatively low cost”, and it is still widely in operation. It helped to forestall the very real possibility of revolt if tribespeople were displaced by a prohibition of their characteristic form of cultivation (although even taungya cultivators sometimes thwarted the state 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.

More commonly, however, 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, led to a sharp fall in the jhum cycle. A form of agriculture practised for several millennia has become unsustainable in the face of external forces.

III

SETTLED CULTIVATORS AND THE STATE

Notwithstanding the spatial separation between field and forest, over the most part of India plough agriculturalists (mostly caste Hindus)

33 Aiyappan, Report on the Socio-Economic Conditions of the Aboriginal Tribes, pp. 16-17.
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 since animal husbandry was a valuable appendage to cultivation, the forest was a prime source of fodder in the form of grass and leaves. The forests also provided such necessities 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" (that is, codified) arrangements, the previously unlimited use rights were severely circumscribed. These restrictions affected two distinct classes of agriculturalists, and in somewhat different ways. In areas dominated by cultivating proprietors, and where social differentiation was not strongly marked, those affected by state forestry consisted primarily of middle to rich peasants, many of whom were graziers rather than agriculturalists. On the other hand, in tracts exhibiting more advanced forms of class differentiation, a different social stratum was at the receiving end. These were *adivasi* (tribal) and low-caste communities, who supplemented their meagre earnings as tenants and share-croppers 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": that is, the continuance of the territorial control that they

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35 On traditional systems of communal resource management in Madras, see Brandis, *Memorandum on the Demarcation of the Public Forests*. 
formerly enjoyed. 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".

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, agriculturalists 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 goats declined precipitously in the years following forest reservation. While there were no incidents of large-scale protest, the peasantry refused to co-operate with the Forest Department or to submit to the new regulations.

Not surprisingly, opposition to state forestry was far more intense among lower castes and tribespeople. An important source of income for tribal households in the Thane district of coastal Maharashtra was the sale of firewood to Koli fishermen. This trade was severely affected by the stricter control exercised over the forest from the later decades of the nineteenth century. Typically, the early manifestations of discontent were peaceful: petitioning the local administration, for example. When this had no impact, however, collective protest turned

36 Under commercial forest management, areas with young saplings are completely closed to grazing, thus restricting grazing to specific blocks of forest where it cannot harm the reproduction of commercial timber species: see, for details, Guha, "Scientific Forestry and Social Change". See also J. McKee, "On Grazing", Indian Forester, i (1875).
38 See M. S. S. Pandian, "Political Economy of Agrarian Change in Nanchilnadu: The Late Nineteenth Century to 1939" (Univ. of Madras Ph.D. thesis, 1985). The impact on local ecology of the massive expansion of tea plantations in north-east India has yet to be studied. Apart from the widespread deforestation they entailed, these plantations also displaced communities of hunter-gatherers and shifting cultivators.
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 Rs
d per maund and that the Government should redeem their mortgaged land and restore it to them’. In another incident, a large number of tribespeople carrying firewood to 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 of the force allowed them to proceed.39

A similar turn of events is reported from the Midnapur district of Bengal Presidency. In an area called the Jungle Mahals, land owned by the Midnapur Zamindari Company (M.Z.C.) — an associate of the important British managing agency firm of Andrew Yuile — was cultivated by Santhal tribal tenants. While early leases 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 led the zamindars to impose sharp restrictions on the Santhals. Again, the tribespeople first tried the courts and other means of legal redress. However, the conditions of economic distress prevailing in the aftermath of the First World War provoked a more militant response. In 1918 the forest-dwelling Santhals proceeded on a campaign of haat (market) looting, their principal targets being up-country cloth-traders who were money-lenders as well.

Some years later, and after the intervention of Congress nationalists, the Jungle Mahals witnessed a movement more sharply focused on the question of forest rights. Early in 1922 Santhals working as forest labour went on strike. Following a scuffle between employees of the M.Z.C. 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 subdivision of the area, Silda, Santhals began to plunder jungles leased to timber merchants and a police party trying to confiscate the newly cut wood was beaten up.40


Another form of assertion of traditional rights was the looting of fish from ponds controlled by individual zamindars. In April 1923 there was a wave of such activity and breaches of the forest law over an area of 200 square miles, from Jhargram in Midnapur to Ghatshila in the Singhbhum district of Bihar. While recognizing this to be "illegal", the tribespeople argued that tank-raiding would force the zamindars to concede their customary rights over forests. The Santhal, commented the district magistrate, "will tell you how 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 recognition that they were illegal was abandoned. Indeed, as alarmed officials reported, 90 per cent of the crowd believed that they were merely restoring a golden age when all jungles were free.41

Defiance of forest regulations also formed part of the country-wide campaigns led by the Indian National Congress in 1920-2 and 1930-2. Gandhi's visit to Cudappah in south-eastern India in September 1921 was widely hailed as an opportunity to get the forest laws abolished. In nearby Guntur peasants invaded the forests in the belief that "Gandhi-Raj" had been established and that 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 resolved not to pay the grazing fee, arguing that grazing restrictions deprived the sacred cow of its daily food. Encroachment on reserved forests was followed by the felling of teak trees and the hoisting of the national tricolour on a teak pole 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 on to carts and stacked in front of a local temple. When the men were arrested, the women symbolically breached the rules themselves, invoking the god Sri Krishna who had gone into the forest. In the Central Provinces, meanwhile, tribal peoples 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: the many violent incidents were clearly in defiance of nationalist leaders, wedded as the latter were to an ideology of non-violence.42

Perhaps the most sustained opposition to state forest management was to be found in the Himalayan districts of present-day Uttar Pradesh.43 Dominated by magnificent stands of coniferous species, the hill forests have been the only source of softwoods, and hence the most valuable forest property in the subcontinent. At the same time, they have also played a crucial role in sustaining agriculture in the mountainous terrain, a role 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. Since the forests of Tehri Garhwal came under commercial management even earlier (circa 1865), however, peasant resistance to encroachment on customary rights was remarkably sustained and uniform in both areas. In Tehri important if localized movements occurred in 1904, 1906, 1930 and 1944-8, and forest grievances played an important and sometimes determining role in all of them. 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 pre-capitalist 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, and at the most visible signs of its rule: the pine forests under intensive commercial management and


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); Ramachandra Guha, The Unquiet Woods: A Century of Protest in the Indian Himalaya (New Delhi and Berkeley, forthcoming).
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 paralysed 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 inevitable differences in the social idiom of protest, in both Tehri Garhwal and Kumaun Division forest restrictions were the source of bitter conflicts, unprecedented in their intensity and range, between the peasantry and the state.44

IV
EVERYDAY FORMS OF RESISTANCE: THE CASE OF JAUNSAR 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 élites that minimize the element of open confrontation: non-co-operation with imposed rules and regulations, for example, giving false or misleading information to tax collectors and other officials, or migration.45 In colonial India, too, the peasantry often resorted to violent protest only after quasi-legal channels, such as petitions and peaceful strikes, had been tried and found wanting. Although the historical record is heavily biased towards episodes of violent revolt in which peasants impose themselves rather more emphatically on the processes of state, it is important not to neglect other forms of protest that were not overtly confrontational in form.

These other forms of resistance often preceded, or ran concurrently with, open conflict. Thus in many areas breaches of forest laws were the most tangible evidence of the unpopularity of state management: the available evidence shows that, typically, the incidence of forest “crime” followed a steadily escalating trend. While this would be

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.
true of regions where sustained protest did occur (such as those described above), the absence of an organized movement plainly did not signify approval of state forestry.\textsuperscript{46}

That the conflict between villagers and colonial forest 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 which bordered Tehri Garhwal on the west. From the early 1860s the forests of Jaunsar Bawar had attracted the attention of the state. They were important for three reasons: as a source of wood for the railway, as “inspection” forests for training students at the Forest School in the nearby town of Dehra Dun, and as a source of fuel and timber for the military cantonment of Chakrata.\textsuperscript{47} In a settlement made in 1868 the state divided the forests into three classes. While Class I forests were wholly closed for their 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 apparent government monopoly. The confused legal status of the Class III forests, in which (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. While peasants believed that they could not dispose of the produce of the Class III forests as they liked and that their control was only a formal one, the government for its part was loath 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 with their extent: indeed “they would be contented to take much less than they have now, if they felt it was their own”.\textsuperscript{48}

\textsuperscript{46} Work on forest “crime”, so far unpublished, by three Indian historians should help clarify some of these issues: Neeladri Bhattacharya on Kulu and Kangra, Prabhu Mahapatra on Chotanagpur and Gopal Mukherjee on Chathisgarh.

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

\textsuperscript{48} Uttar Pradesh Regional Archives, Dehra Dun (hereafter U.P.R.A.), Post Mutiny Records (hereafter P.M.R.), List No. 2 (hereafter L2), Dept. XI, file no. 71, H. G. Ross, superintendent of Dehra Dun, memorandum on verbal complaints made to the

(cont. on p. 165)
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 superintendent urged a revision of the forest boundaries and the confirmation of village proprietorship in Class III forests, since "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".49

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 (Himalayan 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.50 Again, the takeover of village grazing lands and oak forests to supply the fuel and grass requirements of Chakrata cantonment was a grievance acknowledged by district officials to be legitimate, even if they could do little about it within the overall structure of colonial administration. Particularly contentious were proposals to regulate or ban the traditional practice of burning the forest floor before the monsoons for a fresh crop of grass. While this was regarded by the Forest Department as essential for the reproduction of timber trees, it led to the drying-up of

\[n. 48 \text{ cont.}\]

lieutenant-governor by syanas (headmen) of Jaunsar and Bawar (n.d., but probably 1871 or 1872).


grass and, consequently, a shortage of green fodder, as well as a proliferation of ticks. Pointing to deodar forests where numerous young seedlings had sprung up despite the constant grazing and even occasional fires, villagers were openly sceptical of the department’s claim that closure was “scientific”. 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 from the Muslim community of Gujars were allowed access to forest pasture even in areas where sheep and cattle belonging to the local peasantry were banned.

The Forest Department also prohibited the use of the axe by peasants 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 prohibiting the use of the axe in the land settlement of 1873 came to nothing. Although the settlement had considerably raised 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 to use axes in obtaining their grants of timber from forest land.

If such petitions represented an appeal to the “traditional” obligations of the state, the peasants of Jaunsar Bawar also resorted to

51 U.P.R.A., P.M.R., L2, file no. 244, note by C. Streadfield, superintendent, Dehra Dun, 1 Nov. 1898. See also Guha, “Scientific Forestry and Social Change”, for attempts to resolve this conflict.


53 U.P.R.A., P.M.R., L2, file no. 244, no. 483, B. B. Osmaston, deputy conservator of forests, Jaunsar Division, to assistant superintendent, Jaunsar Bawar, 19 Mar. 1899. 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 U.P.R.A., P.M.R., L2, file no. 244, no. 520, report on forest administration in Jaunsar Bawar, submitted by superintendent, Dehra Dun, to commissioner, Meerut Division, 10 Dec. 1900; L2, Dept. XXI, file no. 244, E. C. Buck, officiating secretary to Board of Revenue, N.W.P., to C. A. Elliot, secretary to government of N.W.P.; L2, file no. 2, no. 47, settlement officer, Jaunsar Bawar, to commissioner, Meerut Division, 17 Feb. 1872.

55 That is, what James Scott has called the key reciprocal duty of non-cultivating elites in peasant societies, the guaranteeing of subsistence. See J. C. Scott, The Moral Economy of the Peasant (New Haven, 1976).
extra-legal forms of protest which 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. Nearly two million sleepers were floated annually down the Yamuna and its chief tributary, the Tons, and they were considered to be the property of the Forest Department. 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 6 rupees, it was not unknown for villagers caught in possession of one to be sentenced to two months’ rigorous imprisonment or a fine of 30 rupees. 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 — 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 Jaunsar Bawar”.56

As in eighteenth-century England, the infringement of forest laws, which was viewed as “crime” by the state, was an assertion of customary rights, and as such it represented an incipient form of social protest.57 In Jaunsar Bawar the theft of floating timber and the defacement of government marks were accompanied by other forms of forest “crime”, 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,58 organized a firing of the pine forest to get rid of the dry grass and the insects it harboured, and of the deer who were a hazard to the adjoining croplands. Under the direction of the priest, Ram Singh,

56 See Dehra Dun Collectorate, Criminal Record Room, Basta (Box) for 1927-30 for Chakrata Tehsil, trial nos. 98 of 1925, 36 of 1927, 53 of 1930, and unnumbered trials dated 1 May, 15 June 1922, 7 Apr. 1923.
57 See the fine studies by Douglas Hay and E. P. Thompson in Douglas Hay et al., 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).
several villagers set fire to the forest on the night of 13 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 after several hours had elapsed. 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 temple, suddenly retracted their confessions in court. Expected 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 fire), disavowed the *wajib-ul-arz* (record of rights), which required headmen personally 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 . . . 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 cry". What differentiates Jaunsar from other forest areas where protest took a more open and militant form is the reliance on individual and largely "hidden" forms of resistance. But this was an equally effective strategy in thwarting colonial forest administration. As an official reflecting on the history of state forestry in Jaunsar Bawar remarked, "prosecutions for forest offences, meant as deterrents, only led to incendiariism, which was followed by more prosecutions and the vicious circle was complete". Clearly, these ostensibly individual acts of violation relied on a network, however informal, of

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59 The oath in the court of Jaunsar Bawar was taken in the name of Mahashu Devta.
60 See Dehra Dun Collectorate, Criminal Record Room, criminal case no. 98 of 1915. Ram Singh and five others were sentenced to terms of imprisonment ranging from three months to a year.
consensus and support within the wider community. Since all strata of village society were uniformly affected by commercial forestry, every violation of the Forest Act could draw sustenance from a more general distrust of state control; and since 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".63

V

THE DECLINE OF ARTISANAL INDUSTRY

Apart from its all too visible impact on the cultivating classes, state forest management also contributed to the decline of various forms of artisanal industry by restricting access to traditional sources of raw material.64 Chief among these was bamboo, a resource vital to many aspects of rural life. Extensively used in house construction, basket-weaving, for the manufacture of furniture and musical instruments, and even as food and fodder,65 this plant 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 paper-making, there was a radical shift: foresters now encouraged industrial exploitation while maintaining restrictions on village use. Many weavers were forced to buy bamboo from government-run depots or on the open market.66 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 artisanal caste specializing in basketwork, asserted their "trades union" rights to a monopoly of bamboo supplied by the Forest Department.67

While bamboo, whether obtained surreptitiously from the forest

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 See S. N. Prasad and Madhav Gadgil, Conservation of Bamboo Resources in Karnataka (mimeo, Karnataka State Council of Science and Technology, Bangalore, 1981).
67 Elwin, Baiga, p. 80.
or bought in the market, continues to play an important role in present-day village society, one form of indigenous industry which 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 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, changing circumstances virtually forced the Agaria out of business, especially since improved communications 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 of an industry that was formerly very widespread.

Proposals to set up ironworks 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, 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”. While acknowledging that the abundance of wood in presently inaccessible areas made the promotion of charcoal iron a potential source of forest income, Brandis advocated a different

Verrier Elwin, *The Agaria* (Calcutta, 1942), pp. xxiv-xxv, 31-2, 39, 121-2, 241-3, et al. Cf. also S. Bhattacharya, “Iron Smelters 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 over their means of subsistence. As detailed and firsthand accounts of socio-ecological changes under colonialism, their writings should qualify as authentically “primary” sources.


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 nothing and the industry died an inevitable if slow death.\textsuperscript{71}

Other forms of artisanal industry, too, declined under these twin pressures: the withdrawal of existing sources of raw material and competition from machine-made, largely foreign, goods. Thus the \textit{tassar} silk industry, depending on the collection of wild cocoons from the forest, experienced a uniform decline through most of India from the 1870s onwards. Here, too, decay could be attributed to the new forest laws: specifically, the increased duties levied on weavers collecting cocoons from the forest. Although the \textit{tassar} industry experienced a later 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.\textsuperscript{72}

CONCLUSION: THE SOCIAL IDIOM OF PROTEST AND ITS MECHANISMS

As we indicated at the outset, in the absence of detailed studies of the socio-ecological history of different regions, the present study can only provide a preliminary mapping of the various dimensions of forest-based conflict in British India. Through a synthesis of the available evidence 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


\textsuperscript{72} This paragraph is based on information kindly supplied to the authors by Tirthankar Ray of the Centre for Development Studies, Trivandrum, who is researching 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, \textit{Maria Gonds}, pp. 163-4. Among other artisanal castes, evidence from Khandesh in western India suggests that bangle-makers were almost ruined by the fee imposed on wood for fuel: see Maharashtra State Archives, Revenue Department, file 73 of 1884 (personal communication from Sumit Guha, St. Stephen’s College, Delhi).
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.73 These two sharply opposed notions of the forest were captured in a perceptive remark made by Percy Wyndham, commissioner of Kumaun during the uprising of 1921: 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 was invoked by someone ranged on the opposite side of the fence: Badridutt Pande, the leader of the movement, 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.74

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 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 focused 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, 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. In the imagery 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.76

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 which involved a mix of religion, folklore and tradition regulating both the quantum and the form of exploitation.77 The suppression and occasionally even obliteration of these indigenous systems of resource management

75 Modern environmentalists concerned with the abuse of nature for profit have also considered using forms of directed arson or "ecotage" (that is, ecological sabotage). Thus a group in the western United States which had previously fixed spikes in trees to thwart logging has now threatened to burn forests marked for felling, with the justification that, while fires were "natural", logging brought in roads and more felling. See Nicholas D. Kristof, "Forest Sabotage Is Urged by Some", New York Times, 22 Jan. 1986, p. A-21.

76 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, on the grounds that the temple deity had threatened him with dire consequences if he entered into such an agreement: see Anon., Selection of Despatches, 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 J. A. Mcneely (eds.), Culture and Conservation (Dublin, 1985).
under colonial auspices was acutely felt by different communities, albeit in somewhat different ways. The Baigas, for example, resisted attempts to convert them into plough agriculturalists 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”. However reluctant this conversion, it was not without divine retribution: 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”.78

The Gonds, aboriginal plough cultivators, were similarly afflicted by a melancholia or what Elwin has elsewhere called a “loss of nerve”.79 They were convinced that the loss of their forests signalled the coming of Kaliyug, an age of darkness in which their extensive medical tradition would be 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 town-dweller prospered.80

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. The Agaria believed that in the old days, when they were faithful to iron, they had enjoyed better health. Now that government taxes and scarcity of charcoal had forced many ironworkers to take to cultivation, their gods no longer provided immunity from disease. The real point of conflict with authority concerned charcoal-burning, and this was 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.81

78 Elwin, Baiga, pp. 106-7. See also R. N. Datta, “Settlement of Tribes Practising Shifting Cultivation in Madhya Pradesh (India)”, Indian Forester, lxxxi (1955), p. 371. Drawing a parallel 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 off my mother’s hair?”.

79 Elwin, Aboriginals, passim.


Researches over the past two decades have demonstrated that, while peasants operate in a world largely composed of "illiterates" whose movements lack a written manifesto, their actions are imbued with a certain rationality and an internally consistent system of values. It is the task of the scholar 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. From a reconstruction of the different episodes of social protest surveyed in this article, we can discern 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.

Of special 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 directly to challenge state forest policies. They did, however, try to break the new regulations by resorting chiefly to what one writer has called "avoidance protest": petty crime or migration, for example, which minimized the element of confrontation with the state. In the long term, however, these groups were forced to abandon their traditional occupations and to eke out a precarious living by accepting a subordinate role in the dominant system of agricultural production. Both slash-and-burn and plough agriculturalists 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, jhum cultivators characteristically responded to forest laws with a militant resistance which 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 traditional forms of cultivation to continue. More frequently the state reached an accommodation with these communities, restricting but not eliminating jhum cultivation. The consequent shrinkage of the forest area available for swidden plots, coupled with rising population, led

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

gradually to a reduction in fallow cycles and to declining yields. A large proportion of jhum cultivators have therefore had no alternative to becoming landless labourers.

Settled cultivators have perhaps been more successful in retaining some degree of control over forest resources. While sharply limiting access, the new laws did not seriously threaten the livelihood of agriculturalists and graziers. Since subordinate forest officials commonly hailed from the same castes, the peasantry was often able to obtain forest produce by bribing rangers and guards. While the cost of access may have increased significantly in such cases, the deprivation of forest resources was very rarely total. Moreover Hindu peasants protesting against forest restrictions were more successful in using the resources and strategies of modern nationalism, such as petitions and litigation, to advance 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": it reflected a general dissatisfaction with state management of the forest, and it rested heavily on traditional networks of communication and co-operation. It is noteworthy that traditional leaders of agrarian society — clan and village headmen — almost always played a key role in social mobilization and action. Since the colonial state regarded them as local bulwarks of power and authority, such leaders were subjected to conflicting pressures; but they usually decided to throw in their lot with their kinspeople. The tenuous hold exercised by the premier nationalist organization, the Congress, over most of the movements described in this article is also instructive. 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 pre-dated the involvement of the Congress; and even when the two streams ran together they were not always in tune with one another. Finally, these conflicts strikingly presaged similar conflicts in the post-colonial period. Contemporary movements asserting local claims over forest resources have replicated earlier movements in their geographical spread, in the nature of their participation and in their strategies and ideology of protest.

A study of colonial history may thus 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 among intellectuals, policy-makers and grass-roots organizations has in recent years brought to the fore two opposed notions of property and resource use: on the one hand, communal control over forests is paired with subsistence use, and on the other, state control with commercial exploitation. Yet this duality merely mirrors, albeit in a more formal and institutionalized fashion, the popular opposition to state control over forests which was endemic during the period of colonial rule. The movements described in this article may have been short-lived and unsuccessful, but their legacy is very much with us today.84