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Ecological Nationalisms

Nature, Livelihoods, and Identities in South Asia

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ENVIRONMENTAL HISTORY, THE SPICE TRADE, AND THE STATE IN SOUTH INDIA

Kathleen D. Morrison

IN CONTEMPORARY INDIA, BOTH OFFICIAL AND SELF-ASCRIBED IDENtities not only shape positions and possibilities in resource struggles, but also constitute real resources themselves. Among the poorest of India's poor, groups classified as "tribal," many of whom self-identify as *adivasi*, or original inhabitants, are eligible, along with other traditionally disadvantaged groups, to reserved positions in education and government service. Inclusion in these reserved categories has itself thus become an object of struggle. While some might see this development as both ironic and recent, it is in fact a contemporary example of a longer-term set of processes in South Asian history whereby complex and sometimes changing identities have been variably used as justifications for exploitation, mirrors for self-definition, and refuges from the larger society. The very existence of many of the distinctive named groups included in the broad and problematic "tribal" category itself speaks to past attempts, not only of exclusion and exploitation by outsiders, but also of definition and direction from within.

Sivaramakrishnan and Cederlöf, in their Introduction to this volume, define ecological nationalism as a space for cultural and political struggle for identity and livelihood, noting that in ecological nationalism competing perspectives are linked both to land (and its resources) and to claims of identity and authenticity, resources and identities being key terms in both

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historical and contemporary struggles in India's western mountains. In these terms, the very existence (and persistence) of named, self-conscious upland "tribal" groups might be seen as a product of ecological nationalism—certainly there have been very diverse notions of what Sivaramakrishnan and Cederlöf call nature devotion in the development and enactment of nationalism in this region, including its smaller regional versions, Kaviraj's (1992) "vernacular nationalisms." I will examine some of these more local affinities (arguably cultural identities as much as nationalisms, in this case) and their intersections with larger political forces and players. In doing so, I add to the discussion a closer examination of the "ecological" side of ecological nationalism, where "nature" operates as more than simply an object of discourse, set of resources, or field of political contestation, where it is itself a player in the constitution of the lifeways, strategies, and even identities of human communities and individuals. This kind of environmental history takes the ecology in political ecology quite literally, stressing both interaction and interconnection in contingent human histories. Here an inclusive sense of ecology embraces both environments, many of these transformed by millennia of human action.

This essay describes the environmental and cultural history of the Western Ghats within the overall context of imperial expansion and incorporation, changes in agricultural production, and the oscillating history of long-distance and local exchange involving forest products. Integrating data from paleoecology, archeology and history, I track environmental, social, and political transformations in this region over the last two millennia, focusing on the period between the fifteenth and seventeenth centuries, when, I argue, many of the strategies available to South Indian hill peoples became more constrained, and when many of the basic contours of colonial and contemporary conflicts over forested areas were established. In this discussion of south-west India between the fifteenth and seventeenth centuries, a contingent history of imperial expansion and incorporation, changes in agricultural production and the histories of long-distance and local exchange involving forest products provide the context for a consideration of multiple, contesting "nationalisms," particularly those leading to the creation, maintenance, and sometimes loss of what are often also seen as fundamental cultural identities—those of small-scale "tribals" or hill peoples.

In South Asia, as elsewhere, the disciplinary gulf between the social and biological sciences has, to a large extent, obscured much of the complex imbrication between sociopolitics and landscape history, with the result

that human–land relationships, if not simply ignored, are, conversely, typically seen as part of the essential "nature" of social groups rather than as the contingent products of long-term, mutually constitutive actions and interactions. Perhaps the best example of this tendency are the contemporary South Indian "tribal" groups, named identities,[1] who, in both scholarly and popular circles, are variously presumed to cohere on ethnic, caste, community, or even "racial" grounds, and who are often presumed to be the original inhabitants of this region (Morrison 2002a: 21–40). These groups tend to be seen as doubly "primitive," both aboriginal and simple. In this essay and elsewhere (Morrison 2002a), I argue that historically specific ecological, economic, and political relations have defined a range of sociocultural possibilities for residents of the South Indian uplands, and that far from exhibiting some essential "relation to nature," whether as hunter, farmer, pastoralist, or even bandit, upland groups have shown a great deal of flexibility and ingenuity in relating to both their mountain environment and to their neighbors.

Although the earliest inhabitants of South Asia subsisted solely by hunting wild animals and gathering wild plants, it is possible from the time of the first establishment of agriculture to document relations of exchange and interdependence between agriculturalists and hunting-and-gathering peoples. These relationships were marked by a high degree of variability and flexibility, with specific groups altering their strategies in relation to ecological, demographic, and political imperatives, such that it is difficult, and at times misleading, to use labels such as "hunter-gatherer" and "agriculturalist" as if they described an exclusive or stable strategy. I will be concerned here to trace some of the changes and possible changes in the organization of foraging/trading groups in south-western India coincident with the expansion[2] of the coastal spice trade and the increasing integration of this region into a world economy in the immediate precolonial and early colonial periods; that is, between about AD 1400 and 1700. Although the participation of South Indian "hill tribes" in regional and even international economies began much earlier than this (Morrison 2002a), I focus here on the early colonial and late precolonial organization of foraging and trading, and on some of the relationships of foragers with larger-scale political entities. In so doing I hope to illustrate the dynamic nature of these marginalized groups and the long-term evidence for economic integration and interdependence between foragers, peasant agriculturalists, states, and empires in this part of the world. This history illustrates the importance of

the lived experiences of place in the construction of contemporary identities and resource contests, experiences doubly shaped by the human and natural worlds.

SOUTH-WEST COASTAL INDIA

The south-west coast of India is set apart from much of the rest of the peninsula by both physiography and climate. Bounded by the Indian Ocean on the west and the Western Ghats on the east, this region consists of mountain evergreen and semi-evergreen tropical forests dissected by well-watered alluvial valleys. The Ghats not only act as a rain shadow during the summer monsoon, ensuring a fairly high rainfall along their western slopes, but they also send down numerous small, navigable rivers to the coast. The Malabar coast, the primary locus of spice production in India, is largely contained within the modern state of Kerala, where backwater transport by boat is still very important for integrating the relatively dispersed population (Stein 1982: 120). Of the spices involved in expanding trade networks, the most important was pepper (*Piper nigrum*), indigenous to the region.

Further north, the Kanara and Konkan coasts boast a somewhat broader expanse of flat land between the coast and the mountains; this region is among the most productive rice-growing regions in India. These coasts are now divided between the modern states of Karnataka, Goa, and Kerala. Natural harbors are relatively rare all along the western coast, and most port cities were actually located slightly inland, along rivers. The Ghats, relatively steep on the western approach but more gently sloping on the east, are traversed by a number of natural passes, themselves called ghats, which rather strictly circumcise routes of movement from the coast across to the drier South Indian plateaus.

FOREST DWELLERS AND EXCHANGE: THE WESTERN GHATS

In India today, a number of hill peoples or "tribes"[3] subsist in the Malabar Ghats and Nilgiri Hills (Hockings, ed. 1989: 1997) by hunting and collecting forest products for external markets, trading of those products, and sometimes also by wage labor. These groups include the Kadar, Paliyan, Karumba, and the Hill Pandaram (spellings and even names vary; these are

from Morris 1982b; see Lee and Daly, eds 1999 for more ethnographic detail). Groups practising swidden agriculture, forest collecting, trading, and even some wet rice agriculture include the Nayadi, Kannikar, Muthuvan, and Urali Ulladan (Morris 1982b: 16–17), among others. In Sri Lanka the well-known Veddas (Brow 1978; Seligman and Seligman 1911) also consist of a number of different groups more or less integrated into the dominant Sinhalese and Tamil agricultural economy. Anthropologists and archeologists in South Asia helped create and now must contend with a tradition of research in which "tribals" are viewed as cultural-evolutionary fossils (e.g. "living stone age peoples"), useful as ideal types in the construction of generic hunter-gatherer models (cf. Fox 1969: 139–40) or as exemplars of the distant past (Morrison 2002b). More recently, anthropologists (e.g. Hockings 1985; Bird-David 1983; Bird-David 1992a; Morrison 2002b; Stiles 1993; Zagarell 1997) have begun to stress the lack of physical isolation of "tribal" groups from caste society and the time-depth of their integration with lowland agriculturalists. Many forest groups depend on lowland products, notably foodgrains, textiles, and iron, for their basic subsistence. Thus, exchange relations are not simply incidental, but provide staple food items and technologies.

Although the orthodox perception seems to be that contemporary foragers are descendants of an unbroken tradition dating back as far as the Mesolithic, some scholars have suggested alternative routes by which groups could have moved into specialized collecting and trading. Hockings, for example, considers the case of refugees from caste society—marginalized groups who move into the forests to take up new opportunities and/or to escape intolerable situations in their homeland (1980). Such movements are not unknown, and Hockings (1985) suggests more specifically that the Roman[4] market for pepper and cardamom may have opened up opportunities for marginal lowland groups. If this is correct, however, such groups may have also come into contact and perhaps competition with existing upland peoples.

Even if some upland groups represent refugees from the intensively cultivated lowlands, it is likely that other specialized forager-traders reliant on imported foodstuffs began as more generalized foragers and/or as swidden agriculturalists. Several key periods can be identified in the move toward specialized foraging. The first of these is the Early Historic, for which the rather sketchy evidence points to significant changes in the occupation history of the uplands—including the beginnings of large-scale modification

of the vegetation—changes associated with good evidence for active networks of long-distance exchange. The second period, on which I focus here, is the sixteenth- and early-seventeenth century, a period in which the expanding spice trade and the concomitant expansion of lowland agriculture created both opportunity and constraint, a period when, even as new productive options opened, political and resource pressures combined to limit the subsistence flexibility of many hill peoples. In this latter period, we can document a transition toward specialized foraging, a move that may have been responsive to several factors. The first of these relates to the demands of the spice trade and other politically-based demands for forest produce. The second, more indirect but no less important, involves pressure on the forests from below created by expanding agriculture. Both the land-use "push" and the political "pull" or demand for produce from below forced foragers and forager/agriculturalists into an increasingly specialized (and increasingly marginalized) position as participants in a world market.

LONG-TERM OCCUPATIONAL HISTORY OF THE WESTERN GHATS

By the last few centuries BC, an extensive network of exchange stretched across the Indian Ocean, connecting, indirectly, the Mediterranean with East Asia (Morrison 1997). Forest products played a prominent role in this exchange, with peppercorns from the Malabar coast reported from an archeological context on the shore of the Red Sea and attested to in Chinese documents. Indo-Roman trade also included such forest products as sandalwood, ivory, ginger, cardamom, and myrobalan (*Terminalia chebula* and *T. bellirica*) (Morris 1982b: 15), as well as other woods, aromatics, and dyes (Ray 1986: 114). Finds of Roman coins are reported from both coastal and inland sites in south-west India and Mediterranean-made and inspired goods are found on both coasts (Nilakanta Sastri 1975: 135; and see Begley and DePuma 1991; Cimino 1994; Morrison 1997). In the corpus of Tamil Sangam poetry, dating to the first three or four centuries AD, there is mention of a coastal intra-Indian trade in pepper and honey (Nilakanta Sastri 1975: 110; Morris 1982b: 15), both forest products.

While some forest products may have been collected by lowland traders or agriculturalists, the degree of specialized knowledge involved and the dispersion and seasonal availability of such products suggest instead that they were collected by upland groups at least partially specialized toward

the gathering and trading of forest produce. Preliminary work on the long-term occupational history of the Ghats suggests that intensive human use of these mountains may have begun quite late. In a review of archeological data from the Nilgiris, Noble (1989) concludes that these hills were not occupied prior to the first century AD. The earliest identifiable archeological remains consist of megaliths, most containing iron. Zagarell (1997) describes these megaliths in some detail, concluding that their forms and distributions show evidence of extensive, long-term relationships with surrounding polities and societies (and see Zagarell 1994). Although the dating of these features is uncertain, he generally accepts Leshnik's (1974) dates of the fourth through sixth centuries AD (Zagarell 1997: 29) for the majority of these burial/memorial features.

Another form of information on human use of the Ghat forests is provided by paleoenvironmental analyses that track, among other things, human impact on vegetation, soils, and landforms. Among the most important of these for the purposes of this essay are analyses of pollen data conducted by Caratini *et al.* (1990–1). These data derive from a pollen core taken from a buried sediment profile near Vazhavatta, in the Wayanad District of northern Kerala, at about 760 meters (2493 feet) elevation. This profile contains information on forest composition between about AD 200 and 700 (Caratini *et al.* 1990–1: 126). Although the climax vegetation of this area is wet evergreen forest, the landscape surrounding Caratini *et al.*'s Wayanad site is now under the permanent cultivation of wet rice, along with plantations of coffee and hevea. Pollen data indicate neither significant compositional change in the forest between the third and eighth centuries AD nor any indication of a regime of intensive agriculture. However, some pressure on the forest was noted in that *Pteridphyte* (fern) diversity declined steadily, a pattern they attribute to "a reduction in the forest on which the majority of ferns are dependent" (Caratini *et al.* 1990–1: 137). Further, taxa specific to forest openings or margins were common in the core, suggesting that clearing of the forest for cultivation had already been established.

A second paleoenvironmental study of the Ghat forests (540–600m above msl) near Bhatkal (Mariotti and Peterschmitt 1994), although limited in spatial scale, also provides powerful evidence for anthropogenic vegetation change by the first century AD. In this study, stable carbon isotope ratios on soil organic matter indicate destruction of the evergreen forest margins and creation of an anthropic savannah around the first few centuries BC/AD.

While this finding is in broad agreement with other studies reporting a near-universal pattern of savannah formation following earlier forest communities (see especially Archer 1990), unfortunately the limited spatial scope of this study (only a 350m long transect across the ecotone was analysed, Marriotti and Peterschmitt 1994: 475) makes it difficult to draw broad conclusions about the overall history of the Ghat forests.

Thus, there is good evidence to suggest at least small-scale occupation of the Ghat forests, of a nature sufficient to induce modest vegetation change, by the first few centuries AD. There is also limited though striking evidence for total destruction of some forest margins and the creation of an upland savannah, a more open vegetation form that may have been entirely artifactual, at the same time. This evidence does not, of course, mean that the Ghats were not used prior to the first century, nor does it necessarily indicate that these hills did not support small groups of mobile foragers prior to this time. Much more archeological research, in particular, needs to be carried out in this area before we can say that the lack of earlier archeological remains in the uplands represents definitive evidence for late colonization of the Ghats.

Thus, while it is not possible at present to precisely describe the mix of subsistence strategies employed by Ghat peoples before about AD 1800, there is sufficient evidence to indicate that swidden agriculture was practiced by many groups from about the first few centuries AD. For about the same time, textual and archeological sources indicate that Ghat forest products were involved in long-distance trade networks. It is difficult to say if the extraction of forest products at this time was carried out by specialists or if local farmers and subsistence foragers engaged in some collection for exchange; either way, the volume of forest produce involved was significant enough that some reorganization of production was undoubtedly already under way. It is certainly clear from contemporary indigenous texts that literate observers were not only aware of the existence of distinctive economies and lifeways apart from those of settled agriculture, but also had strategies for engaging with and avoiding those same peoples. I suggest here that relations of interdependence that were almost certainly in place by the first half of the first millennium AD formed partial frameworks for response to the increased pressures on forest dwellers in the later precolonial and early colonial periods. Understanding this later period requires consideration of political, ecological, and economic conditions in southern India; these are briefly sketched below.

COASTAL ENTREPÔTS AND INDIAN OCEAN TRADE: MALABAR AND KANARA

When the Portuguese first arrived on the south-west coast of India in AD 1498, the Malabar port city of Calicut was one of the most important trade centers in the region, largely as the result of its (not uncontested) political predominance over neighboring coastal polities. As the "first among equals," however, the ruler of Calicut, the Zamorin, was neither the ruler of an extensive territory nor was he able to control his coastal neighbors, including the independent states of Cochin to the south and Cannanore to the north (Bouchon 1988). Indeed, the extent of Calicut's direct political control did not include much of its forested, mountainous hinterland (Dale 1980: 15). Permanent settlement in the interior was sparse, and restricted largely to riverine areas. Building on a long tradition of local self-government in South India (Stein 1982; Frykenberg 1979), "chiefs" or other local leaders were often held accountable to larger-scale political entities for tribute, taxes, and control within their area of influence.

With the arrival of the Portuguese and the establishment of their trading empire along the coast (Bouchon 1988; Pearson 1981; Subrahmanyam 1993, 2001), Calicut's importance as a node in the regional exchange system was eclipsed by that of Goa (the seat of Portuguese power and one of their few territorial possessions) and, to a lesser extent, of Cochin. The position of Goa *vis-à-vis* the export and food-producing hinterlands of the west coast was, if anything, even more precarious than that of Calicut, underlining the importance of cheap coastal transportation in maintaining this network of interdependence in foodstuffs and export items. As noted, the Malabar coast was the primary locus of pepper gathering and production, as well as of many other forest products, including ginger, cardamom, honey and wax, various gums and resins, dyes and scented woods, and medicinal and poisonous plants (Morris 1982b).

Further north, the wider Kanara coast provided a large portion of the rice consumed further south in the Malabar region; much of the Kanara coast was under the control of the territorially extensive inland Vijayanagara empire. Goa lies even further north, on the Konkan coast, and not only imported Kanara rice (Mathew 1983; Subrahmanyam 1990) but also had to bring in pepper and other Malabar products up the coast for exchange. Similarly, other coastal cities such as Cannanore, Calicut, and Cochin also prospered commercially by the bulk storage and marketing of products

neither manufactured on site nor procured in the immediate locality. Even discounting the important role such ports played in the redistribution of goods from further east and west, the local products, such as pepper, that they helped distribute came not from urban hinterlands, by and large, but from the Ghat uplands.

Understanding the role of the coastal entrepôt cities as both centers of consumption and as pivots in the larger sphere of exchange is important, inasmuch as increased demand for forest products in the late precolonial and early colonial periods cannot be dissociated from economic reorganization in the coastal lowlands. Lowland politics and economics ramified into the uplands, as discussed in more detail below. Most directly, the demand for pepper and other forest products and upland crops was accelerated by direct Portuguese purchases and forcible extractions as well as by ongoing extra-Portuguese trade. However, the pressure on the forests also had ramifications for lowland agriculturalists, ramifications involving changes in the organization of production and distribution of foodgrains in the lowlands, most notably of rice. Combined with increased exports of rice to coastal cities, changes in the organization of production must have been widespread in both uplands and lowlands.

Portuguese involvement in the movement of rice took three forms. The first was the demand for tribute, in order to supply Portuguese forts and settlements. These demands fell almost exclusively on the kingdoms of the Kanara coast,[5] particularly Honawar, Bhatkal, and Basrur (Subrahmanyam 1984: 445; Desai *et al.* 1981). The amount of rice involved was considerable; convoys of several hundred small ships, often under Portuguese guard (Pearson 1981: 77) sailed up the coast to Goa. In the 1570s and 1580s three to four convoys per year to Goa alone are reported (Pearson 1981: 77). The second form of Portuguese involvement stemmed from the cartaz, or pass system, for local as well as long-distance trade, so that no ocean transport whatsoever could officially take place without Portuguese approval and taxation. The third form of involvement in the rice trade may be seen as something of an unintended consequence to other forms of exchange and extraction, this being the escalation in demand for rice and other staples created by Portuguese extractions of pepper and similar products from the foothills and mountains of the Ghats. As discussed below, the shipment of staples to the forested interior was ultimately necessary to support the foragers and cultivators of spices, among others.

One striking effect of Portuguese involvement in southern India was the shift in the area around Goa from a grain surplus to a grain deficit. Before the arrival of the Portuguese and their efforts to shift the focus of trade from Calicut to Goa, rice was imported from the Goan hinterland and from "Vijayanagara" (Mathew 1983: 20, presumably this refers to the Konkan coast regions under Vijayanagara suzerainty) to Malabar cities. After the establishment of Portuguese Goa, the city became almost entirely dependent upon imported foodstuffs. The difference may not relate entirely to increased population in the cities, but rather to the severance of relations in the Portuguese period with the rural hinterland (Pearson 1981: 76–8). Numerous references to Goa's inability to feed itself exist in the literature (Subrahmanyam 1984: 434; Pearson 1981: 77), as indeed to the similar import of rice by precolonial Calicut (Danvers 1966: 85; Digby 1982: 147). Not all of Goa and the Malabar coast's foodstuffs came from the Kanara coast; a large portion also arrived from Bengal (Pearson 1981) and Orissa (Foster 1968: 26, 44) on the east coast. As I discuss below, the expansion and intensification of lowland agriculture had a significant contributing effect on changes in the opportunities of upland peoples.

EXPANSION AND INTENSIFICATION: UPLAND–LOWLAND LINKS

While it appears, then, that frameworks for exchange and economic interdependence were in place long before European involvement in South Asia, it is certainly the case that the scale of exchange underwent a rapid expansion in the early colonial period. Historians of both Europe and South Asia are in broad agreement that the volume of pepper, as well as of other products[6] such as ginger and cardamom, increased significantly in the sixteenth century. European pepper consumption doubled during the 1500s (Diffie and Winius 1977: 318; Boxer 1969: 59); Braudel (1972: 550) estimates that between 1554 and 1564 the flow of spices into the Mediterranean through the Red Sea route alone was of the order of 100 to 200,000 kilograms per year, most of it pepper. This quantity approximates that of the pre-Portuguese period, but does not include any of the spices brought around the Cape by the Portuguese at the height of their control. From the Indian perspective, Mathew (1983: 212–13) estimates that pepper production jumped 200 to 275 percent between 1515 and 1607. Wallerstein's contention (1974),

then, that the impact of the increased pepper demand on Asia was "minimal" seems unrealistic at best, based perhaps on a notion of the importance of pepper to the average European rather than to foragers or to swidden cultivators (and see Chaudhuri 1985; Reid 1993a).

Luxury goods—items of relatively small size and high value, including most spices—moved from one end of the network to the other, while the movement of bulkier and more perishable goods formed smaller but sometimes still impressively large circuits within the larger system (Mathew 1983: 19). Although historical attention has traditionally been focused on the "small but trifling" (Wallerstein 1974) trade in high-value items, there has been an increasing awareness of the important role of more "utilitarian" trade goods, such as rice (Subrahmanyam 1984, 1990) and coarse cotton textiles (Ramaswamy 1985; Digby 1982). On the one hand, these two categories of trades good create distinct organizational problems and prospects for political control. European colonial powers such as the Portuguese in India adopted a program of regulation and taxation of the existing "country trade" (cf. J.H. Parry 1963), or local trade in utilitarian goods, in order to finance their costly involvement in the long-distance exchange of spices and other "luxury" goods. The colonial administration of the latter was organized quite differently—in the case of the Portuguese, the spice trade was considered to be the exclusive right of a centralized crown monopoly (Boxer 1969; Danvers 1966; Subrahmanyam 1993)—although certainly this represented more an ideal than a reality.

From the perspective of indigenous producers, however, distinctions between "luxuries" and "utilitarian" commodities and between the structure of international and interregional trade in each were largely academic. The productive demands placed on peasant agriculturalists, gatherers of forest products, and export-oriented swidden cultivators were all structured through networks of local power and authority. The expansion and restructuring of such demands promoted changes in the opportunities and strategies of different collectors and producers, and fostered relationships of economic interdependence that survive, in altered form, into the present. The structure of intensive wet rice agriculture was predicated on the existence of markets for surplus; the basic subsistence needs of specialized foragers and possibly swidden spice cultivators were met through the mobilization of this surplus. The implications of this accelerated demand for spices in India and beyond probably also meant an accelerated demand for rice and other subsistence goods that would have been felt by intensive agriculturalists as far afield as Java and Bengal.

If demands for forest products were on the rise in the sixteenth century, it is also the case that areas under forests were declining. Throughout the South, both inscriptional and archeological evidence from at least the tenth century AD has as a constant theme the expansion of agriculture at tne expense of forests. The limited paleoenvironmental data that exist (Morrison 1994a) tend to confirm this pattern. In the Nilgiris, pressure on land was not simply the result of lowland agriculturalists clearing forests in the foothills. There, Hockings has documented the expansion of the Badagas ("northerners," Hockings 1980; and see Zagarell 2002) a refugee group supposedly fleeing the destruction of the Vijayanagara empire in the late sixteenth century. The Badagas were accommodated by various hill groups and, according to the soil evidence (von Lengerke and Blasco 1989: 44) established permanent fields about three or four hundred years ago. Thus, forest dwellers have come under increasing pressure as the result of local agricultural land-use practices as well as from demands for forest produce.

Pressure on forests was not entirely a byproduct of expanding agriculture, however. Vijayanagara kings as well as other rulers sometimes adopted specific policies of forest clearance for the express purpose of diminishing the potential threat forest dwellers posed to agriculture. In the *Amuktamalyada*, a sixteenth-century compilation of political maxims attributed to the expansionist Vijayanagara king Krishna Deva Raya, the clearance of forests is presented as the only way to control the activities of robbers (S. Guha 1999: 49). The text advises kings (Saraswati 1926: 65): "Increase the forests that are near your frontier fortresses (Gadi *desa*) and destroy all those which are in the middle of your territory. Then alone you will not have trouble from robbers." Deliberate forest removal, also advocated by later rulers, including the British (S. Guha 1999), probably rarely involved state-sponsored deforestation as that would have been extremely expensive and time-consuming, even if aided by fire. Instead, forests could be cleared and land claimed for agriculture through the labor of agriculturalists; from at least the tenth century, inscriptions note the existence of tax incentives for the clearance of forests and the establishment of new fields and new irrigation facilities such as reservoirs (e.g. Heitzman 1997). Land-clearance incentives are extremely common in the Vijayanagara period, accelerating in the sixteenth century (Morrison 1995).

THE TRADE IN FOREST PRODUCTS: STRUCTURES OF POLITICAL AUTHORITY BEYOND THE COAST

Throughout the massive expansion of the spice trade, connections between primary producers and collectors and colonial or indigenous governments benefiting from forest produce were generally indirect. Intermediate brokers or "secondary traders" (cf. Dunn 1975: 99) forged relations of dominance and indebtedness with forest peoples; these brokers then dealt with more proximate political authorities. The contractual system depended on keeping foragers constantly in debt and personally dependent on the broker, who also acted as the supplier of subsistence goods. Brokers were either independent entrepreneurs, or more often, it seems, agents or contractors of governments. Many precolonial South Indian polities used tax farmers as collectors rather than directly employing government functionaries (Sinopoli and Morrison 1996). These tax farmers bid for the privilege of collecting revenue and then had to recoup the cost of the bid through direct collections. Middleman broker positions may have been similarly contracted.

Describing the system somewhat later was Francis Buchanan, who in 1800 set out on a trip throughout southern India for the express purpose of describing the agriculture of the country, including the cultivation and preparation of the "valuable commodities" pepper, sandalwood, cardamom, and cotton (Buchanan 1988 (1806): ix–x). He described a contractual system in place between the Kadar and local authorities in the Anamalai Hills (southern Nilgiris). Buchanan explains (1988 (1806): 334, italics in the original):

> Here is a person called the *Malaya-pudy*, or *hill-village man*. He rents the exclusive privilege of collecting drugs in the hills south from *Ani-malaya*. These are collected for him by a hill people named *Cadar*, of who, among the hills two day's journey hence, there is a village of 13 houses. The renter has there a small house, to which he occasionally goes to receive the drugs the Cadar have collected and he brings them home on oxen. The men only work for him, and each daily receives in advance four *Puddies* of rice [. . .]

These "Cadar," Buchanan continued (1988 (1806): 338), "are a rude tribe inhabiting the hills in this neighborhood, and speaking dialect that differs only in accent from the Tamul. . . . They rear no domestic animals, nor cultivate anything whatever; but their clothing is as good as that of the neighboring peasantry." The renter obtained his concession from Tipu Sultan's government. Among the products collected were wild ginger and turmeric, honey and wax, several dyes and resins, and ivory. The wild pepper was said to be of bad quality. The renter was also noted to trade with several other groups, who provided cardamom, which was not cultivated. These other groups were said to practice (swidden) agriculture (1988 (1806): 336–7).

The Portuguese, too, used this system of intermediaries for obtaining forest products. Pepper, ginger, cardamom, and cinnamon (in Sri Lanka) were all procured via "native intermediaries of the Sudra caste" (Diffie and Winius 1977: 319). This label does not clearly identify the intermediaries, except to suggest that they were probably not tribal peoples, often considered outcastes. Goods were purchased by the Portuguese on fixed-price contracts with a go-between, much as they are today. The Portuguese did prefer, however, to induce local rulers to supply them with spices at an agreed-upon price (Bouchon 1988; Danvers 1966; Mathew 1983). Presumably, then, these rulers employed intermediaries. Pearson (1981: 28) notes that the Portuguese had no direct control over pepper-producing areas and thus were dependent upon coastal rajas and local merchants for their supplies. As an empirical pattern, then, we see with increasing scope of political authority an increasing physical distance from the source of the product, an increased concentration in stored goods, an increase in settlement nucleation, and an increase in the status of landholding groups. Along parts of the Kanara coastal strip, for example, Brahmins were the major landowners in the sixteenth and seventeenth centuries. Further inland, landholding was largely in the hands of the Bant, a "clean" Sudra caste (Subrahmanyam 1984: 439). Still further inland were the tribal swidden farmers and hunter-gatherers. This social ordering corresponded well with the pyramidal structure of power relations stretching from the forests to the inland riverine towns and to the coastal cities.

If this picture seems to be one of the exploitation of timid forest dwellers by outsiders— a picture not altogether inaccurate for some contemporary contexts—a closer historical look at political relations shows a more complex situation. As far back as we can trace, forest peoples have always been integrated in some way into larger political structures. Kings of the South Indian Chola empire, between the ninth and thirteenth centuries AD, demanded tribute in forest products from *nadus* (territorial units) located in the Ghats (Hockings 1985: 115; see also Stein 1982). R.G. Fox (1969:

144) cites early reports that the Kadar of Kerala made periodic visits to Tripura to carry tribute and to exchange "gathered" items, such as tame elephants, wild honey, cardamom, and other forest products for rice, iron, chillies, and opium.

Tribute could also be exacted through local leaders, rather than directly from producers or collectors, a method also used to collect taxes from agriculturalists. Morris (1982b: 23) describes a copper plate inscription describing a contract between the local king of Attingal and the Hill Pandaram, appointing the latter as "tenants" of the forest, in return for which the *muppan*, or chief, should bring certain forest products to the capital every year. At these visits, cloth and other "gifts" would be given. In this case the local king was subject in turn to the Raja of Travancore, to whom he had to pay tribute. Both Murthy's (1994) historical work on the Chenchus and S. Guha's (1999) study of the Kolis and Bhils of western India reveal not only potential independent bases of power of these groups, but also the intermittent establishment of independent polities, and the ongoing engagement of tribal leaders and warriors with lowland polities. Thus, although I outline here an account of the oppression and immiseration of some Ghat residents and their creation as specialized forager-traders, it is also the case that other upland peoples referred to as tribes were able to create for themselves positions of power and domination, especially as bandits preying on settled agriculturalists—the dacoits and criminal tribes of the British documents. Tribal kingdoms, if that is not a contradiction in terms, flourished in the interstices of Vijayanagara and, later, British, Mysore, and Maratha rule.

What, then were the effects of the expansion of the spice trade in and after the sixteenth century on "hill peoples" of the Ghats? Clearly, the effects were variable, but while it is clear that some tribals were able to restyle themselves as Rajputs and establish kingdoms, or at least elicit fear from lowlanders, many others became, in Sumit Guha's (1999) characterization, a landless proletariat. In trying to outline the processes by which this took place, it may be helpful to contextualize these political and economic dynamics with some ecological consideration of Ghat forest products.

ECOLOGICAL CONTEXTS: PEPPER AND CARDAMOM

Although the existence of a pepper trade was well established by at least the first century AD, pepper cultivation seems to have been rare until about the sixteenth century.[7] Here I briefly discuss the growing conditions of pepper

and cardamom, two of the most important of the Ghat forest products. Black pepper is a perennial climbing plant cultivated in India today in monocrop plantations and in mixed areca nut palm/pepper associations. Pepper also still grows wild in the Ghat forests. It has a limited natural distribution, being confined to the Malabar region (Aiyer 1980: 269). It prospers in partly shaded locations from sea level to 1200 meters (4000 feet), and in areas with 152 cms (60 inches) or more of rain a year. Pepper does not do well in sandy or alluvial soils of the sort favored by coconut palms (Aiyer 1980: 270). Because pepper is a climbing vine, it requires standards to climb on; thus it is often intercropped with trees or trained onto poles. It begins to bear four years after planting (Aiyer 1980: 275).

Cultivation of pepper in mid-elevation, mixed-crop swidden field seems to be most appropriate for the requirements of the plant. Its drainage needs often result in its growth on hill slopes. In modern varieties, the harvest time falls between February and March (Aiyer 1980: 276), January to March in Sumatra (Hill 1969: 37), but wild strains usually have fruit at all stages of maturity on the vine at any given time. Thus, harvesting (or collecting) is an ongoing process. Harvesting involves cutting off branches of the plant-bearing ripe fruit, threshing the fruit from the vine, and about six days of sun-drying (Aiyer 1980: 277). Today pepper harvesting is done with the aid of ladders (as Buchanan also notes for the early seventeenth century: 1988 [1806]). The dangers of collecting are thus evocative of the dangers involved in honey collection among contemporary foraging groups such as the Hill Pandaram (Morris 1982b; see also Demmer 1997).

The scheduling demands of pepper cultivation, and particularly, of pepper collection, are of particular interest. According to Buchanan (1988 [1806]: 334), dry rice in the Anamalai region would have been harvested at about the same time as cultivated pepper. Thus there would have been conflict in scheduling and labor demands involved in these different activities. Subrahmanyam (1990: 66) notes that in later-sixteenth-century Portuguese Cochin, "an important point on the annual calendar was the arrival in March of the first pepper-laden boats from the mountains." Thus, demands of labor and demands of scheduling for grain production and pepper production (and even more for pepper collection) had to be balanced.

Cardamom (*Elettaria cardomom*) has a more limited range than pepper, occurring between 760 and 1525 meters (2500–5000 feet) in elevation (J.W. Parry 1962). Cardamom does not produce well in the lower, more deciduous Ghat forests, where leaf-fall has the effect of shortening the flowering season (Sahadevan 1965: 9). Cardamom prefers a slightly higher

rainfall and cooler temperature range than pepper, as reflected in its occurrence at higher elevations. In addition, cardamom prefers a relatively deep shade (Aiyer 1980: 296), and while the depth of the soil is apparently not very important, the plants require "a well-developed vegetable mulch" (Sahadevan 1965: 10) like that found in the forest floor. Cardamom is today grown as a plantation crop, in mixed associations with areca and coffee, although Sahadevan (1965: 21) asserts that the actual cultivation of cardamom is not more than two hundred years old. Swidden plots containing cardamom are not unknown (Sahadevan 1965: 21); these may be placed along watercourses and in other damp situations. Wild stands are subject to varying degrees of management, as described by Aiyer (1980: 297):

> [. . .] in this the natural growth of cardamoms as an undergrowth in the favourable forest zones is aided in varying degrees by actual cultivation; the latter ranges from conditions where cardamom is wholly a forest product and practically grows under wild conditions, up to conditions where it approximates closely to systematic cultivation, except for the fact that it is a temporary and shifting one. Areas are abandoned and then allowed to revert to jungle after a few years of bearing and then a new area is taken up for similar cultivation.

Cardamom bears four to five years after sowing, and its harvest characteristics are similar to those of pepper. The picking of cardamom, is, however, an even more skilled task, since the joint must stay attached to the pod and the latter must be a precise stage of maturity. If the pods are picked too green, they will shrivel upon drying, if too ripe, they will shatter. Aiyer notes that the clumps of plants need to be visited every week to ten days in order to gather the ripe pods (Aiyer 1980: 302). Because the harvest season is more or less continuous, specialized indoor drying facilities are often necessary in order to properly dry the material during the rainy season (Aiyer 1980: 303; Sahadevan 1965: 18). Competition from elephants, birds, squirrels, and rats is also a problem (Aiyer 1980: 308).

CHANGING PATTERNS: ECONOMIC STRATEGIES AND RELATIONS OF POWER

By the beginning of the sixteenth century, then, there existed in upland south-west India a complex mosaic of economic practices which included

swidden agriculture, gathering of forest products for trade with lowland groups, military service, and no doubt gathering and hunting for subsistence as well. There are hints of the presence of specialized foragers in inscriptions pre-dating European documents, but certainly by the time documentary sources become abundant from the sixteenth century onward, there are clear indications of the presence of named groups engaged in specialized collection of forest products for exchange, as well as subsistence activities that included agriculture, gathering, and hunting. There was at the same time a similarly wide range of political forms and ethnic/caste identities; although productive forms, political orders, and group identities do not map neatly onto one another, contests over land and resources as well as cultural and political legitimacy have always been key in their relationships.

Both the expansion of the spice trade and increasing pressure on forests from the sixteenth century on (accelerating thereafter) led to transformations in upland economies and political ecologies. Several different options may have been available to upland groups faced with pressures on land and demands for produce. One such option was, evidently, to begin producing rather than simply collecting pepper. Pepper growers, then, concentrated on their agricultural plots and the scheduling demands of those plots almost certainly limited the spatial scale of their gathering and hunting. Morris (1982b: 63) notes in this regard that the more sedentary Hill Pandaram who made a commitment to their swidden fields could make only daily rather than overnight foraging trips. It would be helpful to know how much of the pepper that made its way to the coast was cultivated and how much was simply collected; it seems reasonable to assume that both wild and cultivated pepper were in circulation, implying a variety of strategies for its procurement.

An alternative strategy available to groups with knowledge of forest resources would be to abandon cultivation as a major subsistence component and become specialized forager-traders, collecting forest products of the higher elevations, such as cardamom with its rather stringent scheduling demands for harvesting.[8] These groups would have had to abandon cultivation as a primary subsistence activity, becoming highly specialized forager-traders, collecting ginger, cardamom, and other forest products. Although this essay has concentrated on political and economic contexts and has not considered questions of the cultural integration of forager-traders with others (e.g. Bird-David 1983, 1992a, 1992b; Gardner 1985, 1991,

1993; Lee and Daly, eds 1999; and Hockings, ed. 1989: 1992), ethnographic descriptions of some South Indian foragers emphasize other kinds of specialist roles taken by upland hunter-gatherers, including sorcery and wage labor. It is difficult to say to what extent competition for land at lower elevations (where swidden plots of pepper were presumably appearing) would provide the "push" for the adoption of this strategy, and to what extent scheduling consideration would have come into play.

CONCLUSION

Despite the limited information now available on late-precolonial and early-colonial-period transformations of upland economic and social practices in southern India, it is possible to make some suggestions about the parameters of change. The picture that emerges seems to be one of increasing subsistence specialization and decreasing diversity of options available to particular people, although the overall level of both economic and social/political diversity certainly increased. Levels of interdependence between groups are high and power relations markedly unequal. It would be useful to be able to discuss patterns of ethnic, linguistic, and cultural differentiation or amalgamation, but there is at present little convincing information on these important topics, especially for earlier periods.

Perhaps the most important conclusion to be drawn from the empirical evidence presented here has to do with the historically constructed nature of forager-trader lifestyles. Far from being simple, timeless, denizens of the forest, South Indian forager-traders emerge as active, strategic agents working in the context of complex political worlds. The economic and political roles of South Asian foragers are, and have been, both variable and flexible. Within this range of strategies, specialized foraging for exchange—what Woodburn (1980) calls commercial foraging and R.G. Fox (1969) the role of "professional primitives"—is, however, a precarious one, ultimately dependent on long-distance rather than local exchange links, and on volatile world markets. In South India, the relations of domination and the precarious nature of forager-trader economies point to the marginality of their position, a problem that continues into the present (e.g. Baviskar 1995). This marginality is not, however, eternal. It has been created by a complex set of historical and ecological circumstances, only a few of which I have been able to sketch here.

Both the creation and maintenance of south-western Indian forager-trader identities appear to be related to their long histories of interconnection with lowland agriculturalists and states—histories of both cooperation and conflict. In the contested spaces of the Western Ghats, competing "nationalisms" involved a range of political forms: colonial empires, agrarian states, coastal trading entrepôts, merchant guilds, class- and caste-based agricultural groups, individual entrepreneurs, kin groups, and small-scale egalitarian societies. This complex world of power met an equally complex field of production. In the forests alone, people hunted for subsistence, trade, or sport, and grew, gathered, and processed plants for a similarly broad range of purposes. The forests also hosted traders, raiders, herders, rulers, mystics, teachers, and more. At the same time, the physical and biological environment of the Ghats was far from static, with overall forest loss and regeneration, changes in vegetation composition and distribution, and soil movement all contributing to changing ecological contexts. The connections between political forms, economic strategies, and ecological contexts were far from haphazard. Although some small upland groups were able to organize effective local polities or to threaten and intimidate their neighbors, most ultimately paid the price for their (at least partial) separation from the cultural forms and social mores of the lowlands in the coin of reduced power over their own subsistence options. At the same time, historical distinctions between lowland and upland groups, while not indexing anything like a "pristine state of nature" or indeed a lack of interaction and integration of hill peoples with those of the plains and beyond, do seem to reflect the success of these groups in creating and maintaining distinctive identities, identities which both then and now constituted bases for claims to resources and, thus, economic and cultural resources in themselves.

NOTES

1. Many of these groups consist of quite large numbers of people and are not in any real sense communities or co-residential groups.

2. Throughout this essay I use the terms expansion (in demand for pepper, for example) and "intensification" (in rice and pepper production, for example) rather loosely. It is worth noting, however, that this discussion is meant to help lay an empirical groundwork for a more explicitly theoretical consideration of the

process of intensification that includes foraging and trading as strategies of intensification and that takes into account power dynamics, including possible implications of the loss of diversity in subsistence options. Cf. Morrison 1994b, 1995, 1996.

3. The difficulties with such classifications as "tribe," "caste," and alternatives such as *adivasi* (a Hindi term for original dweller or indigenous person, cf. Baviskar 1995) are well discussed by Béteille 1998; see also Hardiman 1987b: 11–16).

4. Recent research on the Early Historic period in southern India, while continuing to emphasize the importance of regional and interregional exchange, would tend to de-emphasize the primary role of the Roman empire, stressing instead the great variety of trade connections at this time (e.g. Ray 1994).

5. With the fall of the capital city of the Vijayanagara empire in 1565, the empire was reorganized and reduced in size; these coastal areas seem to have shrugged off the sometimes nominal control they had formerly experienced. Nilakanta Sastri 1975; Sewell 1982 (1900).

6. These products would include cinnamon from Sri Lanka, cloves and other spices from the Moluccas, and many more. A more thoroughgoing analysis of the larger system of exchange from the points of view of collectors, extractors, and producers rather than solely traders and governments would certainly be desirable.

7. That pepper was indeed cultivated in the sixteenth century is clear. Although Marco Polo mentions the cultivation of both pepper and ginger in the Eli kingdom (the precursor to Cannanore) during the thirteenth century, it is doubtful that he actually witnessed it. The English traveler Ralph Fitch visited Cochin in 1589, where he noticed a group of people who seemed different from other Malabaris; they had bushy hair and held long bows and arrows. Of Cochin, Fisk wrote: "Heere groweth the pepper; and it springeth up by a tree or a pole, and is like our ivy berry . . . The pepper groweth in many parts of India, especially about Cochin; and much of it doth grow in the fields among the bushes without any labor, and when it is ripe they go and gather it. The shrubbe is like unto our ivy tree; and if it did not run about some tree or pole it wold fall down and rot. When they first gather it, it is greene; and then they lay it in the sun, and it becometh blacke." The unfamiliar appearance of a swidden field might well have seemed unplanned and unplanted to a European; this confusion may lie at the base of the persistent Portuguese notion that pepper cultivation required no labor. See Bouchon 1988: 3; Foster 1968: 45–6.

8. The Hill Pandaram today, for example, collect dammar, inja bark, honey, wax, and cardamom for export as well as hunting various game animals. These activities are, however, difficult for those with swidden plots to participate in. See Morris 1982b: 80.

3

THE TODA TIGER

Debates on Custom, Utility, and Rights in Nature, South India 1820–1843

Gunnel Cederlöf

> It is beautiful to observe the agility with which they bound over the hills, shaking their black locks in the wind, and as conscious of liberty as the mountain deer, or any true-born Briton. They are remarkably frank in their deportment; and their entire freedom from Hindoo servility is very engaging to the Englishman, and cannot fail to remind him of the "bold peasantry" of a still dearer country.[1] (1829)

> I learn that when stung with hunger they spring upon food with the eagerness of the tiger, when their appetite is sated, they doze away their hours in idleness or sleep, then they are an easy prey to the temptation of each wild and passionate impulse, and reckless in their manner of gratifying it. Their passions, wild and turbulent, have been prematurely kindled—their inborn sense of shame prematurely withered—they are imbruted—they are men without a God—they grope their way through a dark world, and know not of hereafter.[2] (1846)

THE EYES OF OUTSIDERS WERE CONTINUOUSLY AMAZED BY THE hilly landscape of the Nilgiris mountains in South India.[3] These outsiders were among the first Europeans to reach the plateau, about three decades after the British annexation of Mysore state in 1799. They took in its beauty, its promising climate, and its soils so perfectly rich and appropriate for British fruit and crops. And, just as perfectly, and as natural a part of this landscape, were its people: first and foremost the "herders," the Toda, who already, within ten years after the first brief interventions, had been surrounded by myths of their ancient origin and noble culture. When the Reverend