
Development Discourses and Peasant–Forest Relations: Natural Resource Utilization as Social Process

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ABSTRACT

This article analyses the changing role of forests and the practices of peasants toward them in a Costa Rican rural community, drawing on an analytical perspective of political ecology, combined with cultural interpretations. The study underlines the complex articulation of local processes and global forces in tropical forest struggles. Deforestation is seen as a process of development and power involving multiple social actors, from politicians and development experts to a heterogeneous group of local peasants. The local people are not passive victims of global challenges, but are instead directly involved in the changes concerning their production systems and livelihood strategies. In the light of historical changes in natural resource utilization, the article underlines the multiplicity of the causes of tropical deforestation, and the intricate links between global discourses on environment and development and local forest relations.

INTRODUCTION

Environmental hazards in the Third World have attracted increasing attention among scientists, conservationists and development experts in the past two decades. Dozens of books and articles have been published on deforestation in Amazonia, environmental degradation in sub-Saharan Africa, and loss of biodiversity and genetic base in tropical central and south America. This has clear connections to contemporary world politics where environmental issues are becoming one of the main arenas of debate, and where tropical forests are gaining the symbolic value of a ‘heritage of the world community’. Research focusing on deforestation became important only when the phenomenon was politically defined as a global problem. The same holds true with the current discourse on biodiversity, global climatic

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change, and sustainable development (Adams, 1990; Roe, 1993, 1995; Sachs, 1993; Taylor and Buttle, 1992).

There is a large literature analysing the relationships of global forces and local processes in tropical deforestation and environmental degradation (Blaikie and Brookfield, 1987; Millikan, 1992; Redclift and Goodman, 1991; Schmink, 1995; Utting, 1993). An increasing number of scholars have addressed the multifaceted impact of the larger social structures and political-economic processes on local strategies of resource use (Adams, 1990; Neumann, 1997; Nugent, 1993; Peet and Watts, 1996; Ribot, 1995). They also stress that in order to understand deforestation as a social process, it is necessary to recognize the unequal relations of power and how they relate to resource access and control. As remarked by Blaikie and Brookfield (1987), environmental problems in the Third World are less a problem of poor management, over-population, or ignorance, as of social action, political-economic constraints and global inequalities.

This requires increasing attention to the broader issues involving development and power, as well as to the complex relationship between social structure and the cultural construction of nature (Gandy, 1996). We cannot analyse people's resource management strategies as something determined solely by the local culture; rather we need to explore them in relationship to historically shaped relations of production and power (Agarwal, 1992; Moore, 1993). Natural resource utilization is a social process in which different interest groups, with diverse and often conflicting intentions, confront each other at local, regional, national and global levels (Schmink and Wood, 1992). The social relations of resource utilization are historically and politically constructed, and the concepts of sustainability and development change over time and between different social and cultural actors.

A spate of recent studies have looked at the changes caused by state, market and development interventions in the natural resource management strategies, property rights and landscape composition of forest-dependent local peoples. Ghimire (1994), Neumann (1997), Ribot (1995) and Vivian (1994), among others, examine how African states and global environmental organizations have established governing mechanisms to strengthen their control over natural resources and over the people traditionally dependent on them. Peluso offers a sensitive analysis of the conflicts between forest-dependent people, foresters and the state over the use of forests in Java (Peluso, 1992a) and Indonesia generally (Peluso, 1992b, 1996), while Fairhead and Leach (1994), Fortmann (1995), Rocheleau et al. (1995) and Roe (1995) analyse a series of environmental narratives that embody a history of Western images and ideologies about the local processes of deforestation and environmental crises in Africa. Most of these studies, however, focus their attention on an analysis of the natural resource management strategies of traditional forest dwellers, with a long history of forest utilization; and of how their conceptions of sustainable

use of forests differ from the views of Western developers. As such, these studies offer valuable insights into how ‘outsider’ developers and state officials have tried to exercise their authority over the peoples of the forests, and over their natural resources.¹ Less attention has been paid to the natural resource use strategies and environmental conceptions of the migrant settlers colonizing tropical forests. As noted by Nugent (1993: 20–34), the peasant colonists of Amazonia have frequently been represented in the literature as maladaptive land invaders and haphazard forest destroyers, who pose an immediate threat to the few remaining indigenous groups. Through categorical cultural representations, the forest-clearing activities of non-Indian colonists have been attributed to their primordial ‘land hunger’ or to their cultural ‘forest phobia’ (Joly, 1989; Sandner 1981/2), with little reference to contextual factors — including colonization policies, land tenure regimes, and market forces — which have combined to reinforce a land use pattern of forest conversion in most land colonization areas (Browder, 1995).² It is just these multifaceted demands of wider agrarian policies and global development discourses on the livelihood strategies of peasant colonists which may offer valuable angles to understanding the natural resource utilization strategies and forest-relations of the peasant forest-fellers, with their bargaining positions in the larger society and in a far-reaching global economy.

This article presents a case study of peasants as forest-fellers in the context of Central America. It analyses the history of a Costa Rican rural community, Alto Tuis (a pseudonym), as a history of change seen through the process of forest utilization from the epoch of pioneer colonization to the present day. Its aim is to unravel the multiple causes of deforestation and the plurality of cultural constructions of forests by the local peasants at different stages in the history of Alto Tuis. The simple starting point is that deforestation involves much more than the physical act of felling trees. It is a process of change in the people’s land tenure and land-use systems, in their social stratification and power relations, and in their environmental perceptions and cultural constructions — a process of change that has to be examined from a diachronic perspective. The case study focuses particularly on those structural changes in people’s livelihood strategies that led to increasing deforestation in the area, and on the historically-changing relationships between local conceptions of forests and global discourses on natural resource utilization and development.

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1. This does not mean that in the studies mentioned local people are portrayed as environmentally-benign ‘forest peoples’, with idealistic tones. The forest utilization practices of the studied populations are carefully linked to the broader social structure and environmental history.
 2. For inspiring case studies on colonist peasants in Amazonia, see Bedoya Garland (1994), Cleary (1993), Nugent (1993, 1997), Schmink and Wood (1992) and Townsend (1995).

Political Ecology: From Local to Global

In order to see the history of deforestation within a particular social and cultural context, there is a need to move beyond the old opposition between 'virtuous peasants' and 'vicious states' to a perspective in which both the peasantry and the state are seen as internally differentiated (Bernstein, 1990: 69; Mitchell, 1990). A political ecology approach, combined with cultural interpretations, offers a fruitful alternative.³ This study emphasizes that environmental changes are inextricably linked to social and political processes and that social relations of production are central to an understanding of deforestation. In order to grasp the larger impact of struggles over forest and power, local natural resource management practices are analysed in relation to world-wide processes by progressing from a local to a global perspective. The initial interest is in the local resource users and their social relationships; the analysis then broadens to the corresponding economic and political events on the regional, national and global scales that affect local systems of production and systems of signification (Agarwal, 1992; Schmink and Wood, 1992). An examination of the historical dimensions of resource conflicts is essential to an understanding of contemporary struggles, in order to reveal the changing social relations of production and cultural constructions related to local landscape (Fairhead and Leach, 1994; Peluso, 1992a, 1992b; Rocheleau et al., 1995).

According to Watts (1989: 4), the history of deforestation can be seen as a process of change in which 'productive resources, property rights, and authority are struggled over'. In this struggle, local people alter their production strategies, as well as their perceptions of the environment, within a social context which is structured, but not determined. According to the changes in their natural and political ambience, they try to create strategies of survival and resistance in order to improve their control over the utilization of natural resources. However, a one-sided actor-orientated paradigm, according to which no matter how degraded people might be,

3. Bryant (1992) identifies the contextual sources of environmental change, conflicts over access and the political ramifications of environmental change as the three critical areas of political ecology. However, as noted by Peet and Watts (1996: 3–13) and Peluso (1992b: 51), political ecology can hardly be considered a theory, *per se*. It is rather a wide-ranging research field, pluralist in its orientations and lacking an explicit theoretical coherence. A political ecology inspired perspective has been successfully utilized in analyses of the historical circumstances leading to local patterns of resource use and control (Blaikie and Brookfield, 1987; Hecht and Cockburn, 1989; Painter and Durham, 1994; Peluso, 1992b; Schmink and Wood, 1992), plurality of perceptions of environment-development problems (Agarwal, 1992; Moore, 1993; Zimmerer, 1993), local resistance to state control and global environmental management (Ghimire, 1994; Neumann, 1997; Peluso, 1992a), trajectories of social movements (Escobar and Alvarez, 1992; Gadgil and Guha, 1994), and criticisms of development (Escobar, 1995; Hass, 1993; Rocheleau et al., 1995; Watts, 1989).

they preserve a certain potential for creativity and space for manoeuvre (Torres, 1992; Valestrand, 1991; Verschoor, 1994), is not sufficient. By stressing people's capacity to invent and create, actor-orientated researchers tend to remove agents from structures and to replace determinism with voluntarism. At the same time, they easily forget that the central causes of environmental degradation and rural deprivation are to be found in land tenure relations, market dependencies, organization of economies, and social relations of production (Bebbington, 1993; Millikan, 1992).

PEASANT–FOREST RELATIONS IN COSTA RICA

The case study which follows is based on anthropological research carried out during 1990–2. The primary information is based on ethnographic field material consisting of 150 hours of tape-recorded interviews, together with dozens of informal meetings, daily conversations and participant observations. This material was supplemented by existing archive and statistical material, ministerial documents, law texts, and historical documents, as well as by the interpretation of aerial photographs of the region that were taken in 1965, 1978 and 1988. Of course, there were methodological problems in reconstructing the local life-histories and cultural conceptions of forests from information gathered principally through ethnographic interviews. In this respect, it is important to note that retrospective human memory is highly selective, and in the case of historical narrations the past tends to be negotiated from the framework of the present. This is especially true of oral history, which bears many metaphoric messages and acts as a channel through which we express our cultural constructions of history and of the social world around us (Chambon, 1995; Fairhead and Leach, 1994; Townsend, 1995). The in-depth interviews proved to be the best way to obtain diachronic information about life in Alto Tuis, given the scarcity of historical documentation. The acquisition of diverse environmental narratives and constructions of the past in the interviews with the local people offered valuable information about their historical consciousness and social memory, and how the transformations in social relations of production, in national agrarian policies, and in global political economy were culturally perceived.

Context and Positions

Costa Rica, the third smallest country in the isthmus of Central America, comprises 51,000 km² of territory and 3.3 million inhabitants. It is often portrayed as a global leader in environmental protection and biodiversity conservation (Calvo, 1990; Holl et al., 1995: 1549). More than 25 per cent of the national territory has been set aside as protected areas — one of the

highest proportions in the world. During the 1992 United Nations Conference on Environment and Development (UNCED), Costa Rica received an international award for its conservation policies, and the country was praised as a model for sustainable development world-wide (Boza, 1993).

Paradoxically, for most of the second half of the twentieth century, Costa Rica experienced one of the highest rates of deforestation in the world, a trend which has been reversed only in recent years. In 1940, approximately 75 per cent of the country's total land area was under forest cover; by 1995 the comparable figure was 25 per cent. Discounting the forest area inside national parks and wildlife areas, where no forest management is permitted, less than 5 per cent of Costa Rica's land area is now under productive primary forests (Segura et al., 1997).

The community of Alto Tuis, situated in the mountains of Turrialba in eastern Costa Rica, has a highly skewed land tenure and a complex social structure. Most of the population are small-scale peasants, with a few big cattle raisers and absentee land speculators; the rest are landless labourers. As small-scale cash-croppers of coffee and sugar cane, the peasants of Alto Tuis have not been pure 'subsistence' producers for a long time; their production is closely linked to global markets and policies (Nygren, 1995a).

The following analysis looks at the history of deforestation in Alto Tuis. It begins with the epoch of land colonization and pioneers' slash-and-burn agriculture for basic food cropping, progresses to the next generation's timber sales and forest clearing for coffee and sugar cane, and thereafter to the conversion of forest to pasture. It then arrives at today's clandestine deforestation, discourse on forest conservation, and emerging resource conflicts. For each time period, the peasants' activities in the forest and their cultural conceptions of local environment are linked with contemporary agrarian policy, social structure, and ideological discourse on rural development. In this way, the study illustrates how relations between local people and the forests are embedded in global discourses on environment and development, and how the local exploitation of forest resources and subsequent resource scarcity relate to wider issues of forest, power and development. At the same time, it illustrates how concepts of the 'proper' utilization of natural resources change over time and between different social actors. Local constructions of deforestation are, therefore, not seen as mere reflections of cultural experience and history, but as the constitution of past and present power relations.

Inward Colonization and Agricultural Frontiers

The land colonization of Alto Tuis arose from the political perception, common in many Latin American societies, that forest areas occupied by

indigenous populations constitute an empty space and a resource frontier to be exploited for the national wealth. Until the twentieth century small groups of Cabécar Indians lived in the area. Their livelihood strategies were based on the multiple use of natural resources, such as hunter-gathering, small-scale swidden agriculture, and mixed home gardening (Morrison and León, 1951).

At the end of nineteenth century, a railway was built from central Costa Rica to the Atlantic Coast. Facilitated by the improved networks, many big coffee and sugar cane haciendas were established in the Valley of Turrialba, around Alto Tuis. Most of them were owned by English and German proprietors, encouraged by the Costa Rican government in the hope that this would advance international trade. The haciendas required a large labour force; because of the small number of the indigenous population, landless Mestizo people from central Costa Rica were persuaded to move to this eastern periphery with the promise of employment on the haciendas (Hall, 1976: 33–41).

Stimulated by this governmental colonization policy, some of the labourers on the estates were inspired to try their luck as pioneers in the surrounding mountains. According to agrarian legislation of the time, virgin forests were state-owned wastelands that colonists could appropriate by clearing the land for cultivation (Salas Viquez, 1985). The first struggle over land in Alto Tuis was thus between the Cabécar Indians and pioneering peasants. In this struggle, the hunter-gathering Cabécar were defined as ‘primitive’ forest-dwellers with no rights of possession in the land. The colonization meant not only a struggle over the physical occupation of space, but also a cultural struggle over knowledge and power regarding the ‘rational’ use of natural resources. The communal land use system of the Cabécar was seen as inferior to the conception of land as a private commodity, and their hunter-gatherer livelihood strategies as inferior to forest felling for agriculture (Nygren, 1995b: 55–7).

The inward migration of the peasants was anything but spontaneous.⁴ The movement was closely linked to the agrarian policy of that time, and to the profound transformation in the Costa Rican agrarian structure. First, the government promoted the formation of coffee estates in the Valley of Turrialba by liberalizing the privatization of the national forest lands, giving free land to the haciendas in return for their deforestation activities and the construction of the necessary infrastructure for their estate agriculture.

4. Augelli (1987), Sandner (1981/2) and Vargas Ulatea (1986) argue that the remoteness and the relative distance of the colonized areas from the moderating state institutions made the Costa Rican land colonization spontaneous. However, these studies pay little attention to the links between the land-use changes in a particular region and the agrarian policies of the country. When analysing the land colonization of Alto Tuis within a wider context of Costa Rican agrarian change, the whole question of spontaneous versus organized colonization seems deficient.

Thereafter, the state began to favour the creation of peasant settlements on the surrounding hinterlands as a safety valve for landless people and as a reserve of untouched natural resources to be exploited (Salas Viquez, 1985). The socially constructed role of peasants was, at this time, to act as pioneers converting virgin forests for the agricultural development of the country.

The peasant settlements also served as a way of ensuring a seasonal supply of labour for the haciendas, especially for the peak time of the coffee harvest. The costs of the social reproduction of labour were minimal in the case of these seasonal wage workers, who also had their own small-scale agriculture. A similar land colonization strategy was applied throughout Costa Rica (Roseberry, 1991; Salas Viquez, 1985), but was especially prevalent in Turrialba, where most of the coffee and sugar cane haciendas were concentrated and where inward colonization was most conspicuously linked to the latifundia–minifundia complex.

The land colonization of Alto Tuis was not brought about solely by poor peasants, however. Although the first colonists were principally landless poor searching for a piece of land for cultivation, they were joined by land speculators and absentee landlords. The social structure became complex and the process of land claiming chaotic. Pioneers sold their lands to second-wave colonists and moved to a new frontier as part of a two-step migration. Many big landowners appropriated the land occupied by pioneering peasants, simply informing them that the land had been taken over. Given that costs for registering land and applying for the land title were prohibitively high, there was little that the poor peasants could do (Morrison and León, 1951).

The close connection of the colonization of Alto Tuis with the haciendas of the Valley can also be seen in the fact that the first colonists did not go very far away. Although they sought freedom from tenancy on the haciendas, they did not want to be relegated to a distant jungle with no connections, as they had from the outset begun to produce maize and beans and needed access to markets. This was encouraged through governmental grants and credits in order to meet the growing demand for basic crops in the national markets.

Many newcomers settled in close proximity to the pioneers, giving rise to a form of community. This was no static village settlement, for there were colonists of different origins, and a constant flow of people coming and going. Absentee landlords bought the parcels of smallholders, combining them into large landholdings, whilst at the same time, the land was fragmented via the customary land tenure arrangements. The whole system was dynamic, with intense competition for land, multiple disputes over productive resources, and rapid replication of the same sort of highly skewed land tenure as had been characteristic in the colonists' homeland.

It is thus not viable to analyse the history of Alto Tuis from a static perspective, assuming homogeneity among the pioneer colonists. In his study on Pejibaye, southern Costa Rica, Sewastynowicz (1986) argues that

the first colonists developed an egalitarian society with no differentiation in social status. From this basis, Sewastynowicz assumes that on a pioneer frontier even the least promising members of society had the opportunity for upward social mobility, if they only had the right psychological motivation and good judgement. In reality, however, there were great differences in the colonists' status right from the outset, and the state played an important role in regulating the opportunities of different social actors. Sewastynowicz thus seeks the principal motive for inward migration in each colonist's individual desire for upward social mobility, and pays little attention to colonization as a social process.⁵ At least in Alto Tuis, it was mostly the early land speculators who profited from the land claims made in this uninhabited jungle. The poor colonists failed to radically improve their situation because they lacked the capital required for intensive cultivation or for extensive cattle raising, the strategy used by most of the absentee landlords.

Pioneer Deforestation: Struggle over Access

The deforestation of Alto Tuis began during the pioneer colonization: both peasants and absentee landlords were active deforesters. This was related to the contemporary agrarian policy, in which the legal basis for securing ownership of the national wasteland was to 'make improvements' on the land, and in which the value of the farm was calculated according to the jungle area cleared. The land tenure legislation, credit systems and public discourse on rural development were all based on the notion that forest land has no value until it is cleared for agriculture (Utting, 1993: 34–40).

In most cases, it was the peasants who carried out the labour-intensive task of forest felling; the big absentee landlords asked the local peasants to clear their forest as contract work or through land tenancy. This opportunity for contract work, together with seasonal wage work on the haciendas, had important impacts on the social organization of labour in Alto Tuis. Many of the non-monetary labour arrangements common in other pioneer regions never developed in Alto Tuis, which was so closely involved with the haciendas. Working festivals were arranged only when communal buildings were being built, and *peonada*, a reciprocal labour exchange typical among the peasants of lowland Panama and Colombia

5. Jones (1989) sees the same kind of individualistic, get-rich-quick motive behind the agrarian colonization in Costa Rica. He argues that the Costa Rican land colonization was driven by something much like the American 'frontier spirit', with the peasant colonists drawn to the uninhabited forests by the promise of prosperity (ibid.: 66). Such a view neglects the links between the expansion of agrarian capitalism and the agricultural colonization of the country, and pays little attention to the role of the peasants in the larger society.

(Gudeman and Rivera, 1990; Heckadon-Moreno, 1984), was usually practised only among close kinsmen. Between non-relatives, wage labour was the most common working relationship. This situation was characteristic of many similar peasant settlements in Latin America, where the close proximity of coffee haciendas provided a demand for seasonal wage labour (Duncan and Rutledge, 1977; LeGrand, 1984).

The intensity of the pioneer deforestation in Alto Tuis cannot be justified by the need to clear new land to satisfy the food requirements of the expanding local population. In the first place, food agriculture in the area was never developed beyond the needs of the local population, and secondly, a considerable part of the Alto Tuis forest was cleared to accommodate speculative cattle raising. As most of the colonists never acquired title for their claims, they preferred to clear as much as possible in order to secure land ownership through deforestation. Those pioneers who had sufficient forest in reserve considered it better to fell a new plot of virgin forest for slash-and-burn agriculture than to return to the once-cultivated fallow. Although the felling of a new piece of forest was more costly, it was a means of appropriating the land, given the prevailing agrarian legislation and land occupation rights — a clear case of land tenure arrangements impacting on the rate of deforestation.

The pioneers of Alto Tuis identified themselves first and foremost as colonists, who ‘tamed the wilderness of the jungle’. Removing the forest was a dangerous and labour-intensive job, and most of the pioneers remembered their lives during colonization as being hard and melancholic. While present-day environmental extensionists (*extensionistas*) idealize the life of traditional peasants as ‘living in equilibrium with nature’,⁶ in the pioneers’ world-view the forest was a jungle, intact and wild, that remained outside human control and outside the active circle of women. Women took care of fuelwood gathering, but on the secondary scrublands; it was not considered appropriate for them to go alone or to work in the dense forest. Forest felling was an activity only for men, and even for them, much mental and technical capacity was needed to accomplish such an arduous task.

The forest represented a source of unpredictable rains, thunder and storms in the pioneers’ world-view, and it was also a place of malevolent supernatural beings. Alto Tuis’ oral history includes many collective memories about the apparition of supernatural spirits to forest travellers, as well as charms to protect workers in the forest. This connects to the peoples’ life-history as colonists who opened the virgin forests for

6. A more thorough analysis of the environmental extensionists’ conceptions of Costa Rican peasants and their environmental relations is presented in Nygren (1998). For portraits presented by development experts on the local environmental histories and crises in various parts of Africa, see the studies by Fairhead and Leach (1994, 1995), Neumann (1997), Roe (1991) and Rocheleau et al. (1995).

agricultural capitalism: as they were closely incorporated into the market economy on the haciendas' hinterland, the pioneers of Alto Tuis perceived in the dense forest the constant risk of losing control over economic and symbolic resources. Deforestation meant access to participation in the great competition for physical and cultural authority over the remaining unappropriated natural resources.

Logging and Cash Cropping

A remarkable point in the agrarian transformation of Alto Tuis was the construction of the penetration road in the late 1950s, a typical mark of the politicians' desire to incorporate the remote peripheries into the market economy (Jones, 1989). The construction of the road led to intensive forest exploitation in Alto Tuis. Both the peasants and the agricultural entrepreneurs were active loggers. However, for many poor peasants logging was a part of their survival strategy, while the bulk of the profit from timber sales went to some of the richest peasants and absentee landowners.

To this generation of active loggers, the forest was a non-renewable natural resource, whose high-quality timber could be logged for markets and the land brought under cultivation. This view was conditioned by the contemporary political environment, in which the peasants were encouraged to deforest the land in order to increase the country's agricultural wealth. The arguments of present-day foresters that the traditional peasants had an intrinsic antipathy toward the forests, or that they lacked a 'forest culture', are simply not adequate in this context (Nygren, 1998). In a situation where clearing the forest for agriculture was defined as the only reasonable land use strategy in the tropics, local people had little room to create sustainable forms of forestry.

The construction of the road also led to intensive cash cropping of coffee and sugar cane in Alto Tuis. This brought increasing articulation to national and international marketing systems, as well as increasing control over local production by state institutions. According to the green revolution ideology of that time, the people were urged to change from traditional polycultures to monocultural plantations and from green manure to agrochemicals. The majority of the Alto Tuis peasants became producers of the primary commodities of coffee and sugar for export. Simultaneously, their food cropping activities were marginalized and the participation of women in agricultural decision making diminished.

The question of peasant marginalization cannot, however, be categorized simply as food cropping versus export cropping: a number of factors were involved, such as the quantity of land, capital and labour required by each crop, and the forms of its commercialization. Due to its labour-intensity, coffee production was one of the few activities in which the Alto Tuis peasants had

any chance of competing with the large-scale producers⁷ — although this meant that they had to refrain from calculating a real value for their own work. Coffee production for fluctuating world markets was a risky operation for the small peasants. However, in the context of an aggressive agro-export policy, where most credits and grants were shifted to the capital-intensive coffee and sugar cane production while the basic grain producers were left to depend on their own resources, it was often the only opportunity.

The beginning of coffee cultivation did not have any noteworthy impact on deforestation in Alto Tuis, as the area planted for coffee by each household was not very large. The problem was rather that the people remained in a vulnerable position in regard to price control. Their freedom over the production process diminished when the agricultural agents began to set ever-changing requirements with regard to the quantity and quality of the coffee. The same was true of the transition from domestic to commercial sugar cane production, but in contrast to coffee, commercial sugar cane growing was possible only for a minority of the Alto Tuis households.

The orientation toward cash cropping complicated the agrarian transformation in Alto Tuis. The expansion of export agriculture did not lead to a direct transformation of Alto Tuis peasants into wage labourers, but a small coffee-growing peasantry did emerge. Most of them were not independent peasants but rather producers who supplemented their livelihood with seasonal wage work on the haciendas, and with diverse economic activities in the formal and informal sectors (Nygren, 1995b: 90–8). The complexity of these local livelihood strategies has often been underestimated in classical frontier theories, which treat the peasantry as a broad analytical category in the transformation from the ‘pre-capitalist’ to the ‘capitalist’ mode of production (Foweraker, 1981, 1982; Galli, 1981; Roseberry, 1978). Recent ethnographic analyses of tropical frontiers reveal instead the multi-dimensional nature of local livelihoods and the considerable importance of the informal economy, such as small-scale forest extractivism, mixed gardening, timbering, and ambulatory trading, in addition to capitalist cash cropping and wage working.⁸ In Alto Tuis, as in many similar communities, the people were constantly moving between monetized and non-monetized, as well as between formal and informal spheres of the local economy.

7. A considerable part of the coffee cultivation in Costa Rica was in the hands of peasants right from the outset, while the agricultural entrepreneurs controlled the processing and exporting stages (Roseberry, 1991). For a discussion on food cropping versus export cropping in Central America, see Brockett (1988), Jansen (1994), Maxwell and Fernando (1989), Utting (1993) and Williams (1986).

8. For detailed analyses of the multiplicity of production systems and livelihood strategies in tropical peasant communities, see Cleary (1993), Leach (1994), Nugent (1993, 1997), Peluso (1996) and Schminck and Wood (1992). For an interesting study of the re-creation of a Peruvian peasant economy within the framework of international capitalist expansion and national agricultural policies, see Painter (1991).

Extensive Cattle Raising

The 1970s saw increasing conversion of forests to pasture lands all over Costa Rica. Extensive cattle raising programmes, supported by international aid agencies, were designed to increase the country's beef export to the hamburger markets of the United States (Brockett, 1988: 48–9). The cattle expansion effected profound changes in the landscape and social structure of Alto Tuis. The traditional practice by which large landowners lent a parcel of their land to tenants ceased, and many minifundists lost their opportunities for seasonal wage work, as the cattle ranchers needed little labour.

Most of those in Alto Tuis who began with commercial cattle husbandry could not afford a herd big enough for profitable beef cattle raising. They turned to dairy-cattle, despite difficulties in marketing the milk and low meat prices. The internationally sponsored cattle raising policy favoured large landholders, while many peasants lost control of their land and of the production process (Nygren, 1995a). Ecologically, large-scale cattle raising offered little prospect of sustainability in regions like Alto Tuis, where most of the pastures are situated on steep slopes and suffer from serious soil erosion.

According to information provided by aerial photographs, the extent of pasture land in Alto Tuis increased 197 per cent during the period 1965–78, signifying that 54 per cent of the total farm area was under pasture. Throughout the country, two-thirds of agricultural land was devoted to cattle raising at an economic return far below that obtained through the cultivation of export or food crops, not to speak of the ecological costs. Inequalities in land tenure and resource ownership only increased. The overall social problem is illustrated by the fact that in the late 1970s, 64 per cent of the agro-export and beef cattle farms in Costa Rica were larger than 200 ha. Together, they occupied 90 per cent of the total area in production and received 88 per cent of the agricultural credits (Guess, 1977: 12–14).⁹

From Deforestation to Forest Conservation? Diverging Policies and Perspectives

In the 1980s, Costa Rican agrarian policies underwent a U-turn, with strict restrictions placed on forest clearing. Deforestation was constructed as a global problem and tropical forests as 'the lungs of the world', whose

9. Edelman (1994) warns of exaggerating the 'hamburger connection' as the only cause of deforestation in Costa Rica. Although probably a major force behind forest clearing, the process of deforestation is too complex to be explained solely as 'cattle eating the forest'.

protection is essential for the survival of the planet (Nygren, 1998). The practice of deforestation was condemned, affecting especially the poor peasants who owned the most marginal lands with limited agricultural potential. For many big landowners, the new legislation meant only greater bureaucracy: if the land was suitable for agriculture, there were no restrictions to its deforestation. Moreover, many big landowners carried out their forest clearing clandestinely, as did smallholders. In practice, the new legislation had little impact on forest clearing in Costa Rica: the rate of deforestation continued at an average of 50,000 ha per year throughout the 1980s. In Alto Tuis, only 25 per cent of the total land area remained under forest cover in 1988, signifying that almost all of the primary forests had disappeared and the secondary forests survived only in the steepest areas (Nygren, 1995b: 111–18).

Where the new policy was put into effect, forest issues were translated into rhetorical speeches in favour of national parks, with considerable support from international aid agencies and conservation foundations. Forestry was made synonymous with forest protection; it passed rapidly through a stage of formal acceptance via political decision making and public involvement, but had little to do with sustainable alternatives to deforestation, such as empowering rural people to local forestry actions (Carrière, 1991). The close connection between social inequality, rural poverty and deforestation was ignored by the politicians, who stressed that the key to reducing deforestation lay in increased state control based on careful vigilance and strict sanctions for clandestine deforesters.

Today, Costa Rican peasants are being urged to engage in community forestry, agroforestry, and traditional polycultures. The forest law is very strict with regard to deforestation, and there are governmental incentives for reforestation. The international development agencies are placing increasing emphasis on forest protection and environmental conservation in their aid distribution for Costa Rica, while the Costa Rican government is negotiating a reduction of a part of its foreign debt by means of conservation (Segura et al., 1997: 114–15). This turn-round illustrates how the conceptions of reasonable use of natural resources are historically and politically constructed.

According to Costa Rican state officials, the main problem underlying the country's deforestation is the peasants' lack of cultural awareness of the value of conservation (Nygren, 1998). Yet the social identity of these migrant peasants has always been linked to forest clearing for agriculture; their world-view corresponds to their life-history as colonists, who gained the ownership of the land by felling its forests. In Costa Rican political discourse, to be a peasant (*campesino*) means more than just engaging in a particular mode of production. The concept is also endowed with stereotyped cultural characteristics — the *campesino* as uneducated forest destroyer and unruly client of development. Institutional power establishes itself not only in the structures of distribution and accumulation,

but also in the cultural constructions of social representation and social order.

The historical differentiation in the cultural construction of reasonable use of natural resources can also be noted at the local level when comparing the environmental perceptions of different generations and genders in Alto Tuis. In contrast to the pioneer colonists, the young producers of Alto Tuis today know little about the forest. They devote themselves to small-scale coffee production or cattle raising, combined with agricultural wage work, but their life is hard as they cling to agriculture on tired lands. This generation is the most critical of the living conditions and environmental situation in Alto Tuis. They lament the fact that their grandfathers as pioneers felled quantities of trees and left them to rot, while their fathers as loggers sold all the fine timber at prices that were too low. Their own future looks unpredictable, with the increasing concentration of land in the hands of a few absentee landowners.

The relationship of these young producers to the forest is distant. It is no longer a source for gathering, because remaining forests are scarce, or secondary growth, for few native fruit trees and medicinal herbs remain. Most of the young people in Alto Tuis consider the forest a prohibitive place, whose utilization is restricted by the forest law. For the youth and children, the virgin forest is a curious relic from their fathers' and grandfathers' time. As children of an era of aggressive environmental education, they are the most interested in reforestation in Alto Tuis. However, they do not perceive this to mean large-scale tree planting, as proposed by most of the reforestation programmes; for them, reforestation means the planting of fruit trees on the field borders or as shade trees in pastures.

In terms of the gendered differences in forest-relations, it is worth noting that although the women are responsible for natural healing in Alto Tuis, it has always been the task of men to go in search of natural remedies in the dense jungle. Today, the women of Alto Tuis feel that serious illnesses are difficult to cure because of the scarcity of powerful remedies such as wild herbs and vines, and they lament that they have to search for fuelwood at ever greater distances. In the times of pioneer colonization, strategic gender differences with respect to critical productive resources were reflected in the fact that forest felling was considered an exclusively male activity; today, it is decision making in the coffee and sugar cane production which is the exclusive domain of men, because it is the men who usually own the cash crop cultivations. Women's relations to coffee production are confined to picking, a task which is stereotyped by many men as an ideal activity for women because of their 'patient character and innate handiness'.

This plurality in social relations of production and cultural constructions of environment has attracted scant attention in classical deforestation literature (Bunker, 1985; Foweraker, 1981; 1982). As Cleary (1993: 331–8) notes, in deforestation studies which assume a macro-structural approach, ethnographic diversity in the environmental relations of the people is easily

forgotten. The peasantry is constructed as a monolithic category in a regional branch of a national sub-system of a global system, without taking into account the multiple cultural constructions of nature among the local actors, especially those differentiations revolving around the productive inequalities mediated by class, gender, ethnicity, and age.¹⁰

FOREST, POWER AND DEVELOPMENT

When analysing the environmental history of Alto Tuis from a diachronic perspective, the Alto Tuis landscape proves to be saturated with historical struggles over the territory and its productive resources, as well as over the symbolic meanings of diverse production systems. In these struggles, local peasants find themselves confronted with capricious policies concerning the 'proper' utilization of forest and land. A major conflict in this respect arose in 1990, when a multinational coffee corporation bought various farms in Alto Tuis and began to clear the remaining forests on these farms for coffee plantations. The people of Alto Tuis were strongly opposed to this action and began a struggle to stop it. They claimed that the area felled by the estate consisted of dozens of hectares of forest, and that the estate had acquired the permission to fell the forest by corrupt means.

The point of the protest was not so much to preserve the remaining forest, but to show that the control and the benefits of forest resources belong to the local community. It was part of a growing social concern about the ability of outsiders to appropriate ever-dwindling local resources and to define themselves as arbiters and agents of development. The protest action was a demonstration of resistance against the estate's hegemonic conception of progress, and a visible attempt by the local people to claim their right to reconstruct the meanings of development. The protestors pursued a strategy of non-violence in their struggle: they criticized the obvious inequality of citizens before the law, claiming that the forest law only penalizes poor peasants, while large landowners and timber companies are allowed to fell quantities of forest. A local conservation group was established, and the estate's forest clearing activities were publicized through the media, with

10. See, for instance, the studies by Agarwal (1992), Guha (1990) and Leach (1994), on gender, domestic politics, and struggles over the environment at the household and community levels, as well as the studies by Moore (1993), Peluso (1992b, 1996) and Zimmerer (1993) on the diversity of perceptions of nature and environmental degradation at the local level. Rural communities tend to be politically fractured and socially differentiated in complex ways. Homogenic labels, often used to categorize rural people as 'indigenous', 'traditionalist', or 'subsistence peasants', easily mask the existing class, age, gender, and ethnic differences within the communities; on this, see Long (1996), Neumann (1997) and Pigg (1992).

great concern being expressed over its impact on the region's environmental situation.

The community was not completely united in its opposition to the forest clearing, however. The leaders were two peasant union activists; they had the tacit support of the majority of the small and medium-sized coffee growers, who felt that the estate's expansion was a threat to their own coffee growing. On the other hand, the absentee cattle ranchers and land speculators associated the estate's expansion with modernization and an increase in land prices that could also profit them, while the landless labourers who worked at the estate thought it better to withdraw from the quarrel for fear of losing their jobs.

Officials in the Costa Rican Forest Service interpreted the whole protest as an expression of envy, claiming that the local people did not understand the benefits that the estate would bring to their community through employment opportunities. They argued vehemently that the cleared area was only a couple of hectares, and emphasized the amount of money which the estate had to pay for the cutting licence, as well as for timber taxes. The question of the legality of the action was left open. Papers in the archives of the Forest Service indicate that 29 ha was cleared. Since the area was not entirely suitable for agriculture, forest officials required in their authorization that if the area was cleared for coffee, soil erosion should be controlled with terraces. By the end of 1992, at least, the estate had not fulfilled this requirement, although the entire felled area was already under coffee cultivation.

Against the background of cases such as this, where big entrepreneurs and transnational companies are authorized to clear forest for extensive agriculture, the public demand in Costa Rica for environmental education to counter the cultural idiosyncrasy of the peasants toward natural resources sounds curious, to say the least. In fact, the current greening of the development discourse has concealed more than it has elucidated regarding knowledge of environmental questions. The defence of the environment has often been separated from social rights, and environmental questions have become a pretext for political intervention in rural communities. The establishment of protected areas, ecotourism businesses, and agreements for biodiversity trade are marketed as being free of controversy simply because they are 'green' (Carrière, 1995). On the other hand, the boom in local participation has shifted the discourse on rural development towards an understanding of local culture, with little interest in the social circumstances that construct the people's land use practices and knowledge systems (Nygren, 1998). The people of Alto Tuis know that their history is not made at the local level alone, but that any change in the current situation requires dialogue and struggle at different levels, from local to global.

In the ever-changing discourses of what resources are to be utilized, how and by whom, developers frequently define themselves as exponents of the right knowledge, while peasants are labelled as 'target groups' in need of

education. First, the people of Alto Tuis were urged to clear the forest for development; today they are advised to plant trees in the name of development. Where once they were encouraged to log their forests completely, today they are 'educated' to value the trees as renewable resources that require management and yield cash. A similar *volte face* is to be found in agriculture. During the green revolution, the Alto Tuis peasants were urged to change their polycultures to efficient monocultures, but now polycultures are praised as highly sustainable production systems. Their traditional land conservation practices of intercropping and agroforestry were labelled as primitive compared with the use of agrochemicals; now the same agroforestry systems are hailed as one of the most ecologically sound production systems. In this struggle between different production systems and world-views, local livelihood strategies are continuously labelled as outmoded and obstructive to development.

The people of Alto Tuis have responded to this by challenging the developers' expertise as haphazard advice which is likely to change dramatically according to the vicissitudes of development policies. They contest the progressive character of development projects by pointing out that developers' promises are never fulfilled. In the current boom of 'natural products' and 'local environmental wisdom' the people of Alto Tuis feel themselves used. Where only a decade ago, physicians condemned their use of wild plants as medicines, there is now a stream of ethnopharmacologists wanting to be guided to the remote mountains in search of natural remedies. A local peasant, Don Rodrigo, was scornful of the whole circus, relating how a Cabécar Indian had just begun to sell wild vines and roots to a homeopath in the nearby town of Turrialba — the more rich in mould and the more bitter in taste, he laughed, the more money one could get for the plant. Such stories illustrate the ignorance of the developers who have no notion of the wider social and political context in which the 'utility' of natural resources and local environmental knowledge is continuously reconstructed.

Any attempt to improve the peasants' marginalized production conditions will fail unless there are other changes — in the land tenure system, the knowledge–power stratification, and the social violence against local action. The developers' humanistic assurance of 'working on behalf of the rural poor' offers no easy alternative, because it does not necessarily safeguard the rights and dignity of all citizens, and because the ethics of this approach, which is sharply separated from politics, is highly voluntaristic (Bernstein, 1991: 163–4; Ribot, 1995). There is a need for radical social and political change within which an alternative perception of social concern, cultural representation, and local action is possible. At its best, the struggle for more sustainable development means an increasing plurality of social actors and social movements, revising the one-sided view of development in favour of strategies that permit a new orientation to questions of knowledge and power through a more diverse conceptualization of the social reality.

CONCLUSION

This study has examined the history of deforestation in the community of Alto Tuis as a process of environmental and social change, involving continually shifting concepts of the reasonable use of natural resources, and the historically constructed relationships of development and power. The clearing of Alto Tuis' forests was promoted through agrarian legislation, land tenure arrangements, market policies and ideological discourse of colonization as modernization. In the case of the cash cropping peasants on the margins of the haciendas, no clear distinction between local and global could be made. Since Alto Tuis was incorporated into global systems from the outset, its deforestation could only be explained within those larger social structures that altered the local livelihood strategies over time.

Struggles over the utilization of natural resources in Alto Tuis consisted of a complex set of social actors and the dynamic articulation of different economies and cultures. These included hunter-gatherer Cabécar Indians, heterogeneous groups of pioneering peasants engaging in the market economy and supplementing their own agricultural production with seasonal wage work, capitalist land speculators, absentee cattle raisers, and timber dealers exploiting local productive resources, as well as different development agents pursuing their multiple development goals. The agrarian transformation was a dynamic process, in which traditional production systems, land tenure arrangements, and environmental perceptions articulated with new ones.

The relationship of local resource management practices to global processes varies according to the history of colonization in the communities in question, their incorporation into the global economy, and the capitalist mode of production. In the case of Alto Tuis, no clear-cut distinctions between conservationists and forest exploiters could be drawn, but as noted by Touraine (1981: 8) 'all historical societies have transformed their relations with the environment, this is the very definition of their historicity'. The local-level analysis of the social relations of production and the symbolic meanings of livelihood shows the complex interaction between global forces and local resource management practices in the history of Alto Tuis, while the ethnographic analysis of the local life-histories and cultural constructions of forests marks the inevitable encroachment of global development discourses upon the everyday life of the peasants.

As a whole, the agrarian transformation of Alto Tuis brought increasing state control over the production processes and livelihood strategies of the local peasants. Through cash cropping of coffee and sugar cane they became vulnerable to fluctuating prices on world markets and to ever-changing demands with regard to product quality. Through cattle expansion many of them lost ultimate control over production processes and became totally landless rural poor. The current model of agrarian development offers little hope for a better future. Despite the rhetoric of sustainable development,

neoliberal non-traditional agriculture may lead to increasing rural deprivation unless attention is paid to the inegalitarian structures of resource access and power at local, national, and global levels (Barham et al., 1992; Utting, 1994). Currently emerging social movements are attempting to alter the course of hegemonic developmentalism through alternative strategies of social action and ways of making politics. In this struggle critical inquiry also has an important task. It must go beyond the relativizing of narratives to challenge the authoritative social discourse and find new ways to analyse the complex relationships between local problems and global forces.

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