

Privatizing Nature

The concept of 'the commons' as a device for controlling land, forests, rivers and natural resources first entered the political realm during the enclosure movement in pre-industrial Britain. Now, as we approach the twenty-first century, new forms of enclosures and notions of private property are emerging - from water rights, biodiversity, and 'gene pools' of plants and humans to the demands of multinational corporations for free access to more land for investment and exploitation. The power of the commons is still flourishing and the 'global commons' now provides the central metaphor for ecological politics.

The contributors to *Privatizing Nature* examine the reasons behind the political resurgence of the commons, and the widespread struggle to transform existing nature-society relations into ones that are non-exploitative, socially just, and ecologically healthy. Tackling the key themes - such as the convergence of environment and social justice, global commodities, and the role of social movements - the authors draw on examples from the Amazon, Mexico, Cameroon, India and the industrialized North. They argue that, although environmental problems like the Chernobyl disaster suggest that the world is indeed shrinking, the fate of the global commons should not be left to a new powerful class of global problem-solvers at the World Bank, IMF, NAFTA, and WTO. By contrast, the authors highlight the political expertise of social movements fighting dominant strategies to 'privatize nature'.

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Published in association with the Transnational Institute (TNI).

ENVIRONMENT / POLITICS

Cover illustration: Jim Holmes/Axiom
Cover design: Mark-making graphic design

Pluto Press 345 Archway Road London N6 5AA

PLUTO  PRESS

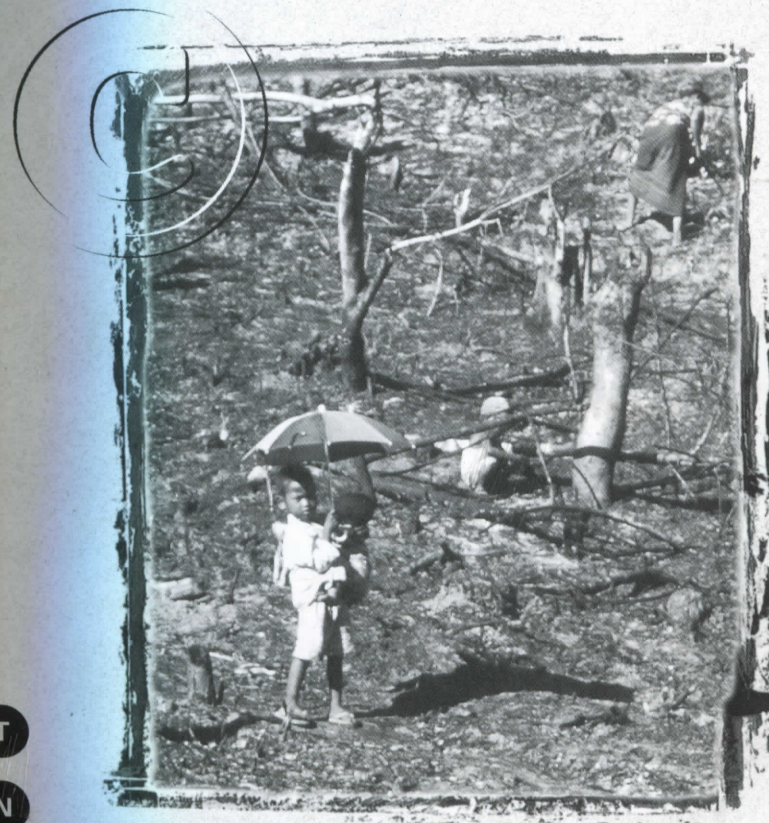
ISBN 0-7453-1305-1



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Political Struggles for the Global Commons



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Edited by Michael Goldman



First published 1998 by Pluto Press
345 Archway Road, London N6 5AA

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British Library Cataloguing in Publication Data
A catalogue record for this book is available from the British Library

ISBN 0 7453 1310 8 hbk

Designed and produced for Pluto Press by
Chase Production Services, Chadlington, OX7 3LN
Typeset from disk by Stanford DTP Services, Northampton
Printed in the EC by T J International, Padstow

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2

Social Movements and the Remaking of the Commons in the Brazilian Amazon

Antonio Carlos Diegues

In Brazil, common property regimes do not exist like artefacts from an archaeological dig, existing today as time-worn versions of their distant past. Although typically made 'invisible' by the state and other elite actors, rubber tappers, artisanal fisherfolk and forest harvesters have successfully struggled to reaffirm and rebuild their commons as vibrant community-based institutions of natural resource appropriation and land and water management. Under constant threat by land speculation, urbanization and capitalist expansion, the commons none the less survive in the hands of diverse social groups who, up until recently, have been politically weak and geographically isolated.

This chapter tries to show that contrary to the conventional view of the ecological commons in the Brazilian Amazon, resource-management institutions are not moribund, and resource-using commoners are not passive in the face of powerful actors eager to transform the Amazon into a profit-making machine. Recent attempts to occupy and deforest the Amazon have unleashed new social movements that are rebuilding and creating new common property regimes as a strategy for democratizing production and social institutions in the Amazon. It is from these forest-based social movements – typically portrayed as backward and in 'need' of modernization – that we see some of the more positive efforts to transform Brazil into a more democratic and ecologically sustainable society. As they strengthen their ties with regional, national and international movements, commoners from the Amazon appear to be one of the more serious challenges to the current neoliberal policies of the state. Their success in rebuilding the commons in the Amazon, however, is ultimately linked to political strategies elsewhere in Brazil. But, their efforts to build social institutions of equality, justice and sustainability may become the catalyst for progressive

political change, starting from deep within the Amazon and extending outwards to Rio and beyond.

'The commoners' thrive in marginal but biologically rich ecosystems, such as the Amazonian humid forest. Their communal social institutions have existed in many forms and places, and are characterized by a common utilization of renewable resources such as fish, forest and medicinal plants, cattle and products of shifting agriculture. Common appropriation regimes typically exist alongside, and benefit from, sites where families 'privately' grow, raise and/or produce vegetable gardens and domesticated animals, hunt and gather, and make craft products. Access to these marine and terrestrial resources and space is dependent upon participation in the social kinship life through *compadrio* (kinship/godparent) ties. These appropriation regimes continue to prosper in part because of the strongly held view that renewable resources must be conservatively managed and not overexploited.

These traditional institutions contradict, in practice, Hardin's 'tragedy of the commons' theory (1968). In his highly influential writings, US biologist Garrett Hardin argued that commoners would necessarily overexploit communally owned resources, destroying everyone's natural resource base, as well as profitability. But the Brazilian experience reveals that Hardin's universal remedy for resource management – privatization – does not necessarily lead to a more rational use of natural resources, as private appropriation schemes for cattle raising and large-scale agriculture in the Amazon over the past 50 years have demonstrated. In Brazil, instead of talking about the 'tragedy of the commons', one should consider that there is a 'tragedy of the commoners' (McCay and Acheson 1987), as they have been consistently expelled from their traditional territories through land speculation, large state-owned hydro-electric plants, and wildly irresponsible development schemes.

From the 1960s onwards, common property regimes have been under tremendous pressure and commoners all over Brazil have been stripped of their rights of access to renewable resources, often through violent expropriation. Many rural communities have mobilized in response, forcing the state to formally recognize their rights, including those whom the state refers to as 'squatters' or people without property titles. For example, in the 1980s, the state reluctantly agreed to set-up 'extractivist reserves' (*reservas extrativistas*) for rubber tappers and for fisherfolk along estuaries, rivers and bays in the Amazon. Thus, sprinkled across the Amazon, one finds social movements articulating a national political agenda to *rebuild the*

commons in some places and establish new common property regimes in others. Remarkably, movements have forced the state to legally recognize their common property regimes as national models for 'sustainable development' and for conservation of biological and cultural diversity.

In the Brazilian case, the rebuilding of commons has been possible only after the rebirth of democracy, after the long years of military dictatorship (1966–84). The military regime promoted 'economic modernization' or rapid colonization of Brazil's frontiers (e.g. the Amazon) through massive fiscal incentives for cattle raising, mining operations and large power plants that ultimately have led to rapid devastation of natural resources and expropriation of traditional local communities of Indians, rubber tappers, and riverine fisherfolk (Diegues 1992b). The social reaction against these processes was at the same time cause and consequence of the opening of new democratic spaces in Brazil, through the creation of rural unions, local movements, non-governmental groups and progressive political parties. In this context, the emergence of collective actions at the local level (Ostrom 1990) was only possible because they were backed by large social mobilizations, the rise of a powerful political consciousness and the creation of new cultural symbols.

Collective actions concerning the commons have erupted across Brazil's vast landscape, motivated by a number of social forces. First, extensive environmental degradation throughout the Amazon and Atlantic forest has cultivated an ecologically conscious populace. Second, non-governmental organizations (NGOs) linked to international activist organizations have offered their support to local collective actors, mobilizing their capacities to exert pressure on multilateral banking institutions, industrial countries' parliaments and the Brazilian state. The successful campaign to find Chico Mendes' killer and to support, in part, his organizing plans, is one such example. Third, some Indian and non-Indian cultures have become more socially visible and better organized. Often these peoples' organizations have received the support of important national institutions, such as the Catholic Church. In the late 1980s, local movements, NGOs and research groups were able to establish important alliances around issues such as forest conservation, marine resources conservation and social participation in rural areas because of these strategic alliances. These social and ecological practices and processes are crucial factors in the movements to rebuild common property regimes in Amazonia.

Deforestation and the Conditions for New Social Movements

The recent occupation of Amazonia must be seen in the context of modernization politics and capital accumulation and not simply in terms of so-called development. Because of its possibilities for rapid capital accumulation, over the last few decades, Amazonia – the last significant frontier in Brazil – has been catapulted into the national economy. This massive appropriation of the region's renewable and non-renewable resources by national and international capital has resulted in unprecedented depletion of the natural resources and the marginalization of the local population. These rapid changes were fuelled by two critical ideological constructs: Amazonia as *geographical vacuum* and as *economic panacea*.

First, the ideological dimension in effect during the 20 years of military rule (from 1964 to 1984) was the 'geographical vacuum'. Half of the Brazilian territory had to be occupied at any cost. Since the 1970s this strategy had a clear geopolitical dimension, expressed in huge economic programmes such as the National Integration Program. Long and costly highways such as the Transamazon and the Northern Perimetral Highway (running close to the northern frontiers of the country) were initiated and partially completed. In order to occupy the region with Brazilians, the government encouraged the arrival of landless peasants from the northeast and from areas with land conflicts in the south. Hundreds of thousands of peasants poured into the region, most of whom lacked the farming experience and capital necessary for survival in a totally different, aggressive tropical environment. Some of these newcomers arrived spontaneously, attracted by the publicized availability of cheap land, while others came in groups to set up organized settlements, as was the case in the State of Rondônia.

Most settlements quickly failed, principally because of land conflicts, but also because of the low fertility of the forest land, lack of services (marketing, extension-work and social infrastructure) and an unfamiliar environment (Diegues 1992b). In fact, the recent occupation of Amazonia has resulted in the highest number of land conflicts, proportionally speaking, in Brazilian history. It opposes, on the one hand, the traditional dwellers (the Amerindian tribes, the riverine and forest extractive populations) and, on the other, the newcomers, such as farmers and Brazilian and multinational cattle-ranching and mining interests.

By the mid-1970s the military government's strategy had changed. Replacing agricultural settlements of small farmers were grandiose mining projects (Grande Carajás), large dams (Tucuruí and Balbina), industrial centres (São Luís do Maranhão and Manaus) reliant on mineral processing and free zones, and large agribusiness projects. These projects benefited not only from a number of tax incentives, but also from the plentiful cheap labour available, composed principally of those farmers who had abandoned their plots of land.

The second ideological dimension to the recent widespread occupation is the fallacious assumption that the Amazon could be an instrument for solving overall structural problems brought about by the failed 'Brazilian economic miracle' of the 1970s based on uneven capital accumulation in the southern regions. In fact, in the mid-1960s, the already highly concentrated land-tenure system became even more unequal as the result of the labour-saving technology (called modernization) implanted in the south, which forced the labour force off the fields. Many of the small farmers and tenants in the wealthy southern states were forced to sell their plots as intensively mechanized soybean production expanded, which required larger areas of land and less labour input. Many farm workers, especially sharecroppers and other tenants, lost their sole source of income. As a result, 2.5 million peasants migrated from the rural areas of the state of Paraná alone during the 1970s. Many migrated to Rondônia, where they began clearing the forests.

Attempts to introduce land reform met fierce opposition from big landowners. The federal government's modest attempt at land distribution in 1985 was also a failure. Opposition to land reform has also increased deforestation in Amazonia, as many big landowners, fearing land reform, burned large tracts of forest to 'improve' the land, as a means of escaping agrarian reform in their latifundia. According to Brazilian legislation, clearing of a forest is a sign that the landowner is using the land productively, and thus should not be expropriated.

The ideology of occupying Amazonia at any costs was backed up by a series of incentives for large livestock-raising and agricultural schemes in the region, since latex extraction and nut harvesting by traditional populations were considered backward economic activities which failed to effectively occupy, or sufficiently utilize, the territory. Since 1966, when special subsidies and incentives were created, 581 projects have been approved for agriculture and cattle raising (Oliveira 1989). These projects cover an area of over nine million hectares, the average area per project being 16,300 ha in Pará and 31,400 ha in Mato Grosso. A study carried out by Yokomizo (1989) concluded that of 92 projects analysed, only three were profitable. Multinational

enterprises not only bought land in the region, but benefited from incentives as well and from the infrastructure established in the region by the government. One study (Eglin and Thery 1982) identified 19 multinational groups in Amazonia, owning approximately 7,342,000 ha of land, used for logging, cattle raising, agriculture and speculation.

Pasture for cattle is the main use of the deforested land in Amazonia and the impact of this cattle raising on the forest environment is much more severe than that of small farming activities. According to Hall (1989) less labour-intensive forms of land use have the highest impact on the Amazon forest, as is the case of logging and ranching. Many studies have shown the non-sustainability of cattle ranching in the region (Hecht 1982, Fearnside 1989). These studies show that the initial enrichment of soils (from cutting and burning of biomass) is basically detrimental to the total available supply of nutrients in the ecosystem. Lacking the defences of the diversified natural system, within a few years many pastures were invaded by pests and weeds. Many ranchers overgrazed in some areas and then abandoned the deteriorated pastures. The high costs of chemical fertilizers (Amazonia has no known phosphate deposits) and of weed control meant that ranchers found it more profitable to clear new forest than to recuperate old pastures (Goodland 1988). It is clear, then, that large agricultural and cattle-raising projects (combined with land speculation) were responsible for most of the deforestation, as compared with forest cutting by small farmers or slash-and-burn agriculturalists. In fact, large projects have often expanded their holdings by buying out or forcing small farmers off their lands. Small farmers were frequently used by large companies to clear the forest, plant food crops for one or two agricultural seasons and then grow pasture (Gall 1978). Logging companies also received special incentives in the lumber-extracting areas of the State of Pará. In the State of Pará alone, lumber extraction grew 4,000 per cent during 1970s (Schmink 1988) and logging roads opened up access for clearing the forests.

The failure of the previous strategy is reflected, for example, in the large number of small farmers who abandoned farming to become gold placer miners (*garimpeiros*) often roaming from one of these open mining sites to the other. Today this quasi-nomad population comprises over 600,000 people. Gold prospecting, undertaken by both placer miners and firms is a widespread practice along many river areas of Amazonia, causing serious health and environmental problems.

From these state-instigated migration flows, the region's population rose from approximately 2.6 million inhabitants in 1960 to 8.6

million in 1989 according to the IGBE (Brazilian Geographic and Statistical Institute). Between 1970 and 1980, the annual population growth in Amazonia was 5 per cent compared with 2.5 per cent for the country as a whole. This high increase in population, however, was unevenly distributed and is now concentrated in the capital cities in the north (notably Manaus and Belém), in the State of Rondônia and in southeastern Pará. There is a generalized 'pull' effect on populations of poor farmers and traditional peoples attracted by large economic projects. The increase in the urban population has been higher than that in the rural regions and more than 65 per cent now live in urban centres. The slum areas in and around the cities have increased dramatically, even though job opportunities and most of the social services are highly deficient. The rush of migrants to the 'attractive' Free Trade Zone of Manaus has been met with the availability of relatively few jobs.

The impact of 'modernization' has resulted in the indiscriminate depletion of the forest in many regions. By 1989, as much as 8 per cent of the total Amazon had been deforested, an area almost the size of France. Recent studies show that the rhythm of deforestation decreased in 1992, but increased again in 1993 and 1994, particularly in Rondônia, southern Pará and in the newly created state of Tocantins (INPE 1995). The impact of forest clearing is serious, not only in ecological terms (loss of biodiversity, aggravation of the greenhouse effect, soil erosion, etc.) but also in social and cultural terms. The livelihood of the traditional populations has been deeply affected. As enormous numbers of rubber and nut trees have been felled, income and employment opportunities have been lost, forcing people to migrate to the urban areas. As productivity decreased, after a few years of land cultivation, small farmers also abandoned their plots and migrated farther north. In many cases the land was sold to speculators from the south or to large neighbouring cattle ranches. Many migrants then became wage earners on large plantations or else they ventured out to the placer mines in search of gold. Native Indian reserves are being invaded by these individual miners as well as large logging and mining companies, making them the most vulnerable communities in the Amazon.

By the end of the 1980s there were signs that the government was intending to change some of the most damaging policies leading to deforestation in Amazonia. In April 1989 President Sarney announced a new programme for the region, called Our Nature (*Nossa Natureza*). This initiative came at a moment when the federal government was under heavy opposition due to a number of different events. A few months before, the well-known leader of the rubber tappers, Chico

Mendes, was murdered and his death brought about a major national and international reaction. It is likely that the government was concerned with the possible suspension or cancellation of a number of multilateral loans, including the follow-up of the North-western Development Program (POLONOROESTE), due to pressure from environmentalists at home and abroad.

The Our Nature programme had a very nationalistic tone, reaffirming Brazilian sovereignty over Amazonia and deep concern for what sectors such as the army called the dangerous 'internationalization of the region'. The programme instigated broad environmental protection and research activities and established national forests and parks. Some investments by SUDAM (the government's supervising organ for the Amazon) were suspended and limits were placed on round-log exports. By 1990, it was also clear that no money had been allocated for the programme and nothing important would come from it, except for the creation of IBAMA, Brazil's major environmental institute.

In March 1990, the newly elected president, Fernando Collor de Mello, took office in the midst of a political crisis, an annual inflation rate of more than 4,500 per cent, high foreign debt and a fall in the GNP. Collor appointed a highly respected environmental activist, Dr Lutzemberger, to head a new environmental secretariat, known as SEMA, with the president's support to addressing the most pressing environmental questions, particularly in the Amazonia. A total ban on incentives and on the export of hardwood logs was established. There was also a commitment to remove gold miners from the Yanomami reservation and to halt the construction of new pig-iron smelters along the Carajás Railway. From the beginning, Lutzemberger fought for a new style of development for Amazonia, and attempted to halt the paving of the highway extending from Rio Branco, in the Brazilian State of Acre, to Pucallpa in Peru. He favoured forest management and extractive reserves. By that time, deforestation was actually slowing down, more due to the deepening financial crisis than to a sea-change in governmental action.

Lutzemberger soon ran into enormous opposition from various social sectors, including the environmental movement, who began criticizing him for being more active outside Brazil than inside, where crucial environmental problems were being ignored. Lutzemberger's strongest opposition came from the newly elected governors of the states which comprise Amazonia, most of whom favoured development of the region at any cost. These governors, backed by the same social conservative forces that had benefited from the previous incentives, also received support from sectors of the

army, which believes Amazonian NGOs are directed by Northern governments in order to diminish the sovereignty of Brazil over the Amazon region. Lobbying by these governors and members of the Congress is very strong, and it appears that some of the destructive incentives which had been eliminated are now making a return.

Deforestation and the Extractivist Populations

In Amazonia a large rural population relies on the forest and its products for survival. Approximately 1,500,000 people, or 33 per cent of Amazonian rural population, harvest forest products in combination with subsistence agriculture and fishing (Allegretti 1987b). In addition, the Amerindian population, of approximately 220,000 persons, also rely on forest products such as rubber, oils, fruits and fibre. While extractive production has declined in terms of the share of the total dollar-value income generated in Acre, Amazonas and Rondônia from 1970 to 1980, it is still of substantial economic importance and its value continues to increase in absolute terms. In Acre, while the area occupied for extraction decreased from 1970 to 1980, and the areas of cattle ranching and agriculture increased dramatically, the per hectare value of extraction increased much more than either meat or crop production. At the same time, rubber exports increased as a share of overall state exports. The business of extraction, therefore, has become an attractive development alternative to cattle or agriculture for small producers. Whereas almost half of the small producers in the Amazon earn less than the minimum wage, the average annual income for forest extractors in the early 1990s was US\$ 1,500, or twice the minimum wage (Allegretti 1987a). Moreover, the greater sustainability of extractive activities – they do not destroy forests – makes it a more attractive long-term alternative.

Rubber tappers typically live in *colocações*, which are both living areas and productive units in the forest. In the centre of *colocações*, *seringueiro* families build houses made of *paixiuba* (a palm tree). Most of the *colocações* are established at the side of an *igarapé* (small river). This production unit is customarily around 300 to 600 hectares in area. The latex is collected from the rubber trees and transformed into rubber through smoking over a fire. In the *colocação*, shifting agriculture, hunting and fishing are also essential livelihood activities. Every day, the *seringueiro* walks several kilometres through a path called *estrada da seringa*. In order to earn a minimum income, the

seringueiro has to extract latex from 100 to 150 trees daily, producing around 500 kilograms of rubber. In order to survive, each *seringueiro* has to work some 200 to 300 rubber trees (Allegretti 1987a). There is no division of labour in the rubber extraction process. The tapping and transformation into latex is done individually by the *seringueiro*, who stays the whole day in the forest. Under these conditions, each *seringueiro* family is very isolated as *seringueiros* are dispersed throughout the forest. As explained above, the main outside contact of the *seringueiro* is with the *barracão*, a warehouse belonging to the rubber baron, where he buys what he needs at a high price. The free producer deals with the middleman (*regatão*) from whom he buys the goods he needs.

The impact of deforestation on the *seringueiros* has been disastrous. From the beginning of the 1970s, with the state policies of encouraging occupation of Amazonia based on cattle raising and fiscal incentives, the situation of the rubber tappers worsened dramatically. These policies contributed to changes in land ownership and use that deprived the rubber tappers of access to their traditional sources of livelihood. Since the 1970s, there has been an increasing concentration of land in the hands of a few large owners, most of whom come from the south. At the same time, the number of smaller holdings has increased. In Acre, for instance, between 1960 and 1970, the area predominantly devoted to extraction fell by 65 per cent, while the area devoted to agriculture increased 410 per cent and cattle ranching by 132 per cent. During the same period, the number of holdings devoted to extraction increased by over 1,000 per cent, implying that the traditional rubber-producing estates were fragmented as rubber barons withdrew or sold out and independent rubber production was taken by free rubber tappers. In 1970, the number of holdings smaller than 500 hectares represented 57 per cent of the total number of holdings while in 1960, these were only 9.5 per cent of the holdings (Schwartzman 1989). Consequently the number of small producers, particularly renters and occupants, increased. This reflects the emergence of autonomous rubber tappers who are largely occupants with precarious tenure or, in some cases, renters.

Consequently, large rubber tree and Brazil nut-tree areas are being transformed into cattle ranches. Although these trees are protected by law and should not be cut, all other trees are usually cut and burned. This hinders the survival of the protected trees which remain semi-burned and isolated in the middle of new pastures. One of the areas of widespread destruction of Brazil nut and rubber trees is the southern part of Pará where many large cattle-raising farms have been

established. In the same area, pig-iron plants are being developed and, as a consequence, large areas of those valuable trees are being cut and burned for charcoal. At the same time, logging activities also responsible for the destruction of Brazil nut trees, are increasing dramatically (Allegretti 1987b). The expansion of cattle ranches and other large (usually speculative) holdings is responsible for the expulsion of the *seringueiros* from their traditional lands and activities. Many of them became wage earners on the ranches or have migrated to the outskirts of the new towns of Amazonia. Often they become temporary workers, migrating from one place to another, or have entered gold-mining activities as *garimpeiro*.

Not only are the rubber-tapping areas being reduced but deforestation is also affecting the availability of fish in the *igarapés* and game from the forest, which deprives forest extractors of their main sources of protein. Rivers are also being polluted by mercury used by the *garimpeiros* (Petrere 1989). River fishing is still the most important source of protein for the Amazonian population and fish consumption there is highest in Brazil, over 35 kg per person per year. (Diegues 1992a). Fishing also employs a large number of people either for subsistence or for commercial purposes. But in recent years, larger farmers are putting fences close to the rivers, creating serious conflicts with traditional fisherfolk. At the same time, people coming from urban areas using predatory fishing gear are depleting the fish supplies in the area. As a result, riverine fisherfolk are organizing themselves to manage the lakes – the biologically richest areas – on a communal basis (Hartman 1989, Loureiro 1991).

The Indian population in Amazonia is the single human group suffering most from deforestation and related large development projects such as mining, dams and road construction. Since the European colonization of Brazil began 500 years ago, the number of indigenous people has declined from six million people to its current level of about 220,000. These survivors speak more than 140 languages and dialects. Prior to the arrival of the Europeans, the indigenous population was widely distributed across Brazil, consisting primarily of hunter-gatherers, many of them living in the Amazon forest. These Amazonian peoples were the last indigenous groups to be destroyed by contact with the colonizers, mainly because they lived in isolated forested areas. The progressive displacement of indigenous people resulted from physical extermination, enslavement and especially the spread of new diseases to which they had no resistance. Some 70 per cent of the remaining indigenous population lives in the north and central-west regions where Western-style 'civilization' has only recently appeared (CEDI 1987).

After 1910, the Brazilian authorities adopted measures designed to protect native people from the most extreme forms of violence and other conditions leading to long-term population decline. Some institutions like FUNAI (previously SPI) were created to protect Indian communities, but their activities were often ineffective in checking continuous aggression by outsiders, and sometimes even abetted it. During the first half of the twentieth century alone, some 87 distinct Indian groups were exterminated (Farren 1989).

The main policy to protect Indians has been to establish 'reserves'. By 1990, some 27,000,000 hectares of land had been set aside as reserves; almost half of this area was included in the last four years. Many of these reserves, however, have not been physically delineated. As their limits are not clear, invasions by loggers, *garimpeiros*, large companies, ranchers, speculators and others are common and frequently lead to open conflicts. The extension of these reserves is often criticized by large agricultural and mining interests with the argument that too much land has been allocated to too few Indians. Other Brazilians, however, suggest that these Indians have inhabited those areas for centuries and that they require access to large areas of forest in order to survive. Moreover, they point out that in Brazil, the land controlled by only a few latifundiarios is far more than all that has been set aside as Indian reserves. Overall, the threats to Indian lands come from a number of sources, including invasions of gold- and cassiterite-mining operations, commercial logging, landless peasants and large dams. Together, they threaten to completely undermine Indian social institutions and the ecosystems on which they depend.

As a consequence of these invasions, Amazonia is at present the region with the highest rate of land conflicts in Brazil. The unplanned occupation of the area has led to many heated and often violent disputes throughout the region between squatters or other occupants with precarious tenure and landholders. Those claiming legal titles to the land are often the much feared *grileiros* (land speculators) who commonly engage *pistoleiros* (hired gunmen) in order to drive small farmers off the land they occupy. Land tenure, especially access to land for cultivation and housing, is currently the most conflictive social and political issue in that region. These conflicts have been aggravated by the government's retreat in 1988 from proposing long-promised programmes of agrarian reform. Human rights abuses in the Amazon region are all particularly centred around land tenure issues (Farren 1989).

Violence, however, is not limited strictly to land title issues but is also used by landlords to obtain cheap labour. Most of the workers

in the *fazendas* (livestock and agricultural estates) are hired through middlemen (*gatos*) to clear the forest. Most of the workers are financed by the *gatos* and as a result are in debt to them. In many cases they are stuck in the *fazendas* without being able to leave as they are not in a position to pay their debt. This debt peonage is made effective through use of force. Many rural union and Indian leaders have been killed in conflicts over land and labour. So too have several progressive Catholic priests who took positions in favour of the rural poor. During the last 20 years, over 150,000 people were involved in land conflicts in the region, resulting in thousands of deaths of rural leaders, particularly in the states of Pará, Maranhão and Goiás.

Rebuilding the Commons through New Social Movements

Until the 1960s, social conflicts in the region were not as acute as they have been since, and local populations were not as well-organized to oppose domination and exploitation. During the last two decades, however, the local population has been deeply affected by the violent processes of land and natural resources expropriation. Many negatively affected groups have started to react and to organize.

By the end of the 1980s, a series of national and international events and situations placed Amazonia in the public spotlight. First, when the military dictatorship ended, several social groups and political parties seeking constituencies were instrumental in organizing a politics of protest and resistance amongst rubber tappers, homesteaders (*posseiros*), Indians and small-scale miners (*garimpeiros*). In the 1970s, agencies of the Catholic Church (e.g. Pastoral Land Commission (CPT) and the Missionary Council on the Indigenous People (CIMI)) publicized incidents of violence in the region, openly criticized the military and assisted in the creation of rural unions and other local institutions. Soon after, the *seringueiros* and indigenous communities started a number of political organizations, such as the Union of Indigenous Nations (UNI).

Internationally, too, the Amazon hit the spotlight. First, in the late 1980s during a severe drought in the US, some scientists and environmentalists started to make the links between large-scale deforestation in the Amazon and the 'greenhouse' effect caused by increased forest burning. Several networks were established between Brazilian and US NGOs denouncing deforestation and violence in the Amazon. US NGOs such as the Natural Resources Defense Council,

the Environmental Defense Fund and the National Wildlife Federation started lobbying the US Congress to pressure the World Bank and the InterAmerican Development Bank to stop funding large projects that were carving up the forest, particularly in Rondônia and Acre (POLONOROESTE).

Due to these pressures, the World Bank halted disbursement of the POLONOROESTE loan, pending compliance by the government with new loan conditionalities that superficially, at least, covered forest and indigenous people's protection issues. These political pressures provoked surprise and resentment amongst Brazilian politicians and the military, stirring up suspicion that foreign agents were behind these environmental concerns. Many believed that the sudden appearance of Amazonian leaders, such as Chico Mendes and Indian chiefs (*caciques*), in foreign capitals was actually a media strategy to mask imperialistic designs on the Amazon's natural resource base. But as one observer points out:

The danger of internationalisation of Amazonia evoked by the Brazilian Government is a myth, to the extent that society has long been part of a national/transnational world. Moreover, it is a myth that can be used to cover up the perversity of the national policy for regional occupation. It does not, however, exclude the reality of political pressure by governments and international corporations brought to bear under new form. Planet-wide awareness is real and it is active, which does not preclude, however, formation of a form of ecological ideology favouring those very forms of pressure. (Becker 1992:95)

By the end of the 1980s, particularly after the assassination of rubber-tapper leader Chico Mendes, forest dwellers rallied to form a national coalition to protect their interests. In 1989, the Kayapó Indians, after expanding their international public campaigns, hosted a six-day First Encounter of Native Peoples, in Altamira, Xingu, in which over 600 indigenous leaders, Brazilian and foreign supporters, journalists and a few celebrities participated. They condemned the invasion of the Yanomami Indians' land by new ELETROBRAS plans to build several large dams in the Amazon. Meanwhile, protest forced the World Bank to withdraw loans from Brazil's energy sector and, instead, provide (very small) funds for energy conservation, which further enraged Brazilian authorities.

One government strategy to control deforestation in the Amazon is the establishment of protected areas, such as national parks and ecological stations. These areas are also created to meet the

requirements of international institutions, such as the World Bank, when large development programmes such as the POLONOROESTE are funded. One of the contradictions in this process is that such protected areas follow the North American model of creating wilderness in which no dweller is allowed to stay (Diegues 1996). Brazilian legislation on protected areas unequivocally states that rubber tappers, riverine groups and artisanal fisherfolk are not allowed onto their own territories in order that certain places can be 'preserved'. This environmental policy has sparked numerous conflicts as local populations have refused to leave their land.

By the late 1980s, resistance to land eviction became so strong that a new form of protected area was proposed, commonly called 'extractive reserves'. The creation of this new category of protected area – in which locals can actually continue to live and work – was a direct result of sustained protest movements by 'commoners', especially rubber tappers and artisanal fisherfolk, often with NGO assistance. Today, there are nine extractive reserves covering two million hectares on which more than 28,000 people live (CNPT 1994). The economic activities in these reserves include small-scale fishing, babassu and Brazilian nut-tree harvesting and rubber tapping. The most remarkable aspect of these reserves, however, is that they represent a resurgence of locally managed common property regimes. That is, social and political confrontations over the past two decades between traditional populations and both large landowners and the state have led to innovative, practical and democratic reconstruction of threatened common property regimes as well as the creation of new types.

In this vibrant political landscape, three distinct strands of activism thrive in the Amazon. First, autonomous local movements unrelated to broader social movements are responding, protesting and organizing around aggressive and unjust state actions. Above all, they are fighting to defend their territory and social institutions against external interventions. Although they appear as the weakest of the three types, they are more dispersed across the map, more spontaneous and perhaps more abundant. Second, local movements with incipient alliances with non-local NGOs are working to fight projects, legislation and other oppressive state activities. They appear to be better organized, with more facilities and non-local support to sustain forms of resistance. Third, the rubber tappers have organized the extractive reserves movement. They are well connected to larger social movements, but their strategies, skills and tools come mostly from within their local ranks. The rubber-tappers movement emerged in the 1970s during the height of conflict over land grabs in Acre;

at that point, they organized the first rural union in Brazil. By 1985, they had organized a national council as well as a constructive plan for extractive reserves. Only by the mid-1980s did they start to link up with other national and international social movements. As we will show below, these three types of commons-based movements collectively reflect the diversity of practices, politics and worldviews of Brazilians dependent upon the commons for their livelihood.

Brazil has two types of social movements of traditional communities living in protected areas – local movements with and without direct links to broad national movements. Those without links can be considered as local reactions against the administration of conservation or protected areas that curtails traditional forest harvesting, hunting and agricultural practices. They are also local spontaneous reactions against territorial invasions by outsiders, a process that can result in the unofficial declaration of an 'exclusive resource use unit' by the environmental authorities. They have succeeded in pressuring park administrators to open up negotiating channels on the alternative use of natural resources. These local movements or institutions are, however, incipient and weak and still subordinate to state administrations.

Spontaneous local movements are local instances of resistance and organization of small-scale local extractivist producers, in defence of their traditional territory. They have the objective of gaining control over access to natural resources, and which in some instances came to be recognized by IBAMA (Instituto Brasileiro do Meio Ambiente) as legitimate (or tolerable) forms of action. One example is the case of the fishers of Rio Cuiabá, near Santo Antonio do Leverger, who traditionally fished with canoes and hand-lines in deep pools in the river that were rich in fish. They would *sevar* the fishing sites – that is, throw corn or other types of food in the water regularly to attract fish. Recently, amateur fishers from southern Brazil have begun to appear with motorboats and have preyed on the fishing resources, without using the *sevar* method. In reaction, locals formed river patrols and only permitted the 'Southerners' to fish if they used the traditional way of the region. This method, however, demands great ability, because the local fishers do not use weights to anchor their boats. Rather, they use one hand to paddle and the other to hold the line, which turned out to be impossible for the southern sport fishers. IBAMA later recognized this location as an area for the exclusive use of local fishers, giving it the character of natural resource conservation.

Another autonomous movement of fishers are the ones who have collectively closed off lakes in the Amazon region. These lake

communities have assumed control of the territories that they have traditionally occupied but which now were threatened by commercial fishers coming from the cities. For example, many *vargeiros* and riverine communities of Amazonia have had access to their local fishing sites reduced by the fences of large landowners. Commercial fishers from the cities are also employing predatory fishing equipment to overfish the waters. The *vargeiros* from many rivers of Amazonia spontaneously closed lakes for the sake of their survival and to protect the natural resources. IBAMA eventually expressed some support for these fisherfolk through the establishment of fishing reserves in Amazonia. This struggle has produced more than new rules of access to the lakes. According to one observer:

The closing of the lakes has brought together a movement to delineate their territories, which in practice amounts to small community ownership. The affirmation of communal ownership is, in this context, an affirmation of communal responsibilities and rights shared by consent of the community members, who depend for their subsistence on the use of a specific territory, without, however, having any legal basis for this affirmation. (Ayres and Ayres 1993:3)

These processes of communal appropriation have been met, however, with extensive physical violence. In one conflictive situation, IBAMA's protected area officials joined up with the Federal Police to harass *quilombo* communities (originally established by escaped African slaves as places of refuge) of the Trombetas River area for their extractivist activities of fishing and nut collecting. In 1979, the IBDF (which became IBAMA) created the Ecological Reserve of Trombetas, in an area long used by the inhabitants of Trombetas. IBAMA, assisted by the Federal Police, took hunting and fishing equipment from the residents, in a manner similar to the repression by mining companies that had become established in the area, such as Alcoa, Mineração Rio Norte and Eletronorte, who were considered by the Afro-Brazilians from Trombetas as 'foreign' in opposition to the local populations. The establishment of the ecological reserve on the left side of the Trombetas River, and the later creation, in 1989, of the National Forest on the right side of the same river, made the way of life of these people unviable. Those who insisted on staying on their land were not allowed to hunt, fish or plant crops. For these Afro-Brazilians, the restrictions imposed by IBAMA were considered as a new slavery, destroying their way of life, and threatening their cultural connections with the falls and the waters, which they

consider sacred. Some old residents were expelled three times from their homes, by three different entities — Mineração Santa Patrícia, IBAMA and Alcoa. For most of the old inhabitants, this 'new slavery' meant misery and an unacceptable life in favelas and *beiradões* (shacks built along the river-bank) to where they moved after being displaced by the large projects and protected areas.

This case shows an alliance of the private forces (mining companies) and public (IBAMA) is physically and culturally destroying a population that until now had lived in harmony with the forests and rivers of Amazonia. In the view of these institutions, the action is legitimated by the appeal to 'economic and ecological modernity', according to which the expulsion of the Afro-Brazilians of Trombetas is considered fundamental to the establishment of 'ecological modernity', characterized by the need to separate humans and nature through the constitution of protected natural areas. This will ensure the 'economic modernity' needed to obtain high profits for the mining companies, according to the plans of the military regime for the occupation of the 'vacant spaces' of Amazonia (Acevedo and Castro 1993).

The second type of local movement in isolated regions are those supported by NGOs and research institutes. One example is the project of the Mamirauá Ecological Station, in the State of Amazonas, administered by the Mamirauá Civil Society and supported by several international environmental non-governmental organizations, among them the World Wildlife Fund (WWF). The EEM (Mamirauá Ecological Station) covers more than one million hectares, having been created to protect a large part of the floodplain between the Japurá and Solimões rivers. In this huge area live 4,500 *vargeiros*, spread over 50 small communities, with an average of 14 households in each. These communities live from fishing, hunting and gathering forest products. Along with these traditional activities, however, there is logging for sale to the sawmills in the cities.

Contrary to what is required by legislation — expulsion of the population of the area — the project administrators decided to allow the *vargeiros* to remain in this territory where they have always lived. During the floods, water covers millions of hectares, making law enforcement an impossible task. The administrative team, belonging to a local non-governmental organization, believed that only with community participation could the biodiversity and culture of the region be protected. This type of management, however, is different from the establishment and imposition of 'management plans' by scientists and bureaucrats. It requires a longer time for development, since it depends on continuous consultation and a constant dialogue

with local populations, inclusion of social scientists in research teams and more flexibility in planning. It places more value on the process of decision making than on the establishment of rigid conservation objectives. The experience of this project has demonstrated, however, that once a decision is taken by the local population, it has a much greater chance of being followed. This is demonstrated, for example, in the consensus that was reached by the local population in regards to the conservation and sustainable use of lakes, which had extreme biological and socio-economic importance.

In these discussions, the communities decided to define six categories of lakes, including totally preserved areas, such as lakes for reproduction of fish (untouchable, with the shoreline included in the area of total preservation), 'subsistence lakes' (for exclusive use of the community for subsistence fishing), 'market-oriented lakes' (for exclusive use of the community, with the fish to be sold), and 'lakes for use of the nearby urban centres' (where fishing is permitted to satisfy the needs of municipalities). The communities, in an assembly, also decided on the types of sanctions to be applied to those community members who disobeyed the decisions. The administrators of EEM concluded:

With the definition of the limited areas for professional fishing, it is hoped to create some kind of 'social responsibility' between the fishermen, of the urban centres and local fishermen that leads the community members to defend, almost in unison, the preservation of lakes and non-predatory fishing . . . The consensus reached means that there is a good chance that the decisions taken will be carried out, thereby reducing the requirement for additional effort in implementing these decisions, and was judged by the Mamirauá Project Team as being very satisfactory from the biological, geographic and conservationist point of view. (Ayres and Ayres 1993:10)

The third type of local movements concerning the commons is typified by the rubber-tappers' extractive reserves – locally initiated and recently supported by national and international coalitions. Created in the 1970s, during the height of conflict over land in Acre, this movement organized the first blockade (*empate*) in which rubber tappers confronted the machines that were cutting down the forest and threatening their way of life. In 1975, when the first rural union was created in Basiléia in Acre, in one of the centres of high density of rubber trees, the reaction of the landowners was

violent, and in many cases the houses of the rubber tappers were burned and the leaders assassinated. The National Council of Rubber Tappers, established in 1985, responded with a strategy of pursuing the creation of 'extractive reserves'.

The extractive reserves are administered communally. Although not allocated in individual lots, families have the right to exploit the resources along their traditional extractivist tapping routes (the *colocações*) within the reserves. The land cannot be sold or transformed into non-forest uses, except for small areas that are allowed to be cleared for subsistence agriculture (not more than five hectares per family, or approximately 1–2 per cent of the area of the reserve). The creation of these reserves is also based on the local organization of rubber tappers and on programmes of education, health, cooperativism, marketing and research into alternative systems of forest management.

The community members of extractivist reserves are aware, through their representative organizations, that a legal guarantee against aggression by large economic interests is not enough. It is fundamental that their extractivist production has economic viability, since they currently depend primarily on only a few products, such as rubber, nuts or babassu palm-trees. Rubber production is precarious because of the high cost of production and an external market unfavourable to primary products, and also because of the lower price of latex produced by monoculture plantations in the south of the country. The rubber-tappers solicit government subsidies to maintain prices for rubber on the internal market, while they look for alternative markets for products of Amazonia on the international market. To this end, a few cooperatives are organized to eliminate the middlemen (Schwartzman 1988) and facilitate marketing.

The National Council of Rubber Tappers also created a Centre of Training and Research that, together with Brazilian universities, looked for ways of diversifying production through research and the establishment of systems of management of natural forests, agroforestry, neo-extractivism and genetic conservation (Viana and Kageyama, quoted in Diegues 1992a).

The extractive reserves gained international notoriety after the assassination of the rubber-tappers' leader, Chico Mendes, in 1988. The first extractive reserve was officially created in 1988, and was called the Project of Extractivist Settlement, being part of the National Plan for Agrarian Reform of INCRA (order # 627/INCRA). In 1990, the extractive reserves became part of the protected areas system under the authority of IBAMA (Government Decree # 98897). Based on a movement to support their land rights and their traditional way of

life, the rubber tappers began to count on the support of environmental groups and national and international non-governmental organizations. Also, in 1986 the Alliance of the People of the Forest, which also included the indigenous populations, was created. The joint effort of the indigenous leadership, the rubber tappers, and those adversely affected by dams, supported by environmental organizations both within and outside Brazil, made possible, for example, the creation of the Encounter of the People of the Forest, in Altamira in 1989, to protest against the construction of hydro-electric dams on the Xingu River, where many indigenous reserves are located (CEDI 1989). This joint effort was responsible for the suspension of plans to create large dams along the Xingu River.

The rubber-tappers' movement, despite the organized reaction of large landowners through UDR (Democratic Rural Union), expanded not only into Acre, where 60 per cent of the municipalities had rubber-tapper organizations, but also into other states such as Amapá, Rondônia and Amazonas, including ten extractivist settlements and four extractivist reserves covering three million hectares and benefiting around 9,000 families (CIMA 1991). In 1992, IBAMA created CNPT (National Council of Traditional Populations), for the purpose of technical support for the reserves in Amazonia and expanding the idea to other regions of the country. Currently there are other extractivist reserves outside of this region, based on extractivism of babassu, a natural resource of the *cerrado* (savannah vegetation in semi-arid areas), and on fishing resources in Santa Catarina State. The establishment and reinforcement of extractive reserves continues in the Amazonian region and in other areas of the country, not only in the tropical forests, but also along the coastline, as is the case of Pirajurubá in the State of Santa Catarina and Mandira in São Paulo.

The movement to establish extractivist reserves is an example of defending, reinforcing and recreating threatened ways of life. Furthermore, in Amazonia it is an alternative that can enable the sustainable use of natural resources, which respects both biological diversity and the traditional way of life of populations. As Silberling stated (1990), official and public recognition of these reserves was only made possible by the strong social movement that worked together with the National Council of Rubber Tappers, looking for national as well as international legitimacy, especially in their struggle against other forms of ownership, in particular the large landholdings. They managed, through social mobilization, to raise the levels of consciousness and education of their members, creating and re-creating values of group solidarity fundamental to the

continuity of the creative process. The frequent meetings of the leaders of the National Council with the rubber tappers in many regions of Amazonia helped them to organize associations that will propose new reserves. Their ideological and symbolic role has been based on the creation of solidarity involving the support of other groups, social forces and policies within and outside the country, and on obtaining financial and technical resources, along with contributing decisively to the growth of the power of local associations of rubber tappers, who feel linked to a larger movement that transcends Amazonia.

Conclusion

As this chapter illustrates, communal appropriation practices in Brazil is not an issue of the past, but a very critical political strategy of the present. The interest in reviving commons institutions is spreading, as more communities are responding to predatory enclosures of their territories by landlords and investors driven by the political momentum of the expansion of the economic frontier. Commons activism coincides with other social processes aimed at maintaining threatened livelihood of certain traditional communities. It can be seen as a process of social reconstruction of livelihoods that have been partially disorganized by the expansion of the market economy and the encroachment of large private businesses into communally managed sites. In this process of social reaction, it is clear that environmental protection issues related to sustainability play an important role, as some social actors, including government and non-government agencies, see these experiences as 'case studies' leading to the search of 'sustainable development'. It is hard to foresee the outcome of these social experiments, as they contradict the current neoliberal policies of the Brazilian state. The success of these social experiments will clearly depend on their socio-economic sustainability and on the capacity of the support movements to counteract the tremendous strength of powerful latifundia and conservative social forces in Brazil. The success of these social experiments is ultimately linked to the possibility of the establishment of a long-living democracy and the recognition that biological diversity can only be ensured through the empowerment of the resource-dependent commoners who maintain both the biological and cultural diversity of Brazil.