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SUSTAINING THE FORESTS:
THE COMMUNITY-BASED APPROACH IN
SOUTH AND SOUTH-EAST ASIA

by Marcus Colchester

Preface

The UNRISD research programme on the **Social Dynamics of Deforestation in Developing Countries** is concerned with analysing how deforestation processes are generated in different ecological and socio-economic settings and how they affect the livelihood of different social groups. The programme has included local level case studies in Brazil, Central America, Nepal and Tanzania, as well as eight studies of specific themes which cut across countries and regions. This paper by Marcus Colchester is one of these thematic studies.

By drawing on numerous examples from south and south-east Asia, the paper examines the social and political context in which forest communities operate, outlines the main obstacles to sustainable management of natural resources, and reviews the experiences of community-based forest protection initiatives.

It begins by outlining the dominant concept of sustainability which emphasizes basic needs provisioning, secure land tenure and control over resources, and popular decision making. It shows how in reality these conceptions are being overridden by national and international policies and development strategies. This is leading to increased poverty, social conflict and, frequently, accelerated deforestation.

The paper demonstrates how traditional systems of resource management of forest communities have proved far more resilient and environmentally appropriate. Many of these communities, struggling to assert their customary rights, have successfully opposed socially and environmentally destructive development schemes proposed by national and international authorities. However, population increase, market penetration and internal differentiation have also tended to produce numerous contradictory results.

These changing circumstances have required local communities to seriously examine their livelihood strategies and associated social actions. In some countries, positive initiatives have also been taken by national governments to promote community forest management. The paper concludes that successful community-based management depends on the existence or evolution of open, accountable and equitable systems of decision making at the local level, as well as on many external factors.

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Table of Contents

Acknowledgements

Abstract

The concept of sustainability as developed by the World Commission on Environment and Development emphasizes three basic principles when applied to rural communities - meeting basic needs, local control over resources and that communities have a decisive voice in planning. Popular movements add a fourth principle, that local communities should represent themselves through their own institutions. To varying degrees, these principles have been notionally accepted by development planners and conservationists, at all levels.

Yet, throughout the tropical forest belt, these principles are being systematically overridden by international and national policies and development programmes. This is leading to increasing poverty, social conflict and rapid deforestation.

Traditional systems of land use and traditional knowledge have proved far more environmentally appropriate, resilient and complex that initially supposed by outsiders. Forest peoples, struggling to assert their rights, have successfully opposed many socially and environmentally destructive development schemes proposed for their lands.

However, these societies are not resisting all change. Population increase and the internal dynamic for development has also created, sometimes serious, social and environmental problems. A review of community-based initiatives in South and South-East Asia shows how they have dealt with these challenges. In some countries, positive initiatives have been taken by local and national governments to promote a community-based approach.

Notable successes have been achieved but many other initiatives have failed, not only as a result of outside intervention. An analysis of the examples shows that, besides the four principles noted above, environmentally successful management depends on innovative political organization at the community level, to ensure equity, accountability and openness in decision-making.

"If you have come to help me
You can go home again,
But if you see my struggle
As part of your own survival
Then perhaps we can work together."

Australian Aboriginal Woman (ANGOC, 1989:4)

Concepts of Sustainability

As made popular by the United Nations' World Commission on Environment and Development, the phrase "sustainable development" refers to the means by which "development" is made to meet the needs of the present without compromising the ability of future generations to meet their own needs (WCED, 1987). Since the needs of future generations are undefinable and the future potential for wealth generation of species and ecosystems are equally unknowable, the term apparently implies that total biological assets are not reduced, in the long-term, through use.

In a rural context, sustainable use thus includes not just conserving biological diversity, fauna and flora, but also maintaining ecological functions such as soil quality, hydrological cycles, climate and weather, river flow and water quality. It also implies maintaining supplies of natural produce - game, fish, fodder, fruits, nuts, resins, dyes, basts, constructional materials, fuelwood etc. - essential to the livelihoods of local people.

It is important to distinguish between the WCED definition of sustainability, with its emphasis on human needs and sustaining livelihoods, and those subsequently adopted by many development institutions, whose more technical definitions of sustainability are in terms of ecosystems' continued production of goods or services or the maintenance of biodiversity (see, for examples, Pearce, Markandya and Barbier, 1989; ITTO, 1990a; World Bank, 1991). Many definitions strip the concept of "sustainability" of the social and political issues implicit in the notion.

As the WCED study acknowledges, achieving sustainability implies a radical transformation in present day economies. It requires a fundamental change in the way natural resources are owned, controlled and mobilized. To be sustainable "development" must meet the needs of local people, for, if it does not, people will be obliged by necessity to take from the environment more than planned. Sustainability is fundamentally linked to concepts of social justice and equity, both within generations and between generations, as well as both within nations and between nations (WCED, 1987; UNEP, 1989).

Achieving sustainability thus implies major political changes. As the WCED notes:

> "The pursuit of sustainable development requires a political system that secures effective participation in decision-making... This is best secured by decentralizing the management of resources upon which local communities depend, and giving these communities an effective say over the use of these resources. It will also require promoting citizen's initiatives, empowering peoples' organizations, and strengthening local democracy." (WCED cited in Durning, 1989b:54)

Such a notion of popular "participation" in development is very close to that adopted by the United Nations Research Institute for Social Development.

> "Popular participation is defined as the organized efforts to increase control over resources and regulative institutions in given social situations, on the part of groups and movements of those hitherto excluded from such control." (UNRISD/79/C.14, Geneva, May 1979 cited in Turton, 1987:3)

The WCED develops this concept even further in its discussion of indigenous and tribal peoples, of whom it notes:

> "In terms of sheer numbers these isolated, vulnerable groups are small, but their marginalization is a symptom of a style of development that tends to neglect both human and environmental considerations. Hence a more careful and sensitive consideration of their interests is a touchstone of sustainable development policy.... Their traditional rights should be recognized and they should be given a **decisive voice** in formulating policies about resource development in their areas." (WCED, 1987:116, 12, emphasis added)

The same principles are echoed by the International Union for the Conservation of Nature and Natural Resources (IUCN), which, in its "Guidelines for the Management of Tropical Forests" notes that: "the people who live in and around tropical forests should control their management" (IUCN, 1989).

In the same vein, the Tropical Forestry Action Plan states that one of its basic principles is to promote the: "... active organized and self-governed involvement of local groups and communities in forestry activities, with a particular focus on the most vulnerable and on women and on commonly shared resources"(FAO, 1989).

Forest Communities

In South and South-East Asia, perhaps the majority of 200-300 million people who live in close association with the forests are socially and culturally distinct from the ethnic majorities outside the forests whose economies have largely developed in lowland areas of permanent - typically irrigated - agriculture. Even if, historically, some of these lowland societies once had very close ties with the forests (Bandyopadhyay and Shiva, 1987), it is the case today that most forest communities are politically and/or culturally marginalized. They are thus poorly placed to exercise the "participatory" control over their resources that "sustainability" apparently demands (Colchester, 1988; 1989b; Beauclerk, Narby and Townsend, 1988).

Today many of these peoples are described as "indigenous", a term used in this article to refer to the various ethnic groups in South and South-East Asia, which are officially distinguished from the society of the national majority by a wide range of culturally loaded terms. These include the "scheduled tribes" (*adivasis*) of India, the "hill tribes" of Thailand, the "minority nationalities" of China, the "cultural minorities" of the Philippines, the "isolated and alien peoples" of Indonesia, the "aboriginal tribes" of Taiwan, the "aborigines" of Peninsular Malaysia, the "natives" of Borneo etc.

In recent years, such peoples have increasingly begun to identify themselves as "indigenous". In part, this is because the term carries fewer pejorative connotations than other terms commonly applied to them by outsiders. However, the main reason that they have begun to adopt the term is to demonstrate their common struggle for a recognition of their rights. By labelling themselves as "indigenous", these ethnic groups at once affirm their solidarity with others using the same term and assert their rights to land and self-determination (Nicholas, 1989).

As used by outsiders, the term "indigenous" has come to have a somewhat different emphasis. The term is used in order to group together various ethnic groups with close ties to their lands which are, in some way, marginalized from the national society within whose boundaries they now find themselves (Burger, 1987; ICIHI, 1989). The World Bank, for example - which used to refer to "tribal peoples" (World Bank, 1982c) - has recently adopted the term "indigenous" in its policy documents. As now used by the World Bank, "the term indigenous covers indigenous, tribal, low caste and ethnic minority groups. Despite their historical and cultural differences, they often have a limited capacity to participate in the national development process because of cultural barriers or low social and political status" (World Bank, 1990:1).

However, by no means all forest dependent peoples are members of ethnic minorities. On the contrary, many peasant peoples in South and South-East Asia - even those whose main economic activity is permanent agriculture - have a very long history of using forest produce and of regulating access to forest resources. What many of these peoples share with "indigenous" groups is a lack of land security and a politically marginal status. And while not necessarily subject to the same degree of bruising cultural prejudice, their lowly status often exposes them to similar discriminations and exactions.

Right across South and South-East Asia, from Pakistan in the west to the Pacific islands in the east, the claims that these politically marginalized peoples are making present a striking similarity. The three central claims of these communities are: the right to the ownership and control of their territories; the right to self-determination; and the right to represent themselves through their own institutions.

More specifically, what most of these peoples demand is rights to the collective ownership of their communal territories. They want legal recognition granting them inalienable freehold title to their ancestral domains. They also demand, what is by no means always the same thing, that they be granted control of land-use choices and decisions made about these territories. They insist that such decision-making should be carried out by their own representative institutions (International Alliance, 1992).

These claims are not without justification: to varying degrees they all have a basis in international law. The right of tribal and indigenous peoples to the collective ownership of their lands is accepted in Article 11 of ILO Convention 107 and has been reaffirmed in more detail in Articles 14-19 of ILO Convention 169. The right of all peoples to self-determination is recognized in the International Covenants of Civil and Political Rights and of Economic, Social and Cultural Rights. The right of tribal and indigenous peoples to be represented through their own institutions is recognized in Article 2 of ILO Convention 169.
There is, thus, a remarkable convergence between what the WCED has set out as the essential conditions for "sustainability" and the rights demanded by forest peoples. And this should be

no surprise, for what forest peoples are demanding is no more than that they should be allowed to sustain their societies from the environments that they have always depended on.

Forest Peoples and Government

The gap between what the WCED has called for and the reality for forest peoples and other indigenous groups in South and South-East Asia could hardly be greater. Even where government policy is notionally designed to discriminate in favour of such peoples, such as in China and India, rights to traditional lands and to control development are systematically denied. In both these countries, the government adopts the attitude that it has a duty to develop the minorities out of their "backward" state (Anon, 1984; 1987; Cannon, 1989; 1990).

Underlying the disenfranchising policies of governments throughout the region lie deeply held prejudices. These have been most explicitly stated in Indonesia, where so-called *suku suku terasing* ("isolated and alien peoples") are defined by government as "people who are isolated and have a limited capacity to communicate with other more advanced groups, resulting in their having backward attitudes, and being left behind in the economic, political, socio-cultural, religious and ideological development process" (**Down to Earth**, No. 12, February 1991). As in the United States at the turn of the century and Australia in the 1950s, the Indonesia government pursues a policy of re-educating indigenous people to break them from their "backward" ways. They are also banned from pursuing their traditional religions (Atkinson, 1988).

For example, in 1986, the Indonesian government embarked in west Papua on a new project titled "Total Development of Indonesian People" aimed at re-educating west Papuans whom it describes as "still living in a Stone-age-like era". In order to bring these peoples "up to a par with the rest of the country", children "will be separated from their parents to keep them from settling into their parents' lifestyle". This is necessary, according to the government, "because changing their parents' lifestyle would be very difficult, and necessitate considerable expenditure and time" (Indonesia, 1986).

There have been very few local level studies of the impact of such policies (Persoon, 1985; Colchester, 1986a). Garna's study in west Java shows how a programme of directed development and modernization among the Baduy created a sense of dependency and fatalism, with a consequent failure of economic change. "Given the chance, the Baduy would prefer to be left alone to decide their own future", Garna concluded (1990:100).

Throughout the region, forced resettlement has been a central plank in government programmes to "assist" indigenous peoples. National security has often been a paramount consideration. In Malaya, for example, the Department of Aboriginal Affairs embarked on a hasty process of forced relocation in the 1950s to prevent the *Orang Asli* (Aboriginal People) villages being used as guerrilla bases. Paternalistic policies still prevail in Peninsular Malaysia and have proved socially destructive, economically unsuccessful and environmentally imprudent. Today the *Orang Asli* are still entrusted to the Ministry of Home Affairs whose other charges include administration of the police, armed forces, prisons and civil defence (Carey, 1976; Endicott, 1979; Lim Teck Ghee and Gomes, 1990; Nicholas, 1990).

In Thailand, the "hill tribes" face equally severe obstacles. Not only are they subject to forced resettlement and imposed development programmes, but they are denied Thai nationality and residence. The Thai armed forces have even gone so far as to expel long settled tribal communities into Burma at gun point (Tapp, 1986; McKinnon and Bhruksasri, 1986; Survival International, 1987; Ekachai, 1990).

In Laos, the government is similarly engaged in an ambitious resettlement programme, aiming to remove some 900,000 people from the upland forests of the country and resettle them as sedentarized agriculturalists, all in the next eight years. The Lao PDR government's intention is to allocate some 5 million hectares of these forests for timber production while the remaining 2.5 million hectares will be set aside for nature conservation. The land use programme is being developed with the assistance of the World Bank, International Union for the Conservation of Nature and the Global Environment Facility (Lao PDR, 1990; Madar and Salter, 1990; Van der Heide, 1991; GEF, 1991; Colchester, 1992).

The now defunct government agency, PANAMIN (Presidential Assistance to National Minorities) must bear a large share of responsibility for the breakdown in relations between the indigenous peoples of the Philippines and the national government. The institution came into being under the patronage of President Marcos and his relative Manuel Elizalde, with the ostensible purpose of protecting the indigenous peoples' rights and interests. But far from preventing the pillage of indigenous lands by mining companies, loggers and hydropower projects, PANAMIN collaborated with the armed forces in depriving the peoples of their ancestral lands. The result was a chronic breakdown in relations between the government and the indigenous peoples, a breakdown exacerbated by the heavy-handed repression meted out by the Philippines armed forces.

Denied protection by the very institution set up to defend their interests, the indigenous people were forced into militant opposition and many even took up arms against the government by joining the communist insurgency group, the New Peoples Army. During all this period PANAMIN consistently failed to defend the indigenous peoples' rights to their ancestral lands. On the contrary because Elizalde's political base and personal wealth lay in extractive concerns such as mining, logging and agribusiness, PANAMIN collaborated with the armed forces and industry in dispossessing the indigenous peoples. When PANAMIN was founded in 1968 the majority of its board members were from wealthy industrialist families many of whom had direct financial interests in companies encroaching on indigenous lands. Elizalde maintained his own private army in Cotobato in Mindanao, near the area where the Tasaday were "discovered". In 1975 PANAMIN created its own official counter-insurgency unit and within two years "security" expenses became the single largest item in the PANAMIN budget.

In Mindanao, where the Elizalde family owned several concerns, PANAMIN actively co-operated with agribusinesses in forcing indigenous peoples to give up their lands. Tribal communities such as the Manobo were forced to relocate on to tiny reservations owned by PANAMIN. In all, according to PANAMIN's own claim, some two and a half million indigenous people were resettled in this fashion (ASS, 1983; Rocamora, 1979; Fay, 1987).

The Struggle for Land

The most severe problem that forest peoples face throughout South and South-East Asia is the lack of recognition of their customary rights to their land. With the partial exception of Melanesia (James, 1985; Treace, 1987) and parts of India's north-east (Furer-Haimendorf, 1982), the collective ownership of traditional lands is almost nowhere legally secure.

In Indonesia, effective recognition of *adat* (customary) law extends only to areas under permanent cultivation or occupancy, and then ambiguously (Colchester, 1986b; Brewer, 1988). A detailed study of Indonesian law as it applies to the 1.3 million indigenous people of Indonesian-occupied West Papua concluded that:

> "Current agrarian law does not adequately recognize *adat* rights in land ...thus frustrating environmentally sound, sustainable land management practices. This is not only unsound policy, it contravenes the goals of the Basic Law on the Environment, as well as the command of the Basic Agrarian Law that land should be utilized in a sustainable manner for the optimal welfare of the people." (Barber and Churchill, 1987:10)

The study found that Indonesian agrarian law and policy persistently discriminates in favour of urban and industrial land users at the expense of traditional owners and rights holders.

In Peninsular Malaysia areas set aside for Aboriginal use are held by the state and may be reallocated at the stroke of a pen (Nicholas, 1990). In Sarawak, "native customary rights", while tenuously recognized in law, are ignored for practical purposes and can be extinguished by simple gazettement (Colchester, 1989a; 1990b). In Sri Lanka, central India and lowland Bangladesh although laws are meant to protect "tribals" from expropriation and land sales, only individual title is recognized (Colchester, 1984; Survival International, 1984). In the Philippines, rights to "ancestral domain" are not respected (ASS, 1983), although, after heavy lobbying, the new Constitution does grant them some recognition.

The main result of this lack of land security has been the massive take over of forest peoples' lands by the expanding lowland populations and enterprises. In Assam, for example, forest lands have diminished catastrophically over nearly a century and a half of progresssive invasion by lowland settlers and tea planters. The era began in 1833 and by 1871, 700,000 acres of forest peoples' lands were reallocated to tea plantations. By 1900 there were nearly 800 tea estates, established in areas previously given over to *jhum* (shifting cultivation), being worked by some 400,000 workers brought in from outside the area. Pressure on the forests intensified further with the demand for plywood for tea chests. Between 1930 and 1950, a further 1.5 million acres of forest lands were taken over by successive waves of Muslim Bengali settlers and Hindu migrants (Tucker, 1988).

Processes set in motion in the colonial era continue in India unabated. Tribal lands continue to be classified as "wastelands" and taken over by tea plantations, thus displacing the traditional owners and obliging them to move into other already occupied areas, leading to an over-intensification of land use (Vikas and Pradan, 1990).

Legal landlessness has not necessarily been the immediate consequence of this lack of recognition of collective land title. Adjusting to the political realities, many forest peoples have used what legal avenues exist to secure individual land rights, usually to small parts of

their once extensive domains. Indeed, during the colonial period in both British and American possessions, registration of individual land title under the Torrens system was strongly promoted, explicitly in order to bring land, labour and harvests into the market. The Dutch promoted a similar process in Indonesia.

The denial of communal land rights and their fragmentation into individually owned plots undermined traditional systems of resource management. Systems of shifting cultivation, in particular, have suffered (Colchester, 1990a). On the one hand, confining shifting cultivators to small parts of once extensive territories has reduced or even eliminated periods of fallow, leading to soil exhaustion, accelerated erosion and poverty. On the other hand, even where access to land has not been physically limited, lack of land security has promoted mismanagement by undermining traditional concepts of custodianship and resource allocation. A good example of this process is Jeffrey Brewer's study of Bima in eastern Indonesia (Brewer, 1988; see also Blaikie and Brookfield, 1987).

Chronic conflict between the state and forest peoples, and thus chronic lack of secure access to natural resources, has actually promoted the cultivation of ecologically sub-optimal crops. Among the Hmong of southern China, Burma, Laos and Thailand, for example, the opium poppy has been selected as the main crop despite the fact that it is very demanding on both soils and labour. The reason is that it yields a light valuable harvest within eight months of sowing. The crop can, thus, be taken "on the run" and its considerable cash returns used to pay off corrupt army officers and government officials, whose demand for protection money in exchange for tolerating the Hmong's continued presence (Geddes, 1976; Tapp, 1986; McKinnon and Vienne, 1989).

Indigenous economies have been undermined by the creation of a market in land, which many traditionally non-monetized peoples have found hard to manage. In western Bangladesh, for example, the Santal's territories have been progressively reduced as they have been forced to sell their lands to Bengali moneylenders due to their improvident incurring of debt, the usurious rates of interest and the extremely unequal position in the local political economy. Today the Santal, once the exclusive occupiers of the area, own less land per capita than the invading Bengalis (Colchester, 1984). Haimendorf's studies in central India have shown how this process of land transfer accelerates rapidly with the creation of markets for new cash crops like tobacco and cotton (Furer-Haimendorf, 1982). The process has also intensified sharply as a result of the so-called "Green Revolution". High yield, high input agriculture naturally favours farmers with greater access to land and capital, leading to a growing concentration of land and wealth (Duyker, 1987; Shiva, 1989).

Today the process is perhaps fiercest in Thailand where a frenzy of land speculation and commoditization is sweeping through once economically isolated provinces (Feeney, 1988; Ekachai, 1990). Laments an Akha from Chiang Rai province "I don't think we can stay here much longer. Land is most important to our livelihood and there's almost none of it left" (Ekachai, 1990:181).

State Lands

Whereas the initial aim of the colonial powers in Asia was to gain control of trade, it was only in the eighteenth and nineteenth centuries that western concepts of landownership and control began to be widely applied. A major force in this process was the demand for timber

to furnish the colonial navies, which led to the imposition of the new forestry policies over vast areas of Asia (Fernandes and Kulkarni, 1982; Shiva, 1987; Richards and Tucker, 1988; Westoby, 1989; Peluso, 1990). In the process forest peoples lost control of the major part of their ancestral lands to the newly created government agencies.

Reviewing the problems caused by this process in India, Agarwal and Narain note:

> "The biggest problem lies in the alienation that the modern state has created amongst village communities towards their commons... The British were the first to nationalise these resources and bring them under the management of government bureaucracies... The laws have totally destroyed the traditional systems of village management..[and] have started a free for all... Today nearly one third of India's lands and all its water resources are owned by the government. No less than 22 per cent of the national territory is under the control of the forest departments. The result is that village communities have lost all interest in their management and protection... This alienation has led to massive denudation of forests, over-exploitation of grazing lands and neglect of local water systems."(Agaral and Narain, 1989:13, 27; see also Morris, 1982; 1983).

In South-East Asia the picture is even more startling. Indonesia's Forest Department controls some 74 per cent of the national territory, putting it in conflict with some 30-40 million people who live in or directly from the forests (Poffenberger, 1990). Special forestry laws, which override the Basic Agrarian Law, criminalize unauthorized occupation or working of official forest areas and prohibit the unauthorized cutting or harvesting of forest products (Barber and Churchill, 1987). As the Indonesian Minister for Forestry told journalists in 1989, "in Indonesia, the forest belongs to the state and not to the people...they have no right to compensation" when logging destroys the forests that they depend on (**Japan Times**, 5 October 1989).

The 7,000 staff of the Royal Forestry Department in Thailand administer 40 per cent of the nation's land area, where there are at least 6 million "squatters" (Poffenberger, 1990). In October 1989, Thailand's newly appointed Forestry Department chief announced that all these people were to be relocated. He drew special attention to the need to expel the 700,000 hill tribespeople living in these areas (**Bangkok Post**, 10 October 1989). In the Philippines, fully 55 per cent of the country is now classified as forest reserves after the area was greatly expanded in 1975 by Presidential Decree 704, by which all land steeper than 18 degrees in slope was so categorized. Recently it has been estimated that these forest reserves are inhabited by some 18 million people, including most of the country's 6 million indigenous people (Poffenberger, 1990). Yet forestry policies almost systematically ignore these peoples' numbers, welfare and rights (Colchester and Lohmann, 1990; Lynch, 1990).

One of the main problems with this policy of divesting local people of control of land is that the relatively tiny bureaucracies charged with administering and policing the forests are totally unable to prevent public access. Moreover, forest policy has leased out the same areas to private industry as logging concessions. The result of these combined pressures has been environmental devastation on an astounding scale (Repetto, 1988; Porter and Ganapin, 1988; Tucker, 1988; Gadgil, 1989; Myers, 1989; Colchester, 1990a; SKEPHI, 1991).

In sum, besides replacing previously sustainable systems of resource use with extravagant and destructive practices, forestry has created almost insoluble political conflicts between

local people and government, which have further "limited the ability of both the state and the community to effectively control forest use, and have contributed to uncontrolled exploitation and mismanagement" (Poffenberger, 1990:97).

Moreover the alienation of forest lands from local communities has long-term damaging effects on traditional regulative institutions that control access to resources (Douma, Kloezen and Wolvekamp, 1989). The damage may be so severe that, even when local populations subsequently manage to reassert their rights to forest resources, deforestation only accelerates further since traditional controls no longer operate (Tucker, 1988:97; Peluso, 1990:43).

The policy bias against local people and in favour of timber-based economies has also severely damaged the evolution of democratic institutions in Asian countries. In Sarawak, for example, the corrupting influence of the timber trade has promoted the domination of the economy by nepotistic, patronage politics. This has undermined democratic principles and caused an increasing marginalization of rural people, who find they can no longer rely on their political representatives to defend their interests. The practice of dealing out logging licenses to members of the state legislature to secure their allegiance is so commonplace in Sarawak that it has created a whole class of instant millionaires (Colchester, 1989a).

The Commission of Enquiry in Papua New Guinea has revealed a similar decay in standards of public service due to the logging industry (Marshall, 1990) and, in fact, the process is very widespread having formed a crucial component in the "crony capitalism" of the Philippines under Ferdinand Marcos (Anderson, 1987). In Indonesia, logging concessions continue to be one of the perks enjoyed by the ruling military clique (Hurst, 1991).

Ironically, western attempts to promote natural resource conservation have also foundered on this unresolved conflict between local communities and state administration. Like forestry reserves, national parks established on indigenous lands have denied local rights to resources turning local people practically overnight from being hunters and cultivators into "poachers" and "squatters" (Colchester, 1989a). The problem is in fact very widespread. One example of many, is the Dumoga Bone National Park in Sulawesi (Indonesia), where the indigenous Mongondow people, displaced to the hillsides from their valley lands by spontaneous and government-sponsored colonization, have found themselves persecuted as "encroachers" when the hillsides were declared a national park, in turn created to protect the catchment of a dam constructed to promote irrigation agriculture in the lowlands (**Down to Earth**, No. 5, 1989). The last community of forest-dwelling Veddah in Sri Lanka face an identical problem from the creation of the Madura Oya National Park.

Development as Expropriation

The past 40 years have seen a massive acceleration in the rate at which indigenous peoples have been deprived of their lands and livelihoods by imposed development programmes (Bodley, 1982; 1988; Burger, 1987). Large-scale projects such as plantations, dams, mines, military installations, nuclear waste dumps, and colonization schemes have been the most obvious causes (ASS, 1983; Fiagoy, 1987; Tapol, 1988; Colchester, 1985; 1986c,d; 1987a; TABAK, 1990; Tenaza, 1990).

In very many cases these kinds of government-directed development initiatives are justified as being "in the national interest" and the state has thereby exercised its power of "eminent

domain" to deny local peoples' rights. In Indonesia, the government feels entitled to invoke this prerogative for any project or programme in its five-year plans (Butcher, 1988). In India, it is estimated that as many as two million "tribal" people face eviction from their lands to make way for proposed projects (Colchester, 1987b).

Summarizing the experience in India, the Delhi-based Centre for Science and Environment notes:

> "In a country like India, with a high population density and high level of poverty, virtually every ecological niche is occupied by some occupational or cultural human group for its sustenance. Each time an ecological niche is degraded or its resources appropriated by the more powerful in society, the deprived weaker sections become further impoverished. For instance, the steady destruction of our natural forests, pasture lands and coastal water bodies has not only meant an increased economic poverty for millions of tribals, nomads and traditional fisherfolk, but also a slow cultural and social death: a dismal change from rugged self-sufficient human beings to abjectly dependent landless labourers and urban migrants. Current development can, in fact, be described as the process by which the rich and more powerful in society reallocate the nation's natural resources in their favour and modern technology is the tool that subserves this process." (CSE, 1982)

Traditions of Sustainability

> *"We hill tribes preserve the forest to protect people and animals against danger, disease, injury, soldiers and bad spirits. Having a forest belt around the village will bring happiness to the community. Big trees are like mothers, and little trees are like children, needing to be encouraged into flower and growth. If no one comes and cuts the little tree, it will grow up to be a big one in place of those there now. The forest belt and the village are things people are not to destroy."*
> Akha elder (cited in Permpongsacharoen, 1990)

For centuries, the economic systems of Asia's forest peoples have been viewed as backward and irrational. Underlying this prejudice lies a deep mistrust of peoples who are neither subject to government control and taxation systems nor contribute substantially to the market economy (Dove, 1985). The Dutch summed up their prejudice to shifting cultivation in Indonesia by referring to is as the "robber economy". In India, the British classified shifting cultivation areas as "wastelands" - not because the practice laid waste the forests but because it provided no revenue to the Empire (Tucker, 1988). As pressure on natural resources has intensified, such systems have, in addition, been criticized as being environmentally destructive (Agarwal and Narain, 1989; Colchester, 1990a).

However, many detailed studies of these economies made since the 1950s suggest a quite different conclusion. Hunters and gatherers, such as the Penan of Sarawak, who explicitly see themselves as passing their lands on unharmed to the generations that follow them (Brosius, 1986), consciously manage their resources to ensure sustained yield (Langub, 1988a, b). The idea that present generations are merely stewards who hold the lands of the ancestors in trust for future generations is echoed in many indigenous cultures throughout the region, as in

New Guinea where the people refer to future generations as "our children who are still in the soil" (Colchester, 1986b).

Clear evidence has emerged, too, that these ideas are not just long cherished ideals but actually inform and influence day-to-day behaviour. Studies of shifting cultivation reveal not only their extreme variability and complexity but the enormous reserve of vernacular knowledge on which they are based (Conklin, 1954). Practices to conserve resources, restore soil fertility, mimic biodiversity and protect watersheds have been widely documented throughout the region. Equally studies reveal the immense reserve of practical lore in forest-based societies concerning their environment: to the knowledgeable the forest is an immense store- house of medicines, drugs, herbs, spices, fruits, oils, resins, gums, dyes, basts, rattans, horn, ivory, bird's nests and much else (de Beer and McDermott, 1989).

Similarly, studies of indigenous systems of irrigation agriculture have revealed both the appropriateness of the technology and the very complex social institutions which regulate water rights (Coward, 1985). In Thailand, the network of obligations and rights implicit in the traditional institution of the *muang faai* extends the management and protection of resources right up into the forested watersheds which are essential to maintain water supplies (PER, 1990; Tongdeelert and Lohmann, 1991). In such ways, very pragmatic community-based management processes secure biodiversity far more effectively than imposed conservation plans (Lohmann, 1991).

A major obstacle to the appreciation of the value of such "common property" systems has been the myth of the "tragedy of the commons", the notion that "common properties" are free-for-all areas where each individual acts without concern for his neighbours to extract the maximum personal benefit from the land to the ultimate loss of all.

As Michael Cernea has pointed out:

> "The term common property has been largely misunderstood and falsely interpreted for the past two to three decades. Common property r,gimes are not the free-for-all that they have been described to be, but are structured ownership arrangements within which management rules are developed, group size is known and enforced, incentives exist for co-owners to follow the accepted institutional arrangements, and sanctions work to insure compliance. Resource degradation in the developing countries, while incorrectly attributed to 'common property systems' intrinsically, actually originates in the dissolution of local level institutional arrangements whose very purpose was to give rise to resource use patterns that were sustainable." (Cernea, 1989:iii; see also Bromley and Cernea, 1989)

The point from all this is not to conclude naively that all traditional systems of resource use are undisputably "sustainable" and above criticism, but rather that they are far more diverse, complex and subtle than outsiders realize. The social, cultural and institutional strengths inherent in traditional systems of resources use need to be built on to achieve sustainability and not dismissed as "backward" and "wasteful".

Resistance to Destruction

The intimate association between forest peoples and their land, and their determination to maintain their ways of life, is most obviously expressed in their opposition to imposed and destructive change. Such opposition may take very subtle forms. Von Geusau (1986), for example, sees Akha society as fundamentally shaped by centuries of passive resistance to outside interference, creating what might be called a culture of marginalization. Across the region literally hundreds of different indigenous movements have their roots in resistance to cultural, economic and political oppression (Singh, 1982; Worsley, 1957).

Most obvious of these, have been the mass movements of forest groups that have mobilized to confront specific threats to their future. One of the most celebrated such struggles, between indigenous peoples and loggers, is still going on in Sarawak, where Dayak peoples, denied legal or political means of defending their lands, have resorted to setting up human barricades across the logging roads to defend the forests around their longhouses. The government has responded with mass arrests and by passing a new law making all interference with logging roads a criminal offence. Yet despite the intimidation and threats, the blockades have been persistently re-erected, halting timber extraction on the concessions of prominent politicians such as the Minister for Environment and Tourism. Harrison Ngau, a native activist, who was detained in solitary confinement for 60 days in 1987 without charge or trial, remains defiant. "A lot of money is being made from the trees and the Dayaks are not getting anything and they are losing their way of life. The government says this is development. If this is development, the Dayaks do not want it" (Colchester, 1989a; WRM/SAM, 1990). International agencies have also been critical of Malaysia's logging policy. The World Bank has estimated that the country is logging its forests at four times the sustainable rate, while the International Tropical Timber Organization predicts that the primary forests of Sarawak will be logged out by the turn of the century (ITTO, 1990).

In India, the most famous movement to halt deforestation, the tree-hugging "Chipko" movement, developed in the context of a very long history of popular mobilization against government control of forests in the Kingdom of Tehri-Garhwal dating back to the turn of the century (Bandyopadhyay and Shiva, 1987). The movement to assert popular rights to forests intensified during the Gandhian nationalist struggles of the 1920s (Tucker, 1988) reaching a head when on 30 May 1930 protesters at Tilari were fired on by soldiers, who killed 17 people and arrested 80 others (Hegde, 1988).

After independence, Gandhian teaching was perpetuated in the region by European converts who developed a social reform programme centred on the principles of empowering women, curbing alcohol consumption, asserting rights to forest resources and promoting locally run, forest-based industries (Bandyopadhyay and Shiva, 1987). In 1970, serious floods and landslides at Alakananda, associated with the over-cutting of timber in water catchments, caused many deaths and widespread damage to property and agricultural land. The tragedy made a profound impression on local peoples, making them keenly aware of the ecological importance of forests in regulating water supplies (Das and Negi, 1982). Chipko developed on this basis and evolved as a movement of non-violent resistance to logging, in which the mobilization of women, notably tribal Bhotiyas of the village of Reni in Chamoli District, played a leading role (Das and Negi, 1982). Eventually, due to the dogged determination of villagers and activists to protect the remaining forests in the face of arrests and police harassment, the forest management policies in the area were changed. While logging was reduced and finally curtailed, the Chipko grew into a tree planting movement to restore

forests to denuded hill slopes. The movement has subsequently spread and diversified into many other parts of India (Hegde, 1988).

In fact, Chipko is only one of myriads of popular movements within India that have challenged modern economic development. Widespread mobilizations against hydropower programmes that are displacing thousands of tribal communities and flooding their forests and farmlands have sprung up all over the country. Mass marches of protesters have led, in some places, to the cancellation of proposed dams and, in others, have resulted in police firings and deaths.

Not all these popular movements have been environmentally benign. In Bihar, for example, where the battle between commercial plantations and communal use of forests has been symbolized as a struggle between teak and sal trees, Ho tribespeople who have lost rights to forest lands have mobilized against official forestry programmes and developed a "forest cutting movement". Despite having an ancient tradition of respect for forests, including the preservation of sacred groves for religious ceremonies, the Ho have turned to forest clearance as a means of asserting their rights to use the lands which forestry laws deny them.

Popular mobilization against forestry plantations has also developed in Karnataka state in south India. Here, attempts to take over common lands for commercial plantations of fast-growing eucalytus for paper, pulp and rayon led to a "pluck and plant" movement, in which the eucalyptus seedlings were uprooted and replaced by indigenous species that provide products useful to the local peasants (Kanvalli, 1990). The movement eventually led to the suspension of international financial assistance from the ODA and the World Bank to "social forestry" programmes centred on eucalyptus planting and to a rethink in forestry policy in the state which is still in a process of redefinition (e.g., SWDC, 1990a, b, c).

Popular mobilization against state forestry policies has also been intensive in Thailand. With as many as 15 million people living in forest reserves (*pah sangung*) (Lynch and Alcorn, 1991), the government has experienced a long history of compromise and policy shifts to accommodate various vested interests. In recent years, as pressure on forest lands has intensified (Feeney, 1988; Ekachai, 1990; Hafner, 1990), these popular movements have found a renewed sense of unity and courage born of desperation.

Popular pressure finally led the government to declare all timber extraction illegal in 1989, after floods and landslides led to a number of deaths and a public outcry against logging. Since then, the most contentious issue has been the government's promotion of commercial tree plantations on "degraded" forest lands, on which, as in Karnataka, the livelihoods of many rural people depend. Eucalyptus plantations threaten to displace at least 200,000 people. The result, as Larry Lohmann notes:

> "...has been an explosion of rural activism unprecedented since the mid-1970s. Small farmers are standing up to assassination threats; weathering the contempt of bureaucrats; petitioning cabinet officials; arranging strategy meetings with other villagers; calling on reserves of political experience going back decades; marching; rallying; blocking roads; ripping out seedlings; chopping down eucalyptus trees; burning nurseries; planting fruit, rubber and forest trees in order to demonstrate their own conservationist awareness.....Their message is simple. They want individual land rights. They want community rights to local forests which they will conserve themselves. They want a reconsideration of all existing

eucalyptus projects. And they want the right to veto any commercial plantation scheme in their locality." (Lohmann, 1990:10)

Concerted action by rural peasants has brought a number of such plantation schemes to a standstill. However, since the military coup early this year, the political space they have fought for has been squeezed tight. Village leaders who had been involved in the dispute have been harassed and arrested by the military (Anon, 1991).

Resistance to imposed development has been very widespread in the Philippines (ASS, 1983; TABAK, 1990: Regpala, 1990), the most topical example being the Bagobo peoples' resistance to government plans to build geothermal power plants on the forested slopes of Mount Apo, a national park, held sacred by the Bagobo as the domain of the "god" Sandawa (Fay, 1989). Mobilization against the project has linked the indigenous people with local environmental organizations. The protests have been met with intimidatory tactics by the military.

In some areas, relations between the national government and local people have become so bad that the affected populations, denied other means of protest, have expressed their opposition through organized armed resistance. A tragic example involved the World Bank-supported Chico dams project in the Philippines which threatened to displace some 80,000 Kalinga and Bontoc people from their ancestral lands (Bello, Kinley and Elinson, 1982; Lopez, 1987). When the locals protested against the project, the Marcos r,gime responded with brutal violence, leading to an escalating conflict. Many tribals took to the hills and joined the New Peoples Army in defiance of the imposed development programme (Drucker, 1986; Fay, 1987). The conflict endured long after the World Bank pulled out of the project. Villages were repeatedly bombed and subjected to counter-insurgency programmes as a result (**Survival International News**, 1985, 7).

North of the Chico, the resistance of the Tinggian people of Abra to the Cellophil Corporation's logging of the pine forests on their watersheds escalated into similar armed confrontation (Dorall, 1990). In Mindanao, Higaonon resistance to the logging operations of the Nasipit Lumber Co., led to indiscriminate aerial bombardments of their communities and the displacement of hundreds of tribal refugees into the lowlands (Survival International archives).

The Philippines is far from the only area in the region where conflicts over natural resources have contributed to armed confrontations between indigenous people and the state. It is no accident that the Naxalite movement in India has thrived most in remote and forested tribal areas (Banerjee, 1984; Duyker, 1987), where land grievances are most acute and government institutions weakest (**The Economist**, 2 February 1991).

Resistance to exploitation similarly underlies the insurgency in the Chittagong Hill Tracts in Bangladesh (Survival International, 1984; ASS, 1984; Mey, 1984), in Nagaland and other parts of north-east India (IWGIA, 1986), Burma (Smith, 1991; Lintner, 1990a, b) and west Papua (Tapol, 1988; ASS, 1991). The recent liberation movement in Bourgainville in eastern Papua New Guinea, has its roots in a social conflict between indigenous peoples and a mining operation (Filer, 1990).

Whether violent or not, and whether successful or not, the most important and enduring outcome of these conflicts over natural resources has been the local, national and

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international mobilization and organization that has resulted. For example, opposition to the Chico dams and Cellophil Corporation in the Cordillera was organized around the revival of the institution of the *bodong* or "peace pact", by which warring communities would establish peaceful relations. To confront the dam, the *bodong* was extended over a very wide area, even beyond its original extent so that today it embraces a major part of the Cordillera. Today there are literally hundreds of local organizations in the Cordillera concerned with educational programmes, economic development, health, women's rights, marketing and land. As a consequence, despite the lack of legally secure land rights, the people feel once more in control of their ancestral domains (Regpala, 1990).

Change and Sustainability

> *"Don't mistake us. We are not a backward-looking people. Like others we want development and we want to improve our lives and the lives of the next generations; we want better education, better health and better services. But we want to control this development in our land and over our lives. And we demand a share both in decision-making and in the benefits of development."*
> Tinggian statement (cited in Dorrall, 1990:62).

Indigenous peoples and many proponents of "sustainability" assert that genuine "development" can only be achieved if local people control their lands, institutions and have decisive voice in their future. Far from being reactionary forces resisting all change, practically all indigenous communities in the region are actively seeking development; in health, education and increasing involvement in the cash economy (e.g., Gerritsen et al, 1981; May, 1987; Warry, 1987).

This raises the crucial question: can indigenous peoples maintain the balance between their societies and environments when they have rising populations and increasing demands for cash and services? Many development planners are sceptical of the ability of indigenous communities to manage their resources prudently under such changed circumstances, and use this as an excuse for maintaining control of their lands and institutions.

The argument is a difficult one. If, on the one hand, there is unmistakable evidence of environmental decline in many forest peoples' areas where they are exerting increasing pressure on their resources, this has often occurred where their social institutions and environments are simultaneously under heavy pressure from outside. On the other hand, the overall record of government agencies in forest management has been far worse and undermines the claim that the forests are best entrusted to their care.

Papua New Guinea, where collective land rights are strongly protected by law, thus forms a crucial testing ground for such arguments: on the face of it the case is not encouraging. Despite apparently secure land rights, New Guinean communities have frequently negotiated away rights over their lands, by leasing them to logging and mining companies in exchange for royalties. Only later have they come to regret the massive damage that their environments have sustained from such operations. However, closer examination reveals that the issue is not so simple.

Imprecisions in the law have meant that, while the principle of collective landownership is clearly recognized, the law does not make clear who has rights to negotiate land deals.

Outside enterprises have taken full advantage of this loophole, by such means as creating fake landowner companies, exploiting internal divisions within the societies, bribery, extortion and debt leverage (RIC, 1990a; Renner, 1990; Marshall, 1990).

However, even once these examples are discarded, there remain cases where apparently representative landowner associations have allowed their lands to be exploited (Good, 1986; Hughes and Thirlwall, 1988). Perhaps the principal reason is that many New Guineans are very inexperienced in the cash economy and even less aware of the social and environmental implications of inviting in foreign enterprises. There is clear evidence that this situation is changing and much harder bargains are now been struck by local communities than in the past. Another factor, somewhat unique to Papua New Guinea, is that the rate of social change has been unusually rapid. As a result many New Guineans have unreal expectations about what is achievable. Crucially, many no longer believe that their own future, much less that of their children, lies on the land.

Taxation, schooling, labour saving technology, new fashions and consumerism have generated a demand for cash without the corresponding growth of a market for traditional produce. Cashing in natural resources is thus the only ready option for most communities. New technologies such as *wokabaut somils* may provide a solution to this problem (Sargent and Burgess, 1988; RIC, 1990b) but the social and political challenges to sustainability in New Guinea are also significant.

Melanesian political processes have traditionally concentrated power and trade in the hands of "big men". Whereas, under traditional circumstances, such leadership was both openly accountable and also, in the context of frequent inter-tribal war, dependent on the allegiance of clan members, this is no longer so true. Today, community leaders are as likely to be in an office in the local administrative centre as in the village men's houses and their wealth more likely to be stashed in a bank in Port Moresby or Singapore, than accumulated as pigs, wives and cowries. As local leadership becomes less and less accountable and responsive to community needs and rights, the opportunities for making land use decisions that increase personal gain at the expense of the community security, both social and environmental, are widening.

This problem, of what I call "lairdism", whereby the indigenous élite make land use decisions for personal gain rather than in the interests of the communities that they are meant to represent, is very widespread in indigenous societies.[1] Many such societies are radically transforming their political institutions to take account of the problem. In Sarawak, for example, the indigenous élite, after a long history of manipulation and co-optation by the colonial and post-colonial authorities, very often sides with loggers against the local people. To overcome this problem the communities have begun to evolve new "Longhouse

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[1] I use the term lairdism to echo the experience of the tribal crofters of the Scottish Highlands of the eighteenth century. There, the power of the lairds, in whom all land was traditionally vested, was in the past subject to checks and balances by their need to be able to raise a force of fighting men to defend their cattle or go out on raids to rustle from their neighbours. This accountability was undermined, however, after the highlanders' united force was destroyed by the English at Culloden and the British Crown exerted effective authority over the region for the first time. Deprived of military might by the Firearms Acts and secured in their authority by British law and the redcoats, the lairds soon found that their lands could be more profitably used to raise sheep than peasants. The result was the mass enclosure of the uplands and the "highland clearances" by which hundreds of thousands of native people were expelled from their ancestral lands and resettled on the coasts or in the Americas (Prebble, 1961; 1963; 1966).

Associations", run under much more democratic principles than the traditional institutions, to provide themselves with truly representative leadership (Colchester, 1989a).

Agarwal and Narain (1989) note a very similar situation among rural communities in India. There leaders of the panchayats, made up of several often large, caste- and class-divided villages, have proved wholly unrepresentative. The result has been a disastrous degradation of natural resources. Yet where communities have managed to recreate open, accountable and, crucially, equitable forums for making decisions about resource management, Indian villagers have managed to check and even reverse resource depletion.

Perhaps the best known such example is the Chipko and, derivative, Appiko movement, which, as noted above, evolved as a community-based response to unsustainable forestry in the foothills of the Himalayas. Having successfully halted the logging of the watersheds and secured control, though not ownership, of their hillsides, women's groups have mobilized effective tree planting programmes which have begun to spread widely to other parts of India. A key feature in the success of Chipko has been the development of new political associations - what social scientists now call "user groups" (Cernea, 1989) - which are democratic, open and accountable (Hegde, 1988).

In the Philippines, too, the Ikalahan of the eastern Cordillera have developed a successful reforestation programme, based on a transfer of resource control from the Department of Energy and Natural Resources to community management, that has restored water quality and brought revenue to the villages involved (Rice and Bugtong, 1989; Cornista and Escueta, 1990). The project has encouraged the government to develop a programme of leasing out state lands under so-called Community Forest Stewardship Agreements, the legal terms of which have been improved so that indigenous signatures to the agreement are no longer deemed to have waived their ancestral land rights (Gasconia, 1989). The example shows how the same principles of community management can be as effective in promoting reforestation as in preventing deforestation.

In the southern Philippines island of Mindanao, where indigenous communities have lost far more of their lands than in the Cordillera, land reoccupations have become a central part of their struggle. Unproductive state lands and extensive cattle ranches have been taken back by dispossessed tribal people for plough cultivation and subsistence farming (Lumad Mindanaw, 1991). Reorganization into novel political institutions has been a critical step in this process and, as in the Chipko example, women have played a key role in negotiations (Edtami Mansayagan, personal communication).

Conservation groups have also begun to recognize that effective resource protection is only possible if local communities are both fully involved in protected area planning and gain direct benefits from the project. The Arfak Mountains Nature Reserve in west Papua, for example, is based, simultaneously, on a recognition of the ancestral land rights of the Hatam people and a recognition that Indonesian law does not secure them. Although the legal definition of the area as a "Strict Nature Reserve" makes indigenous resource use theoretically illegal, the project, which has local government approval, allows the Hatam to continue to use the area until the law is changed in their favour. Aware of the benefits, the local people have begun to effectively act as a "guard force" for the reserve (Craven, 1990).

Government Promotion of the Community-Based Approach

Many foresters and local government administrators have long realized that effective management of forests cannot be achieved without the goodwill and co-operation of local communities. Attempts to develop such relations between forestry and people have a very long history, which this paper cannot hope to encompass. Whereas, on the one hand, foresters have sought to reconcile commercial logging with the interests of local communities, mainly by providing employment in forest industries, on the other hand, so-called "social forestry" programmes - essentially plantation schemes - have also been developed with a primary focus on poverty alleviation. The latter were, in particular, promoted by the FAO's "forests for people" programme.

However, the notion that local people should not just volunteer goodwill, in exchange for benefits from forest exploitation, but should actually direct forest development and control the resource was not seriously entertained by central governments until very recently. More usually, the need for better communications with local communities has been conceived in terms of "institution building" - of building up the capacity of government to reach out to rural areas and provide for local peoples' needs more sensitively and effectively.

The political consequences of this approach have not been well appreciated but may have done serious harm to the existing institutions within forest communities. As Jack Westoby, once Director of Forestry at the FAO, noted of the craze for "institution building" in the 1960s and 1970s:

> "Only very much later did it dawn on the development establishment that the very act of establishing new institutions often meant the weakening, even the destruction of existing indigenous institutions which ought to have served as the basis for sane and durable development: the family, the clan, the tribe, the village, sundry mutual aid organizations, peasant associations, rural trade unions, marketing and distribution systems and so on." (Westoby, 1987:306)

As noted, the attempts in India to place local resources under the control of recreated *panchayats* has not been as successful as initially hoped because the "user groups" have been oversized and undemocratic. Resource transfers have, anyway, not gained wide political support at government levels in India and, apart from the *panchayat* experiments, the experience remains limited to those communities, like those in the Chipko areas, which have achieved de facto control of local forests through popular mobilization even though, legally, these remain under state ownership and administration.

In Nepal, however, the government has been committed to a process of reallocating usufructory rights (but not ownership) of forest resources to local communities since 1978. The process has been accompanied by progressive legislative changes, which have gradually ceded more and more rights and controls over forest resources to local users. Some of the crucial elements of these laws were only introduced in 1988 and further refinements are predicted.

The programme has been developed with outside technical assistance over many years, has been incorporated into Nepal's Tropical Forestry Action Plan and supported by many bilateral and multilateral funding agencies, including the World Bank. The programme starts from a recognition that security of tenure (understood in this context as secure use rights) is a

pre-condition to sound forest protection and management (Government of Nepal, 1988; World Bank, 1989).

The programme has not been without problems. As in India, experience has shown that the polity appointed by law to control and administer forests, the *panchayat*, is too large a unit and too far removed from day to day decisions to effectively supervise and manage local forests (World Bank, 1989). Attempts are now being made, therefore, to identify and promote smaller more wieldy "user groups" that will more fairly be able to manage forest resources (World Bank, 1989). However, a major problem with the programme is that it has all been imposed from outside and has not built on popular movements or initiatives.

In the Philippines, the same process of resource transfer of forests to the control of local communities is now also just beginning (Government of the Philippines, 1989; Cornista and Escueta, 1990). As in Nepal, the proposed scale of this transfer is truly impressive, but it remains to be seen what will result. Many of the political niceties, which have just begun to be teased out in Nepal, have barely yet been addressed in the Philippines case (Colchester and Lohmann, 1990).

The Role of International Agencies

International development agencies continue to provide a significant proportion of the finances used by Third World countries to develop marginal areas. This source of revenue is likely to increase in the present climate of concern about the fate of tropical forests. Yet, historically, the development agencies have long fought shy of the kind of "bottom-up" approach which this paper has argued is intrinsic to the notion of sustainable development.

Concepts about how to do development have seen a progressive shift over the passed 40 years. In the 1950s and 1960s, the hey day of centrally planned development, the new multilateral development banks led the way in imposing top-down prescriptions on Third World economies. Roads, dams, mines and agribusinesses were assumed to provide a sure route to peace and prosperity.

The Cuban revolution forced a rethink of this simple strategy, as it was recognized that wealth generation without redistribution actually increased poverty and social unrest. In Latin America the new resolve to make development more sensitive to the needs of the poor was one factor that gave birth to the rhetoric of the "Alliance for Progress" (Pearce, 1986), while internationally it was expressed right through the 1970s - the McNamara years at the World Bank - in an emphasis on "poverty focused lending". As part of a strategy that has been described as one of "defensive modernization" (Ayres, 1983: 227), the Bank adopted a policy of promoting land reform in Third World countries (World Bank, 1975). Even forestry lending was revised to have a social welfare focus (World Bank, 1978).

For all this, the top-down approach remained essentially unchanged and the result was an overall failure of development assistance to alleviate poverty. As a World Bank review admitted:

> "The principles guiding beneficiary participation in Bank-financed projects have
> been quite abstract and of limited operational impact. Beneficiaries were not
> assigned a role in the decision-making process, nor was their technological

knowledge sought prior to designing project components."(World Bank, 1988 cited in Hancock, 1989:126)

In the 1980s, the emphasis shifted yet again. Programmes aimed at poverty alleviation, it was widely noted, were not working. For development to really benefit the poor and marginalized, it had to be made culturally sensitive (World Bank, 1982a, b; Chambers, 1983; Mair, 1984; Cernea, 1985; Hughes and Thirlwall, 1988).

Development policy also came under two conflicting new pressures during the 1980s. On the one hand, the rise of governments pursuing monetarist policies simultaneous to a massive rise in interest rates, put poverty-focused lending on to the back burner (El-Ghomeny, 1990), while, at the same time, the development community came under heavy attack for the environmental ruin caused by its projects and policies.

The facts have been overwhelming and the development agencies have been obliged to grope for new ways of making development environmentally sensitive and "sustainable". One attempt to achieve this end has been to "internalize" environmental costs and benefits into project accounting (Warford, 1987; Pearce, Markandya and Barbier, 1989). However, as Bank officials admit some "externalities", notably social, cultural and political considerations are "intangible" and cannot be accommodated by number-crunching development planners.

This paper has presented a quite different approach. For development to benefit the poor, meet their needs, nurture their cultures and accommodate itself to their external political, economic and environmental circumstances, it must be under their control. Only if the natural resources that these communities depend on are controlled by them can they be expected to commit their initiative, labour and financial resources to their prudent management. Only if local communities have a decisive voice in their use is sustainability achievable.

These are not new principles. On the contrary, forest-based communities have been managing their resources in this way for millenia. The challenge today is to reassert these values and to show that, far from being backward and irrational, the principles for which forest peoples are struggling are the very same ones that have recently been "rediscovered" in the search for sustainability.

The degree to which resource transfers can be successfully carried through without long preparation must also vary from one situation to another. Where communities have a long and still vital tradition of community management, the need for the rapid re-establishment of community control is clear. However, where such traditions have long been lost due to severe acculturation and the destruction of traditional institutions, the transition back to communal tenure and management may also prove destabilizing and disruptive. The emphasis at all times should be to build on existing local institutions and initiatives, rather than on imposing change from outside. Alan Durning has argued that, if, in the future, development is to be made sustainable, "international development agencies might look on their role broadly as building the groundwork for grassroots-government partnerships" (Durning, 1989b:53). Many others have argued for an increasingly rigourous application of conditionality as a means of creating such political space for local peoples (George, 1989; Tomasevski, 1989).

However, the political obstacles to achieving such a transformation of development relationships are formidable. As Susan George (1989) notes, and as this study has persistently highlighted, some of the main barriers to a socially just and sustainable development process

inhere in the social orders of Third World countries themselves. Institutionalized injustice, land and wealth concentration, patronage and "cronyism", censorship and repression, are the main enemies of sustainability (Colchester, 1989c).

To date international development assistance has done more to shore up these forces than challenge their hegemony; and this should be no surprise for western economies remain heavily dependent on the cheap resources that the Third World provides. The "north" is unlikely to give up easily the comparative advantage in trade relations that it currently enjoys thanks to the collaboration of Third World élites, much less use the conditionality of its aid to undermine their control of natural resources.

Conclusions

This paper has tried to summarize the social and political context in which forest communities operate and to outline the main obstacles that stand in the way of them achieving a "sustainable" management of their resources.

Examples have been adduced which provide evidence that community-based resource management can be environmentally benign and perhaps even "sustainable". An essential pre-condition for achieving success is that the state divests itself of control of land and transfers it "into the hands of those whose survival directly depends upon their careful management" (Fay, 1989:8). As we have noted, such moves should be built on existing local institutions and initiatives.

Summarizing their studies of community-based resource management in India, Agarwal and Narain (1989:viii) have reached the similar conclusion that, to achieve environmental security, "each rural settlement of India must have its own clearly and legally defined environment to protect, improve, care for and use".

By itself, land security through communal tenure or collective control may not guarantee prudent resource use. Control and management of the resources must be vested in open, accountable institutions which respect the principle of equity. Moreover, long-term sustainable resource use is only likely to be achieved where the community believes its future does lie on the land. The barriers to achieving such a transformation in government policies towards indigenous peoples, development and the environment should not be underestimated (Durning, 1989b). The promotion of sustainability is by definition political. The assertion of indigenous rights and the transfer of resources back to local communities is being, and will continue to be, resisted by those who benefit most from the present development strategies.

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