

Asia Pacific

I S S U E S

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The U.S. Congress established the East-West Center in 1960 to foster mutual understanding and cooperation among the governments and peoples of the Asia-Pacific region, including the United States. Principal funding for the Center comes from the U.S. government, with additional support provided by private agencies, individuals and corporations and more than 20 Asian and Pacific governments.

The Center promotes responsible development, long-term stability and human dignity for all people in the region and helps prepare the United States for constructive involvement in Asia and the Pacific.

SUMMARY As more and more of the world's tropical rainforests are cut down, environmentalists have come up with a new idea to stop the destruction: marketing non-timber products from the rainforest. They argue that if Western consumers buy forest products such as "Rainforest Crunch" ice cream, cookies, cereal, or cosmetics, the forest will become too valuable for the native people to cut down. Most of the trees, however, are cut down not by native forest dwellers but by commercial loggers and ranchers and the migrants who follow them. Moreover, whenever a forest product becomes valuable in international markets, elites are likely to appropriate it and leave only products of little value to the forest dwellers. Marketing rainforest products is not only trying to protect the trees from the wrong people; it perpetuates the process of leaving to the forest dwellers the resources of least interest to the broader society. The focus on "green shopping" is a dangerous distraction from the political and economic changes that must be made to encourage conservation of the world's tropical forests and improve the lot of the people who live there.¹

Little Men and Big Stones

The forest dwellers who prospect along the river banks of Kalimantan (Indonesia's territory that makes up most of the island of Borneo) in search of diamonds to supplement their income have a saying: "Whoever finds a big stone, he will eventually suffer." These part-time miners have no problem selling small stones, but a large and valuable stone is out of proportion to their normal marketing channels. Big gemstones represent great wealth held by *orang kecil*—"little men"—but never for long. News of such finds quickly comes to the attention of *orang besar*—"big men"—in cities in Kalimantan or even in the capital, Jakarta, on the island of Java. These "big men," not wanting to pay the finder more wealth than is deemed appropriate for a poor tribesman in a remote corner of the country, appropriate the stone in the name of the nation—for a national museum, for example—and pay the finder a nominal "honorarium." In some cases the stone may actually go to a museum, but in others it goes to state elites. In either case, the injustice of the extraction is clear, and the finder suffers because of the ill luck that brought him a fortune that, according to the rules of his society, he should never have had.

The parable of the big stone and the little man offers a model that applies to much of the resource development in the tropical forests. When a resource is successfully developed and becomes valuable, political and economic elites are likely to become involved and local inhabitants are unlikely to retain control, like a little man with a big stone. Resource development that is left to the local people, on the other hand, is likely to be less successful and of less interest to the outside world—little stones for little men. This dilemma has a bearing on the proposed solutions to an issue that now preoccupies the whole world: tropical deforestation.

Deforestation and Rainforest Crunch

While human societies have been cutting trees and clearing forests for millennia, the rate and scope of

deforestation has increased dramatically this century, and in particular during the last several decades. This process, especially in the tropical less-developed countries, has alarmed the international community because of its potential effects on global biodiversity and climate. The extinction of tropical forest species represents a permanent loss of the earth's natural heritage, and loss of the tropical forests themselves increases the amount of atmospheric carbon dioxide and the threat of global warming. These effects have unknown ramifications for human society.

The less-developed countries tend to blame their deforestation on their poverty: they say the poor themselves are cutting the forests (either for timber or fuel or to clear farmland), or else other agents such as the state are cutting the forests to benefit the poor. According to this interpretation, poor countries have no alternative except cutting their forests; if the more-developed countries want them to stop, they will have to restructure the global economy to be more favorable to the less developed.

The latest, international manifestation of this view of deforestation can be seen in almost any grocer or health-food store in the industrialized world. Over the past few years, beginning with the efforts of Boston-based Cultural Survival, a number of products containing ingredients from endangered rainforests have appeared on the shelves. These include cereals such as Rainforest Crisp, cookies like Cashew Crunch, cosmetics like the Body Shop's Rainforest Bath Beads, and, perhaps best known of all, Ben and Jerry's Rainforest Crunch Ice Cream. (Even a Rainforest Dog Food is available). The public has responded, with some 30 million Americans buying such products in 1991 and doubtless many more today. But there has been opposition from organizations such as Survival International, based in London, which argues that "green marketing" will only make money for the marketers and may actually cause more damage by overexploiting products, destroying indigenous lifestyles, and distracting global attention from the real problems.

The rationale behind marketing rainforest

You can buy
rainforest cereal,
candy—and even
dog food

products is stated on the back of one of the cereal boxes. The company and others like it hope "to demonstrate that forest residents can make more money per year from the sale of nuts and fruits than they can by logging and ranching." Another product says the venture helps to raise the income of forest residents between 500 to 2,000 percent, which "makes the trees too valuable to cut down." Such statements imply that forest residents are doing the logging and ranching, and that the challenge is to make sustainable forest uses more profitable than unsustainable uses.

Abundant evidence, however, suggests that most deforestation is carried out by external commercial interests, that it does not benefit local communities, and that it represents a highly uneconomic "fire sale" of national resources.² The real culprits are elite political and economic groups whose opportunism is responsible, directly or indirectly, for the loss of the tropical forests. The real victims are the native inhabitants of the forests, who lack the political power and voice to defend themselves and their environment. When these forest inhabitants *are* responsible for the deforestation, it can usually be shown that external political and economic policies have put them in the forest with no alternative other than to clear the land. And today's search for new sources of income for poor forest dwellers is often, in reality, a search for opportunities that have no other claimants because they are relatively unattractive.

Forest Peoples, Loggers, and Truck Farmers

Forests throughout the tropics were traditionally inhabited by tribal peoples who lived (and in some cases still live) by an ancient but sophisticated system of agriculture called shifting cultivation, slash-and-burn agriculture, or "swidden" agriculture. The tribal peoples cut down and burn the forest, then poke holes in the ash-layer to plant seeds without turning the soil. After one to three harvests, they move on and clear another area, allowing the forest to grow back before the cycle is begun again. This is the only sustainable system of agriculture ever developed for tropical areas with high rainfall and poor

**Deforestation
benefits state
elites, not forest
dwellers**

The "Green Marketing" Debate

Cultural Survival: "With market-oriented strategies, human rights groups can protect endangered peoples and habitats at the same time."³

Survival International: "This is at best a money-making gimmick and at worst a harmful idea which could . . . lead to more destruction."⁴

soils. Forest peoples also traditionally gathered or grew products to trade or sell. Together, these activities gave most forest peoples a reasonable standard of living—certainly better than the conditions many now face.

This situation changed radically in the past several decades as the rest of the world began to take an increased interest in the resources of the tropical forests. Some want to log the forests, others to mine the earth, and still others to replace the forest cover with other profitable (for them) land uses such as ranching or export crop plantations. In some cases, people encouraged by governments to migrate into the forests (such as the great numbers of people Indonesia has relocated from crowded Java and Bali to more remote islands) simply want land to farm for subsistence. In all cases, the new activities have impoverished the indigenous peoples by degrading their forest environment.

To take the case of Indonesia, commercial loggers have come into the forest to harvest the trees for lumber and pulp, and in their wake have come market-oriented "truck farmers." These are either lowlanders that urban entrepreneurs have outfitted with trucks and chain saws, or government-sponsored transmigrants who turn to slash-and-burn agriculture after the failure of their farming systems, many of which were designed with the assistance of the World Bank. They follow the logging roads into the hills and, as soon as logging operations have been completed, burn the remaining timber and plant cash crops to supply the rapidly growing urban markets. After two or three years, the land cover succeeds to grassland and the farmers move up the logging road and begin again.

**The problem is
weak peoples amid
rich resources**

Most government officials blame deforestation on the traditional swidden agriculture of the forest dwellers. Although the new shifting cultivation of truck farmers and transmigrants is far more destructive, the political power of the urban business class and the transmigration program make it impossible for officials to curtail or even acknowledge this. Also to blame are the logging concessionaires who build the roads but shirk their legal responsibility to control their use. But, again, the political clout of the offenders usually makes it impossible for government officials to acknowledge this dimension of the problem. In short, what has been called a straightforward “law-and-order problem” involving exploitation of the forest by “urban based entrepreneurial shifting cultivators”⁵ is instead officially construed as a problem involving the forest dwellers. The “big men” escape criticism while the “little men” take the blame.

When Little Stones Become Big Stones

The “little man, big stone” model can be seen most clearly in the case of products previously unknown or not valued that suddenly acquire value. In several areas in Indonesia’s outer islands, gold fields were historically developed by small-scale, household-level operations. Observing their modest successes, the national government several years ago licensed the mineral rights to corporate concessionaires and declared the smallholders to be “illegal.”⁶ Some regulation may have been necessary, as officials claimed, to control the many miners flooding into the region, but that did not justify shifting the benefits from local shareholders to corporate outsiders.

The same thing happened in the case of rattan, which has been gathered and traded by Kalimantan’s forest dwellers for centuries. Rattan began to enjoy a boom in the mid-1980s, and in 1989 the government banned export of half-finished rattan in an effort to add on value before export. This was laudable, but officials then placed all export of finished rattan under the control of the Indonesian Association of Furniture Producers, headed by the “kings” of Indonesia’s timber industry—very big men indeed.⁷

A contrasting example is the development of South American Para rubber (*Hevea brasiliensis*) in Indonesia. More than three-quarters of the country’s production is produced in small groves of a hectare or so by smallholders—ordinary farmers who produce rubber with household labor to make extra money. They grow food crops as a hedge against the volatile rubber market, and they grow rubber as a way of coping with the risk of drought, flood, or pests wiping out their food crops. Rubber cultivation has many features supposedly favored in current schemes to help tropical forest peoples develop while conserving their environment. It is adopted quickly by local peoples, allows them to produce for national and international markets, and reduces their dependence upon forest-based food cropping. But smallholder rubber development also contradicts unstated governmental goals, such as centralized control, that are better fulfilled by estate development of rubber.⁸

Smallholders, as a result, have received little official support. Until relatively recently, the government directed virtually all technical, material, and regulatory support—even international loans, grants, and projects—to the estate sector. Even research and development levies collected from all growers (and therefore largely from smallholders since they produce the bulk of the crop) have gone to support estate production. The government has begun to help smallholders, but only a few have benefited (8 percent in the 1980s). In addition, the form that this help assumed—a government estate surrounded by smallholder estates—was really an attempt to remake smallholdings in the image of, and under the control of, the government estates. This provided the disadvantages of the estates at the cost of the advantages of the smallholdings. It proved to be economically unviable, and the approach has now been largely abandoned.

These examples suggest the existence of a common pattern of resource development in the tropical forest: forest people develop a resource for market, and when and if this market attains sufficient importance, central economic and political interests assume control of it based on self-interest

disguised as the common good. Given this pattern, rainforest marketing may attract the unwanted attention of outsiders to the few forest resources still left in the hands of forest dwellers, with the result that these resources will be lost as well.

Little Stones For Little Men

This pattern throws into question the premises of well-intentioned international efforts to develop nontimber forest products. For example, a recent United Nations (UNESCO/FAO) study of the prospects for a crafts industry to protect Kalimantan forests concludes that in addition to handicrafts, the income of rural and isolated people can be supplemented by "agriculture or other activities, such as butterfly farms, crocodile farms, fish farms, and medicinal plant collection."⁹ Notably absent from the list are the tropical forest products of greatest interest to the broader society: trees for timber or pulp, gems and other minerals, rubber and other smallholder export crops such as coffee, tobacco, and coconuts, and finally, the world's greatest botanical gene pool.

The UN study's list of potential sources of income is a list not of what the broader society values most, but of what it values least. It is a list of the "little stones" that the broader society is likely to allow the forest peoples to keep, so long as some twist of fate does not suddenly render one of these products more valuable than is deemed appropriate for a poor forest dweller. A list of potential income sources that finds nothing more lucrative than butterfly and crocodile farms in an environment as rich in resources as Southeast Asia's tropical forests is a recommendation not for the empowerment of the forest peoples but for their impoverishment.

The Real Crunch on the Rainforest

Thus, the marketing of things like Rainforest Crunch as a solution in and of itself to the problem of tropical deforestation is a mistake. The

focus on developing new commodities for the forest residents distracts attention from the fact that they already have valuable commodities that they are not being allowed to fully exploit for their own benefit. The question is whether tropical forest dwellers need to be *helped* to develop new resources or *allowed* to develop their existing resources by the broader political and economic systems in which they are enmeshed.

Forests are not degraded because forest peoples are impoverished; rather, forest peoples are impoverished by the degradation of their forests and other resources by external forces. The problem is not that the forest peoples are poor but that they are politically weak—they inhabit a resource coveted by groups more powerful than they. The problem is not that the forest is environmentally fragile, but that it is politically marginal—inhabited by peoples who are too weak to insist on its sustainable use. This imbalance stems from an association of rich resources and weak peoples.

The imbalance operates on several different levels. At the level of the individual, a poor man or woman is hard put to hang onto resources incommensurate with his or her social and political status. At the level of the community, marginal forest dwellers have a difficult time contesting appropriation of their resources by central political and economic forces. At the level of the nation, countries with poorly developed political and economic institutions eagerly acquiesce in the under-valued purchase of their resources by powerful industrialized nations. For example, Japan can import valuable hardwoods from Malaysia to make throw-away chopsticks and concrete shuttering because Malaysia's political and economic institutions are insufficiently developed to insist on pricing that reflects the true value to society as a whole. As long as a state elite makes a profit, the sales continue, regardless of whether their gain outweighs the social and environmental losses at the local level. A political-economic imbalance between Malaysia and Japan makes this inequitable extraction of hardwoods possible at the international level just as a political-economic imbalance within Malaysia

**Elites get timber,
forest people get
butterfly farms**

**Forest peoples
don't need to find
new resources . . .**

enables national elites to appropriate resources from local communities. Respectively, the nation and the local people are "little men," too weak to hang on to their "big wealth." In the most recent replication of this pattern, Malaysian logging companies are starting to exploit the forests of less-developed Guyana.¹⁰

This analysis is based upon Southeast Asian data, but there are important similarities in the development of forest resources in South America and Africa. In the Amazon, for example, government policy has supported forest clearance by cattle ranchers and land-hungry migrants. And, as in Indonesia, political and economic elites have dominated rubber production in the Amazon almost up to the present day.

Easing the Rainforest Crunch

Since the forest peoples are not responsible for most of the forest degradation, they cannot be responsible for ending it. It is not they who need to have their cost-benefit ratios altered. Proponents of rainforest marketing argue that Brazil nut production can provide three to five times as much income from a given area of land as forest clearance and cattle raising.¹¹ The flaw in this argument is that the people who harvest Brazil nuts are not the same as the people who raise cattle. What is needed is not to make forest protection more profitable for forest dwellers but to make forest destruction less profitable for outsiders—and it seems unlikely that breakfast cereal can do this. Imagine reading on the back of a cereal box: "We hope to demonstrate that timber kings and ranching barons can make more money per year from the sale of nuts and fruits than they can from logging and ranching."

The focus of efforts to solve the problem of tropical deforestation should not be on the forest but on the wider society. The direct sources of large-scale degradation of the forest, such as logging, truck farming, mining, plantations, and ranching, all lie outside the forest. The sources of impoverishment of the forest people are also outside the forest: the national markets of many important commodities (such as cloves, coffee, and oranges in Indone-

sia) are biased against the forest residents who actually produce them. In many cases, forest dwellers must market their commodities through state-created marketing bodies and receive only a fraction of their worth. Removing regulations that restrict access to markets for nonelites would be one of the quickest and most effective ways to improve the welfare of the forest residents.

Smallholder cultivation of rubber in Borneo is an example of helping forest residents grow a product they already have. The smallholders use rubber varieties and techniques of cultivation and production that have remained unchanged since the plant's introduction to Southeast Asia at the turn of the century; not surprisingly, their rubber has the lowest quality and fetches the lowest price.¹² Productivity could be greatly improved by introducing high-quality planting material and providing advice on better farming techniques through agricultural extension. In Malaysia, such government efforts raised average smallholder yields by 126 percent between 1965 and 1980; but the corresponding figure in Indonesia during the same period was just 17 percent.

Whatever development course is followed, it is important to avoid the kind of centralization that leads to external appropriation and degradation of the resource. The government should help small rubber growers on their existing plots rather than set up large and expensive estate projects. If an export organization is deemed necessary, as in the case of rattan, a nongovernmental organization would be preferable to an elite-dominated trade association.

The story of the little man and the great treasure is perhaps most familiar to Western audiences through John Steinbeck's novel *The Pearl*. A poor diver finds a great pearl but society conspires to defraud him of it, bringing him not wealth and happiness but violence and tragedy. At the end of the story he hurls the pearl back into the ocean. This may tell us something about further willingness to conserve forest resources on the part of the forest dwellers, whose past record of conservation is very good. Forest dwellers who benefit from only the most minor forest products are unlikely to feel

any great commitment to conservation; indeed, the reverse is possible. In the last century, the desire of Indonesia's rajahs and Dutch colonialists to control the sandalwood trade caused Timor islanders more pain than profit. As a result "whenever possible the population tried to get rid of the troublesome sandalwood tree by clandestine felling or by other means."¹³ The response of native Hawaiians to exploitation of native sandalwood by the monarchy during the 19th Century was similar.¹⁴

Conclusion

Development and conservation of tropical forests must begin not with a search for resources that forest dwellers do not have but with a search for the institutional forces that restrict their ownership and use of existing resources. The clearing of the tropical forests is being rationalized and thus supported by the fiction that the beneficiaries are the poor and that this is being done to combat their poverty. Demonstrating that deforestation actually benefits a small elite would remove much of the justification for it. Indeed, far from benefiting from forest clearance, the forest residents suffer greatly as a result, because an intact forest ecosystem is the basis of their livelihood.

The cases of rubber and rattan show that forest peoples do not need access to global markets as much as they need unrestricted access (in a regulatory sense) to their own regional markets and development infrastructure. The global community could do much more by lobbying for such access, persuading the national governments to eliminate ruinous commodity monopolies, than by investing "rainforest marketing" with illusory importance. Consumers in the more-developed world, whose purchases make them a knowing or unknowing part of inequitable economic systems, have a responsibility to make sure that the message on the back of the cereal box is the full story. Sharing control of the 'big stones' with the 'little men' would do more to save the tropical forests and peoples than filling shopping baskets with "Rainforest Crunch."

... they need to gain control of the resources they already have

NOTES

1. The data presented here were gathered during eight years of residence and research in Indonesia between 1974 and 1985, supported by the National Science Foundation, the Rockefeller and Ford Foundations, and the East-West Center. The current analysis was initially supported by Yale's Program in Agrarian Studies, and some of it was originally presented in *Environmental Conservation* 20, no. 1 (1993).
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