



ANALYSIS

Busting the Forest Myths: People as Part of the Solution

The long-held contention that rural forest communities are the prime culprits in tropical forest destruction is increasingly being discredited, as evidence mounts that the best way to protect rainforests is to involve local residents in sustainable management.

BY FRED PEARCE

Some forest campaigners have been saying it for years, but now they have the research to prove it: Local communities are the most effective managers of their forests, best able to combine sustainable harvests with conservation.

A series of studies unveiled in the past year have skewered the long-held view — still espoused by many governments and even some in the environmental community — that poor forest dwellers are the prime culprits in deforestation and that the best conservation option is to combine strict ecosystem protection in some areas with intensive cultivation elsewhere.

Here are seven myths punctured by recent research.

Myth One: Forests prevent short-term rural wealth generation. Forest communities therefore have an economic incentive to get rid of them and replace them with permanent farms. Forest protection requires curbing them.

Reality: A six-year global study of forest use, deforestation and poverty conducted by the Indonesia-based [Centre for International Forestry Research](#) (CIFOR) has found that harvested natural resources make up the largest component of incomes from people living in and around tropical forests. Nature contributes 31 percent of household income, more than crop farming (29 percent), wages (14 percent), or raising livestock (12 percent).

Forests emerge from the study — the result of detailed interviews conducted by Ph. D. students at 8,000 households in 24 countries — as important sources of food, firewood, and construction materials that communities want to protect. But this

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forest fecundity is largely ignored by policymakers, says Frances Seymour, CIFOR's director-general, who presented many of the findings at the Royal Society in London last June, ahead of publication in peer-reviewed journals. "This income is largely invisible in national

statistics," she said, because the produce is either consumed in the home or sold in local markets unmonitored by national data-collectors.

Myth Two: Deforestation is carried out mainly by the poorest farmers, often as a coping strategy to get through bad times. What they need is economic development to wean them away from the forests.

Reality: The same CIFOR study found that within forest communities it is the rich who take more from the forests. They have the means, wielding chainsaws rather than machetes. But they are also the top dogs, able to assert control of community-run forests. "We see that at the level of households within villages, but also at a national and international level, where deforestation has been faster in Latin America, which is richer," says Seymour.

The study found that just over a quarter of all households clear some forest each year, with an average take of 1.3 hectares, mostly to grow crops. But the bottom line is that deforestation is usually a source of wealth for the rich in good times, rather than a coping strategy for the poor. In bad times, the poor are more likely to leave the forest in search of wages than to stay and trash the place, says CIFOR principal scientist Sven Wunder.

Myth Three: Forest protection, many governments say, cannot be entrusted to local communities. It is best done by state authorities, perhaps with help from environmental NGOs, on land under the control of the state.

Reality: A recent meta-analysis of case studies found that [deforestation rates are substantially higher on lands “protected” by the state](#) than in community managed forests. There are well-known maps showing that the best protected parts of the Amazon rainforest, for instance, are those designated as native reserves, run by the Kayapo Indians and others. This seems to be the rule rather than the exception, Luciana Porter-Bolland, of the Institute of Ecology in Veracruz, Mexico, and others concluded.

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When the state is in charge, rules are barely enforced, corruption is frequent, and forest dwellers have little stake in protecting forest resources, because they do not own them. Where the people who live there control the forests, they are much more likely to protect them.

The analysis confirms [a global study two years ago by Ashwini Chhatre of the University of Illinois at Urbana-Champaign](#) who, with Arun Agrawal, compared data on forest ownership with the carbon stored in forests and found that community forests held more. “Our findings show that we can increase carbon sequestration simply by transferring ownership of forests from governments to communities,” says Chhatre.

Myth Four: Agriculture is bad for biodiversity.

Reality: It sounds like a no-brainer. Of course, intensive farming will wreck forest ecosystems and replace them with monocultures. But traditional farming systems are often biodiverse, and may take place within forest ecosystems, rather than replacing them. New research in Oaxaca state in Mexico suggests that such farms enhance forest biodiversity.

James Robson and Fikret Berkes of the University of Manitoba investigated the impact of the recent widespread desertion of forests by Oaxaca farmers heading for the cities. The natural forest reclaimed their fields and orchards, but the result was an overall loss of biodiversity. The authors concluded that traditional low-intensity farming systems within forests [had created a “high biodiversity forest-agriculture mosaic”](#) that exceeded that in primary forest, but that disappeared with the farmers. In other words, there was greater biodiversity in the low-intensity farming area than in primary forest.

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This may be no isolated finding. CIFOR’s Christine Padoch said the Oaxaca study showed that “rapid urbanization, simplified agricultural systems and abandonment of local resource-use traditions are sweeping across the forested tropics.”

Myth Five: Illegal local wood-cutters are a major threat to forests. Much better to maximize both production and conservation by curbing local wood-cutters and allowing commercial loggers to take over those forests set aside for “productive” use. Commercial loggers are, it is argued, easier to police and can operate according to strict rules on sustainability, such as those of the Forest Stewardship Council.

Reality: There is a serious downside to this approach. In central and West African countries such as Cameroon, Ghana, Cote d'Ivoire, and Liberia, small-scale logging by locals is often a much bigger contributor to local economies and employment than large-scale enterprises. Moreover, most lumber harvested by this informal sector is processed locally for furniture and other local needs, whereas large-scale enterprises mostly export the timber as logs.

It is far from clear that the local wood-cutters do more damage than outside loggers. But a study by the Washington-based [Rights and Resources Initiative](#) found that they produce more benefits for their local communities, in jobs, income, and products. And, like other local forest users, they may be more amenable to community controls on their activities. Andy White, the coordinator of the initiative, concluded that small-scale forest enterprises “have contributed substantially to equity, forest conservation, and poverty reduction. Supporting their development and suspending public support for large-scale industrial concessions should be key priorities.”

Myth Six: Degraded forest land is a wasteland that should be targeted for high-intensity agriculture such as oil-palm cultivation and timber plantations. Many environmentalists encourage this. For instance, the World Resources Institute is mapping Indonesian degraded lands to help the government there “divert new oil palm plantation development onto degraded lands instead of expanding production into natural forests.”

Reality: This is risky. A study in Borneo, a major biodiversity hotspot, found that, even after repeated logging, [degraded forests retain 75 percent of bird and dung-bettle species](#), which were chosen to represent wider biodiversity. The indiscriminate conversion of these forests to oil-palm and other intensive agriculture is a big mistake, says David Edwards,

‘Natural resource protection can only be achieved if the rights of forest-dwelling people are respected,’ says one advocate.

co-author of the study and now at James Cook University in Australia. “Degraded forests retain much of the biodiversity found in primary forests. Conservationists ignore them at their peril.”

Myth Seven: To prevent further forest destruction, we urgently need to intensify agriculture. This is often called the Borlaug hypothesis after its originator, the green revolution pioneer Norman Borlaug. He argued that the more we can grow on existing farmland, the less pressure there will be to clear forests for growing more crops.

Reality: The counter-argument is that commercial farmers don't clear forests to feed the world; they do it to make money. So helping farmers become more efficient and more productive won't reduce the threat. It will increase it.

Thomas Rudel of Rutgers University in New Jersey [compared trends in national agricultural yields with the amount of land planted with crops](#) since 1990. He argued that if Borlaug was right, then the spread of cropland should be least in countries where yields rose fastest. Sadly not. Mostly, yields and cultivated area rose together, as farming became more profitable.

All this raises vital issues for forest protection. Twenty years ago, at the Earth Summit in Rio de Janeiro, sustainable development was declared the key to a green and equitable global future. But nobody quite knew what it meant. The UN is planning [a follow-up Rio+20 event this June](#), and the question of what is meant by “sustainable development” will come under intense examination.

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Many industrialists there will argue that sustainability requires high-intensity, high-efficiency economic activity that can produce the products we need without taking over wild areas such as rainforests. But the recent findings from CIFOR and others strongly suggest that may be the wrong way to go. Perhaps forests and other ecosystems can be protected best by protecting the land rights of their inhabitants, and by trusting their knowledge, priorities and management skills.



writes, prompting conservation groups to step up boycotts against rapacious timber interests. [READ MORE](#)

As the Rights and Resources Initiative's Andy White puts it: "Global natural resource protection and production for the benefit of all will only be achieved in coming decades if the rights of rural and forest-dwelling people in the developing world are respected."

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Fred Pearce is a freelance author and journalist based in the UK. He serves as environmental consultant for *New Scientist* magazine and is the author of numerous books, including *When The Rivers Run Dry* and *With Speed and Violence*. In previous articles for *Yale Environment 360*, Pearce has written about the environmental consequences of [humankind's addiction to chemical fertilizers](#) and the promise of "[climate-smart](#)" agriculture.

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