

## **Striving for Sustainable Forest Management in Mexico and Honduras**

Author: Tucker, Catherine M.

Source: Mountain Research and Development, 20(2) : 116-117

Published By: International Mountain Society

URL: [https://doi.org/10.1659/0276-4741\(2000\)020\[0116:SFSFMI\]2.0.CO;2](https://doi.org/10.1659/0276-4741(2000)020[0116:SFSFMI]2.0.CO;2)

---

BioOne Complete ([complete.BioOne.org](https://complete.BioOne.org)) is a full-text database of 200 subscribed and open-access titles in the biological, ecological, and environmental sciences published by nonprofit societies, associations, museums, institutions, and presses.

Your use of this PDF, the BioOne Complete website, and all posted and associated content indicates your acceptance of BioOne's Terms of Use, available at [www.bioone.org/terms-of-use](https://www.bioone.org/terms-of-use).

Usage of BioOne Complete content is strictly limited to personal, educational, and non - commercial use. Commercial inquiries or rights and permissions requests should be directed to the individual publisher as copyright holder.

---

BioOne sees sustainable scholarly publishing as an inherently collaborative enterprise connecting authors, nonprofit publishers, academic institutions, research libraries, and research funders in the common goal of maximizing access to critical research.

Catherine M. Tucker

116

# Striving for Sustainable Forest Management in Mexico and Honduras

## The Experience of Two Communities



*Can a community achieve economic development while protecting its forests? This question challenges communities for which forests represent a primary resource. Community forestry offers one approach, and two cases from mountainous zones in*

*Mesoamerica illustrate its promise and difficulties. While the communities' exploitation of forest resources is limited, they face problems that reflect issues with wide relevance to the developing world and sustainable forestry.*



**FIGURE 1** Hauling firewood from a La Campa communal forest. (Photo by Catherine Tucker, June 1994)

### The study sites

#### La Campa, western Honduras

"A municipality with few resources cannot provide all the development desired," observed a La Campa council member during a community meeting, as residents hotly debated whether to permit logging to fund road construction. The *municipio* (county) of La Campa, in western Honduras, banned logging in 1987 after a long struggle with the Honduran Forestry Development Corporation (COHDEFOR) to expel sawmills that had degraded communal forests. The residents reached a consensus to cease resin tapping and limit forest use to subsistence needs (Figure 1). Despite the loss of timber income, they have completed a potable water system, expanded roads up steep mountain slopes, and constructed schools. The municipality has received development assistance through government programs and nongovernmental organizations (NGOs), but residents have provided the labor. Yet many residents would agree with one mother who noted, "things have not changed much." Most households depend on subsistence production of maize and beans; children still suffer from malnutrition; jobs are scarce.

#### Capulálpam de Mendez, Mexico

Over 1000 km away, Capulálpam de Mendez lies in the Sierra de Juárez, Oaxaca, Mexico. Similar to La Campa, pine-oak forests represent the most important natural resource on the steeply sloping terrain, and the community has a history of effective self-governance. Capulálpam also suffered forest degradation by outside interests; FAPATUX, a paper mill with a government concession to exploit the region, logged their forests from the 1960s to the early 1980s. Capulálpam participated in a grassroots organization that united many

communities against renewal of the FAP-ATUX concession. In 1982, Mexico's government decided not to renew the concession and recognized communities' rights to manage their forest resources.

### Community forestry as an alternative to external management of resources

#### Capulálpam

While La Campa chose to severely limit market-related forest activities, Capulálpam pursued forest production. The people gradually acquired the experience necessary to manage their forests; they sold small volumes of timber and reinvested the profits in community projects. With these funds and *tequios* (obligatory community labor), Capulálpam constructed a sewage system, built new schools (including a technical college), and established community enterprises—a sawmill (Figure 2) and a rock-crushing plant. Unlike La Campa, Capulálpam has created local jobs and has cooperated with other communities. In 1989, Capulálpam and four other communities founded the Union Zapoteca-Chinanteca de la Sierra Juárez (UZACHI) with assistance from an NGO, Estudios Rurales y Asesoría. The union has hired a permanent forestry staff, with considerable savings over separate contracts for expensive forestry services. UZACHI foresters helped Capulálpam develop a management plan with 12,467 hectares of forest designated for silviculture (Figure 3) and the remaining 13,481 ha for domestic use, recreation, and reserves. Residents collect and sell edible mushrooms seasonally and have started a project to raise mushrooms artificially in beds (Figure 4). Capulálpam has become a regional success story, and it received certification from *Smartwood*® for sustainable forest management, qualifying its lumber to be sold under a green label meriting higher prices at market.



**FIGURE 2** Trimming a log in Capulálpam's sawmill. (Photo by David Dodds, May 1999)

### La Campa

La Campa has focused on preventing non-residents from utilizing its forests while meeting inhabitants' needs. The municipal council has tried to manage forests in the public interest while continuing the logging ban. It sold pine saplings to fund a public project and permitted a group of residents to resume resin tapping. Areas of degraded forest have been regenerating. La Campa's determination to protect its forests received recognition in 1996, when it won second place in a national competition to reward outstanding examples of forest conservation.

### Challenges for both communities

#### La Campa

Both communities face challenges for continued success in forest management. In La Campa, the municipal council has allowed the growing population to claim private holdings from communal forests. Expanding coffee production, under national and international incentives, has also spurred incremental forest clearing. Coffee profits have contributed to social heterogeneity and have undermined the traditional relationships that facilitated communal efforts and consensus building. Compared with Capulálpam, La Campa has a higher population density and less forest (an estimated 6000 ha); thus, it has more demands to meet with fewer resources. Conversion of communal forests to private holdings is a matter of contention; a majority approve, although it has placed greater demands for firewood on the remaining forests.

#### Capulálpam

In Capulálpam, the traditional system of obligatory community service, which has been the foundation for recent progress, remains strong. Yet the younger generation is finding it difficult to maintain their

dual responsibilities to community and family in the wage-driven, market economy. Many—including the highly skilled, potential leaders—migrate to large urban areas. The sawmill, kept to low production volumes through hard-won consensus, operates intermittently and suffers a high labor turnover. The rock-crushing facility, built to provide gravel for state road-building projects that failed to materialize, has burdened Capulálpam with outstanding debts. The people have been debating whether the enterprises provide enough value-added given their costs and which alternatives may be best.

### A determination to further pursue communal management

Through different approaches toward forest management, La Campa and Capulálpam have achieved relative success at protecting their forests. The achievements were facilitated because the national governments, bowing to pressure, allowed community forest management. But more importantly, the residents' organizational experience and background of self-governance contributed to their ability to implement forest management. Their local governance included the practice of reaching a consensus or compromise agreements in the community's best interest, above strong differences of opinion. Moreover, they had strong traditions of communal labor to accomplish community projects and a commitment to forest protection. The communities nevertheless face difficulties related to management shortcomings. Both communities—unwilling witnesses to their forests' degradation by external agents—believe unwaveringly that they are the best ones to manage their own forests. As they face changing circumstances and new problems, they have found in this conviction the greatest promise and challenge of community forestry.



**FIGURE 3** An area 5 years after logging for Capulálpam's sawmill; seed trees (*árboles padres*) were left standing to allow this natural regeneration. (Photo by David Dodds, May 1999)



**FIGURE 4** Spraying spores over artificial beds for the production of mushrooms in Capulálpam. (Photo by David Dodds, May 1999)

### FURTHER READING

- McCay B, Acheson J, editors.** 1987. *The Question of the Commons: The Culture and Ecology of Communal Resources*. Tucson: University of Arizona Press.
- Merino L, coordinator.** 1997. *El Manejo Forestal Comunitario en Mexico y sus Perspectivas de Sustentabilidad*. Cuernavaca, Mexico: Universidad Autonoma de Mexico, Centro Regional de Investigaciones Multidisciplinarias.
- Ostrom E.** 1990. *Governing the Commons*. Cambridge: Cambridge University Press.
- Tucker C.** 1999. Private versus communal forests: forest conditions and tenure in a Honduran community. *Human Ecology* 27:201–230.

### AUTHOR

#### Catherine M. Tucker

Center for the Study of Institutions, Population, and Environmental Change (CIPEC), Indiana University, 408 North Indiana Avenue, Bloomington, IN 47408, USA.  
tuckerc@indiana.edu

Catherine Tucker is an ecological anthropologist and research coordinator at the Center for the Study of Institu-

tions, Population, and Environmental Change (CIPEC) at Indiana University in Bloomington, Indiana. She teaches and is participating in an interdisciplinary project to study processes of forest change in Latin America. Her research has focused on the problems of community forest management in relationship to local dynamics and national policies.