A Future with Forestry

Community Forest Enterprises Offer Hope for Rural Mexico

by Benjamin Hodgdon

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It is before dawn when the late-1980s pickup truck rumbles to life outside Gabriel Reyes's adobe-walled home, perched on the steep slopes of the Indigenous Zapotec community of San Juan Ozolotepec, high in the mountains of Mexico's southern state of Oaxaca. The truck's cargo, young men in their teens and early 20s, bundled against the morning cold, are headed out on the first leg of a long, costly, and dangerous journey that will land them on the other side of the US border — if they are lucky. Watching the pickup climb the rocky, narrow track out of the village, Reyes shakes his head.

"Many here see no future in the countryside," he says. "That's why I left when I was 15. But you can't stay up north forever, and it is getting harder and harder to make it work in the US, especially now." Pointing through the clearing mists to San Juan's pine-studded hillsides, his face changes. "That right there is our best hope — the trees on our land. If we manage them right, they could secure a better future for me, for my family, for this whole community."

Reyes's optimism is startling, given the problems his village faces. Over the last decade, local agricultural production has all but collapsed, and, as a result, most families in San Juan rely on remittances from migrants working in the US to make ends meet. At the same time, deforestation in this region is up sharply, and land conflicts in surrounding communities have erupted, at times turning violent. More menacingly, narcot-

ics trafficking routes are being carved through the remote mountain forests around San Juan as drug smuggling operations are squeezed out of more accessible territory by President Felipe Calderon's increasingly militarized war on drugs.

In the face of all these challenges, the growing number of Mexican communities taking control of their forests form an underappreciated success story. What has taken root here is a rarity in the Global South, where headlines tell almost exclusively of the continuing destruction of forests and further marginalization of the rural communities that rely on them. In Mexico, by contrast, where over half the forests are under community tenure, locals have developed what is probably the most advanced community forestry sector on Earth. There are currently more than 2,000 localities throughout Mexico practicing forestry, many in the poorest and most remote corners of the country, where the interrelated problems of poverty, migration, rural crime, and environmental degradation are most acute.

Three decades after the first Mexican communities organized to wrest control of their forests from concessionaires, strong evidence shows that forestry offers one of the best solutions to the rural crisis. Successful community forestry operations create local employment and increase family incomes, as well as generating funds for infrastructure and social services that the government fails to deliver. In many communities, the development of local forestry enterprises has helped stem the tide of rural migration while bolstering local pride and indigenous traditions, and reducing illicit activities and social conflict. Recent scientific analyses show that well-managed community forests are more effective than parks or conservation areas in maintaining forest cover, protecting biodiversity, and safeguarding ecological services like watershed health and carbon sequestration.

It is a model that Reyes and other leaders in San Juan have decided to extend to their own community.

"With community forestry, we see it is possible to conserve our resources, but at the same time to be productive and competitive, and to start rebuilding our local economy," says Mario Zavaleta Perez, who has taken a lead role in developing forestry in San Juan. "Our goal is to be a community that offers a future for our children and that is a model for our neighbors. And one where no one leaves for lack of work."

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A lofty vision for sure. But evidence suggests that San Juan's chances are good, especially given the substantial size of their forest, which extends over 10,000 acres.

What is happening in San Juan has importance far beyond these remote mountains. Despite all the noise over immigration in US political debates, there is almost no discussion about how the lack of opportunities in places like San Juan helps drive the outflow of migrants. Even less discussion surrounds constructive ways to address the rural crisis in Mexico. The efforts to build community forestry are a compelling example of a regime of natural resource conservation that provides for a sustainable source of employment for local economies. But it is a model whose future is uncertain.

Legend has it that Hernán Cortés, when asked to describe Mexico upon his return to Spain in 1528, ostentatiously crumpled up a piece of paper and laid it out on a table before him. Cortés had recently been in Oaxaca, a place that, as he lamented to King Charles V, was "so mountainous it simply cannot be traveled," causing problems for the conquest.

Today, twisting along Oaxaca's serpentine mountain roads, Cortés's summation of the state's topography comes to life. Few other places can match Oaxaca's sheer magnitude of variable landscapes packed into such a small area. In a single day, it is possible to go from lowland tropical rainforest to high desert spiked with nopal, up to pine-fir forest cloaked in mists at 12,000 feet and down finally into brackish-water mangroves along the Pacific coast. Mixed in along the way are vast expanses of oak woodland, dry deciduous tropical forest, and elfin cloud forest draped in mosses, lichen, and ferns. About the size of Indiana, Oaxaca is perhaps best described as a place of opposites, a constant ecotone, where seemingly incongruent associations are commonplace: palms with pines, agave sheltered by fir, parakeets in thorny vulture country.

This tremendous diversity also expresses itself in the range of distinct human ethnicities present in Oaxaca. There are 16 Indigenous groups who collectively represent nearly half of the state population. These groups have inhabited the area for thousands of years. (Oaxaca is widely agreed to be the site of the first domestication of maize, and it is still home to the largest diversity of maize varieties on earth.) Many Indigenous communities maintain a strong tradition of autonomy, preserving pre-Hispanic forms of social organization and ties to pre-Christian belief systems.

As is often the case worldwide, however, Oaxaca's wealth of natural and cultural capital coincides with high poverty rates, low development indica- ▶

Courtesy Grupo Autonomo Para La Investigation Ambiental

Residents in San Juan Ozolotepec are working with neighboring villages to create jobs by managing their forests.

tors, and deep inequalities in the distribution of power and wealth. According to the World Bank, almost half of Oaxaca's population lives in conditions of extreme poverty, nearly all of which are Indigenous communities. Though Mexico as a whole is considered by the United Nations to be a middle-income country, "in fact there are places in Oaxaca where poverty and the lack of access to social services is similar to that of sub-Saharan African countries," says Harry Patrinos of the World Bank, who recently co-edited a book on Indigenous peoples and poverty in Latin America.

While poverty is dropping in some parts of Mexico, trends in rural villages like San Juan do not inspire confidence. The passage of NAFTA in 1994 accelerated a decline in local agricultural output that began during the Green Revolution. As a result, income from agriculture and other local production accounts for less than five percent of household income in San Juan, according to a local NGO called GAIA. Handouts from government programs, by contrast, account for some 12 percent of income. By far, the most important livelihood source for people here is remittances, amounting to 66 percent of household income, nearly all of which comes from relatives working in the US.

"The huge reliance on remittances in places like San Juan serves as an incentive for increased migration, since it shows people how much money can be made working up north," says Marco Antonio Gonzalez Ortiz, GAIA's director. "But this makes communities particularly vulnerable, especially given current economic trends in the US." Indeed, remittances have been dropping precipitously; the Bank of Mexico reported in October that the amount of money sent back by migrants fell by 12 percent in 2008. "What is clear is that there is an increasing need for locally productive systems, to restore community livelihoods," Gonzalez Ortiz adds. "But with the challenges facing many communities, it is no easy task."

This is the reality of rural Mexico — a story that is not well known in the US, and one that suggests that the outflow of migrants has as much to do with lack of opportunity at home as it does with the draw of some irresistible "American Dream." In fact, the vast majority of the new wave of migrants from Oaxaca, like Reyes, return after just a few years; few intend to stay in the US permanently. While it is true that many will migrate no matter what — in some communities, migration has become a rite of passage — the availability of work in forestry makes it more likely that others will stay, and that those who return will decide not to migrate again.

In June 2007, as CNN's Lou Dobbs lambasted an immigration bill on its way to defeat in the US Congress — mocking as "outrageous" a clause in the legislation that would have provided aid to the Mexican countryside as a way to stem migration — Norberto Uriel Lopez Hernandez was arriving home to his small village in the Sierra Juarez of Oaxaca after a long absence. This was neither the forced return of an "illegal alien," nor an obligatory trip home for a local holiday. Rather, Lopez Hernandez was coming home to work.

A forester in his late 20s, Lopez Hernandez was returning to his village of Santiago Comaltepec, an indigenous Chinantec community about 70 miles north of the city of Oaxaca, to head up the Union of Zapotec-Chinantec Forest Producer Communities, a cooperative made up of his village and three neighboring communities. Formed in 1989 after a decade-long struggle against concessionaire logging on their lands, UZACHI, as the union is known, manages an area of about 60,000 acres — over 70 percent of which is forested — for a range of ecosystem goods and services, including timber, non-wood forest products like mushrooms and ornamentals, ecotourism and, more recently, carbon sequestration.

The operation is certified by the Forest Stewardship Council, the best-known eco-labeling brand for forestry internationally, and is recognized as

one of the most advanced community forestry enterprises in the world. "UZACHI is a marvel of community forestry," says Dr. Michael Conroy, a former Ford Foundation officer in Mexico and senior research scholar at Yale. "Their operations, along with their commitment to social aims, has led to some of the best cumulative benefits anywhere in the world from community-based forestry."

The environmental, social, and economic successes of UZACHI are undeniable. Last year, the union harvested nearly four million board feet of lumber, applying a rigorous silvicultural regime that zones areas specifically for biodiversity conservation as well as protection and restoration. Their efforts brought in more than $800,000 — no small sum in these communities. Of these profits, 30 percent is reinvested in forestry operations and used to pay salaries. The rest goes to collective community projects.

"Through forestry, we have been able to fund the provision of electricity and clean water, build roads, finance education, renovate public buildings and spaces, and provide help to people with special needs, like the elderly and widows," says Lopez Hernandez. Walking through the cobblestone streets of Capulálpam de Méndez, Comaltepec's cooperative neighbor, the benefits of forestry are obvious. The village's 16th-century church has been painstakingly restored, as has its central square, marked by a towering gazebo and bordered by a string of shops bustling with business, including a café with broadband Internet connection. It is a scene in stark contrast to much of the Mexican countryside.

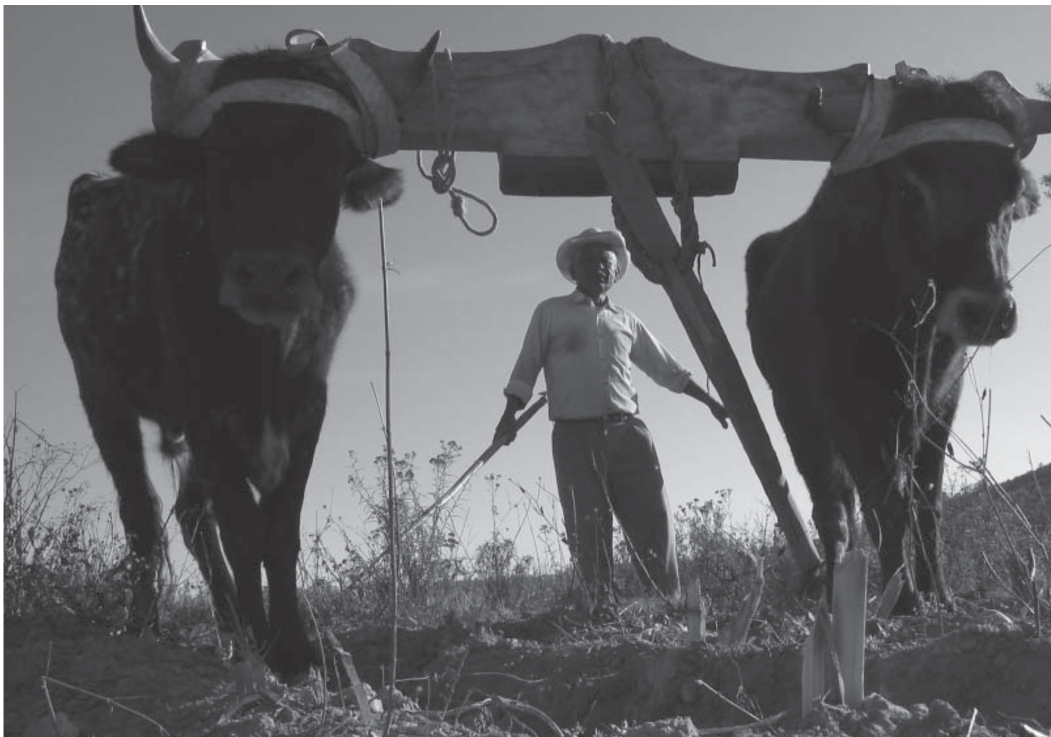
Over time, the UZACHI communities have also built up value-added processing: The four communities each have their own sawmill, and local furniture factories have sprung up. These businesses, plus the technical forestry operations team, provide year-round jobs for some 135 people; seasonal work during harvesting employs many more.

The heart of UZACHI's success, Lopez Hernandez says, lies in the fact that management is communal. The forests, handed over as part of a massive rural land reform set in motion after the Mexican Revolution, is held as common property and managed according to rules formally recognized by the government, giving the villages a great deal of autonomy in decision making. It is an arrangement that is highly uncommon for forest management globally.

"In other countries, governments historically spent their time legislating common property and Indigenous governance out of existence," says David Bray, a professor at Florida International University. "In Mexico, the opposite happened. Communal property was legislated into existence, and local systems for decision making were given official recognition."

All management decisions taken by UZACHI are vetted by each community's assembly, a gathering not unlike a town council meeting (except that assembly meetings often go all day and all night, and are often, by tradition, consensus based). Similarly, all decisions on the use of benefits — how much to use on enterprise development, school upgrades, or the yearly fiesta — are made collectively in community assemblies.

Although the Mexican government has been criticized for its lack of attention to Indigenous rights and rural development, in the forestry sector it has in many ways been a force for positive change. "From the government's perspective,


Courtesy Goldman Prize

The passage of NAFTA in 1994 accelerated a decline in local agricultural output that began during the Green Revolution. As a result, farm earnings have plummeted, helping to spur the flood of migration to the North.

community forestry is a good deal," says Salvador Anta Fonseca, an official with the federal agency in charge of forestry in Oaxaca. "What we invest in helping to promote community forestry is paid back many times over, not only in taxes levied on sales, but in terms of the concrete benefits forestry generates for communities. And, with highly developed enterprises, there is definitely a positive effect on migration."

But communities that have developed as far as UZACHI account for just a small fraction of those who have forests. The challenge now, Anta Fonseca and others say, is to extend the model to communities on the forestry frontier — communities like San Juan Ozolotepec.

IKEA and other big buyers want huge volumes of a single species at low prices — something isolated communities can't deliver.

It takes all day to reach San Juan from the city of Oaxaca. Leaving the hot, arid valley and climbing into the Sierra Sur, the temperature drops, often suddenly, and the trademark pines of the Oaxaca mountains appear, with gnarled oaks in the understory. Once the pavement ends, the drive slows considerably, as does the pace of life in these pueblos. Even the time changes, falling back an hour during the summer months: Zapotec communities do not use daylight savings time, instead staying year round with la hora de Dios.

The approach to San Juan is stunning and treacherous. After hours of winding through narrow valleys and across forested slopes, the road seems to end, disappearing around a hairpin turn carved into sheer cliff face that drops precipitously into the mist. At nearly 7,000 feet, San Juan sits literally in the clouds. (The community's lands, however, stretch from 3,900 feet to over 12,000.) San Juan's 17th-century church, the oldest in this part of the Sierra, appears momentarily in a break in the clouds, framed by a distant waterfall. Tiny milpa plots — the ancient American swidden of maize, beans, and squash — are planted on impossible slopes.

For years, San Juan's isolation meant that its large tracts of forest were subject to little commercial exploitation. In the 1980s, however, as more accessible areas were logged out, timbering began in earnest, directed by outside private sector agents. Their logging activities degraded forest stands, and timber sales benefited only a small clique of connected individuals. By the mid-1990s, the lack of transparency with timbering was causing serious problems in the community, culminating in a violent confrontation. Shortly thereafter, the community assembly voted to disallow all timber harvesting on their lands.

In 2007, with the help of GAIA, San Juan started a land-use planning exercise in which forestry emerged as an important element. But locals were hesitant. "After all that happened in our community with bad logging and fraud, when we started considering forestry, there were serious doubts," says Alfonso Cruz Cortes, head of the committee in San Juan that oversees management of communal resources.

Community members started thinking differently after a week-long visit by San Juan leaders to UZACHI, where they saw community forestry in action. "Seeing for ourselves that forest management does not mean forest degradation, but instead ensures conservation, plus all the benefits the UZACHI communities are getting from forestry, we decided to follow this path ourselves," Cruz Cortes says. Shortly thereafter, San Juan and UZACHI created a formal alliance, and have begun developing a forest management plan for San Juan's forest, with support from GAIA and funding from Anta Fonseca's agency.

But huge challenges remain. The Calderon administration, bowing to business interests, continues to invest heavily in commercial tree plantations at the expense of community forestry in natural forests. At the same time, lowered trade barriers threaten to undermine even the most advanced forestry enterprises. "We cannot compete with Chilean plantation-grown timber, which is so much cheaper on the international market," one UZACHI forester tells me. "And even though IKEA and other big buyers say they want certified wood, they want what we can't deliver: huge volumes of single species at low prices. Our costs, because of the way we do forestry, are simply higher."

Such are the obstacles to making community forestry work in Mexico. Clearly the sector will need continued support to survive and expand. But given its global benefits, its potential impact on migration, and its track record of success, it seems reasonable that the US should support such efforts. With just a fraction of what is spent every day in Iraq, for example, the US taxpayer could help leverage significant and positive impact in the Mexican countryside — a far more effective strategy, it would seem, than building walls to keep people out. ■

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