



Published on *Solutions* (<http://thesolutionsjournal.anu.edu.au>)

[Home](#) > From Mexico, Global Lessons for Forest Governance

From Mexico, Global Lessons for Forest Governance

By: [David Bray](#)

Volume 4: Issue 3: Jun 25, 2013

In Brief:

Policies promoted under the banner of reducing emissions from deforestation and forest degradation (REDD+) propose to achieve that goal, in combination with the conservation or sustainable management of forests and enhancement of forest carbon stocks, through the establishment of robust markets for forest carbon. However, there are existing policies and practices that have already proven their ability to reduce forest loss, conserve forests through protection and sustainable management, and enhance forest carbon stocks. In Mexico, the experience of community forest management is characterized by the devolution of successively expanded property rights, especially timber rights, over sometimes-large forests, combined with community-level governance institutions that mobilize social capital and an intermittently supportive policy environment. This combination, along with factors such as emigration and reduced land-use pressures, has resulted in regions of the country where deforestation and degradation are nonexistent, forest cover and forest stocks have expanded, vigorous community democracy flourishes, options for sustainable livelihoods exist, and biodiversity is conserved. In sum, there are regions of Mexico that already resemble the anticipated outcome of successful REDD+ projects, even though no market opportunities for investors were created.

Key Concepts:

- The current major global strategy for addressing deforestation as a source of carbon emissions is REDD+ (Reduction of Emissions from Deforestation and Degradation, plus conservation, sustainable forest management, and enhancement of carbon stocks). REDD+ assumes the creation of forest carbon markets to create “financial value for the carbon stored in forests,” as the UN-REDD Programme website puts it.
- Global negotiations over the details of REDD+ have bogged down in complex technical problems and disagreements between nations as to how the program should move forward, and the failure of the nations of the world to create a compliance carbon market. It is evolving towards new, large-scale, bilateral and multilateral, foreign-assistance efforts focused on forest monitoring and governance.
- There exists an alternative to market-based efforts, or an essential prelude to them: community forest management. Mexico presents a global model for devolving rights over forests, creating community forest enterprises, and meeting the goals of REDD+.
- The Mexican model is based on a nearly full bundle of rights over forests, supportive government policy, and efforts to generate income for local communities.

Until 2007, forests were the orphan of climate change concerns. They had been largely left out of the Clean Development Mechanism, a carbon-offsets program that emerged from the 1997 Kyoto Protocol, because of concerns about permanence (forests can burn down) and leakage (a forest conserved in one place can stimulate deforestation someplace else). However, negotiations in Bali that year at the 13th United Nations Conference of Parties (COP) tipped off a shift that turned forests into the darling of climate change negotiations. Spurred by dramatic pleas to take forests into consideration from heavily forested Papua New Guinea and Costa Rica, the Bali Action Plan gave birth to the initiative called Reduction of Emissions from Deforestation and Degradation, or REDD. The concern with forests was stimulated by data suggesting that some 18 percent of all carbon emissions came from deforestation—more recent studies place this figure lower—and that addressing deforestation could be relatively cheap, easy, and fast compared to other thorny issues bogging down the climate talks.

In response to concerns that REDD would simply reward those who were currently deforesting, a + (or plus) was added one year later in Poznan, Poland, at COP 14. The plus seeks to reward existing virtuous behavior towards forests in the form of conservation (addressing concerns of countries with lots of forest and low deforestation); sustainable forest management (for countries doing a good job of managing logging); and enhancement of carbon stocks (for countries like China where successful reforestation is expanding forests). REDD+ thus contains two warring tendencies. REDD is about reducing emissions by changing current incentives for deforestation by placing a market price on the carbon that will not go up in smoke—the carbon will stay in the trees because that price competes favorably with an alternate use. REDD is thus predicated on the creation of a robust market trading in the tons of carbon kept in a forest's trees. The plus, on the other hand, now something of a wallflower in the international negotiations, assumes a baseline of good forest management. It is rather unclear how conserved and well-managed forests, with no carbon going up in smoke, can enter into the carbon marketplace. But before even working those issues out, other major stumbling blocks have emerged with REDD+, such as whether emissions should be tracked at the national, regional, or project level. Whether trustworthy forest carbon markets can ever be created is not clear, and may not become clearer until at least 2020.

In the meantime, there is a demonstrated strategy that reduces deforestation and achieves a lot of other things besides, and this is where much of the funds and energies unleashed by REDD+ expectations can be directed. That strategy is community forestry, the granting of clear forest rights to local people who may come already packaged in the collective action unit known as a community. As Andy White, the coordinator of the Rights and Resources Initiative (RRI), a Washington DC-based think tank, has argued in *Nature*, “to fix REDD, we need to focus on policies to support communities, and not markets for carbon.”¹ The most powerful evidence for White's statement comes from the forest communities of Mexico. Currently better known for drug violence than sustainable forest management, Mexico is nonetheless the best-case scenario for why community forestry works. It stands out for its decades-old experiment in devolving an almost complete bundle of territorial and forest rights, while most governments in the developing world are still avoiding the subject.

REDD+: Ambition Meets Reality

REDD+ began with big ideas about transforming deforestation incentives across broad sectors of national economies with major market financing. Almost everyone in the forest sector would like to see it succeed. Advocates note that REDD+ has caused dozens of countries to develop REDD+ strategies, with over 200 projects in around 40 countries planned or underway, billions of dollars in pledges from donor countries, and whole new international programs developed to oversee all this. REDD+ negotiations were hailed as one of the few steps forward after the Conference of Parties (COP) 15 in Copenhagen in 2009. But further progress has faltered, with COP 18 in Doha producing no new agreements on REDD+.

It is now evolving towards something entirely different from what was originally envisioned, as has been detailed in a recent study by Arild Angelsen and Desmond McNeill, researchers for the Center for International Forestry Research.² Even as REDD+ expands its ambitions—including biodiversity and poverty alleviation as “cobenefits,” for instance—it continues to encounter a dense thicket of fundamental disagreements, technical problems, and forest governance challenges.

At talks in Bonn in May 2012, discussion included whether national programs should include monitoring of drivers of deforestation. Brazil and Argentina, for whom soybeans on forest frontiers are a booming export, don't want to hear about this. China thinks REDD+ should depend on public financing rather than on markets. Bolivia expands on that

idea by proposing a "national fund for climate justice." The United States stands by markets as one component that could include broader mechanisms. Japan suggests a thousand flowers should bloom, with every country allowed to choose what mix of mechanisms works for it. But the biggest problem is that the forest-carbon market on which REDD+ was to be based has not been built, and current estimates are that it may not exist until 2020, although accelerating climate change could serve to focus attention before then.

Without that overarching global climate agreement, regulated forest carbon markets are struggling to be born, and the voluntary markets are still tiny compared to the need. And then there are the thorny technical issues of measuring and monitoring all that forest carbon scheduled to enter international markets, and of overcoming the very high transaction costs associated with creating trust in an invisible commodity with endemic uncertainty about its exact quantities. Elaborate sets of proposed regulations to assure "social safeguards" against any negative impacts on indigenous and local communities are also under development, as well as parallel regulations to assure no negative impacts on biodiversity. All of this amounts to feverish development of a vast regulatory apparatus for a market that does not yet exist. As Angelsen and McNeill note, "The commodity is hard to quantify, the sellers are not well defined, the big buyers do not exist and the rules of the game are not established." Finally, there is the slowly dawning realization that it all comes down to clear rights over forests and their products, which is to say forest governance, which is not a problem markets can solve. And it is proving to be wickedly difficult to reform forest governance without reforming government and governance in general. That could take decades.

All the brouhaha about REDD+ has produced major, new, international, bilateral and multilateral investments in improving both technical forest monitoring capacities and forest governance under the name of "REDD readiness." And there is much evidence that the best way to slow down deforestation and nurture healthy forests, healthy human communities, and healthy biodiversity is through precisely the strengthening of these rights of communities to forests, and through taking advantage of existing markets for forest products. Communities are not a panacea, as the late Nobel Prize winner in economics Elinor Ostrom tirelessly reminded us. Just as there can be market failure, and government failure, there can be community failure. But the odds of failure appear to be lowered when communities with clear membership rules are given substantial rights over forest resources. As mentioned before, Mexico is a world leader in devolution of forest rights and advances in forest governance. A recent RRI study on the depth of forest rights showed even governments that are considered relatively advanced in promoting community forest rights still severely limit many rights. The same study shows that Mexico comes out on top in this department, having devolved all rights except land use change and the right to sell forest lands, which also helps to force the issue of how to make the forest productive. Mexico offers a real alternative for reducing emissions from deforestation—and all of the associated pluses—in a dangerously warming world.

The Mexican Model for REDD+

Formally, the Mexican model is based on common property governance over forested territories by legally recognized rights holders organized in long-standing communities tied together by kinship and mutual knowledge. These common property forests represent a *third way* of economic development, beyond just public property and markets. They depend on communities where organizational transaction costs are lowered because everybody knows each other. Economists Samuel Bowles and Herbert Gintis argue that, "far from being vestigial anachronisms, we think communities may become more rather than less important in the nexus of governance structures in the years to come, since communities may claim some success in addressing governance problems not amenable to market or state solution."³

Mexican community forest management emerged from a particular historical process.⁴ It is based on (1) the devolution of successively expanded property rights over forests; (2) community-level governance institutions established by agrarian law, frequently intertwined with traditional governance practices and systematically linked with other levels of government; and (3) government policies that have been, with some significant exceptions, supportive of community forestry. In an important sense, Mexico has invested in its community forestry sector over time. Emigration and agricultural abandonment has also played a role in reducing the demand for land. This confluence of factors has resulted in several regions of the country where deforestation and degradation are nonexistent and forest cover and forest-carbon stocks have grown. A vigorous community democracy flourishes as well, even if it can be exhausting for its participants. Furthermore, alternatives for sustainable livelihoods exist and both managed timber areas and community reserves conserve biodiversity. Some parts of Mexico already exemplify what other parts of the world will look like if REDD+ projects are successful.

This successful model emerged from the ravages of the Mexican Revolution in the second decade of the twentieth century. For almost two decades after the end of the most violent phase of the revolution in 1917, agrarian elites saw common property as only a temporary way station to small, private landholdings based on the U.S. model. But the realities of a strongly communal rural culture, frequent eruptions of rural unrest demanding land restitution, and the return of migrants from the United States because of the Great Depression compelled the reformist President Lázaro Cardenas to take a different path. Instead of promoting Jeffersonian small farmers, he deepened and institutionalized land and forest distribution, which became a permanent feature of Mexican rural policy (with ups and downs in different presidential administrations) through most of the twentieth century. Forests were handed out almost as an afterthought, after all the good agricultural land had already been parceled out. Nonetheless, from 1940 to the mid-1970s Mexican forest policy did not vary much from that of many other countries. The government continued to hold the rights to give out concessions for timber on community lands, with the communities receiving only a modest payment that was sequestered in hard-to-access government accounts.

However, beginning in the mid-1970s reformers in the forestry department agitated for giving more timber harvesting rights to local communities. With groups of communities mobilized behind these reformers, the gains were eventually codified in a 1986 forest law that gave new rights for forest management to communities. A subsequent 1992 constitutional reform gave them a nearly full bundle of ownership rights over territories and forests. The neoliberal government of Carlos Salinas de Gortari (1988–1994) was generally hostile to community forestry, despite the constitutional reform, and hoped to promote plantation forestry in Mexico. But, since 1994, successive Mexican governments have been generally supportive of the sector, although they have invested much more in payments for hydrological services than in community forest management. Mexico demonstrates how the democratization of forest governance and devolution of forest natural capital can produce striking gains in healthy forests for production and conservation. It can also generate a range of employment options, including for women, reducing the need for emigration.

Establishing agrarian community rights over a defined territory was one significant feature of the reform process that recognized two types of communities under the Mexican Constitution: the *ejidos*, established for dispossessed and landless farmers, and *comunidades*, or indigenous territories acknowledged by the Spanish Crown during the colonial period. The agrarian laws also established a structure of community governance across rural Mexico. In earlier decades, government supervision was heavily paternalistic, but the 1992 constitutional reform provided communities substantial autonomy in governing the forest commons. The governance structure includes assembly of all legally defined rights holders who democratically elect community leaders every three years (and can turn them out sooner for nonperformance). While this governance structure can easily be corrupted by authoritarian leaders, the strong incentive provided by access to valuable forests has encouraged broad community participation, establishment of rules through community statutes, and vigorous monitoring and sanctioning of rule breakers—pretty much the outcomes predicted by Ostrom's research.

Some nine thousand communities in Mexico live with forests on their lands, but the vast majority of these manage small forest fragments.⁵ According to Mexican forest analyst Lucia Madrid, about one-third of Mexico, some 66 million hectares, is covered by temperate and tropical forests. Of this, some 60 percent, or nearly 40 million hectares, is owned by communities. By contrast, less than five million hectares of Mexico's forests are in protected areas. Around 8 million hectares of the community forests, or around 20 percent, is under management plans for logging. This means that 80 percent of the community forests are not being logged; there is some evidence that much of this is under community protection, either informally or formally. Where logging is taking place, much is done in small forests and with only occasional harvests. Corruption and forest degradation through illegal logging are still serious problems, particularly in some regions. Extending the Mexican model of community forest management to these areas is the major challenge of Mexican REDD+ policy. However, the potential for what can happen is shown in the hundreds of community forest enterprises that manage forests democratically and generate income for impoverished communities. As recently as 2011, the Forest Stewardship Council had certified 31 communities as well managed. (This number has dropped dramatically recently since there are few national markets for certified timber, making certification cost-ineffective.)

There is increasing evidence that where these communities are managing their forests, there is little or no deforestation. For example, a recent study by University of California—Santa Cruz researcher James Barsimantov showed that, of 733 municipalities in eight states with at least 50 hectares of coniferous forests, municipalities with higher percentages of commonly owned forest and common forest under management plans reduced the rates of deforestation and increased the rate of forest recovery of coniferous forests. (This effect did not hold for nonconiferous forest, showing that forests are conserved when they are valued for their timber.) Studies have also shown that community forests perform as well or better than protected areas in reducing deforestation. For example, one of the regions, central and southern Quintana Roo, which is dominated by community timber production, has the lowest recorded rate of deforestation in southern Mexico—lower than that of any of the protected areas in the region. Another study that compared a community forest region with the Calakmul Biosphere Reserve in Campeche found that the region of the reserve had a deforestation rate of 0.7 percent from 2000 to 2005, while the community forestry region had a vanishingly low rate of 0.002 percent from 2000 to 2004, even with twice the population density.

For purposes of REDD+, perhaps one of the most compelling pieces of recent evidence is also from Barsimantov. One of the biggest challenges for REDD+ schemes is

having a price of carbon high enough to compete with such high-value crops as soybeans in the Brazilian Amazon. In Mexico, avocados are to the temperate forests of the state of Michoacan what soybeans are to the Amazon, the source of a wave of deforestation for a high-value crop dedicated increasingly to export. Barsimantov shows that the region of Michoacan he studied lost one-third of its forest cover in 16 years, mostly for avocado production. But a sample of forest-management communities showed only minor forest loss compared to devastating losses in avocado-production communities.

In addition to stopping or dramatically reducing ongoing deforestation, many forest communities appear to have informally placed large areas of forest under varying degrees of conservation—one of the hoped-for outcomes of REDD+. They do it to protect water sources, as wildlife refuges, because of inaccessibility, or due to relatively low population densities, which means these areas are not needed for agricultural production or other uses. In fact, research suggests that only modest percentages of total community forests are being logged, and substantial portions of the rest may be under informal protection. There have thus also been recent efforts to more formally recognize that community protection.

The International Union for the Conservation of Nature has formally recognized a category of protected area known as indigenous/community conserved areas (I/CCAs). Following this recognition, in May of 2008, the Mexican Congress passed new legislation approving a certification process to include I/CCAs as part of the federal protected areas network. To date, the National Natural Protected Areas Commission (CONANP) has certified 91 communities with over 231,000 hectares; and this only includes communities that have formally sought certification. An estimate by Mexican biologist Salvador Anta has suggested that there are some 640,000 hectares under community conservation, with the real figure almost certainly higher.

These Mexican accomplishments in reducing deforestation through community rights over resources, which include management for both timber and conservation, are backed by global studies. For example, a recent study of 80 forest commons in 10 countries across Latin America, Africa, and Asia showed that larger forest and higher degrees of rule-making autonomy at the community level are associated with higher rates of carbon storage and livelihood benefits.⁶ The authors go on to argue that “local communities restrict their consumption of forest products when they own forest commons, thereby increasing carbon storage.”

None of these community accomplishments in reducing deforestation, conserving forests and their biodiversity, sustainable forest management, enhancement of carbon stocks, or poverty alleviation came about because outside investors could make money off of the effort. And none was done through carbon markets. A recent analysis of REDD+ by the Munden Project argues that the forest carbon market initiative will fall of its own weight due to “major problems related to default risk, pricing power, operational complexity and oversight.”⁷ Further, it is unlikely that commodities markets in carbon will be any different than other commodities produced by poor rural communities, with the producers receiving only a small fraction of the final market value. “Forest carbon trading is unworkable as currently constructed,” says the Munden Project. Their conclusion is to “invest in tenure” and to “engage community-driven approaches, and do so more effectively.” This approach also resonates with other findings by the Rights and Resources Initiative that the cost per hectare of recognizing rights is far less than the estimated costs of REDD. Thus, the first investments should be made in “getting property rights right” as the foundation for getting governance right, which could eventually lead to forest carbon markets.

Markets and states are still struggling to find the right formula for saving the world’s forests from further decline. In most of the developing world, forests still belong to the government, under whose management deforestation has advanced. The alternative of devolving rights to common-property forests has demonstrated considerable successes in addressing that problem. The Mexican model is not the only one available for these efforts. Guatemala, with 25-year concessions to local community user groups, has also reduced deforestation, although with more difficult conditions due to advancing small farmer colonization.⁸ But this will not be easy in most of the forests in the developing world. Devolving rights in situations of weak governance is unlikely to bring positive results. It’s all about getting governance right. And getting governance right requires investments in field staff, in extension agents who will work closely with communities over sustained periods of time to help increase their capacity, build democratic mechanisms for making leaders accountable, and develop both local rules and national laws to protect forests and make them productive for local people. Markets won’t pay for that product.

As the CIFOR report by Angelsen and McNeill shows, REDD+ is rapidly moving towards being a new, large-scale, multilateral, and government effort to improve local forest governance. Thus, the REDD Readiness phase may need to stretch on for many years, with predicted advances in the reduction of forest loss in the meantime, whether or not reliable forest carbon markets ever emerge. These government and multilateral investments should be directed at the military metaphor of “boots on the ground,” investments in well-trained extension agents with long-term contracts and commitments to working with local communities, building human and social capital for local forest management. As RRI’s Andy White has argued, “The focus of REDD on finance has blinded us to other approaches to reducing forest emissions.” For the magic of the marketplace to work, governments must first accept that their forest communities are, as Bowles and Gintis argue, not “vestigial anachronisms,” but the essential governance building block for reducing deforestation and degradation.

References

1. White, A. Cash alone will not slow carbon emissions. *Nature* 471, 267 (2011).
2. Angelsen, A & McNeill, D. In *Analyzing REDD+* (Angelsen, A et al., eds) Ch. 3, 31–50 (Center for International Forestry Research (CIFOR), Bogor, Indonesia, 2012).
3. Bowles and Gintis 1998 Bowles, S. and Gintis, H. The moral economy of communities: structured populations and the evolution of pro-social norms. *Evolution and Human Behavior* 19: 3–25 (1998).
4. Bray, DB. *Towards “Post-REDD Landscapes”: Mexican Community Forest Enterprises Provide a Proven Pathway to Reduce Emissions from Deforestation and Forest Degradation*. [online] (Center for International Forestry Research (CIFOR), Bogor, Indonesia, 2010). www.cifor.org/publications/pdf_files/infobrief/3272-infobrief.pdf.
5. Bray, DB, Merino, L & Barry, D, eds. *The Community Forests of Mexico: Managing for Sustainable Landscapes* (University of Texas Press, Austin, 2005).
6. Chhatre, A & Agrawal, A. Trade-offs and synergies between carbon storage and livelihood benefits from forest commons. *PNAS* 106, 17667–17670 (2009).
7. The Munden Project. *REDD and Forest Carbon: Market-Based Critique and Recommendations* [online] (2011). www.rightsandresources.org/documents/files/doc_2215.pdf.
8. Monterroso, I & Barry, D. Legitimacy of forest rights: The underpinnings of the forest tenure reform in the protected areas of Petén, Guatemala. *Conservation and Society* 10, 136 (2012).

Source URL: <http://thesolutionsjournal.anu.edu.au/node/23381>