

# **Commons Theory and Collective Forest Property in Mexico. When formal recognition of local rights is important, but not enough**

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**Key words: Mexico, Social Property, Forestry, Agrarian Reform, Local Rights**

## **Abstract**

Collective action theory and “the commons approach” are particularly relevant for Mexico, the first country in the world where collective property was recognized by the state, through an extended Agrarian Reform implemented from the 1930’s to the 1980’s.

Today, more than 60% of the country is owned by communities. Collective tenure is particularly important in forest regions where it accounts for more than 70% of the lands; on the other hand, 90% of communal lands are forested.

During the last thirty years collective property and community’s social capital have sustained the coming to light of numerous community forest enterprises, such as producers of timber, resin, and bottled water; have been providers of ecological and recreational services. Where this process has taken place, community members have had incentives to invest in sustainability, participate in collective action which is required for forest management and local governance, and at the same time, local institutions and social capital have also strengthened. Successful forest community enterprises in Mexico are clear examples of key impacts due to the official recognition of property rights to local communities on the sustainability of the commons.

However, these cases only account for less than 20% of the common forests in Mexico. The others face a wide range of problems such as land-use change, forest fires, illegal logging, illegal cropping, and intense migration. We propose that both historically and at present the incomplete “devolution” or recognition of property rights has been a critical factor for this failure. More often than not communities receive formal rights, but the federal government keeps on managing them and even uses rights in forests or areas where logging concessions were granted to outsiders. Even today more than 20% of Mexico’s forests are placed within the borders of protected areas where communities have lost means of livelihoods and have little to say in the governance of these territories.

The lack of nesting among the central government actions and the local efforts has impeded the development of appropriate rules and effective monitoring and sanctioning in most of Mexico’s forest areas. We argue that full recognition of local rights and the strengthening of local productive and institutional capacities should be considered central axis of policies that aim to contribute to the sustainability and resilience of forest commons.

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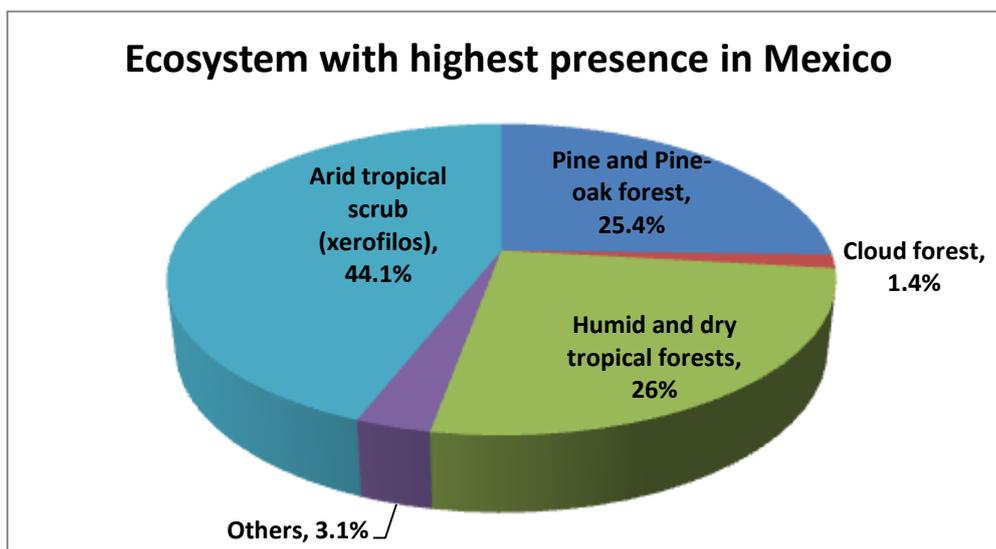
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## Introduction

Mexico is a forest country; it has a forest cover of 141,745,168 hectares comprising a wide variety of forest ecosystems: pine and pine-oak forests, cloud forests, as well as humid and dry tropical forests. This represents 73% of the national territory.

Besides the variety of ecosystems, biodiversity is expressed as wealth of species, as result of a combination of factors: the high fragmentation of the country's territory, its rugged terrain and the type of topography that forms the Mesoamerican corridor that passes through Mexico, South and North American species.

Besides the presence of high biodiversity, the forests of Mexico provide other important global environmental services such as contributing to climate regulation and regional environmental services, for instance the capture and quality of water, soil protection and mitigation of impacts caused by natural disasters.



Source: The National Forest Commission (CONAFOR), 2007

The forest areas of the country have a significant potential which is currently used well below the rate of sustainable extraction that would allow its high biological productivity. This productivity is another of the relevant characteristics of Mexican forests and represents a potential competitive advantage for the forest producers of Mexico.

Although the average productivity of the country's forests in some central and southern regions is estimated at 2m<sup>3</sup> per hectare/ per year, as for example in the Meseta Purépecha, the Sierras Norte and Sur of Oaxaca, the Sierra Norte of Puebla and the Sierra Madre Oriental of Veracruz, the natural productivity in well-managed forests comes up to 8m<sup>3</sup> annual growth rate per hectare.

Official figures indicate that there are 21.6 million hectares of commercial forestry potential in the country's forests and jungles(SEMARNAT, 2004); however, the area under forest harvesting of timber is only 9.0 million hectares.

## Forest, society and social ownership

Forest regions in Mexico are home to a population estimated by the National Institute of Geography and Statistics (INEGI) between 12 and 13 million people (INEGI, 2006 and Presidency 2007), mostly living in extreme poverty and depending on the forest for a variety of goods, services and incomes. It should be emphasized that the indigenous population represents a considerable number of forest dwellers.

The municipalities with the largest indigenous presence in forest areas are those with the most elevated levels of marginalization within the country. (National Forestry Commission, 2008:15). The average per capita income of biggest social gap in the country.

The low level of formal education is another of the general indicators related to the conditions of social marginality. In this sense, the data revealed in the Survey on the Conditions of Forest Communities' Owners of Temperate Forests in Mexico that 45.8% of the land rights holders have not completed primary school; only 22.6% have some level of education after elementary education and 12.4% have secondary school studies.

Much of the surface of temperate forests cannot be exploited because of current access difficulties. The forest regions are also characterized by their abrupt topography which hinders the construction and maintenance of roads which increases the costs to transport forest production in a range of 30-40% of the costs of production. Most of the actual forest road network was built more than twenty-five years ago, during the period of forest concessions. In the major forest regions some *ejidos* and communities have built roads and have maintained them for years, using them also as daily transit routes. However, in many cases traffic on these roads is limited to the dry season months, limiting their potential to serve as articulators of forestry and regional development.

Article 27 of the Mexican Constitution recognizes the legal personality of the *ejido* and **its community and** protects their land. However, the rights of agrarian forests are considerably restricted; **while the nation** has a constitutional right to regulate land use, forests and waters of common use are much more regulated than agricultural land and farmers. And the fulfillment of the right of national regulation in order to preserve the public value of forests and jungles and protect indigenous rights, even more. This has happened throughout the history of the last century, when the regulatory capacity and decision-making has been concentrated in the federal government, often regardless of regional and local conditions and needs.

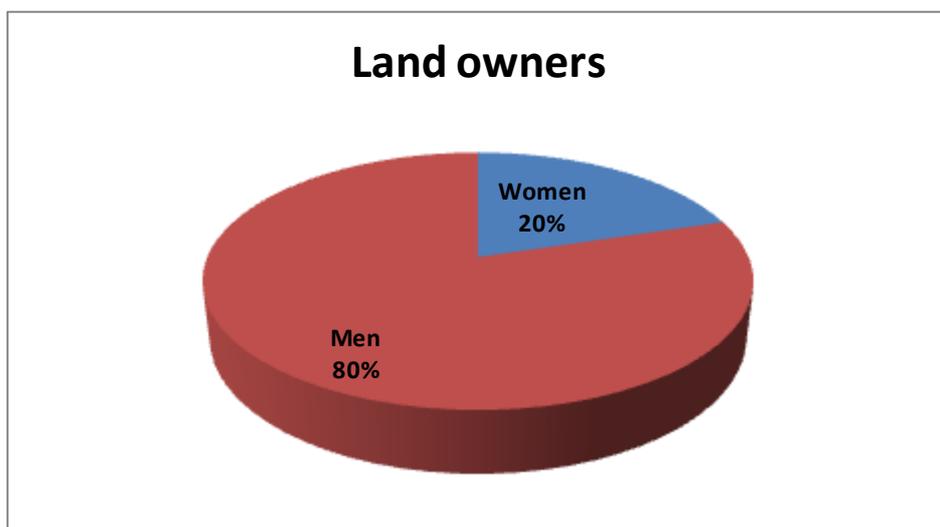
Since the amendments to Article 27 of the 1992 Mexican Constitution communities and *ejidos* acquired greater autonomy and decision-making capacity regarding the use of its resources. This reform established procedures through which members of the agrarian communities can "associate with each other, with the State or with third parties granting the use of their land". In addition, this modification opened the possibility for the *ejidatarios* to "transfer land rights between members of the *ejido*" and established the guideline for the disposition of *ejidal* plots.

There are two types of social ownership, the ejidos and agrarian communities. The ejidos are the result of **manning** mass land that the Mexican State handed over to applicants of land from the 1920's and in particular from the 1930's until the 1980's.

In the case of agrarian communities, the State recognized the historical rights of communities that were recognized initially as indigenous communities and had occupied the territories traditionally claimed as their own. After decades many of these communities ceased using their indigenous languages and the ejido became the major social form of tenure, even in indigenous regions, due to the much more difficult procedures for agrarian communities to obtain recognition of traditional rights.. So now there are agrarian communities with non-indigenous population and ejidos with indigenous population (Warman, 2001).

The National Forest Commission (CONAFOR) estimates that 105 million hectares are collectively owned by 31,480 ejidos and agrarian communities. 8, 928 ejidos and communities have areas covered by forests and jungles (National Forestry Commission, 2008:16) and 3,056 only carry out "activities of care and logging of trees, which represent 10.1 percent of the social properties of the country" (INEGI, 2001 and 2009).

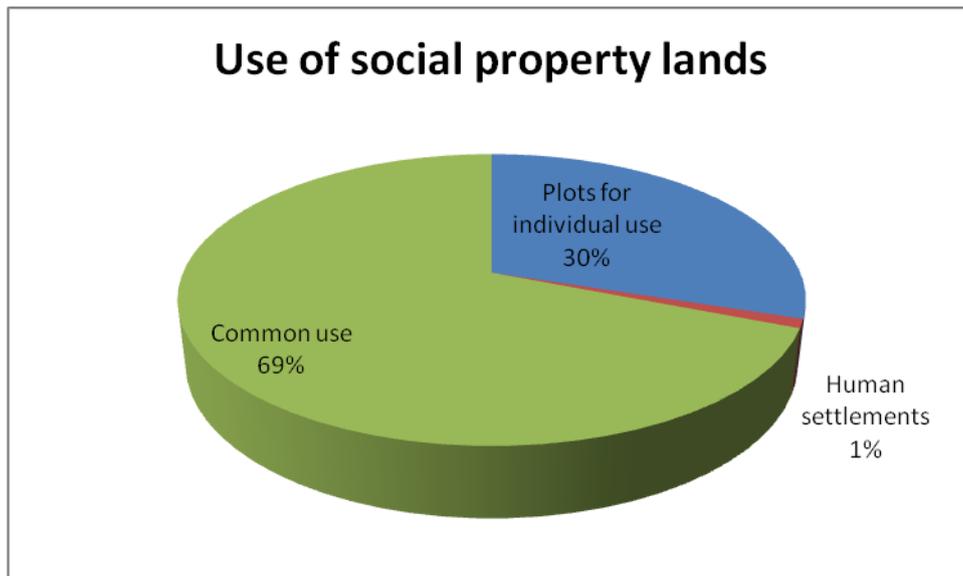
At present, the State recognizes 4,440,506 people as social property land owners . The majority of these owners are men, and the data shows that for two women that have property rights there are eight men with the same rights.



Source: Survey on the conditions of forest communities Owners of Temperate Forests in Mexico.

In the ejidos and communities there are different types of land: agricultural parcels, urban plots and land in common use, which are generally forest and pasturelands. Common use of land is fragmented, even if the Agrarian Law states (Article 59) fragmentation is prohibited.

Although collective ownership of forest areas involves transaction costs and requires high levels of social capital for its sustainable management, and offers a greater chance of social benefit and participation in forest protection.



Source: National Institute of Geography and Statistics (INEGI), 2010

Ejido or communal rights are called agrarian rights and give their holders individual and collective rights. Among the former are the rights of access and use of agricultural plots and urban sites. Within the collective rights are the rights of access and use of common areas and the participation in their management.

As a result of the Agrarian Law reforms made in 1992, ejidos can decide to dissolve and become private property. Only in this case the rights of ejido holders may be sold, i.e. the plots and participation in collective rights over common lands.

Agrarian communities may not have the latter type of right directly, although their assembly may decide to become ejido. The new Agrarian Law also stipulates that in cases in which the ejidos are dissolved, the forest common areas become property of the nation, which in fact operates as an incentive to deforestation in those districts that have been dissolved.

Ejido rights can only be transmitted to a single successor, while the assemblies of the agrarian communities have the legal capacity to integrate so many new members as they deem viable. Generally, new members are young people who reach adulthood and wished to remain in their communities.

As a result of the difference in patterns of succession in the ejido and the increment in life expectancy among the Mexican population, the ejidos present an aging process and, to a lesser extent, a decrease of land rights holders; as counterpart to this, there is an exclusion of young people and adults without rights from ejidos, which are considered settlers, have no productive resources, and no rights to participate in the assemblies. On the other hand, in the agrarian communities, the number of holders of land rights increases and the aging process of the population with agrarian rights as a whole, is lower.

Among the communities considered in the Survey on the Conditions of forest Communities' Owners of Temperate Forests in Mexico, between 2000 and 2006, the number of community members increased 5.5%, while the number of ejidatarios

declined by a similar rate (5.4%). It is also important to note that during this period the number of resident —beginning from a small base, increased to over 400%.

## History of Community Forest Management

By the late 1970 it was clear that neither concessions nor vans were close to reaching their original objectives, forest deterioration had rapidly grown in areas under vans while the industries of forest concessionaires operated at an average half of their capacity. Logging concession periods were close to an end and communities strongly opposed their renewal demanding rights to manage and use forests resources; finally, structural adjustment policies were contrary to State owned enterprises. In this context, a progressive current within the forest administration, grouped in the Department of “Forest Development” (DDF) promoted a new “policy experiment”: to support commercial community forestry.

Pro-community forest policy was based on the assumption that communities could be both: efficient forest producers and viable stewards for forest conservation. The DDF programs were based on intense training and consultancy to forest communities, supporting communities’ associations that were created to get access to technical consultancy on forest management that had always been provided by the federal government (Alatorre, 2000; Bray and Merino, 2004).

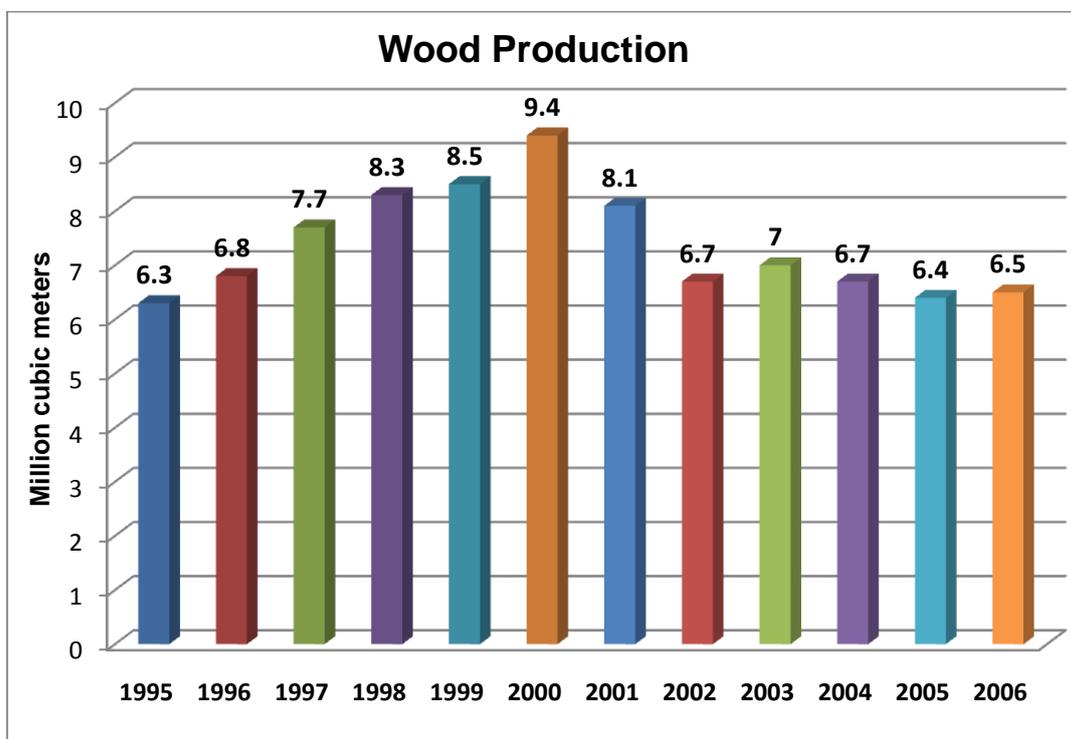
After a few years some of the communities with the most valuable forest assets and better internal organization achieved remarkable gains: they made important profits from forest business, were able to build and maintain roads, buy extraction and industrial equipment and organize their own technical and administrative teams. In the majority of the successful cases the profits of the forest activities were largely re-invested in the development of forest assets including forest protection and the improvement of forest management systems.

During the late 1980’s and early 1990’s governmental support of community forestry faded. The success cases were/ seemed hard to replicate due to diverse difficulties: the aperture of the national market to foreign forest products, particularly after the implementation of the North American Free Trade Agreement (NAFTA); a strong over-regulation of forest activities that poses high transaction costs for legal forest production; the high opportunity costs of forest conservation favored by traditional subsidies to mountain agricultural and cattle raising, completely de-regulated in spite of their often high environmental costs; the extended presence of illegal logging and the inability to implement law.

Since the mid 1990’s the establishment of restrictive protected areas became the main conservation strategy, in spite of their high social costs and often unclear environmental gains (Merino and Hernández, 2004; Durán, Velásquez y Mass, 2005). Since the early nineties massive reforestation programs and subsidies to private companies for the establishment of commercial forest plantations became predominant forest policies, getting poorer results than those initially proposed, repeatedly. Meanwhile communities coalitions, successful communities and supportive NGOs lobbied for alternative forest policies.

During the second half of the 1990's, the just created Ministry of the Environment and Natural Resources (SEMARNAP) launched a second generation of Pro-community forestry programs: the Programa de Desarrollo Forestal (PRODEFOR) and the Programa de Conservación y Manejo Forestal (PROCYMAF), which at the beginning was a joint initiative between SEMARNAP and World Bank. It was first conceived as a pilot project that pretended to craft fine-tuned strategies to respond to the diversity of Mexican forest communities.

Data from a recent study on the performance of forestry and forest policy during the 2000-2006 federal administration in Mexico (Merino and Ortiz, 2010) showed two clear tendencies: from 1994 to 2000, forest production grew 49%, (from 6.3 million m<sup>3</sup> of round wood to 9.4 m<sup>3</sup>r), five years later, in 2006, timber production had dropped to the level reported in 1994.



Source: Merino, et al, 2010

Forest production's performance from 2000 to 2006 reflects an important loss of the capacities of forest communities to produce raw materials and add value to their products.

## Conclusions

This loss of 33% of the wood production occurred in the middle of a considerable increment of the national consumption of forest products, that grew from 16.3 million m<sup>3</sup>r in 2000 to 27.5 in 2003 and 21.3 in 2005. Forest production's performance from 2000 to 2006 reflects an important loss of the capacity of forest communities to produce raw materials and add value to their products.

The rapid deterioration of forest production capacities has occurred during a period of an important growth of the public investment in the forest sector. There are different institutional reasons for the poor results of this important public effort:

1. The concentration of **forest's governance powers** in hands of the federal government.
2. Regulatory policies that highly increase transaction costs.
3. Insufficient human resources in the government's forest administration.
4. Failure in monitoring and sanctioning illegal activity schemes that create wide impunity in forests, together with an absence of legal and/ or market mechanisms that recognize legally produced forest goods.

The survey on the Conditions of Forest **Communities Owners** of Temperate Forests in Mexico shows conditions of persistent and generalized poverty in Mexico's forest regions together with reduced productive options compatible with the conservation of the forest cover. In this context of limited experience and poor incentives and options, training and **advisory** are critical needs of today's fragile forest communities. Without the investment in local capacities, public investment in forest restoration and conservation lose viability. The successful communities' and policy experiences show that close and high quality **advisory** and training have been key factors in success histories. (Merino et.al, 2007; Bray, Merino 2004; Merino, 2004).

The need of collective action for forest governance is even higher taking into account the collective tenure of the vast majority of forests in Mexico. Local organization as well as community and regional social capital are also fundamental for forest sustainability, when these are **present** collective property becomes an important advantage for conservation.

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