# Why some communities keep the commons in the highlands of Chiapas, Mexico

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#### **ABSTRACT**

One consequence of Mexican agrarian reform is half of the country occupied by thousands of communities that have communal governance over their territories. However, not all communities have common land, which means that a true communal action cannot be achieved there. In the highlands of Chiapas some communities have divided their common land in individual plots, but some others have decided to keep their commons. Why has this happened considering that they share similar environment and cultural roots? Several factors contribute to explain the divergent position that communities have respect common land. One of them is demographic; communities have very different demographic growth rates, which are related to cultural and legal agreements on the access to land. Those with accords to limit the incorporation of new land users have not tended to see commons as a reserve terrain for new generations that want new plots to cultivate individually. A combination of economic and environmental characteristics explains why commons are linked to forestry use, and why this kind of land use stimulates the preservation of commons. The struggle for equality in access to land and forest resources within communities is also another factor involved in commons defence. Learning from experiences and resource scarcity are also elements implicated. All this analysis is put under the context of changes in agrarian and forestry policies in Mexico. The recent reforms to Article 27 of Mexican constitution and their possible effects on the continuity of the commons in the region are also addressed.

#### **KEY WORDS**

Ejido, agrarian communities, public policies, Article 27, agrarian code.

## INTRODUCTION

It has been argued that Mexico represents a special case of common property where agrarian policy established communal governance institutions and a common property resource on a nation-wide scale (Bray et al., 2006; Klooster y Ambinakudige, 2005). From the end of the 1910 Mexican Revolution until the early 1990s, large expanses of land were distributed to landless groups of people by government<sup>2</sup>. These groups are referred in this paper as communities. Communities received land under two forms of property created in the Constitution of 1917: *ejido* and *comunidad agraria* (agrarian community). Ejido constitutes a land grant for the usufruct to a population group. Ejido land was expropriated from oversized private holdings (Collier, 1994). Agrarian

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<sup>&</sup>lt;sup>2</sup> Currently, the area encompassed by ejidos and agrarian communities is 103 million hectares (Ramirez, 2007); this amount represents some more that half the country.

community property is based on historical rights of pre-Hispanic indigenous communities (World Bank, 1995) and consists of the land that has been returned to those communities. Nonetheless, there are large numbers of indigenous populations that have received ejido rather than agrarian community property. Many of the legal regulations in the Agrarian law apply for both types of property, so they operate very similarly in many aspects.

It is important to consider that the fact of being communal governance institutions does not mean that ejidos and agrarian communities comprise only common property; most of them have two different types of property rights over land: individual plots and common land. A family or a small group of families manages individual plots. In contrast, all members of the community, who decide the way of using this terrain, use common land.

In last IASC conference, it was demonstrated that there is a great variation in the importance that these two types of property have in each ejido or agrarian community of the highlands of Chiapas (Cortina, 2006). On one extreme, there are ejidos and communities whose land has been completely divided into individual plots; on the other extreme, there are some ejidos where all the land is common land. At least a third of highland communities have 25% or more of common land.

In the last two decades, changes in type of property have been witnessed in some communities<sup>3</sup>. Sánchez (1993) reported that the general assembly<sup>4</sup> of ejido Jocosic decided to eliminate the commons due to the high demand for land put by ejidatarios' sons<sup>5</sup>. In a general meeting, where the issue of keeping or dividing the commons was raised and debated, the youngsters got enough votes to their cause: the division of the commons in a way that all the landless young ejidatarios received a piece of land. This case shows that the status of the property in ejidos and agrarian communities is not static.

The extent of commons within communities is an important theme in the region because it was found that the more the land under common use the more the area covered by forest and the less the deforested area in a community (Cortina, 2006). In addition to their role in conserving biodiversity and sequestering carbon, forests are very important for rural people because they provide vital goods for domestic life such as firewood and housing timber.

In this paper, we address the following questions:

Why have some communities kept their common land and others no?

What factors and interests have played an important role in the keeping or in the dissolution of the commons?

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<sup>&</sup>lt;sup>3</sup> The keeping of the commons depends on the assembly, the local institution that rules the ejidos or communities. The assembly consists of all the adults who are recognized to have voice and vote.

<sup>&</sup>lt;sup>4</sup> The general assembly is the maximum authority in a community.

<sup>&</sup>lt;sup>5</sup> An ejidatario is a full right member of the community.

This paper is based in a comparative and detailed study of five communities in the highlands of Chiapas. In a previous step of this research, changes in forest cover have been analyzed and related to demographic censuses data for 24 communities. Before showing detailed information on demographic, socio-economic and environmental aspects of the surveyed communities, it will be presented a brief historical review on the impacts of national and state policies on commons and forestry in the highlands. This will serve as a context for a better understanding of differences found between communities.

# PUBLIC POLICIES. COMMON PROPERTY AND FOREST EXPLOITATION IN THE HIGHLANDS OF CHIAPAS

Highland landless people<sup>6</sup> began to receive land grants in late thirties and forties. In some of the official documents published by federal government is stated that the land is granted to a group of landless peasants in two property types: an area divided in individual plots to be used for planting crops and a common land generally covered by grasslands and forests<sup>7</sup> (Figure 1). Grasslands were destined for grazing of domestic animals and forests were to be commercially exploited applying a silvicultural system that avoided their destruction. It is not clear if all grants followed this model, but we could suppose that it applied for most of the ejidos and some of the agrarian communities<sup>8</sup>. Calva (1993) asserts that a mix of individual plots and communal property composed some more 80% of the land granted in the thirties to landless people in Mexico.

The World Bank (1995) claims that the Agrarian Reform of 1934 promoted the occupation of forestlands by giving open access to those who could in fact convert forest areas in agricultural land or grassland. However, in some of the official grant documents, which were published in the official journal of federal government, it can be read that it was banned for ejidatarios to deforest; instead, they should have organized a forestry cooperative under the advice and support of Ministry of Agriculture. It was also forbidden the intervention of external loggers and the sale of standing trees, which implied that ejidos should have developed the capacity to cut and transport logs to a sawmill.

<sup>&</sup>lt;sup>6</sup> Most of the landless people who received land are Maya indigenous descendants.

<sup>&</sup>lt;sup>7</sup> Most of the forests are pine-oak dominated.

<sup>&</sup>lt;sup>8</sup> See, for example, *Diario Oficial de la Federación* (Official Journal of the Federal Government) April 9th, 1940 and July 4th, 1941. Land grants for inhabitants of Colonia Pedernal and Flores Magón hamlets respectively.

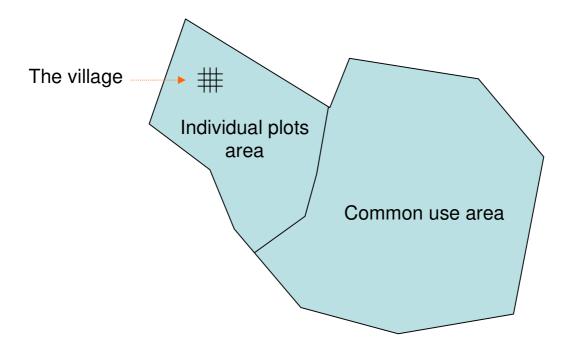


Figure 1. Model of an ejido. Most of the land granted as ejidos followed this model in the highlands of Chiapas. Additionally, a small area was designated to establish the rural settlement.

These progressive policies never took place due to two main reasons. First, the government did not have the capacity to support the communities' development in the vast Mexican territory; second, the next federal governments turned to the right, favouring private companies and cutting support for community enterprises. In 1947, it was decreed that communities' forests should be given in concession to private companies. This has been considered a partial expropriation of communities' land by government (Griffiths cited by Bray et al., 2006). In the opinion of the World Bank (1995) this situation prevented the privatization of forests, which remained as common lands. However, this opinion can be debated, because forests were in fact in private hands and people had a restricted access these resources.

In the 1980s after concessions period finished, several communities began to gain control over their forests in different parts of Mexico. However, the state of Chiapas has remained as a particular case. From 1983 to 1989 the State Government brought under control forestry by buying private sawmills and creating a public one. Most of the highland communities sold logs to that sawmill (Montoya, 1998; Villafuerte et al., 1997). Probably many of them were forced to do it by forestry officers. At this time, government still exercised close control over communities, particularly over the indigenous ones, which predominate in the highlands. Communities lost still more control over their forests when the next State Government (1989 – 1993) imposed a forestry ban, making illegal for them to harvest timber in their own forests.

In summary, from the 1940's to the beginning of the 1990's, communities were prevented from making a full usufruct from their forest by three mechanisms that occurred in different times: first, the concession system, second, the strong governmental control of the forestry production in the eighties and finally, the ban imposed by state governor between 1989 and 1993.

The strict control exercised by government over communities ended due to changes to the Article 27 of Mexican constitution occurred in 1992 and the Zapatista rebellion that broke out in 1994.

The previous version of Article 27 and the preceding agrarian code permitted a strong intervention of government in community affairs; particularly, it was banned that they sold individual plots or divided communal land. In contrast, the new agrarian law gives more autonomy to communities and permits that their land can be divided and sold if more than 50 percent of their members vote for privatisation in a general assembly. The only exception is that forestland under common property regime cannot be divided into plots. Bray et al. (2005) considers that these reforms may be thought of as a form of devolution of control over natural resources as it is occurring elsewhere.

The Zapatista military rebellion broke out on the first day of 1994 in the highlands, the Lacandona and the northern mountains regions of Chiapas. A group of rebels portrayed themselves as peasants and Indians upset over years of poverty and discrimination challenged the legitimacy of Mexican state (Collier, 1999). Although the armed movement lasted just 12 days, the negotiations between government officials and zapatistas extended for at least three years, and they did not end in a satisfactory way. Some highland men joined the movement, much more just sympathized with it. Because of the rebellion, the communities are now much more autonomous in making internal decisions. Now, they can oppose and reject governmental policies and actions.

The key point is that after these two important events, communities have made divergent decisions on their commons: some have determined to preserve this type of property - and the forest that covers it - and some have decided to dissolve it.

It has been argued that the policies that excluded rural people from the usufruct of forests created an incentive to convert forest land in agricultural land, and therefore, to dissolve the commons. This can explain why some communities ended common property regime when they felt free from government control. However, why not all communities divided commons into individual plots? In the next sections it will be explored what factors have contributed to create highland communities that concede a very different importance to commons.

### DEMOGRAPHIC GROWTH AND ACCESS TO LAND IN COMMUNITIES

In the decades following the first land grants in the highlands, ejidos and agrarian communities experienced a high demographic growth. It is estimated that highland population grew at a 2.1% annual rate between 1950 and 1970, because of a diminution of mortality rates. Between 1970 and 1990 the annual rate was higher: 3.8%. Therefore, many ejidatarios descendants were demanding land since the fifties. Under this scenery,

in some ejidos commons were seen as a kind of land reserve that would be divided in the future in individual plots devoted to agriculture activities of the new generations. The land demand accounts for the pressure to divide commons in individual plots. This has been the case of ejido Jocosic that was described for Sánchez (1995). This situation introduces two factors, one cultural and one legal: virtually all highland rural population has been subsistence corn farmers and land ownership is a symbolic requisite of mature male identity and of status within the community (Collier, 1975). From the legal point of view, each ejidatario was required to farm the land by the old agrarian law in force until 1992, in case he did not do that, he would loss his right over his land.

Nevertheless, not all the communities have had a high rate of demographic growth. Some of them have showed low rates of demographic growth, moreover, some of them have lost population in the last decades (Table 1). The sharply differences are due mainly to a high variation in emigration rates<sup>9</sup>, not to differences in the number of children alive for each family (Table 2). Demographic growth is inversely related to the number of people who have left the community and this number seems to be lightly related to the percentage of common area within each community. One of the communities with the lowest proportion of common area, Los Pozos, has the lowest number of migrants; on the other hand, communities with the high expanses of commons tend to have high number of migrants. However, San Sebastian, without common area, has a moderate migration.

Table 1. Changes in population in five communities in the highlands of Chiapas.

Community	Total population		Annual rate	Percentage of common		
_	1950 <sup>a</sup>	1970 <sup>b</sup>	2000°	1950-1970	1970-2000	land <sup>d</sup>
Los Pozos	196	302	1025	2.2	4.2	1
Jocosic	360	453	704	1.2	1.5	0
F. Bartolomé	270	398	503	2.0	8.0	87
El Chivero	180	225	155	1.1	-1.2	100
Huajam	340	356	281	0.2	-0.8	66

<sup>&</sup>lt;sup>a</sup> DGE (1952); <sup>b</sup> DGE (1973); <sup>c</sup> INEGI (2001); <sup>d</sup> Field survey.

<sup>&</sup>lt;sup>9</sup> Highland Chiapas has been traditionally a region that expulses population to other regions of the state or other parts of Mexico. It is not common that communities receive migrants from abroad.

Table 2. Emigration and average children alive per family in five ejidos in the highlands of Chiapas.

Community	N	Common land (%)	Children alive per family	Children older than 12 who live abroad (per family)	Siblings of household heads who live abroad
Los Pozos	20	1	4.9	0.4	0.4
F. Bartolomé	30	87	5.3	0.7	2.4
El Chivero	21	100	5.5	0.6	1.2
Huajam	31	66	5.4	1.6	2.0
San Sebastián	30	0	5.2	0.8	1.3
$F^{\mathrm{a}}$			0.13 ns	3.172 *	
Kruskal-Wallis <sup>a</sup>				11.83 *	10.76 *

<sup>&</sup>lt;sup>a</sup> Statistical tests: significance level: \*, 0.05; \*\*, 0.01; \*\*\* 0.001; ns, non significant. *F*: Analysis of variance. SPSS, version 11.5, used.

Source: land survey.

What is behind this great variation in migration? The information collected in a field survey carried out between 2002 and 2004 suggests that the high variation in the migration values is linked to the internal tacit agreements that communities have arrived at, which regulate the acceptance of new community members and land inheritance<sup>10</sup>. Land inheritance is one of the critical cultural agreements. In some ejidos land inheritance is possible, in others not. Communities with high percentages of common land do not permit land inheritance; the reverse happens to those that practically do not have commons (Table 3). One of these cases is ejido Los Pozos, where all sons from a household head can receive a piece of land after becoming 18 and getting married. The plot is received directly from their father. Once received the plot, the young men can become full members of the community with voice and vote rights in the assembly. In this way, the number of members in Los Pozos has increased rapidly.

Huajam is a contrasting case. In this ejido only one of the male descendants of a family can become a full member of the assembly. This happens when one member of the community resigns from the assembly and cedes their rights to his son or grandson. Under this mechanism, that is closer to the agrarian law – especially the agrarian law before 1992 – the assembly membership cannot expand; in fact, it has descended here from 70 to 55 in 66 years of ejido existence. This means no demographic pressure for dividing the commons in individual plots. Due to impossibility to receive land, most of young men becoming adults do no have any incentive to remain in the community and prefer to go away. Huajam has the highest number of children older than 12 who have emigrated and the second highest number of household head siblings who have left.

<sup>&</sup>lt;sup>10</sup> Of course, migration is also related to other factors such as internal conflicts within communities due to changes in religious practices.

Table 3. Possibility of land in	nheritance and	increment in the	number of land users.
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Community	Can all sons of a full rights community member be part of the assembly? a	Can the land be inherited to descents?	Can the land be sold?
Los Pozos	Yes	Yes	No
Jocosic	Yes	Yes	No?
F. Bartolomé	¿Yes?	No?	No
El Chivero	Yes	No	No
Huajam	No	No	No
San Sebastián	Yes	Yes	Yes

<sup>&</sup>lt;sup>a</sup> In case they meet all the requirements imposed by community authorities.

#### ENVIRONMENTAL AND ECONOMIC FACTORS

In Chiapas, in 1995, government opened the possibility of getting a forestry permit for selling logs legally. Since then, some communities in the highlands have taken advantage of this opportunity and have obtained such permits. This kind of permits can be just issued to communities as a whole, not to individuals.

From an economic point of view, it would be less efficient to administrate and build infrastructure such as forestry roads in an area divided in small forestry plots (McKean and Ostrom, 1995). The latter seems to happen in the highlands of Chiapas; where it would be also more expensive to contract a professional forester to design an individual management plan for each plot.

Keeping the forest and selling trees seems a better option than growing maize. The highlands of Chiapas are a less favourable environment for growing maize and other plants than the lowlands. Low temperatures, frosts and stony soils cause that these plants grow slowly and produce poor yields. In addition, trading policies have caused a plummet in the real price of maize since 1982, when Mexico entered in a debt crisis. Consequently, the economic incentive to grow it is currently less. Small farmers have responded to this economic policy by reducing maize production; they mainly produce the corn they need for family consumption. Because of this, agricultural areas have been abandoned, and therefore, natural reforestation has taken place in some areas (Cortina, 2007).

This situation creates an incentive to keep the forests and the commons. Therefore, most of communities that have kept a large commons area have now a forestry permit. Most of them would be classified, according to Bray et al. (2005) proposition, as community forest enterprises type II, those that sell standing trees to contractors, who employ temporally some community members in forestry activities. Community members divide forestry profits equally among them each year at the end of forestry operations season. They do not receive much money for selling trees (Table 4), but this amount is important in a poverty economy. In brief, keeping the commons has stimulated forestry, and this activity, in turn, has favoured the continuity of the commons.

<sup>¿? =</sup> Evidence obtained in the field is not enough.

Table 4. Total income obtained for selling different kind of products in the year 2003.

Average per family (US \$).

Community	Agriculture products	Livestock products	Forestry products	Total
Los Pozos	4	98	0	1081
San Sebastián	15	31	2	512
El Chivero	130	45	0	1859
Huajam <sup>a</sup>	78	53	329	4774
F. Bartolomé <sup>a</sup>	3	46	206	2704

Source: field survey.

In contrast, none of the communities that have divided forest into individual plots has a forestry permit and they tend to sell timber illegally. Complex agreements and long negotiations are needed to create a community forest enterprise when the land and the forest have been divided previously in individual plots<sup>11</sup>. Therefore, it does not like easy that most of highland communities that have parcelled can sell timber legally. In fact, the possibility of selling timber illegally could be a stimulus to maintain individual usufruct on forest, which favours the divergence between communities with regard to the importance attributed to commons.

#### DISCUSSION

It is clear now to some communities that forestry on common land provides several economic advantages. However, in 1994, just after Zapatista rebellion, the benefits were not evident; this was a period of great uncertainty in the state of Chiapas. Therefore, the economic factors were not acting strongly in favour of the commons at that time. Apart from the low demographic pressure that some communities have experienced, what other factors had influence on the decision of keeping the commons in that difficult time? Field evidences we have gotten suggest that some communities have discussed and voted the issue in the years following those days that put Chiapas under the world attention.

I hypothesize that some communities have learn over decades that forestry and common use can be convenient for them. During the concessions period, a few community members worked for private companies that were exploiting highland forest. Some of those members could surely realize the good profit generated by those firms, and transmit later to their mates the idea of the advantages of forestry. In addition to that, in the period when government controlled forestry, some communities got a small, but significantly rent for selling their trees. Field interviews let confirm that some communities used the forestry money to buy land in the central valley of Chiapas, in order to farm it. Knowing the advantages of forestry, these communities applied for a forest permit after Zapatista rebellion instead of divide their commons, as other communities did.

<sup>&</sup>lt;sup>a</sup> Communities with a legal sell of timber and a silvicultural forest management plan.

<sup>&</sup>lt;sup>11</sup> See for example the case of San Juan Nuevo Parangaricutiro ejido in the state of Michoacán in Bray and Merino (2004).

One more reason for keeping the commons in the highlands is the struggle to maintain equal access to land and forest within the communities. Forest provide many services for rural people; firewood and housing timber are the two more important, but also people find there medicinal plants, edible mushrooms, ritual plants, etcetera. Dividing forest land could create an unequal access to forest, where some people would obtain more area and trees and some other would be prevented from the usufruct of this resources. Collier (1999) shows that in the Zinacantán municipality of the highlands, community members have been differentiating among themselves along lines of class. The wealthier ones have concentrated the land by renting plots to the poorer ones. So, in a parcelled community it is easier that inequality grows. In the field survey we did, some people stated that one of the reasons to preserve the commons is the fear about someone else community member will take more land and cut the trees. Forestry on commons is a way that prevents the poorest ones in a community be excluded from the usufruct of forest resources.

The scarcity of trees can add an additional pressure to keep the common land and in some cases to re-establish it. A notorious case is that of ejido Los Pozos, where the general assembly decided that the big pine trees, a resource held on an individual basis in the past decades, would become common property. The decision was made when most of the members considered that everybody has the right to get timber for housing from the community trees. In this case, the land remains under individual tenancy, but everyone in the community owns the big trees; at least four more communities share this type of agreement.

Will the commons continue in communities of the highlands of Chiapas? Bray et al. (2006) argue that the frequently expressed concerns that the impact of the 1992 agrarian reform would create incentives to deforest, divide and sell the land in communities do not seem to have happened on a significant scale in Mexico. However, division and deforestation of the commons have happened in some highland communities, whose number should at least obligate to keep an eye in the process.

The prohibition on the division of commons covered by forest has not been an obstacle for some communities in the region; they simply have ignored the law and have made internal arrangements to divide these lands. Deforestation has not necessarily been a preceding step to parcel up; some communities have divided their forestland with no previous extensive deforestation.

Collier (1999) argues that reforms to the agrarian code will aggravate the social and economic differentiation that now exists within communities and will facilitate land concentration in less hands, which is an obvious threaten to commons. In other parts of Mexico, the cases of ejidos that have decided to convert their commons in individual plots have raised significantly. Most of this kind of ejidos is now very close to the growing cities; so the division of the commons is a previous step before converting the plots in private properties that can be sold at high prices (Ramírez, 2007). This situation have reached the highlands, where one community have divide part of their land in the periphery of the small, but rapidly growing, town of Teopisca.

Communities face several pressures for ending the commons; demographic and economic are the most important, but also internal conflicts threaten the stability in some of them and then the communal peaceful use that has been taken place.

#### CONCLUSIONS

Public policies created common land resources as part of agrarian reform. Several decades later commons are preserved in around a third a communities in the highlands of Chiapas. This preservation is due to the following factors: first, a low demographic growth linked to cultural and legal agreements that limit the access to land for the new generations; second, a combination of environmental and economic advantages for forestry on commons, and third, the effort that some members in the communities have made to preserve equal access to land and forest resources.

Conservation of common land depends now more on the communities than ever in the past, when this was impeded by law. At this point, when communities face the risk of dividing their commons, is imperative to strengthen communities' capacities to manage commons and to find forms of use of commons resources in a way that communities increase the benefits that obtain from them. This will stimulate commons preservation. Community forestry constitutes now a new way of managing the commons.

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