

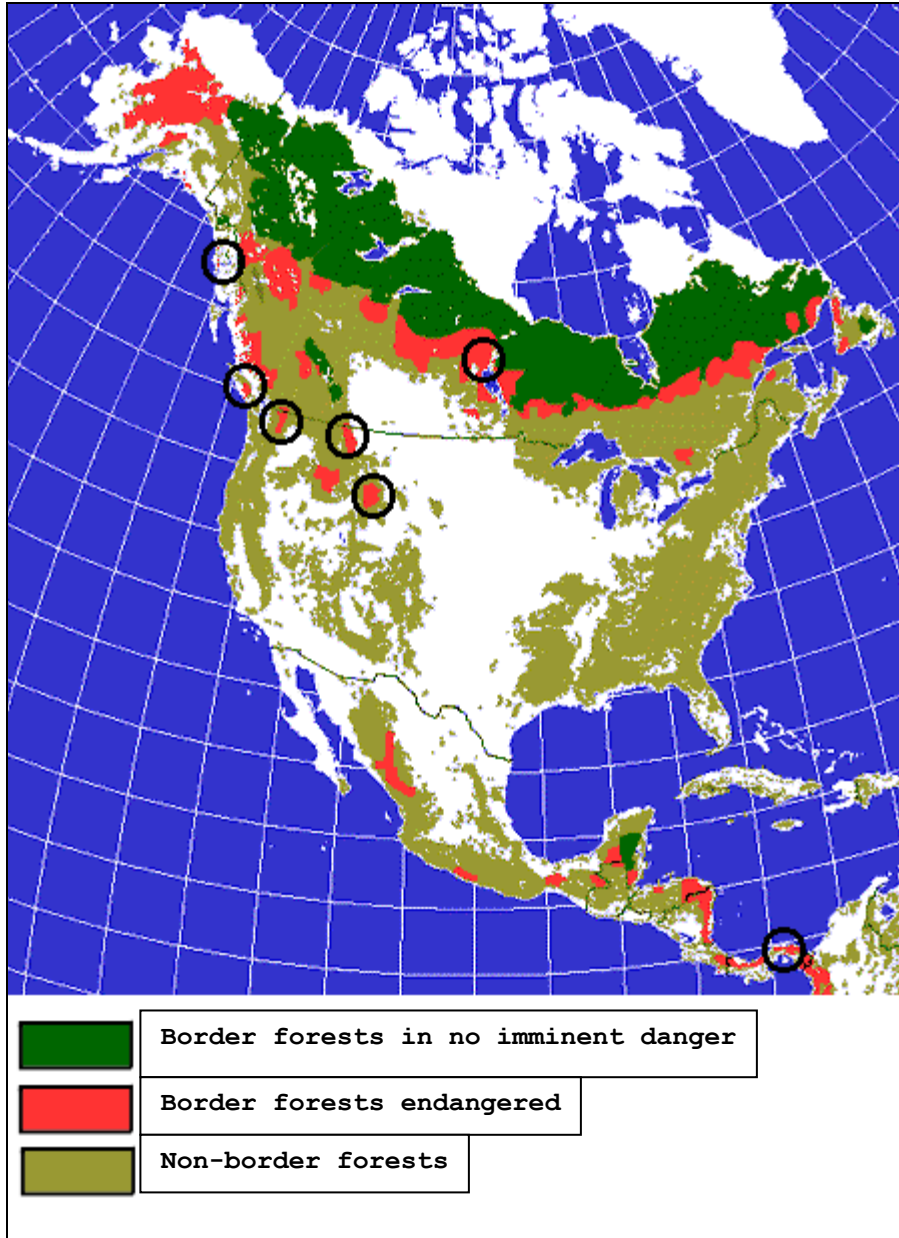
Annex 3: Forest Certification in Mexico

CERTIFICATION IN MEXICO: THE CASES OF DURANGO AND OAXACA

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1. Introduction

Mexico's forests are characterized by their fragmentation and by having a very strong human presence. Ten million farmers and indigenous people, whose livelihoods depend on the harvesting of timber and other forest products (Semarnap 2000), live in Mexico's 21 million hectares of forests. According to data from the World Resources Institute (WRI), only in Mexico are there very localized areas of forests capable of maintaining full trophic pyramids in a relative state of wilderness preservation: the tropical forest of Calakmul, in Campeche and the south of Quintana Roo; the tropical forest of Chimalapas, Oaxaca; part of the mountain forests of Guerrero; part of the forests of the western Sierra Madre and the Mountain of San Pedro Mártir in Baja California (WRI 1997). Of these border forests only the southern forest of Quintana Roo is not in imminent danger even though it is being exploited for timber. Outside these areas, Mexico's forests have been exploited in many ways, and show the effects of human activities that range from hunting to clearing of the forest, including formal and informal exploitation systems. This mosaic of habitats shelters a great biodiversity such that Mexico is considered among the 12 mega diverse countries; in other words, those that maintain 60 percent to 70 percent of the diversity of the planet (Mittermeier and Goettsch, 1992). Mexico is not a country with large extensions of wildlife like Brazil, Canada or Russia. Its diversity is due more to the complex interaction between diverse human resource management strategies and the natural ecosystem. Cultural aspects play a major role in this apparent paradox, in that altered forests co-exist with forest fragments of enormous biological diversity.



Though different forms of forest intervention have allowed the preservation of a large part of forest coverage in Mexico, some 600,000 hectares of forest are still lost annually. Although this figure is not as great as the 2 percent in Indonesia and Malaysia, it reflects a certain inability of the institutional arrangements to conserve the forests and the biological and natural resources associated with them (WRI, 2000).

Deforestation in Megadiverse Tropical Countries		
Country	Annual Deforestation	
	Area (Has)	Rate (%)
R.D. Congo	370,000	0.6
Brazil	2,530,000	0.6
Colombia	890,000	0.6
Mexico	615,000	1.2
Madagascar	156,000	0.8
Indonesia	620,000	1.0
Malaysia	255,000	1.8

Source: WRI, 2000

Institutional Arrangements

Eighty percent of Mexican forests are collectively owned and protected by farmers and indigenous communities (Conafor 2002). This contrasts with the situation in the rest of the world where it is estimated that 71 percent of the forests in the so-called developing countries are government owned. It is estimated that ownership conditions similar to Mexico's exist only in countries like Guatemala, Nicaragua and Bolivia, and they represent only 14 percent of the forests in developing countries (White and Martin, 2002). However, community forest ownership may be an efficient scheme to develop effective organizational arrangements for sustainable forest management. In the past 15 years, the area owned and managed by indigenous communities had more than doubled, reaching almost 380 million hectares—about seven times the size of France (White and Martin, 2002).

Given the pattern of forest intervention in Mexico, the issue is not the preservation of forest areas in a pristine state, but rather the improvement of existing institutional arrangements or the development of new ones to stop deforestation and conserve biological and natural resources associated to forest areas.

Until now, even though a significant part of the country's forest assets have been preserved, the institutional arrangements have not been adequate. Although the country has 21 million hectares of woodland, only seven million are under management plans and authorized extraction.

Certification

The institutional flaws in the Mexican forestry sector seem to be mainly due to the difficulties and high costs involved in fully enforcing the official norms. This could partly explain the currently high annual rate of deforestation of 1.2 percent. In view of this, certification becomes an option for establishing an institutional arrangement whereby the performance standards in forest extraction would be voluntary. Through external technical audits, the owners of the forests could look for preferential markets or obtain nonmonetary benefits by showing that their forest management units comply with standards of good performance recognized internationally.

In the past few years forest communities and “*ejidos*” have shown interest in certification of their forestry operations. This interest is reflected in over 500,000 hectares of community forests that have already been certified and some additional 100,000 that are in the process of certification. At present, there are 60 “*ejidos*” or communities that are somehow linked to the evaluation/certification process, and in the second semester of 2002 alone an additional 34 communities have requested the support of the *Comisión Nacional Forestal* to defray the costs of evaluation/certification of (CONAFOR 2002a).

Until now, the only certifying organization in Mexico has been SmartWood, which works although a cooperation agreement with the *Consejo Civil Mexicano para la Silvicultura Sostenible, A.C. (CCMSS)*. There is also CCMSS, a group of NGOs and persons concerned with promoting sustainable forest management in Mexico. At present, the CCMSS operates in two coordinating offices: Certification, with headquarters in Jalapa, Veracruz and Promotion of Sustainable Forestry, headquartered in Mexico City.

The present analysis of the status of certification in Mexico focuses on the states of Durango and Oaxaca. The first state, located in the north of the country, is the main producer and exporter of roundwood. Durango is closely linked to the markets in the south of the United States. On the other hand, Oaxaca is located in the south of Mexico. It places fourth in volume but first in biological and cultural diversity, all of which makes it closer to the Mesoamerican dynamic.

2. Economic aspects of certification in Mexico

Costs of certification

There has been considerable debate about whether the costs of certification inhibit the expansion of this instrument. There has also been speculation regarding the economic viability of the certifying and accrediting organizations if the full costs of certifications are not charged to the users of this service. On the other hand, it is not certain whether the benefits compensate the producers for the cost of the certification. In the state of Durango there is an oak wood processing company of carbon for export that currently pays a surcharge of 10 percent for the oak coming from certified forestry operations. This carbon company pays this surcharge to remain as a supplier of foreign companies and not because it receives any surcharge. (García, 2002)

To analyze the costs of certification it is necessary to differentiate between the direct and indirect costs of certification that include the costs of technical audits, the certification fees and the costs of annual re-assessments, and the direct and indirect costs of compliance with the CARs:

Direct and indirect costs of certification

Certification in Mexico started with considerable subsidies from international foundations and assistance agencies. The Inter-American Foundation, the Ford Foundation, the McArthur Foundation, Packard, WWF and the German agencies for technical cooperation (GTZ) and development assistance (DFID) are among those organizations that have made major contributions between 1995 and 2001. The Mexican government has been partially replacing these contributions through the *Programa de Conservación y Manejo de los Recursos Forestales (PROCYMAF)*, and recently through the *Programa Nacional de Desarrollo Forestal (PRODEFOR)*. These contributions have had the effect of promoting the formation of a Mexican market of certification services. The trend in the medium term is that once the institutional arrangements for certification are established, these contributions will stop and the total costs of certification will be reflected in the fees charged.

It should be noted that today one of the main driving forces behind certification is the timber industry sector which in many cases has provided financial support to the communities to cover the costs of certification. The state of Durango is the most advanced in the process of certification, and for 2002, 18 communities have taken the first steps to start the process and most of them have a close relationship with timber industries that are already concerned about the international market signals that products have to come to market with the certification of good forest management.

The *Programa Nacional de Desarrollo Forestal (PRODEFOR)* provided a subsidy of 50,000 pesos in 2002 to each management unit to cover the costs of the technical evaluation required for certification (PRODER, 2002). This subsidy is expected to cover up to 49 percent of the total costs with this

institution estimating the costs of certification at 102,000 pesos per management unit, or about \$10,200 dollars.

Direct Costs of a Technical Evaluation (dollars)		
	Unit Price	Total
Five-year Evaluation		12,000
Four Annual Verifications	2,000	8,000
Four Annual Installments	500	2,000
Cost in Five Years		22,000
Annual Average		4,400

For its part, the *Consejo Civil Mexicano para la Silvicultura Sostenible* (CCMSS) estimates that—for the certification figures to reflect actual costs—120,000 pesos (\$12,000 dollars) would have to be charged for each five-year evaluation, which is consistent with PRODEFOR’s estimate. Considering the costs of annual verification and payment of installments of certification, the cost would be on average \$4,400 dollars per year for each forest management unit. However, the office of certification of CCMSS considers that there are indirect costs, such as administrative expenses, costs of revision of technical reports as well as monitoring and transaction costs associated with the contractual relations with SmartWood and the Forest Stewardship Council which, if reflected in the evaluation and certification fees, would make the total costs rise to \$7,200 dollars per year for each forest management unit (Alatorre, 2002).

	Total
Five-year Evaluation	18,000
Four Annual Verifications	16,000
Four Annual Installments	2,000
Cost in Five Years	36,000
Annual Average	7,200

Direct and indirect costs of complying with requisites and pre-requisites

In addition to the costs of certification, it is necessary to add the direct and indirect costs of carrying out the corrective actions required known as “conditions” (CARs) so that the forest management units adjust to SmartWood generic standards.

In May 2002, the area of certification of the *Consejo Civil Mexicano para la Silvicultura Sostenible* made a review of all the certification files. According to this review, the actual evaluation capacity for Forest Management certificates is only about seven properties per year, covering a little over 100,000 hectares. Only 48 percent of the properties assessed have yet been certified. The rest have to fulfill pre-requisites or has some other type of problem that prevents them from obtaining the certificate.

Progress in the Certification in Mexico (1994-2001)

Year	Assessed Properties				Certified Properties		
	Number	Area assessed (hectares)	Average Size	Re-assessed Properties	Number	Certified Area (hectares)	Average Size of the Property
1995	4	77,215	19,304		3	71,370	23,790
1996	1	8,450	8,450		4	5,845	1,461
1997	6	26,851	4,475		1	5,020	5,020
1998	9	30,466	3,385		1	2,826	2,826
1999	9	76,761	8,529		4	33,814	8,454
2000	8	354,463	44,308		1	84,560	84,560
2001	15	171,291	11,419	7	11	301,395	27,400
Total	52	745,497			25	504,830	
Average	7		14,267		4		21,930

Source: CCMSS, 2002

The aforementioned report indicates that from the required corrective actions (CARs) identified by the evaluation teams, the main reasons for a Mexican forest management unit not to get certified or to be conditionally certified are (CCMSS, 2002):

- The need to improve the overall forest management programs and the planning system;
- Little training to farm laborers and forest technicians and the need to update the responsible technical directorates;
- Low efficiency in the processing and marketing of forest products;
- Lack of basic biological-environmental studies on forest productivity, as well as lack of information on sustainable management practices;
- Weakness of the *ejidal* and communal organizations; and
- Low managerial and administrative development.

In sum, more business development (CARs of group c and f) is needed, as well as an expansion of the technical/scientific base supporting the forest management systems (CARs groups a and d) and increased social capital¹ of communal and *ejidal* enterprises. Using PRODEFOR estimates, we calculated that the costs to comply with the CARs identified by the CCMSS could be well around \$61,635 dollar annually per management unit.

¹ See Flores and Rello (2002) for a recent discusión on social capital formation in Mexico and Central America.

Corrective Action (CAR)	PRODEFOR Project	Contribution of the Subsidy	Applicant	Total	
				Pesos	Dollars
Business Development	Marketing support	73,500	80,850	154,350	15,435
Expand the technical/scientific base	Technological research	150,000	165,000	315,000	31,500
Increase social capital	Organization for community forestry	70,000	77,000	147,000	14,700
		Estimated cost in five years:		61,635	
		Estimated annual cost:		12,327	

Source: PRODEFOR, 2000

In the case of Oaxaca, the *Delegación de la Semarnat* estimates that there are between 400 and 450 forest management units between the different *ejidal*, communal and private ownership schemes (Semarnat, 2002). If we consider that only half of the registry would be the universe of potentially certifiable units, we would conclude that $200 * 7,200 = 1,440,000$ dollars per year would be needed to cover the direct costs of certification and that an additional $200 * 12,300 = 2,460,000$ dollars per year to cover the CARs. At the national level, these figures are ten times greater, that is, if we assume that half of the 4,000 permit holders or more that exist in the whole country decide to use certification schemes, we would need about 39 million dollars annually at current costs.

Cost/Benefit Ratio

The renewed concern of several researchers regarding the lack of economic benefits of certification for the communities is logical considering the fact that this instrument was not originally developed for this purpose. Nevertheless, from our perspective, it is somewhat naive at the present stage of development of the international certification initiative to assume that a Mexican *ejido* could sell certified roundwood and benefit economically in the initial years, for the following reasons:

- a) The country's forest industry has been under a serious crisis for 20 years. Proof of this is the hundreds of companies that have closed their doors, the recent bankruptcy of COPAMEX in Chihuahua is a good example. The importation of forest products from South America, North America and Southeast Asia has invaded the national market and has placed domestic businesses in a very delicate situation. In this situation of crisis, it is unthinkable to pay a surcharge to the certified communities that supply raw materials.
- b) There are estimates that indicate that there is as much or more timber from illegal logging circulating in domestic markets (Profepa, 2000). This timber is generally offered at lower prices than legal timber and this drives prices down nationally. It is unlikely that a consumer will be willing to pay the price of legal timber plus a surcharge, when he has the alternative of buying cheaper timber from illegal logging.

- c) During the last decade, most of the Mexican population has lost purchasing power. Mexico is a country where 55 percent of the population has been labeled poor. It is difficult for this population to pay a surcharge.
- d) In the past 20 years, timber production in the country has been used mostly for wooden molds or casts for concrete, in the construction of millions of houses in the suburban areas of the main cities of the country. These wooden molds may be rented, used three or four times a year and later trashed. This segment of consumers, the renters of these wooden molds, for the most part poor businessmen, is unlikely to be able to pay a surcharge.
- e) Mexico is a large importer of forest products and the trade balance of the forestry sector shows a deficit of 1,850 million dollars (this amount represents 46 percent of the total trade deficit of the country.) Imports of forestry products are not limited just to pulp and paper and the importation of solid wood has also been increasing. Some companies that purchased timber from ejidos and communities no longer do so because they get better prices buying timber from Chilean plantations. One such case is that of Pinnely Universal in Durango that at present imports about 75 percent of its raw material requirements at a price 25 percent lower than local timber. Having an abundant supply at cheap prices, it is very unlikely that the processing industry will pay a surcharge for local timber.
- f) The communities and ejidos in Mexico are mainly producers of forest raw materials, producers of roundwood and some of them produce sawed wood. Most of these enterprises are not able to enter large markets because of their current technological level and lack of vertical integration. The international green markets not only require the FSC stamp but also have strong requirements regarding volume, quality, opportunity, presentation, credit, etc., such that rural forestry production in Mexico does not qualify. No doubt there are a few rural enterprises that have succeeded and others are in the process but it will take them several more years. Some other communities will never succeed because local production conditions do not allow it or because it is simply not within their economic strategy (although all three types of communities are still interested in being listed as certified communities under the FSC scheme.)

Although the analysis of the current domestic conditions let us see few possibilities of finding economic benefits for the certified communities in the short term, it is worth mentioning that there are some indications that this situation could change in the medium term. It could be expected that to the extent that certified timber markets grow and there is an understanding of the concept of certification on the part of the consumers, there could be a surcharge that the “industrial timber businessman” would pay, motivated by the demand of the international markets for certified products. (García, 2002)

Cases like this could start reproducing themselves with export companies that already have a certificate of chain of custody in Durango such as Forestal Halcón, Forestal Alfa, Pinnely Universal and Forestal Líder—assuming that the companies can survive the current economic crisis of the Mexican forestry sector and if the demand of international markets for certified finished products continues. Today the timber industry is increasingly interested in obtaining its “certificate of chain of custody” (this is a FSC certificate that certifies them as processing and marketing companies of certified products.) To date ten companies in Mexico have obtained certification and another ten are being processed. These timber producers have not yet obtained any benefits from being certified; however, they are maintaining and renewing their certificates due to international market signals. Their interest is so serious that not only are they covering the costs of their own certificates but they are also financing the costs of certification of the ejidos that supply their raw materials. The evaluation of the *ejido* Pueblo Nuevo is a good example--it was paid by Pinnely Universal and Forestal Halcón.

It is also worth mentioning that there is currently a strong expectation from private companies and communities for obtaining an economic benefit from certification. However, many believe that the economic benefit would be limited to maintaining their products in the international market (García, 2002).

In the review of the cases, we found a series of reasons that have motivated the application and maintenance of the certification and can be summarized as follows:

- a) Certification makes the Technical Directors competitive in their market for the provision of services. The responsible persons or technical directors of the forest harvesting companies in Mexico have promoted the concept of certification in the communities and ejidos. They are foresters that work independently and provide services independent of any forestry operation. Currently, these professionals compete strongly among themselves for the contracts offered by the owners of the forests. Many of them have developed good technical skills and look for work in certified forest properties. This allows them to be more competitive in the market of forestry technical services since they are able to offer their services on the basis that the forest management of the other properties where they work have already been assessed and qualified under international criteria. On the other hand, the conditions agreed upon in the certification contract support the technical director in his/her negotiation of financing for the application of the management plan. Examples: Ing. Roberto Trujillo, Technical Director of Echeverría de la Sierra and Centenario in Durango; Ing. Ricardo Ramírez in Oaxaca.
- b) Certification provides prestige to the Comisariados and/or managers of the forest community companies. Some Comisariados and/or managers of the forest community companies have applied for certification to gain prestige among the ejidatarios and/or community members. As a result of this prestige, their work may be recognized as good and they may gain the trust of the Assembly in favor of their group or themselves. Example: The Comisariado of Pueblo Nuevo, Durango, had to step down because its period was over; therefore, it made the certifying company hurry up to deliver the certificate just a few days before its period was over. In Oaxaca, the Comisariado of La Trinidad took advantage of the CARs to promote the participation of community members in the “labores de cultivo del bosque”.
- c) Certification reduces internal conflicts in the community. Mexican communities and *ejidos* consist of heterogeneous groups of families dependent on diverse economic activities such as cattle raising, agriculture, mining, trade, and forestry. There are conflicts and power struggles as well as struggles for the use of resources among these sectors. Frequently these conflicts have caused the temporary suspension of the community forestry activities. Some examples of forestry enterprises of non-certified communities are Macuiltianguis, Atepec and Peras in Oaxaca. The certification (as an external audit) has been seen as a tool to reduce tensions to eliminate any doubt that the “forest is being destroyed” and to justify the permanence of the community forestry productive project. An example is the case of the *ejido* El Centenario (Durango) where there were serious internal conflicts. These internal conflicts were detected by the evaluation group causing the certifying company to decide to set conditions for the certification. A year later, the *ejido* resolved its internal problems and obtained the certification.
- d) Certification helps to improve the relations with external agencies. Small rural forestry enterprises are frequently criticized by external agencies for cutting trees because there is no clear understanding about the meaning of logging and forest harvesting. Certified enterprises have used certification to show to the media, the *Secretaría del Medio Ambiente*, the *Procuraduría del Ambiente* and environmental organizations that their logging is a planned activity focused on sustainability. The certification has helped to improve the relations

between community enterprises and the municipalities (like in the case of Uzachi of Oaxaca). Moreover, some communities are applying for certification to improve their relations with the government like the *ejidos* in the Mornaca region in Michoacán that are looking for a greater opening of the environmental institutions to develop forest management activities in their own forest areas that the government has declared reserve areas.

- e) Certification is sought as a precautionary business measure. There are several reports in the media indicating that the international timber market is rapidly advancing to demand certification. Many private or farmer business managers have decided to start the certification process as a preventive measure and to avoid risking being left outside the market for lack of compliance with market demands.
- f) Members of the *ejidos* seek certification to obtain an external technical audit that may detect mistakes and recommend improvements. The evaluation of the forestry operation that leads to certification based on international principles and criteria allows forestry land owners to get an external and independent view of forest management. But in addition to certification, it contributes to a series of technical recommendations that should be applied to the forestry operation. This was undoubtedly an important reason for communities like Ixtlán de Juárez in Oaxaca and Pueblo Nuevo in Durango seeking certification.

In sum, one could say that the communities have many reasons to seek and maintain certification. However, there is a hypothesis that these “non-economic reasons” will be useful only during a first phase and that unless economic benefits are found, this mechanism will be rejected in the communities. This hypothesis should be taken into consideration since maintaining certification has permanent economic costs and the members of the ejido, the *ejidatarios*, will demand permanent benefits that impact their economy.

3. Conclusions

Official figures show that there are 28,000 *ejidos* and communities in Mexico of which about 7,000 own forest resources. These communities own 80 percent of the forest land of the country (about 49 million hectares). On average, each community has 7,000 hectares of forestry land, although in reality there are many *ejidos* that have less than 300 hectares and others that have up to 450,000 hectares.

The same way that it is possible to find a considerable difference in the natural capital (forest area and quality of the forest) in the communities, it is also possible to find significant differences in the “social capital”. It is possible to find communities with a strong organizational capacity and development which include authority structures, assemblies, regulations, sanctions, etc. as well as communities whose assemblies do not meet even once a year.

Obviously, communities with ample natural and social capital will have a greater chance to generate income and better opportunities for training, investment, research, organization, administration, monitoring and planning, and thus, comply promptly with international norms of good forest management, but these “elite” communities represent in fact no more than 1 percent of all the communities that own the country’s forest resources. The communities with meager resources and limited social capital are so far away from reaching international standards that they would not even discuss the issue and will continue the process of deteriorating their resources.

Forestry certification, in the framework in which it develops is obviously not a mechanism for most of the communities that own forest resources in Mexico. Thus, it is evident that thousands of communities will

never have access to certification and their forest production could, in certain cases, be excluded from entering conventional markets thus encouraging illegal timber markets.

There is no doubt that certification should not be thought of as the panacea to all communal problems and their forests, but there is a challenge and a possibility to take advantage of the mechanisms of certification, adapt it and make it useful for a larger number of communities with forest resources. Certification may become a support for many more communities. However, it is necessary to implement other mechanisms that provide general support to forest owners to encourage them to preserve land forest use. (again this is not clear: para estimular que ellos mantengan el uso forestales del suelo).

We believe that certification should become a public policy instrument—an instrument to slow down the serious process of forest deterioration that our country is sustaining. An instrument of public policy, enhanced with training, research and marketing that allows that “good forest management” should be implemented, not only by a small group of “elite” communities, but also by the great majority of communities.

As a public policy instrument, certification should also look into the problems of the benefits of certification of forest management and undoubtedly, the State could play a significant role. As an example, one could advance toward the opening and facilitation of sales to government institutions of forest products from communities that practice or are in the process of practicing good forest management. And consider fiscal incentives and subsidies.

We believe that FSC should think more seriously about the problem of “the forestry operations of the non elite” to put much more effort into the design and implementation of schemes other than the current one. Schemes that could be complementary and that make certification much more accessible to “the forestry operations of the non elite” that are on their way to good forest management and the development of a global campaign in the trade and government areas in their support.

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