

Forest Certification in Mexico

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ABSTRACT

Forest certification has become established in Mexico and obtained recognition by government forestry institutions dedicated to forest enhancement, among forestry professionals, the forest export industry, and many forest cooperatives and communities. This was due to the combination of early NGO involvement in funding and promoting certification, and market demand for FSC-certified products from some industries, as well as federal and some state-level government incentives to promote certification. Currently there are 36 FSC-certified operations covering 613,671 hectares in Mexico. Certified forests in Mexico make up 44% of the total number of certified community forest sites and half of certified forest surface area worldwide (Alatorre 2003). FSC certification in Mexico has brought about much positive change: it has improved forest management, recognized the silviculture developed by forest communities and cooperatives, and allowed these groups access to national- and state-level resources that promote sustainable forestry and adaptive management. However, certification has also failed to address some important issues such as illegal logging. Recently, certified cooperatives and communities have begun to question the importance and advantages of forest certification, due to its lack of economic benefits. While a number of initiatives are being undertaken to help strengthen certified markets for Mexican certified products, more work must be done if certification is to be a long-term conservation strategy in Mexico.

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ACRONYMS

CCMSS A.C.	Consejo Civil Mexicano para la Silvicultura Sostenible en México
CONAFOR	Comisión Nacional Forestal
ERA A.C	Estudios Rurales y Asesoría Campesina A.C.
FSC	Forest Stewardship Council
SEMARNAP	Secretaría de Medio Ambiente, Recursos Naturales y Pesca
SEMARNAT	Secretaría de Medio Ambiente y Recursos Naturales
PRODEFOR	Programa de Desarrollo Forestal
PROCYMAF	Proyecto de Conservación y Manejo Sustentable de Recursos Forestales en México
PROFEPA	Procuraduría Federal de Protección al Ambiente
SICODESI	Sistema de Conservación y Desarrollo Silvícola
UNOFOC	Unión Nacional de Organizaciones de Forestería Comunitaria
WWF	Fondo Mundial para la Conservación de la Naturaleza

I. INTRODUCTION

In Mexico, forest certification was introduced and promoted in 1994 as a result of the alliance established between a civil association, the Mexican Civil Council for Sustainable Silviculture (CCMSS in Spanish), and the SmartWood Program of the Rainforest Alliance. CCMSS was interested in promoting sustainable forest management through community forestry and SmartWood in pushing forward the Forest Stewardship Council (FSC) certification process in Mexico.

The certification process had an important start in Mexico since CCMSS is integrated by a team of people who are strongly committed to community silviculture in Mexico; this generated the trust and interest between the forest communities and the supporting institutions (NGOs and government) to develop the concept of forest certification in this country.

Certification in Mexico has been promoted through two channels at the regional level. The first, located in the northern part of the country, involves pro-FSC market signals from US and European clients, who are now requiring that the products they purchase are FSC certified. This has allowed a private byproducts industry in Durango and the charcoal industry to receive economic benefits from certification.

The second channel is in the southern part of the country, and involves the promotion of FSC certification by the federal government, with support from the WWF, with the goal of strengthening community forestry processes and preserving forests with highly valuable biodiversity in the state of Oaxaca. These groups consider certification to be a powerful instrument to stimulate forest conservation, generate of revenue for its inhabitants, and protect diverse environmental services such as biodiversity, the capture of water and charcoal, among others. The Mexican federal government has created public policies and economic incentives designed to strengthen forest certification.

Currently in Mexico there are 36 FSC-certified operations covering 613,671 hectares. Certification in Mexico has instilled in communities, cooperatives, and some forest industries confidence and recognition regarding sustainable management of their forests and production, for which they have acquired advantages in a steady framework and received some economic incentives for their productive development.

Since the communities and FSC-certified agencies do not receive direct economic benefits through forest certification, in recent years a debate has started among them regarding the advantages of certification, and they have begun to question the need to maintain the costs of certification. One of the biggest challenges for forest certification in Mexico will be promoting plans and strengthening processes for the productive and commercial capabilities of the certified agencies and communities so as to improve access and enter international and domestic markets that demand FSC-certified products.

In addition, it will be necessary to explore the possibility of promoting a market for forest-certified products under a commerce model that takes into consideration the

efforts of the Mexican indigenous communities and the management of highly valuable native forests for biodiversity conservation.

II. BACKGROUND FACTORS

Ownership and Tenure

Mexico's forest surface is 127.6 million hectares of which 63.5 million hectares are forest, and 64.1 million hectares are xerophyte scrubland and other types of vegetation. This surface comprises 66% of national territory (SERMANAT 2002). Of the total forest surface, 80% is social property (belonging to cooperatives and communities), 15% is private property (small-scale landowners), and the remaining 5% is government property. Twelve million people live in the forest areas of Mexico, most of them affected by extreme poverty and migration. (CONAFOR 2001).

In Mexico, forest-related activity is regulated by the recently constituted law on sustainable forest development (*Ley General de Desarrollo Forestal Sustentable*) which makes reference to the competencies and attributes in forest material under the three branches of Mexican government: the federal government, the state government, and the municipal governments. This law refers to the institutional framework of activities related to regulation, protection, promotion and forest vigilance, and the diverse government forestry programs. It states the necessary requirements to obtain authorization for forest use, as well as the commitments and obligations of the forest landowners and the Mexican government to conserve, protect, use sustainably, and restore forested areas of the country.

Other laws that complement the aforementioned are the *Ley General del Equilibrio Ecológico y Protección del Ambiente* (a law on ecological equilibrium and environmental protection), focused on activities to protect biodiversity and prevent and mitigate of environmental impacts of some forest activities on forest lands and tropical areas; a law on wildlife (*Ley de Vida Silvestre*) in charge of regulating the use of plant life and animal wildlife; a law on agriculture (*Ley Agraria*) that provides the legal framework so that landowners carry out activities to use their forest resources; and the *Ley General de Desarrollo Rural Sustentable* (a law on rural sustainable development) that establishes the general framework for activities that protect and restore forest cover within the rural development programs.

In Mexico, federal institutions are the government bodies in charge of regulation, advancement, protection and surveillance of forest resources. As such, the Secretariat of the Environment and Natural Resources (SEMARNAT in Spanish) is the institution in charge of regulating forest activities and authorizing the use of forest resources through its delegations in each of the 32 federal entities.

The National Forest Agency (CONAFOR in Spanish) is the agency in charge of promoting the activities related to proper forest use, forest protection, plantation development and restoration, through the support of economic resources that are

allocated as subsidies. While the Federal Environmental Protection Office (PROFEPA in Spanish) is the institution in charge of enforcing the law and carrying out inspection operations and forest surveillance, the state governments and municipalities collaborate and participate in carrying out advancement, restoration, and forest surveillance programs.

To commercialize forests in Mexico, SEMARNAT must give authorization, and for that it requires that the interested parties present the following documents: a Forest Management Report, legal documentation that safeguards property within the forest site; in the case of communities and cooperatives, an assembly act that grants use of the forest site and tax payments to the federal government for the use of these resources. Forest permits are generally issued for the use of forest sites for 10 years.

The number of registered permits registered at SEMARNAT in 2000 was 2,616, which safeguarded the production of 7 million m³s. The states of the Republic of Mexico with the most number of permits were:

Table 1. Forestry permits in Mexico

STATES	NUMBER OF FOREST PERMITS
Puebla	448
Chihuahua	278
Durango	272
Oaxaca	220
Michoacán	219

Source: SEMARNAT 2000

Meanwhile, the states with the highest area under permit were:

Table 2. Authorized volume per state entity in Mexico

STATES	AUTHORIZED VOLUME (thousands m ³)
Oaxaca	1,069
Guerrero	1,038
Michoacán	972
Chihuahua	857
Durango	711

Source: SEMARNAT 2000

In Mexico, the integration of the chain of production is established starting with the landowners and proprietors of the forest who, according to their organizational and technological level, can: a) rent their forest to intermediaries, b) sell their wood in rolls, c) process chip and fibre and sell it as mulch, and d) make products of added value.

The main silvicultural techniques for coniferous forests are selective treatments such as Mexican techniques for forest management (*Método Mexicano de Ordenamiento de Bosques*) and other treatments that incorporate complementary treatment processes in

the forest sites such as the silviculture development method (Método de Desarrollo Silvícola), and the SICODESI, which includes the leaving of “grandfather trees” and pruning techniques (i.e., *cortas de regeneración*, *cortas de liberación*), clearing and pre-clearing. For the tropical rainforests, the main selection methods that are developed focus on rare species, and in some cases, there are forestry procedures that seek to promote the development of commercial species.

Markets

According to the National Forestry Inventory, Mexico’s surface is comprised of 21.6 million hectares of forest with commercial potential. Of this surface, only 8.6 million hectares are utilized, for a total of 40% (CONAFOR 2001).

In 2000 registered forest production in Mexico was 9,429 million m³s, and the Mexican states with the most timber production for that year are presented in Table 3.

Table 3. Volume produced by the main forest agencies in Mexico

STATES	VOLUME PRODUCED (thousands of m ³)
Durango	2,371
Chihuahua	2,091
Michoacán	1,394
Mexico	604
Oaxaca	578

Source: SEMARNAT 2002

Tables 2 and 3 show that there are discrepancies between the volume that is authorized and the actual volume harvested. This can be due to the forest-use registry that assigns the lots annually, which can sometimes include the volume for two years as one year, as is the case of Durango and Chihuahua, who report a greater volume than what is authorized for one year. On the other hand, there are states such as Oaxaca and Guerrero who have a determined authorized surface area and only use a portion of it. Somehow, these data reflect certain efficiency in each federal entity’s production.

The contribution of the forest sector to the Gross Domestic Product (GDP) for 1987 was 1.3%; in 1996 it fell to 0.5%, and in 1999 it rose again to 1.2% of the GDP. (CONAFOR 2001). During the past ten years, Mexico managed to export timber at a total net value of \$1,647 million. Sawn wood, plywood and molding exports comprised 65% of the total of that amount.

Exports of forest wood products in Mexico have fluctuated and, since 1995, exports have increased due to the devaluation of the Mexican *peso*. That is why exports jumped from \$96 million in 1994 to \$286 million in 1997. From 1998 on, they began a steep decrease that would plunge to \$89 million in 2002.

With regard to wood imports, during the past five years sawn wood increased dramatically by 251%, starting from \$49 million in 1998 to \$172 million in 2002, which tends to continue to climb with the ever-increasing influx of Chilean, Peruvian and Brazilian timber in the market. Imports have increased for plywood and medium density fiberboard (MDF), which are used in the furniture industry and are not produced in Mexico. The origin of this timber is mainly the United States, Chile, Peru, Canada, and Brazil. Brazil has been able to increase its presence in the Mexican market by 450%. In two years, Chile has increased its presence in the market by 360%, while Peruvian timber has done so at 900%. Plywood also increased by 269%; the main countries that sell these types of products to Mexico are: the United States, Chile, Malaysia, and Indonesia. This increase is basically due to the entry of Malaysia and Chile into the Mexican market in the past four years, and the increase in imports of 850% and 433% from these two countries, respectively.

Figure 1 presents the tendencies of timber imports and exports and their impact on the balance of payments for forest products.

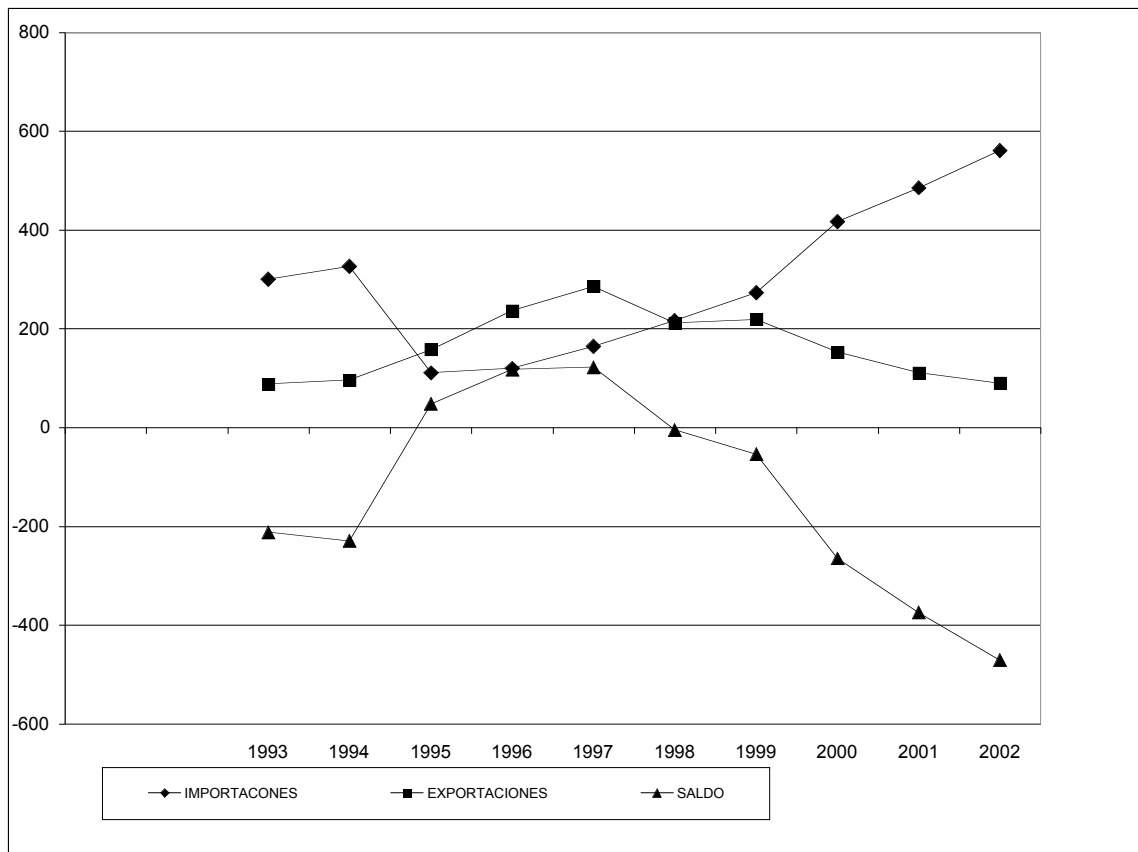


Figure 1. Trade balance of forest products in Mexico.

Source: Pineda, 2003

During the last ten years, total imports of forestry products totaled \$2,973 million and exports \$1,647 million, giving way to a negative account balance of \$1,326 million

of which, during the past three years, totaled \$1,110 million, or 84%. We also have to add to this figure the commercial deficit generated due to imports of cellulose and paper which, during this same period, was \$4,544 million, making the accumulated trade deficit in the forest sector in Mexico \$5,654 million.

III. THE EMERGENCE OF FOREST CERTIFICATION

Initial Support

Forest certification began in Mexico in 1994 with the active participation of a civil organization called the Advisory Council for the Mexican Civil Council for Sustainable Silviculture (CCMSS in Spanish), which integrates a variety of people and NGOs interested in promoting sustainable forest management. CCMSS believed that the forest certification process could be an important instrument to promote sustainable forest management, and thus became in charge of promoting this activity and establishing relationships and links with the Forest Stewardship Council (FSC) and accrediting agencies such as SmartWood.

In 1994, CCMSS, along with SmartWood, began promoting forest certification within forest cooperatives and communities from Quintana Roo and Oaxaca. Previously, several members of CCMSS participated in training courses from SmartWood. They put together three pilot certification projects with forest cooperatives from the following groups: *Sociedad de Produccion Forestal de la Zona Maya*, *la Sociedad de Productos Forestales del Sur de Quintana Roo*, and member communities that are part of a pioneer Indian organization acronymed UZACHI, composed of Zapotecas and Chinantecos. These pilot evaluations were carried out with funding from SmartWood and CCMSS and, subsequently, a collaborative agreement was reached between these two organizations so that CCMSS would be the fellow agency in charge of the forest certification evaluations in Mexico with the support and accreditation from SmartWood.

Initially, the forest certification process was promoted as part of CCMSS's objectives, who considered that this activity could guide the improvement of forest management in Mexico. The initial reaction from government institutions, businesses, forestry experts and the community in general was of general skepticism and poor understanding regarding the importance and scope of forest certification in Mexico.

Subsequently, the establishment of the Secretariat for the Environment, Natural Resources and Fishing (SEMARNAP in Spanish) in 1995 gave way to creating space for the forest sector in Mexico and local organizations associated with aspects of forestry gain better chances of participating in forest-related procedures.

In 1996, an innovative project began in Mexico, the Conservation and Sustainable Forest Management Project (PROCYMAF in Spanish), operated by the World Bank in collaboration with SEMARNAP to support and promote community forestry, and was established as a pilot project in the state of Oaxaca. This project was geared toward encouraging and promoting community forestry in Oaxaca and in Mexico. Since 1998 it

has been in charge of financially supporting forest certification evaluations in the state of Oaxaca in collaboration with the regional World Wildlife Fund office there. PROCYMAF contributes 70% of the forest certification evaluation costs and WWF contributes the remaining 30%. With their support, four communities have been certified, UZACHI has been re-certified, and the certification of four member communities of IXETO, an organization comprised of Ixtlan, Etna, and Oaxaca, has been strongly encouraged. All the certification evaluations were carried out by CCMSS.

In its consolidation phase (1996-2002), CCMSS received financial support from various foundations such as Ford Foundation, Inter American Foundation, and Packard Foundation, who provided the operational costs and support to CCMSS. Subsequently, CCMSS's certification area was maintained through payments derived from certification evaluations.

Since 1999, in the northern part of the country, specifically in the state of Durango, private industries have begun promoting certification. In that year, NORAM of Mexico, an industry that processes and packages encino charcoal, had a European client that demanded FSC-certified charcoal. Since the cooperatives that provided the raw materials to the industry were not certified, NORAM looked to CCMSS to encourage certification of their raw material providers and thus their assessment began. The cost of assessment was taken care of mainly by NORAM, with WWF covering a smaller portion.

In addition, forest industries established in Durango such as the Pirelli Group and *Forestal Lider* and Halcon Industries, which had contracts to supply to several markets in the United States, began to face their buyer's demands for certified sawn wood. Once again, the market demand forced these companies to ask CCMSS for forest certification assessments to certify the cooperatives that provided these industries with raw materials and sawn wood (Robinson 2000).

In the year 2000, with the change in the Mexican federal administration, certain reforms took place in the institutional and legal framework related to national forestry activity, and what was formerly SEMARNAP became the Secretariat of the Environment and Natural Resources (SEMARNAT). The National Forest Agency (CONAFOR in Spanish), an agency decentralized from the former, was also created and has the goal of carrying out functions related to forest enhancement and protection, while SEMARNAT is now exclusively in charge of the regulatory procedures portion.

With the creation of CONAFOR, forest certification in Mexico acquired greater status and importance, since the decision to support forest certification evaluations was taken on by the most important forestry subsidies program in the country: Forestry Development Program (Programa de Desarrollo Forestal in Spanish – PRODEFOR). This agreement took place based on PROCYMAF's experience developed years before and how with PRODEFOR's launch in 2001, forest landowners were called to undergo certification assessments.

Prior to PRODEFOR's publication of its regulations for that year, Mexico's Strategic Forestry Program 2000-2002 (*El Programa Estrategico Forestal para Mexico 2000-2002*) had been published (CONAFOR 2001) in which they made explicit reference to the federal government's interest in encouraging and supporting forest certification-related activities in Mexico. Within this context, CCMSS established an agreement with CONAFOR during that year to promote forest certification in several states of the country, and to carry out assessments of the communities, cooperatives, and small-scale landowners that requested them.

Subsequently, in 2003, when the former Forestry Law was reformed and the General Law for Sustainable Forestry Development (*Ley General para el Desarrollo Forestal Sustentable*) was created, the latter established in article 114 the federal government's commitment, through CONAFOR, to support forest certification with economic resources from PRODEFOR (SERMANAT 2003).

With this development of public policies related to forest certification, CONAFOR decided that forest certification assessments shall be solely supported with resources from PRODEFOR, while PROCYMAF will support the studies and development and strengthening of activities related to forest operations established in the conditions and recommendations of the certification. In addition, the state government of Durango and some other states adopted policies supporting and promoting forest certification, and established a special fund to support certification in this state.

As a result, with the support and incentives provided by the government agencies and some state governments, the largest increase in the number of FSC-certified forestry operations in Mexico took place between the years 1999 and 2002. Currently in Mexico there are 36 FSC-certified operations covering 613,671 hectares.

Standards

Mexico does not have yet national standards for forest certification, primarily due to certain despite the fact that since 1997, through a petition by the FSC, the agency *Estudios Rurales y Asesoría Campesina A.C.* (ERA) was commissioned to initiate the process of preparing national standards for Mexico. ERA A.C. wrote up a first draft that was presented for discussion at several regional forums between 1997 and 1998. Notwithstanding that the proposal maintained the principles of the FSC, certain modifications were made with regard to the criteria, which made it more difficult to be approved by the FSC.

During this time, in a complementary fashion, an agency, diverse and representative of all involved in the certification process in Mexico, was created with the goal of analyzing and agreeing upon a final version of the national standards. This initiative was formalized with the active participation of CCMSS, and in 1999 CERTIFOR was formally established as the agency to be recognized by the FSC to prepare and develop the norms and standards for certification in Mexico.

The draft that ERA A.C. began in 1997 and was discussed in 1998 was readdressed subsequently by the manager of NORAM in Mexico and a member of CERTIFOR, with the intention of encouraging the restructuring process, adjustment and consultation among the chief parties interested regarding certification in Mexico. However, due to various difficulties, the final draft of the document has yet to be completed regarding Mexican standards for certification. This is a very concerning gap that currently exists.

SmartWood and CCMSS decided to readdress the efforts initiated by ERA A.C. with regard to forest certification standards in Mexico, and in 2000 they contracted the organization *Tropica Rural Latinoamericana A.C.* from Quintana Roo to elaborate a proposal on Mexican national standards for forest management evaluation (*Normas Mexicanas Internas para la Evaluacion del Manejo Forestal*) which was hoped would be used by CCMSS and SmartWood for the evaluation processes for forest certification in Mexico. A second version of this document is now in progress and has been tested in several certification processes in Mexico by consultants hired by CCMSS. This proposal upholds the principles and most of the criteria stipulated by the FSC, modifies certain criteria, and develops indicators and verification mechanisms.

Another important progress in this matter is the one promoted by the *Unión Nacional de Organizaciones de Foresteria Comunal A.C.* (UNOFOC), which proposed instituting the concept of “pre-evaluation,” which consists of carrying out a more generic and preliminary assessment to determine the possibility of forest certification for forest operation sites. From this preliminary evaluation, which has a lower cost for the forest operation site interested in certification, it indicates if it is or not in proper condition to be evaluated in order to obtain its forest certification. (CCMSS and SmartWood 2003).

Roadblocks and Challenges

Although certification was accepted readily by many communities and cooperatives in Mexico, there have been many challenges to making certification a viable, long-term success in the country. These roadblocks center primarily on the lack of technical and financial resources of community and cooperative forestry operations, and the lack of markets for their certified products.

Maintaining certification momentum within a universe of small forest operation sites, both belonging to communities and cooperatives, as well as small-scale landowners, who do not have sufficient resources to individually settle the payments for certification nor comply with the necessary technical requirements, has been difficult. While the cost of certification has been covered by NGOs or state initiatives for many operations, these operations will eventually need to be financially self-sufficient.

An additional hurdle for many operations is the lack of an intermediary agency willing to evaluate and follow-up on the quantitative indicators necessary to make progress and reach the standards for forest certification with regard to the environmental, social, economic, and silviculture aspects. The certifying agency generally tends to go no

further than the evaluation process, and monitoring is carried out through annual audits. The technical directors and communities comply with the conditions and recommendations, while the government provides economic support to certified forest operation sites. However, a coalition has not yet been created between civilian organizations and professionals that supports the continuous improvement process of cooperatives and forest communities, and that analyzes the effects of certification at a forest firm level, at a cooperative and/or community level, nor its effects at a regional, state, and national level.

According to CCMSS, another of the most important bottlenecks of the evaluation process for certification in Mexico is the need to have a larger number of qualified consultants to carry out the forest certification evaluations. (Alatorre 2003).

Without a doubt, one of the greatest obstacles, as well as requirements, created by forest certification is the access to markets willing to pay higher prices for their timber and/or certified products. After promoting certification in Mexico for ten years, most of the certified forest operation sites within the social sector have not been able to place their forest products directly in markets that purchase these kinds of products; this has been achieved only through private industries in the state of Durango who purchase certified wood from sites in the state and sell it to their clients in the United States.

Finally, it is necessary to finish developing the national standards for Mexico so that they are congruent with the conditions and reality of the forest sites of the country, as well as put forth a national petition that will follow-up and monitor the certification process in Mexico.

IV. THE REACTION TO CERTIFICATION

Forest Policy Community and Stakeholders

Forest certification has become established in Mexico and obtained recognition by the government institutions dedicated to forest enhancement and normative forest procedures, by forestry professionals, the forest export industry, and among the forest cooperatives and communities. This was due to the combination of early NGO involvement in financing and developing certification, the development of some certified markets (particularly in the North of the country) and federal and some state-level government incentives to promote certification. However, the prominence of certification in the public eye and the ability of certification to make the public less negative about forestry practices has remained weak.

In general, the forest policy community appears to be working to increase market benefits for certified producers and bring certification into its next phase in Mexico. With the support of the Rainforest Alliance TREES Program, the *Pueblo Nuevo* cooperative in Durango established a contract with Sitwell industries, an IKEA supplier, to sell chip and fibre furniture components made from certified timber. These components are value-added byproducts from the sawing industry; due to the large quantity of timber that this

cooperative produces, it is possible for them to produce an adequate volume without increasing their production costs.

In addition, a new initiative by CCMSS, ERA A.C. and CONAFOR has promoted in the state of Oaxaca. In this project, involving nine certified communities and three with certification in-progress, an Integrationist Firm of Certified Forest Communities (*Empresa Integradora de Comunidades Forestales Certificadas*) has been created with the goal of establishing a strategic alliance between these communities. The hope is that this alliance will promote the sale of the members' certified forest products, offer a greater volume of their products, and create designs for products (furniture, boxes, moldings, etc.) that can be offered to firms interested in purchasing certified products. This project has been financed by the Inter American Foundation and PROCYMAF.

So far, the alliance has received orders for 1,000 boxes made from certified timber from an industry that produces natural and organic products in Mexico, and have made contacts with Mexican and American firms interested in producing moldings and purchasing wooden panels that are FSC certified.

The Mexican government may also take additional steps to promote certification, through a policy of "green purchases" to supply the needs of government offices. While this concept is still only an idea and has not yet been clearly defined as an official policy of the Mexican government, it would provide a large market for certified furniture if formalized. In general, the institutional governmental development that has incorporated a sustainable development philosophy as a government strategy began with the creation of SEMARNAP.

Forest Owners

The response of many forest owners (particularly communities and cooperatives) toward certification after its introduction was positive. Currently, however, the certified forest communities and cooperatives in Mexico have begun to question the sense in staying certified, given that the costs of audits, meeting the requirements and recommendations, and re-certifications are not covered by the surplus generated by the certified timber sales (see Roadblocks and Challenges section). This factor will undoubtedly be of great importance in maintaining the communities' and forest cooperatives' interest in certification.

Current Status of Forestland Certification

According to data presented by CCMSS in 2002, the total number of forest operation sites in Mexico that were evaluated for certification was 67, of which 36 were certified, 19 were in progress, 11 had not completed their evaluation, and one was suspended.

Table 4. Assessed forestry operations in Mexico

STATE	CERTIFIED OPERATIONS	OPERATIONS WITH CERTIFICATION IN PROGRESS
Durango	19	9
Oaxaca	8	4
Quintana Roo	6	0
Chihuahua	2	1
Michoacan	1	0
Guerrero	0	1
TOTAL	36	15

Source: CCMSS 2002

Of the 67 forest operation sites that were evaluated, 56 are public property (84%) and 11 are private property (16%). The states with the largest number of evaluated forest operation sites are: Durango (33), Oaxaca (13), and Quintana Roo (7).

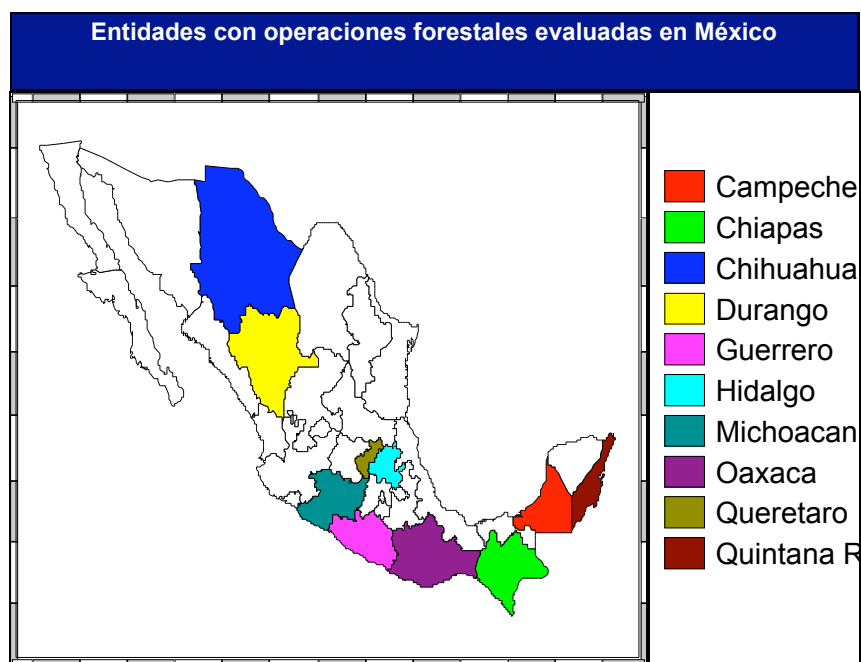


Figure 2. Mexican states containing FSC-certified forestry operations

Source: Alatorre 2003

There are 36 forest operation sites that have become certified and they occupy a surface area of 613,671 hectares, producing 1,029 million m³s per year. This means that the certified forest surface area makes up 7% of the forest area used on a national level, where 13% of the forest production occurs in Mexico.

With regard to the certified forest surface area, Chihuahua is the state with the most certified surface area at 225,569 hectares with only two forest operation sites; following it is Durango with 203,597 hectares; Quintana Roo with 108,120 hectares and

Oaxaca with 67,934 hectares. With the exception of Quintana Roo, which is made up of rain forests, the rest of the forests in the country that have been certified are coniferous and evergreen, temperate forests.

The surface area of the total number of forest operation sites undergoing the certification process occupies 216,146 hectares with an m³ production of 209,953. If these operation sites with ongoing evaluations were to be certified, they could potentially occupy a total surface area of 849,818 hectares and produce 1,239 million m³, which would make up almost 10% of the forest surface area under Mexican management and 15.6% of the national production.

With regard to the evaluations of chain of custody, 22 industries have been evaluated: 11 in Durango, 3 in Oaxaca, and 2 in Chihuahua and Quintana Roo. Of the 22 industries evaluated, 16 industries have been certified: 10 are in Durango, and 2 are in Chihuahua and Oaxaca. All the certified industries in their chain of custody belong to the private sector.

The increase in the number of evaluated and certified operation sites can be observed during the time period between 1998 and 2002. This coincides with the phase in which there was a demand for certification by the forest industry in Durango and, the assistance of government resources, first by PROCYMAF and, subsequently, PRODEFOR beginning in 2001 (See Graph 2).

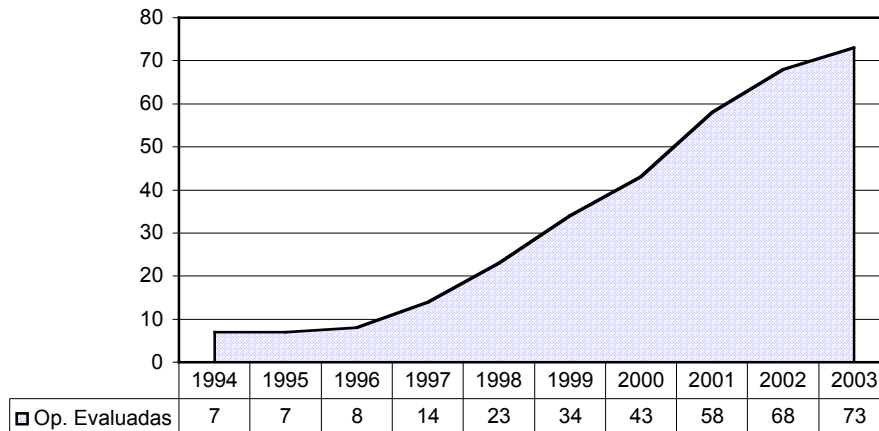


Figure 2. Number of assessed forest management operation sites in Mexico (1994-2003)
Source: Alatorre, 2003

Mexico currently makes up 44% of the total number of certified community forest sites and half of certified forest surface area worldwide (Alatorre 2003).

There have been recent changes made to the most prominent certification body in Mexico. CCMSS, an agency with ample experience in sustainable forest management in the country, has withdrawn from directing the certification evaluation process. SmartWood will be taking its place, and this brings about enormous challenges in maintaining the same level of progress and alliance-building with the communities and cooperatives.

The achievements certification in Mexico has accomplished are due in great part to the work, experience, and trust developed by CCMSS within the communities and forest organizations in Mexico. If SmartWood, as the agency in charge of certification in Mexico now, does not take these experiences under advisement to prioritize commercializing certification, there will be many problems in maintaining the certification process in this country.

In addition, a new certifying agency has begun its operations in Mexico. This is the VIVO Foundation, an agency composed of Mexican professionals from Durango, which has recently been accredited by the FSC for certifying proper forest management. It originated and currently has its headquarters in the state of Durango, where there is the largest number of certified operation sites; it is also the state with the second-largest certified surface area, and relies on state government support through the fund which was created to promote certification.

The creation of this new certifying agency in Mexico constitutes a step towards improving the quality and service attention to either previously certified forest sites or sites interested in certification. As a result, it is also important that the Mexican national standards for certification be completed, given that this constitutes an opportunity to regroup the partners and members of CERTIFOR, and define with greater clarity the norms and standards for protecting the Mexican forests.

Current Status of the Certified Marketplace

With the exception of some forest industries in the Northern part of the country, very few certified forestry operations have been able to sell their products into the certified marketplace. There are numerous reasons why this is so. A serious problem is the disconnected supply chain. For example, some private forest industries in the southern part of Mexico, specializing in the production of certified doors and moldings, do not purchase certified timber from certified Mexican forests. Rather, they buy certified raw materials from Brazil, Bolivia, and several Asian countries, as well as pine from certified forest plantations in Chile. An alliance or chain of production has not yet been established between certified forest firms and certified industries in their chain of custody in Mexico, allowing both sides to make a profit.

In many cases, it has not been made clear to certified communities and cooperatives that access to international and preferential markets requires an organization process by the forest operation site to improve its industrialization process, develop a management framework, and offer large volume sales with high quality product

characteristics. Forest cooperatives and communities need to promote the development of products with a higher added value, be it by producing either finished products or byproducts.

This lack of access to certified markets is also due in part to the lack of a national strategy to create access to foreign markets and promote better sale prices of certified forest products for the communities and cooperatives. As described in the previous section, new NGO and government initiatives are underway to tackle this problem.

V. THE EFFECTS OF FOREST CERTIFICATION

FSC certification in Mexico has brought about much positive change: it has improved forest management, recognized the silviculture developed by forest communities and cooperatives, and allowed these groups access to national- and state-level resources that promote sustainable forestry and adaptive management. However, certification has also failed to address some important issues such as illegal logging.

In general, forest certification has had the greatest impact in forest operation sites that are relatively large in area (more than 5,000 hectares.), and in communities and cooperatives with relatively solid internal organizational procedures. However, the effects of forest certification will be seen more clearly at a mid-term basis during the next five years, after most operations have gone through at least one re-certification process.

Power

Forest certification has forced the institutions of the federal and state governments to consider the forest communities and cooperatives as deserving of special and preferential attention, from the legal standpoint as well as from the public policy development standpoint. Forestry operations are now in an advantageous position of receiving economic resources from government programs such as PROCYMAF and PRODEFOR. Also the Regional Managers of CONAFOR have decided to promote a strategy to economically support the certified communities and cooperatives that need to comply with requirements established by the evaluators: for example, through studies of the flora, fauna, monitoring of silviculture procedures, feasibility studies, strengthening of the administrative and factory units, silviculture management practices, management development, and business/marketing studies.

Forest certification has also been important to the forest communities and cooperatives by granting them a certain prestige with respect to other agrarian nuclei, and a defense against the extremist positions environmentalist and political interest groups take that could affect the image of a community forestry operations and cooperatives.

Forest certification in Mexico has been able to obtain a prominent position as an instrument of social credibility with regard to sustainable forest management of commercial and non-commercial forests. However, there are still sectors within the urban population of Mexico that view forest activity unfavorably. The history of the last fifty

years when private and parastate industries had the greater part of the forest in this country under their control, which caused serious environmental impacts, a reduction of natural capital, the use of forest resources without the consent of its landowners, and unfavorable economic conditions for the forest landowners and proprietors, still remains a prevalent and general situation in most parts of the forested zones in the country. All this has hindered the modification of the social perception that forest activity is by definition a destructive activity of ecosystems and natural resources, which generates enormous revenue for a minute sector of society and is linked to corruption in legal and governmental actions.

This perception of forest activity is without a doubt the result of a lack of awareness within Mexican society of the important progress communities and forest cooperatives have made in Durango, Oaxaca, Guerrero, Michoacán y Quintana Roo since the 70s and 80's during the 20th century when they managed to successfully cancel the grants made by the federal government to private and parastate industries for their forests. Since this struggle, the federal government was forced to modify the Forestry Law and recognize the rights of landowners to manage their forest resources, and encourage the development of a model of community silviculture with social and environmental objectives that seek to preserve their forest resources, make proper and adequate use of their forests, and distribute evenly the collectively generated revenue from forest activity. This awareness has been strengthened recently due, in great part, to the decision made by these forest communities and cooperatives to certify their forest management procedures according to the FSC standards, and it is in this way that forest certification has made its greatest contribution in Mexico.

Social

Through certification, many labor regulations for forests, industries, or forest administration units have improved, and with this the efficiency and productivity of many forest operation sites has increased. This is one of the aspects that is rarely evaluated regarding the effects of certification. Certification has also contributed to strengthening community organization processes, and readdressing organizational procedures that had become weakened.

Forest communities with internal conflicts in their territory have been rejected for certification, and this has discouraged them from engaging in proper forest management. Perhaps if the certifying agency were to consider certifying only the portion of the forest operation site that is conflict-free, this could probably contribute to stimulating the agrarian nucleus to maintain their certification and try to resolve their internal conflicts.

Illegal wood extraction has developed in areas with a much weaker local government enforcement, where the governmental community structures are weak, and only local groups with economic and political power are allowed access to the natural resources through violence and illegal maneuvers. Forest certification has not contributed to a decrease in the illegal extraction of timber, since certified forest operation sites distinguish themselves by working within a specific legal framework. In this sense,

forest certification cannot be considered an economic tool to de-stimulate inappropriate forest practices, since federal, state, and municipal government agencies have the responsibility to provide the legal framework and economic incentives to encourage the protection and proper management of forest resources, as well as the participation of the owners and proprietors of forest resources to maintain their forest in a proper state. However, a case has been reported of a certified cooperative in Durango that was illegally extracting timber and was penalized immediately by CCMSS and SmartWood, which withdrew the cooperative's certificate.

Economic

The economic advantages of certification have occurred for some certified operations on two levels: increased access to certain certified markets and increased internal efficiency. The first level of benefit has been centered on the north of the country, in forest product industries such as charcoal. These benefits have been primarily due to demands for FSC-certified products from existing buyers in Europe and the U.S. These chain-of-custody certified producers have, in turn, requested certified products from their community forest suppliers of raw materials.

For the most part, however, the economic benefits of forest certification have been lacking. This lack is the greatest threat to forest certification development in Mexico. Currently, nearly all certified forest cooperatives and communities sell their timber at the same price as non-certified timber. As a result, forest landowners and proprietors can lose interest in certification and not put up the future costs of their evaluation and audits, and thus, lose their certification altogether.

However, some observers are optimistic that economic benefits will improve. The experience developed by the *Pueblo Nuevo* cooperative with IKEA, with the support provided by the Rainforest Alliance TREES Program and initiatives such as the Integrationist Industry of Oaxaca, as well as support from the government, NGOs, and supporting international agencies working towards the consolidation and strengthening of these markets, should serve as models to present to a greater number of communities and states of this republic. Also, in spite of the fact that Mexican timber is not competitive in relation to timber from Chile and other countries, the processing quality of its secondary products is better than imported timber, and the fact that it is certified assures the continuation of certain export markets.

Through the certification evaluation process, many forest operation sites have improved their forest management programs, the supporting cartography which is elaborated with geographic information systems, and different information systems such as bookkeeping, forest documentation registry, and balance sheets of the forest firms. Many of the manufacturing procedures in the field, sawmills, and forest administration units have been improved and strengthened among the certified communities and cooperatives.

Environmental

Certified forest operations incorporate more environmental safeguards and biological and ecological considerations in their silvicultural management processes. The certification requirements and recommendations have encouraged the elaboration of inventories of the flora and fauna within the forests and cooperatives within the certified communities. They have promoted the development of monitoring and follow-up processes in the designated areas for forest use, and geared educational initiatives for the understanding, protection, and conservation of forests with high value.

Certification has also allowed forest communities and cooperatives to identify their strengths and weaknesses, value their progress, and try to improve the procedures that are the weakest in their forestry management procedures, community organization, forest ventures, and overall management. The requirements and recommendations have allowed many communities and cooperatives to formally incorporate conservation and protection procedures of their ecosystems and carry out a better follow-up of their forestry technical service providers.

In general, however, the ability of certified operations to maximize environmental benefits of certification depends on their economic and technical resources. Those sites with the most resources tend to be integrated in Cooperative and/or Community Unions that can rely on forest technical services providers who are closely tied to the project and the interests of the communities and cooperatives. Several cooperatives or communities that have important natural and social capital have been able to develop their own technical services that work exclusively for them, which allows them to have a better quality and commitment to their work related to assessment and technical assistance. In these cases, the process of complying with the requirements tends to be faster and within the timeframe established by the certifiers.

There is a group of small-scale cooperatives and communities with technical service providers who work in several sites. For these groups, follow-up and attention to the evaluated sites tends to be more external, and hence the conditions and requirements for certification are generally more difficult to comply with and solve. In addition, many of the conditions and recommendations require a greater investment by the communities and forest cooperatives, which causes delay in their compliance and resolution.

In spite of these kinds of problems, certification has been useful for the communities and forest cooperatives in order to improve the management and administration of their forest resources since they have been given the opportunity to point out their strengths and weaknesses, and subsequently develop programs and systems of continuous improvement of their forest operations.

However, the members of CCMSS believe that certification and its associated benefits is about to reach its maximum capacity in Mexico, since most of the forest operation sites that are characterized by proper forest management will soon be integrated. Thus, many forestry operations whose forest management has been rated

between average and poor in the country will remain, and will unlikely be certified in the near future. As a result, forest certification in Mexico faces obstacles in solving many serious forest problems such as deforestation, loss of biodiversity, forest fires, and use of illegal wood. Several of these problems cannot even be attributed directly to forest activity since they do not occur where there is commercial forest activity. This is the case with deforestation in Mexico, which is caused primarily by the changes in the use of the soil triggered by the expansion of the cattle and farming. In addition, forest fires are observed in non-commercial forest areas and can be traced back to the way fire is used to encourage the establishment of both farming and grazing areas for cattle.

V. CONCLUSION

Forest certification in Mexico was developed as part of a strategy between a civilian organization, CCMSS, and an international NGO, to promote the improvement of forest management. The forest communities and cooperatives that practiced silviculture in the southern part of the country shared many of the standards and norms promoted by the FSC. These experiences are strikingly similar and correspond to the community practices of the more developed communities and cooperatives in Mexico.

Subsequently, the demand created by the forest industries in the northern part of the country – ultimately attributable to demand for FSC-certified products from international buyers – promoted certification in the states of Durango and Chihuahua. In addition, Mexican government programs encouraged and stimulated certification and, in just a few years, the number of forest operation sites and certified area in Mexico increased. At present, almost one million hectares are certified or will be assessed soon. In fact, Mexico is one of the countries with the most forest surface area certified in the world that is managed by businesses that practice community silviculture.

Certification has generated confidence among certain sectors of society regarding sustainable management of the certified communities and cooperatives. These sectors have received some preferential government support and their forest management processes have been strengthened in terms of both sustainable forestry practices and business processes and management.

However, certification is being currently questioned as a valuable market instrument for forest communities and cooperatives, as few economic benefits have resulted in this process. This is why it is urgent that all the actors involved – federal and state governments, NGOs, supporting international agencies, and industries – tend to this need and develop commercial links between certified forest producers in Mexico and certified forest products consumers both in Mexico and around the world. It is necessary to analyze and evaluate the feasibility of pushing forward and promoting certified forest products into stable markets, and the conditions under which forests in Mexico are produced and managed: through community forestry firms that practice community silviculture and that take advantage of the native forests that protect and conserve biodiversity. The forest communities and cooperatives, together with civilian organizations, should explore the feasibility of developing and promoting new market

niches that will incorporate forest certification into a tight and stable market. Only by officially differentiating between certified forest products stemming from indigenous, poor rural communities and those coming from private or state-owned forests, or even from certified forest plantations, will it be possible for these communities to compete. Otherwise, forest certification for forest communities and cooperatives will cease to be a supporting instrument of proper forest management processes and will run the risk of turning into an additional cost that will soon be tossed aside if it doesn't create an economic advantage in the market.

Future success of certification also requires that a government policy be developed towards improving the transformation and industrialization processes of certified timber products, as well as the production of value-added products and of products that satisfy the quality standards of the foreign market. It will also be necessary to strengthen the local businesses' forest administration processes, develop management frameworks, and promote production processes that are highly efficient and competitive.

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