MEXICO: MARKET OPTIONS AND BARRIERS FOR TIMBER AND SAWNWOOD FROM MICHOACÁN, OAXACA, GUERRERO, CAMPECHE AND QUINTANA ROO

Summary by Tania Kaimowitz, Forest Trends

BACKGROUND

This study is one of several country-level market assessments that analyze the scope of opportunities for community forest enterprises to participate effectively in forest sector markets. As part of its global analytical program, Forest Trends and its international partners have identified a new forest agenda which seeks to make markets work for low-income producers and to help forest dwellers to achieve the three seemingly contradictory goals of conserving forests, meeting fast-growing market demand and promoting sustainable development to reduce rural poverty. In recent years, development assistance efforts have focused on forests as “safety nets” for low-income forest dwellers. These efforts emphasize the importance of access to forest resources for the poor to meet their subsistence needs. However, not much has been done to help local people exploit their forest assets in a sustainable manner to take advantage of the opportunities (and to cope with the pressures) of the growing demand for forest products.

The research on A New Forest Agenda for Forest Conservation and Poverty Reduction and Making Markets Work for Low-Income Producers documents an exciting range of global opportunities for many low-income producers. Yet under current conditions these producers face serious constraints to successful forest market participation. A New Agenda identified the need for two related sets of targeted action: developing small-scale forest enterprises and removing the policy barriers which limit their development.

The study, on which this policy brief is based, examines the community forestry enterprise sector in southern Mexico, a country where a large percentage of the natural forests are community-owned and –managed. It applies the methodology of A New Forest Agenda at both a country and regional level to evaluate the

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importance of community timber in the marketplace, along with its opportunities and challenges. It also offers recommendations for targeted action that can help communities to face these challenges and make their markets work sustainably. The study was carried out with national experts, in collaboration with a government technical assistance program that provides support to community forestry.

**COUNTRY CONTEXT**

In the past two decades, changes in policy and regulatory frameworks have led to the emergence of significant numbers of community forest enterprises (CFEs) in specific developing countries and regions. Changes include the recognition of traditional forest tenure or resource rights, the abandonment of systems of industrial forest concessions, the simplification or elimination of permits for harvesting, the transport or trade of community forest products, and the decentralization or reduction of forest enforcement and tax functions.

One key county where community enterprises have thrived is in Mexico. The country’s 550,000 km² of forest serve as habitat for the largest number of oak and pine species in the world. With regards to the percentage of forest land under community forest tenure, Mexico ranks second in the world: 80% of the forests in this country are registered as ejido common land or indigenous communal property, and more than 500 communities or common lands have been organized as community forestry enterprises (CFEs). About 5% of CFEs are the main economic driver in their communities. The CFE boom began at the beginning of the 1980s, when various circumstances coincided to promote and consolidate community forest development. At that time, many communities initiated forest production activities and some also entered the industrial lumber and carpentry industry (Bray et al. 2003). The most important outcome of this development was probably the fact that many of the new community forest enterprises focused their attention strongly on the sustainable use of their forests.

Policy reforms in the 1980s and 1990s provided CFEs with greater control over their forests and forest management, particularly in regions where industrial processing concessions were once active. CFEs engaged in timber harvesting, sawmilling, and, in some cases, the production of finished products. Their experience over the past two to three decades provides useful lessons for other countries and regions. It also illustrates the challenges these enterprises face in an increasingly global marketplace. Community enterprises produce and market a variety of timber and non-timber forest products (NTFP) in both temperate and tropical forest regions and make significant contributions to local incomes, employment, forest management and the economic diversification. In many forest communities, the forest provides the most immediate hope for poverty alleviation and sustained livelihoods. In some important market segments community producers have a competitive advantage, but they also face serious constraints from regulatory barriers, new global competitors and limitations in their own enterprises.
KEEPING COMMUNITY FORESTRY ENTERPRISES COMPETITIVE?

How can Mexico’s promising enterprises build on their achievements and continue to prosper in a free-trade environment with growing competition from planted timber and new more sophisticated products and timber substitutes? How can they best position themselves in the domestic market and what is their potential to compete in the international marketplace? What are the lessons for government policy makers seeking to conserve the nation’s forests and maximize its contribution to the overall economy and to local livelihoods? What are the lessons for community enterprises of the future? What are the lessons for other forest-rich countries seeking to maximize the contribution of forests and forestry to community livelihoods and well-being?

Over the last twenty years, the competitive environment for community forestry enterprises has changed drastically. Two of the most different influences are the changes in international trade policies since 1986, as well as changes in national forest policies. In principle, both of these factors determine how forest producers can compete in domestic and export markets.

By imposing obligations that cause financial expenses, delays or other inconveniences for enterprises and their possible clients, fiscal or commercial forestry policies act as barriers on communities’ market access. By contrast, an intelligent incentive-based regulatory framework can release forest producers from expenses or unnecessary delays and facilitate their trade activities in many ways without risking deforestation.

- The progressive trade opening has made exporting forest products easier, but it has also intensified competition in domestic markets. Whereas foreign trade in secondary products (furniture, doors, frames) has grown significantly, the export of sawnwood has stagnated and is far below the increasing imports. At the national level, new players are changing the rules of the game, displacing some traditional participants or even causing entire trading chains to break down. This, at the same time, can have important consequences on the forest base itself.

THE STUDY

This study analyzes how both of these trends affect the market behavior of community producers, the lumber-forestry production chains and trading in sawnwood, taking into consideration other steps in the production chain. It focuses on the external factors in the marketplace, rather than upon internal organizational issues, which – albeit important – have already been researched considerably. It is especially important to analyze earlier stages in the production process to identify market barriers for Mexican sawnwood. The study seeks to answer the following questions:

- What have been the basic trends in sawnwood production since open market trading began?
- How do Mexican products compete with imported products and what are the weaknesses and strengths of one or the other?
• What main segments demand timber and sawnwood? What structures and trends do these segments have? Which are the marketing channels for reaching these segments, and what opportunities exist for Mexican producers to remain within these channels in spite of imports?

• Which are the main market access barriers and what possible strategies could reduce them?

The study was conducted by a consulting team coordinated by the University of Quintana Roo. The team carried out extensive research, interviewed many representative members of chambers of commerce and government organizations, and visited more than fifty primary and secondary processing enterprises in Campeche, Distrito Federal, Guerrero, Jalisco (Guadalajara), Michoacán, Oaxaca and Quintana Roo. In addition, two regional meetings were held at which participating communities presented and discussed the results.

The study analyzed the situation of community sawmills, but it became increasingly clear that making a division between community and non-community enterprises to characterize market clusters was not always useful. Community sawmills share a great quantity of problems with their private counterparts, and there are more similarities than differences in the relationships with lumberyards and secondary transformation enterprises. Community sawmills, lumberyards or secondary industries, all depend on conditions of the other links of the value chain. Many of the problems faced by CFEs will have to be solved in the marketplace as a whole.

**MEXICAN FOREST SECTOR**

**Effect of Open Market Trading on Sawnwood Production**

The basic trends in sawnwood production since the opening of markets in Mexico are presented in Table 1. Despite limited increases in domestic production, the import/export ratio has increased drastically, presenting a significant market threat to CFEs in the absence of serious action to increase their competitiveness.

**Table 1: Sawnwood: Quantities Produced, Imports and Exports (Million of BF)**

<table>
<thead>
<tr>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Domestic production</td>
<td>1,062.8</td>
<td>1,189.1</td>
<td>1,314.4</td>
<td>1,318.8</td>
<td>1,385.3</td>
<td>1,177.9</td>
</tr>
<tr>
<td>Imports</td>
<td>101.4</td>
<td>142.5</td>
<td>275.1</td>
<td>202.8</td>
<td>201.4</td>
<td>312.3</td>
</tr>
<tr>
<td>Exports</td>
<td>49.2</td>
<td>48.7</td>
<td>27.6</td>
<td>22.9</td>
<td>13.3</td>
<td>10.7</td>
</tr>
<tr>
<td>Apparent use</td>
<td>1,115.0</td>
<td>1,282.9</td>
<td>1,561.9</td>
<td>1,498.6</td>
<td>1,573.4</td>
<td>1,479.5</td>
</tr>
<tr>
<td>Percentage of imports</td>
<td>9%</td>
<td>11%</td>
<td>18%</td>
<td>14%</td>
<td>13%</td>
<td>21%</td>
</tr>
</tbody>
</table>

*Source: Authors’ estimate based on SEMARNAT (1996-2001) data.*

*Converted into BF estimating a 50%-use coefficient.*

*Percentage of imports = Imports / apparent use.*
Domestic Lumber Market

During the last two decades, there has been a general trend towards a decreased timber production in Mexico. Whereas in 2001 timber production was 8.1 million cubic meters, according to official SEMARNAT data, in 1989 the production was 8.9 million.

The main Mexican wood products are sawnwood, pulp, boards, posts and piles, firewood and charcoal, and railway ties or “sleepers”. The following section provides some more detailed information about these segments:

- The most important wood product in Mexico is sawn timber. Its relative importance has increased in the last twenty years, with roundwood consumption going from 60 to 70%.

- Another product that has gained market share is plywood, with production recovering after a collapse following Mexico’s entry into GATT in 1986, increasing from a consumption of 248 thousand m$^3$ of roundwood in 1981 (3% of the total consumption) to 450 thousand m$^3$ (1%) in 1989 and 518 thousand (6%) in 2001.

- Pulp and railway ties products lost market share. Pulp fell from 2.5 million (30%) in 1981 to 1 million processed cubic meters in 2001 (15%). Railway ties fell from 5 to 1% of total roundwood consumption (from 408,000 m$^3$ to 102,000 m$^3$).

- More than 90% of the volume processed by sawmills is a variety of pine.

- Taking the temperate zone broadleaf quantities into consideration (mainly oak), temperate zone wood dominates Mexican sawnwood production. Only 2% of the production of this segment is tropical wood.

There is an increasing gap between temperate zone and tropical wood:

- There is a slight rise in temperate zone pinewood production, but it involves very large volumes. In the production of different species of oak, the upward trend in the past twenty years has been much clearer.

- In contrast, there is a clear trend towards a decrease in tropical wood production related to the sharp reduction in the 1990s when customary production of railroad ties from tropical wood declined due to the adoption of new size standards in the US and Canada and substitution by cement.

Changing dynamics in the Mexican forest sector have resulted in:

a) an increased competition between imported softwood plantation timber and naturally-grown timber;

b) the lack of a direct production chain of Mexican wood from sawmill to secondary transformation into furniture, floors, pallets etc.;
c) an increase in Mexican sawmill stock and availability of imported lumber, leading to greater supply availability for secondary transformation companies;

d) a concentration of lumber markets with fewer independent intermediaries and small lumber mills;

e) a reduction in production in Campeche and Quintana Roo due to the collapsed railway tie market;

f) an increased trade in Medium Density Fiber;

g) an increased amount of community and *ejido* timber in potentially high-value market niches, concentrated in the domestic market; and

h) increased competition from forest plantations in segments dominated by communities.

### Table 2: Main Sawnwood Producing States

<table>
<thead>
<tr>
<th>State</th>
<th>Conifer Production (m3 log)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Durango</td>
<td>1,513,552</td>
</tr>
<tr>
<td>Chihuahua</td>
<td>881,380</td>
</tr>
<tr>
<td>Michoacán</td>
<td>753,363</td>
</tr>
<tr>
<td>Oaxaca</td>
<td>409,519</td>
</tr>
<tr>
<td>Jalisco</td>
<td>269,786</td>
</tr>
<tr>
<td>Guerrero</td>
<td>280,439</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>State</th>
<th>Temperate Zone Broadleaf Production (m3 log)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Durango</td>
<td>102,715</td>
</tr>
<tr>
<td>Michoacán</td>
<td>86,500</td>
</tr>
<tr>
<td>Jalisco</td>
<td>8,604</td>
</tr>
<tr>
<td>Puebla</td>
<td>6,745</td>
</tr>
<tr>
<td>Veracruz</td>
<td>4,396</td>
</tr>
<tr>
<td>Oaxaca</td>
<td>2,732</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>State</th>
<th>Tropical Wood Production (m3 log)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quintana Roo</td>
<td>33,514</td>
</tr>
<tr>
<td>Campeche</td>
<td>19,355</td>
</tr>
<tr>
<td>Oaxaca</td>
<td>3,163</td>
</tr>
<tr>
<td>Jalisco</td>
<td>120</td>
</tr>
</tbody>
</table>

*Source: SEMARNAT 2002.*

### Production by State

The most important timber producing states in Mexico are Durango, Chihuahua, Michoacán, Oaxaca, Jalisco and Guerrero. The main tropical wood producers are Quintana Roo and Campeche (see Table 1). Each Mexican state has a characteristic mix of pine species. When processing and marketing lumber was a more regionally based activity, certain particularities in extraction, transportation, classification and wood marketing developed that continue to the present day, even though they no longer make competitive sense. The volume of pinewood produced changes each year, but it does not affect the production ranking of each state. For two decades, Durango has been the most important pine producing state, followed by Chihuahua and Michoacán.

The broadleaf situation is different. States that used to be important, such as Veracruz or Jalisco, have become insignificant producers. Oaxaca is the only Mexican state that produces important quantities of both temperate zone wood as well as tropical wood.
International Lumber Market

Mexico is a relatively minor producer of lumber compared to the United States, where, with a forest area four times the size, production was fifty times greater, or compared to Chile, where the triple amount of timber was produced on a forest surface a quarter the size.

Table 3: Forest Production in America: A Comparison (2002 Data)

<table>
<thead>
<tr>
<th>Country</th>
<th>Forest Surface (million ha)</th>
<th>Quantities Produced (million of m³)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Roundwood</td>
<td>Sawnwood</td>
</tr>
<tr>
<td>Brazil</td>
<td>543.0</td>
<td>102.6</td>
<td>23.1</td>
</tr>
<tr>
<td>Chile</td>
<td>15.5</td>
<td>25.6</td>
<td>5.9</td>
</tr>
<tr>
<td>United States</td>
<td>226.0</td>
<td>404.7</td>
<td>89.1</td>
</tr>
<tr>
<td>Mexico</td>
<td>55.0</td>
<td>7.4</td>
<td>3.4</td>
</tr>
</tbody>
</table>


As a result of the changes in the exchange rate and in rates of domestic inflation, trends in imports and exports have inclined more abruptly than those of domestic production. Mexico is experiencing a negative export trend since markets were opened. One factor is the increased competition from Canada and the United States for hardwood as a result of the NAFTA agreement. Imports from Chile have increased since 1999. Chilean competitiveness has increased due to the lower costs of plantation pine and their more efficient client services. Part of U.S. furniture production has been relocated to Asia, therefore forcing some Latin American timber processors, including in Mexico, who supply intermediate products to the U.S. to reduce production or close down.

In several countries, among them Chile, Costa Rica and Guatemala, great quantities of commercial plantation wood are being harvested or are nearly ready to be harvested. Commercial plantation wood enterprises market their products aggressively and tend to have lower managerial costs.

Currently global supply is growing slower than global demand, although both are on the rise. However, within a decade, the total demand from countries such as China, India, the Philippines and Korea will have increased significantly, will likely exceed supply.

Import and Export of Sawnwood and Secondary Products

If one were not only to compare sawnwood exports and imports, but also consider their by-products, the panorama would change, although in the long run the general trend would continue. Furniture is the main product exported as well as imported. Since 1990, furniture exports increased more than twenty fold, from 18 million USD (total furniture exports) in 1990, to more than 480 million USD in 2000. Subsequently exports declined, with a year-by-year reduction finally to 350 million USD in export value in 2003. Other important export categories are wood frames, platforms or pallets, table components, doors and wooden flooring, all reaching export figures above 10 million USD in 2003. Exports of all these products exhibit the same trend as furniture, but not all reached their nadir in 2000 and most of them were more affected by a decline during the
last few years. Picture frame exports, which had reached almost 120 million USD in 1998, fell by almost 50% in 2003. Platform (pallets) exports reached their zenith in 1999 and have now fallen to a fourth of the exports of that year. The exports of table parts have fallen to a seventh of exports in 2000.

**Installed Capacity**

More than 2,000 sawmills have operating permits in Mexico. Chihuahua and Durango have the best sawmill infrastructure. Although there are some large sawmills, by international standards most are extraordinarily small. With only 1,325 registered enterprises in 1985, the quantity of sawmills in Mexico was clearly below the present number, but the average installed capacity was practically the same as today. As a whole, these mills have a processing capacity of more than 10 million m³ of roundwood per year.

**COMPETITION BETWEEN WOOD PRODUCTS**

**What Is the Product?**

The sawnwood products supplied by community sawmills or wood retailers have supplementary characteristics that are as important to a client for making a purchasing decision as are the basic wood characteristics. These include the: a) dimension of the boards and ring growth position: a result of the logs or cants used and sawmill handling; b) classification: good wood classification allows the buyers to buy the kind closest to their needs and provides assurance of receiving the same grade on each purchase; c) additional processing steps: kiln drying, edging and planing are all processes that reduce transport costs and allow buyers to concentrate on the next production stages; and d) wood appearance. All of these characteristics have a direct impact on production costs of secondary enterprises, and are weighed against other characteristics of the product, including the asking price.

For some buyers, the sales service during the purchasing process is as important as the product that is finally placed in its warehouses, including the speed and timeliness of delivery, the variety, available product quantities, payment terms, the service received from the sellers and their capacity to understand what the buyer really needs, as well as the capacity of the business to adjust to and address unforeseen circumstances, and the attitude towards complaints.

**Pine Sawnwood**

Mexico has the largest number of native pine species in the world and pine therefore represents the most important species group by far for the Mexican forest industry. As mentioned above, about 90% of sawnwood production is from this species. This percentage has remained stable over the last decades and in fact has shown a tendency to increase.
Even within the country there is competition among CFEs due to differences in wood quality, physical characteristics, such as structure or appearance, or added sales services. In general, wood from northern Mexico has greater prestige among domestic buyers. Wood from the North, particularly *Pinus Ponderosa*, is mainly distributed to the country’s industrial centers. Wood from central Mexico (Jalisco, Michoacán) is mainly distributed in the city of Mexico, Guadalajara and Michoacán. Buyers have more varied opinions about wood from this region than wood from the North. While some buyers prefer this to other wood, others consider it to be of lower quality. Wood from the west and southwest (Guerrero/Oaxaca) is primarily distributed to the city of Mexico and the southwest and tends to be good for construction. One complication for consumers purchasing wood from these regions is that it is often difficult to know which species is being consumed, partly due to a lack of uniform classification.
Domestic v. Imported Pine

Imported pinewood comes mainly from Chile (95.4 million USD in cut pinewood imports in 2003) and from the United States (62.3 million USD). Canada (18 million USD), Brazil (17.4), Venezuela (7.5) and other Central and South American countries are also important. The 2003 imports totaled more than 203 million USD, or almost ten times the exports.

Chilean wood is mainly plantation *Pinus radiata* (pine insignse or radiata). More than 2 million hectares of this species have been planted in Chile. In genera, Chilean wood is inferior to Mexican wood in its aesthetic and technological characteristics, but very superior in its price/added-value relationship, presentation and the quality of services to the buyer. For example, Chilean pine is reliably homogenous and usually delivered on the date required. It dominates the markets for pallets, scaffolding, railway ties and, in some cases, export furniture. Yet, Mexico still has the lead in markets for furniture (rustic, upholstered, visible wood), carpentry, appearance grade construction materials, tool handles, cabinetry and flooring and veneers.

Pine Wood Exports

While most of the pine remains in Mexico, certain amounts of the higher grades of wood are exported to the United States. The quantities exported depend upon the seller’s ability to offer specific grades of wood below the United States market price. At the present time, the export trends are negative declining from 100 million dollars of cut pine (FOB value) in 1997, to 26.6 million USD in 2002 and 21.5 million USD in 2003 and exports in the first quarter of 2004 were below the exports in the same period of 2003. This means that Mexican producers have not been able to take advantage of the American market recovery during 2003 and 2004.

Oak

Oak (*Quercus spp*) is among the most important temperate zone species, a genus represented by several species in Mexico. Mexico also has the largest number of species of oak in the world and this market is the only one that has grown over the last 20 years. Currently there is no classification for oak species, although there are differences in practice in the ease of drying and workability. Oak is used mainly for flooring, veneer, tool handles, some high-quality furniture and for built-in applications (kitchens, closets, doors). Oak competes with tropical hardwoods and imported oak and other hardwoods.

Market Segments for Community-Produced Sawnwood

The main market segments of community-produced sawnwood in Mexico include furniture-making, construction segments, wood boxes, pallets and platform producers, and carpentry. Furniture enterprises account for almost 40% of domestic demand for sawnwood and consume 1.5 million cubic meters of sawnwood.

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4 Dr Gustavo Chiang, researcher of the Bio Bio University in Chile, kindly provided the information on the insigne pine.
Construction enterprises are followed by enterprises that produce finished work products: doors, built-in kitchens, closets, jambs, moldings/staves and folding screens/gates. Platform producers account for 75% of total sales of wood boxes and pallets. Carpentries produce both furniture and finished tools. This segments are not included in INEGI statistics, due to the reduced size of the enterprises and their high degree of informality.

Table 5: Estimate of Cut-Wood Consumption by Segment

<table>
<thead>
<tr>
<th>Segment</th>
<th>Estimated Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>Building Materials</td>
<td>18%</td>
</tr>
<tr>
<td>Furniture Parts</td>
<td>18%</td>
</tr>
<tr>
<td>Furniture</td>
<td>26%</td>
</tr>
<tr>
<td>Boxes and Platforms</td>
<td>11%</td>
</tr>
<tr>
<td>Carpentry</td>
<td>15%</td>
</tr>
<tr>
<td>Other Products</td>
<td>8%</td>
</tr>
<tr>
<td>Finishing Work</td>
<td>4%</td>
</tr>
<tr>
<td>Furniture</td>
<td>26%</td>
</tr>
</tbody>
</table>

Source: Estimate based on INEGI data (1999) and authors’ data

Upholstered furniture production: This segment is uses both imported and national wood, with imported wood comprising 15% of this market. There is great potential for naturally-grown forest timber, but it likely requires adjustments in dimensions and presentation to be adapted to this market.

Rustic Furniture production: Imported wood constitutes 40% of this market. Producers report they are using imported wood because of a problem with national supply, low quality in service and in the product. There is some potential for naturally-grown forest timber.

Export Furniture: In the last 10 years, the market for production of trendy wood furniture for the United States has grown. The access of domestic wood to this market would be very limited, given the demand for perfectly punctual delivery of a product with a well-defined quality.

Carpentry: Wood is substituted frequently for plywood and MDF. Imported wood accounts for less than 5% of this market. Carpenters prefer domestic supplies, and some buy illegal wood. Many buy wood in small lumberyards and are not aware of the availability of imported wood. There is potential for naturally-grown forest timber, but it is limited by raw material substitution and lack of growth in the carpentry field.

Cargo pallets: Imported wood accounts for 85% of this market. Chilean wood is optimal for making pallets. Companies buy mill-run quality (lowest quality) and employ it for different uses. There is limited potential for naturally-grown forest timber.

Floors and paneling: This segment has struggled with a domestic supply of wood due to: a lack of consumer demand for paneling; improvements in synthetic imitation wood materials; popularity of other types of flooring, like ceramic. It may be possible for Mexican woods to enter niche markets where customers would accept darker flooring than that demanded by the mass flooring market.
**Construction building materials:** Imported wood comprises only 10% of this market. Chilean wood is too soft for this industry and the competitive advantages of the Chilean wood are not attractive for builders. There is great potential for naturally-grown timber, but the construction market in Mexico has slowed down due to the state of the economy.

**Construction finishing work:** Imported wood constitutes 30% of this market. There is potential for naturally-grown timber with pine for doors and interiors of closets where durability and workability are most important.

**Distribution Channels in the Market Chain**

Lumberyards are the central link in the distribution of cut timber and other forest products in Mexico. Most are family-run businesses, with the largest lumberyards in cities and industrial zones. Most will plane, size, and deliver to homes; some larger ones offer kiln-drying, which decreases the added cost for transportation to the processor. Small lumberyards purchase only national pine; larger ones have a varied source of supply. The small lumberyards focus on carpentry and construction woods. They usually do not provide delivery service or kiln-drying (nobody requests it), but all provide planing and sizing.

The main change in trends in the distribution channels is the stable and adequate wood supply, relative to demand, and a marked lack of funds to purchase inventory. Lumberyards can no longer pre-finance the operations of sawmills. Currently, they serve as a bridge for secondary processors, who cannot or do not want to purchase directly from sawmills. Sawmills that wish to deal directly with secondary processors, eliminating lumberyards from the chain, need to have good products, good service and good liquidity.

**Barriers to CFE Development**

Communities that try to develop their social forest enterprise industries face two types of external barriers: those that stem from the public policies and government interventions and those that are inherent to the forest sector itself. The public policy issues include opening of trade, fiscal and forest policies, including environmental regulations, and incentives structures created by government interventions and cross-sectoral policies. Among the constraints inherent to the forest sector itself, are: banking institution policies, policies to develop forest plantations and encourage or tax forest industry and the widespread persistence of illegal forest operations.

**Trends**

As can be seen in Table 1, sawnwood exports are in significant decline compared to imports. Exports decreased from 5% production of 1996 to 1% in 2001, because inflation eroded the advantage that resulted from the devaluation in 1994 and outside competition grew. Mexican CFEs also face competition from a competing supply from domestic plantations.
GOVERNMENT POLICY AND ADMINISTRATION

Open Trade Policies

Free Trade Agreements opened the Mexican market niche to wood from foreign countries, creating competition in market segments that were previously forest community clients. Given the relatively strict environmental standards for and regulation of forest management in Mexico compared to other countries and to other domestic sectors, the production cost structure is higher for CFEs than for their main competitors.

Fiscal Policies

The new income tax laws established in 2002 disfavor small forest enterprises. The new tax law established that communal lands and communities dedicated strictly to forest activities owe 50% income tax on any profits. Prior to this law, profits were generally used both for social works and reinvestment. Reinvestment in the forest enterprise was important for economic and environmental goals and kept forestry competitive relative to returns from clearing forests for cattle and agriculture. Fiscal policies therefore are counterproductive to the forest law objectives by applying a blanket set of policies to communities who generate very different values than traditional SMEs (small- and medium enterprises). It is also difficult for most CFEs to effectively separate operating costs from profits, leading to their operating capital being treated as taxable “profits”.

Public Forestry Policies

Forest Legal Framework

The current Sustainable Forest Development Law (SFDL) treats planted and natural forests in a contradictory way. It aims to: a) encourage development of forest and communal social enterprises in indigenous towns and communities, recognizing the concept of Forest Social Enterprise (CFE); b) encourage sustainable forest management; c) provide flexibility of forest management by creating three categories for authorization permits for natural forest use; d) treat CFEs as a priority. However, while planted forests are considered to comply with environmental requirements if the government agencies do not responded negatively within the application time limit, natural forest owners must wait until the concerned government agencies make a positive declaration in favor of their forest management standard compliance, regardless of how long this wait period might be in reality. This has led some communities to favor plantations over natural management, given the cumbersome regulatory process and its adverse incentive structure.

Forest Norms and Administrative Procedures

The regulatory requirements for an enterprise in terms of administrative procedures or environmental studies necessary to access the forest can become a Kafkaesque experience. The requirements can be divided into three main groups: documentation and administrative process for obtaining permits, undertaking forest control or transporting or exporting wood and non-wood products. Forest extraction and use permits can take more than a year to be processed and granted, if they are approved, all at community cost. Harvest
controls and transport permits require an initial 10-day process and then a logbook of all species dispatched from site to sawmill. Documentation for sawnwood requires authorization for forest registration and proof of legal origins of logs being transported, which takes up approximately 10 more days. Exports require sanitary certificates (10 days) or CITES for Mahogany (30-90 days or more). Many procedures are centralized in Mexico City, an additional challenge to communities outside or far from the city.

Financial

Financial institutions and private enterprises do not consider ejidos and communities creditworthy and government banking policies require cash guarantees that CFEs, who need advance payment from buyers to finance logging, cannot meet. Private enterprises do not consider them creditworthy which results in a reliance on a network of intermediaries to absorb the profit margin.

FOREST SECTOR

Challenge of plantation wood for natural forest producers

Plantation wood presents a serious challenge to natural forest products because of its lower production cost, available subsidies, and a favored regulatory status with fewer permits as well as fewer controls and quicker procedures. Plantation wood has very limited environmental rules for biodiversity conservation or felling and transport procedures, and it also benefits from better road and energy infrastructure in general.

In addition, the competition from sources of illegal wood—also offered cheaper than legal wood sources—is high. While commercial plantations are a welcome economic activity, the fact that these receive more favorable access to credit, complementary road and energy infrastructure investment, simpler procedures for environmental approvals and government subsidies creates a situation in which commercial plantations compete with natural forest management, and, in fact, encourage, rather than reduce, illegal logging.

CONCLUSIONS AND RECOMMENDATIONS

In summary, the study has found that current policies do not favor CFEs, which provide multiple social and economic returns. Rather, they expose them to growing competition from the open market trade policies, from continued subsidies and indirect supports promoting the expansion of commercial plantations and illegal logging. The Mexican government places considerable bets on the establishment of forest plantations, by favoring plantations over other models e.g. in their financial institutions, as a strategy to compete against wood from other countries. The fact that competitive CFEs could supply a significant share of the domestic forest demand has not been recognized even with documented returns from highly successful enterprises that have been instrumental in raising community members out of poverty. The current range of government programs to support natural forestry management are important, still too limited in size and scope, and do not address the need for regulatory reform and new incentive structures.
RECOMMENDATIONS

In order to overcome the various barriers CFEs should:

- Better understand furniture manufacturer quality requirements and demand trends in order to offer more customized products to furniture manufacturers than can foreign competitors.

- Produce for what the market demands rather than based on current capacity. Develop mechanisms to improve quality according to demand, investing more on fewer quality products than on products with limited markets. This requires more investment in sawmill quality.

- Contact the medium and large furniture makers directly, avoiding lumberyard intermediaries and thereby reducing increases in the final price.

- Evaluate and take part in the design and setting-up of PRODEFOR and PROCYMAF to gain support for medium and long-term co-investment projects for forest development.

- Invest in kiln-drying in order to be able to sell directly to the processing industry and to defend their position in their traditional market segments.

- Network along the market chain and across different market segments.

- Explore new products and improve sales services to the buyer in order to consolidate their presence in secure segments, including improving liquidity to avoid requiring advance payment.

- Develop internal structures to learn about markets and competitive advantages, to develop a regular flow of information, and make changes based on the available opportunities.

- Participate in and shape policy dialogues around environmental service payments and markets to ensure CFEs are key players in these opportunities. Explore options for branding and entry into “socially responsible” market niches, including but not limited to certification.

In order to provide support to CFEs in their attempt to overcome barriers to their development, governments should:

- Recognize the social and economic returns from CFEs, as well as the potential of CFEs becoming a competitive sector capable of supplying the domestic forest demand.

- Promote and support the design and preparation of fiscal policy that will compensate CFEs with good forest management, instead of taxing them when they can show equivalent ISR investments in forestry, industry and/or social work.

- Promote and establish a financial system with risk capital for the communities that legally constitute themselves as enterprises in order to assume the challenge of confronting the network of intermediaries, and the risk of contracting banking credit.
• Decentralize the administrative procedures in Mexico City and daily administrative procedures for CFEs.
• Eliminate disincentives and inappropriate regulations in forest and fiscal policy sectors, including modifying environmental legislation and regulation to fit CFEs characteristics and capacity.
• Analyze the feasibility of reducing and simplifying forest administrative procedures, particularly those related to transport and export of forest products.
• Review incentives to commercial plantations and ensure these do not undermine CFEs.
• Invest more heavily in the capacity and technological development of CFEs.

CFEs and governments should jointly:

• Establish market information channels that are beneficial for the enterprises.
• Work jointly to find mechanisms of increasing domestic production in order to decrease imports and still work towards the sustainable forestry and development goals as described by the forest policy principles.
• Improve classification systems in Mexico and develop uniform standards that are appropriate for clients.

Looking Forward

Mexico is one of the more forward looking countries, having secured property rights to the bulk of the forest estate for rural communities and small producers, enabling their direct management of forest resources and devolving to communities the role of forest steward more often left to government authorities. The communities have responded to enabling policies by developing strong forest enterprises in a number of states. Mexican community forest enterprises and small holders are playing an important role in improving the livelihood of communities and mitigating poverty while simultanenously implementing sustainable use of forests and forest products. Yet, these enterprises that have gained so much over the past several decades are now in danger of losing their markets in the face of competition from plantation wood and illegally harvested wood. At the country level, a number of the market segments identified in Making Markets Work favor naturally-grown wood produced by communities and smallholders, but this competitive advantage can only be realized if existing barriers are lowered and CFEs make internal strategic changes.

CFEs can increase their competitiveness by (i) realizing their need to provide quality and quantity that the markets want instead of trying to continue their current production trends, (ii) invest in kiln drying so that they can avoid the intermediaries and work together to group-supply; (iii) improving sales services, including the elimination of advance payments, (iv) develop internal structures to better know their market advantage and adapt to it.
In parallel, public policy and regulatory reforms need to be implemented in order to create a more favorable institutional environment for CFE development. On the enabling side, the Mexican government needs to (i) recognize the social and economic returns from CFEs, (ii) eliminate disincentives and inappropriate regulations in forest and fiscal policy sectors, including modifying environmental legislation and regulation to fit CFEs characteristics and capacity (iii) review incentives to commercial plantations and ensure these do not undermine CFEs, and (iv) invest more heavily in the capacity and technological development of CFEs.

If both CFEs and governments are willing to jointly face these challenges by implementing the recommendations derived from this assessment of opportunities and barriers Mexico will be able to provide the market for both their domestic consumption demand and participate in the international market. Equally significant, CFEs and governments will be able to further conserve forests and promote sustainable development to reduce rural poverty, while providing multiple benefits to communities and the local economy as well as for public environmental agencies.