



EVALUATING THE RESULTS OF OUR WORK

# **Striking the Balance: Adapting Community Forest Enterprise to Meet Market Demands**

## **A Case Study of TIP Muebles, (Oaxaca, Mexico)**

Community Forestry Case Studies  
No. 7/10

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The Multilateral Investment Fund (MIF), a member of the Inter-American Development Bank (IDB) Group, is the largest provider of technical assistance for private-sector development in Latin America and the Caribbean. Its core beneficiaries include micro and small businesses, small farms, and poor and vulnerable households. It designs and finances pilot projects to test pioneering approaches to building economic opportunity and decreasing poverty. [www.fomin.org](http://www.fomin.org)

The Rainforest Alliance works to conserve biodiversity and ensure sustainable livelihoods by transforming land-use practices, business practices and consumer behavior. [www.rainforest-alliance.org](http://www.rainforest-alliance.org)

## Acronyms

CDI	National Commission for Development of Indigenous Peoples
CFE	Community Forest Enterprise
CoC	FSC® Chain of Custody certification
CONAFOR	National Forestry Commission
FSC®	Forest Stewardship Council®
ICOFOSA	Community Forestry Consortium
IEEPO	Oaxaca State Institute for Public Education
MIF	Multilateral Investment Fund (member of Inter-American Development Bank Group)
SME	Small and Medium Enterprises

Over the last two decades, countries across the tropics have devolved increasing authority over natural forests to local actors. The ability of those actors to manage forests sustainably and make forestry a competitive land-use choice has therefore taken on a growing importance. In response to this changing landscape, a range of efforts around the globe are supporting community-based forest management by working to improve the capacity of local people to manage their natural resources and develop local enterprise. In spite of the abundance of manuals, methodologies and other tools to guide technical assistance, there is a relative paucity of systematic analyses of the results of such efforts: experiences, lessons learned and recommendations for improving assistance to local forestry development.

This case study is one of 10 produced under “Forest Conservation through Certification, Markets and Strengthening of Small and Medium-sized Forest Enterprise,” a five-year project supported by the Multilateral Investment Fund (MIF), a member of the Inter-American Development Bank (IDB) Group. Led by the Rainforest Alliance, the project involves approximately 100 community operations and small and medium-sized enterprises (SMEs) in Guatemala, Honduras, Mexico, Nicaragua and Peru. The project’s central aim is to improve local livelihoods through sustainable forestry and enterprise development. Although the support needs, contexts and development levels of partner communities vary tremendously, the project’s unifying strategy is to improve business capacities, market access and financial support for enterprise development in order to secure sustainable forest management and livelihood development.

The case studies in this series were carefully selected to cover all five countries where the project is active, and to reflect the full range of participants—from highly incipient community operations, to second-tier business alliances among multiple well-developed, certified enterprises. Special attention was also paid to ensuring representativeness with respect to forest ecosystems (temperate and tropical), tenure arrangement (permanent and concession) and production focus (timber and non-timber). In all of the studies, the impact of Rainforest Alliance technical assistance on enterprise development was analyzed, including a critical assessment of priorities for future assistance. Beyond enterprise-specific examples, two studies take a more thematic approach, analyzing experiences with markets for lesser-known species and financial mechanisms.

Taken together, the 10 studies support the growing body of research demonstrating that community-

based production forestry can be an effective approach to conserving forest resources while also generating significant social and economic benefits for marginalized communities. At the same time, however, these studies tell a more nuanced story. The diversity of contexts and enterprises represented sheds light on the development of community forestry in its many forms—towards multiple and sometimes contested goals—while chronicling both successes and failures. As such, each case stands on its own to inform similar cases around the world, while also forming a part of the broader story this series tells about the variable trajectories of community forestry development.

Although a guiding goal of many projects—including the present one—is to achieve financial sustainability for community forest enterprise, the importance of external technical assistance in building local capacities is also clearly fundamental. However, the effectiveness of such assistance is not always optimal, which is why each case includes an assessment of the results of the Rainforest Alliance technical assistance that was received. In several cases, insufficient data and/or a lack of indicator consistency—not to mention confounding external factors (storms, market fluctuations, political upheaval and social conflict) and the absence of truly scientific controls—make it impossible with full confidence to attribute change solely to Rainforest Alliance support, especially given the active presence of other actors at all project sites. This caveat notwithstanding, it is clear that, in each case, project interventions produced concrete results. The studies aim to extract lessons from these results and recommend ways forward.

Finally, while the bulk of these studies have been prepared and published by staff of the Rainforest Alliance, they would not have been possible without the collaboration and dedicated efforts of many others including a host of government agencies, civil society partners, academic institutions and private sector actors. Above all, the communities themselves must be recognized and congratulated for the time that they invested in assisting with the compilation and review of these studies. All contributors are specifically acknowledged in each separate case study. Although the contributions of all of these actors are fundamental, the content of these studies is the sole responsibility of the Rainforest Alliance, except where other institutions have taken a co-publishing role.

The table on the following page presents a breakdown of the 10 case studies that were produced as part of this project.

No.	Case Study	Location	Key Themes
1	Awas Tingni community	North Atlantic Autonomous Region, Nicaragua	<ul style="list-style-type: none"> <li>• Indigenous community forestry</li> <li>• Incipient forest enterprise development</li> <li>• Social and institutional foundations for community forestry</li> </ul>
2	Moskibatana non-timber forest product (NTFP) enterprise	Muskitia, Honduras	<ul style="list-style-type: none"> <li>• Indigenous community forestry</li> <li>• NTFP management and Forest Stewardship Council® (FSC®) market development</li> <li>• Development of a new forest enterprise</li> </ul>
3	Ejido El Largo	Chihuahua, Mexico	<ul style="list-style-type: none"> <li>• Integrated forestry development planning</li> <li>• Community forest enterprise competitiveness</li> </ul>
4	CAIFUL agroforestry cooperative	Río Plátano Biosphere Reserve, Honduras	<ul style="list-style-type: none"> <li>• Local forest enterprise development</li> <li>• Benefits of forest enterprise at the community scale</li> </ul>
5	Analysis of forest management in community concessions	Maya Biosphere Reserve, Guatemala	<ul style="list-style-type: none"> <li>• Impacts of certified community forestry silvicultural and management systems</li> <li>• Investments by community enterprises in conservation and monitoring</li> </ul>
6	Brazil nut production and enterprise	Madre de Dios, Peru	<ul style="list-style-type: none"> <li>• NTFP enterprise development</li> <li>• Financial and administrative capacity building</li> </ul>
7	TIP Muebles	Oaxaca, Mexico	<ul style="list-style-type: none"> <li>• Commercial cooperation among community forest enterprises</li> <li>• Furniture value chain development</li> </ul>
8	Tres Islas native community	Madre de Dios, Peru	<ul style="list-style-type: none"> <li>• Indigenous community forestry</li> <li>• Landscape approach</li> <li>• Incipient forest enterprise development</li> </ul>
9	Building markets for lesser-known species	Maya Biosphere Reserve, Guatemala	<ul style="list-style-type: none"> <li>• Development of new markets for lesser-utilized commercial timber species</li> <li>• Diversification of a second-tier community forestry business model</li> </ul>
10	Financial mechanisms for community forest enterprises	Regional	<ul style="list-style-type: none"> <li>• Design, operation and impacts of mechanisms to increase forestry producer access to credit</li> </ul>

# Striking the Balance: Adapting Community Forest Enterprise to Meet Market Demands



Two-thirds of Oaxaca is forested, including both tropical formations as well as temperate pine-oak forests.

*Photo by Eugenio Fernández Vázquez*

Mexico is characterized by a strong community forestry sector. The Mexican Revolution (1910-1917) introduced an agrarian reform process implemented in successive waves during the 20th century. Over a period of 70 years, lands nationwide were titled to two types of rural communities – *ejidos* and indigenous communities – which now collectively hold an estimated 60.3 percent of the national forest estate. The National Forestry Commission of Mexico (CONAFOR) has identified roughly 9,000 communities who are forest owners, perhaps a third of which have negligible commercial potential (Madrid et al. 2010). Among those communities that have a more sizeable forest resource, over 3,000 manage their forests in accordance with a management plan.

Over the past two decades, a transition to greater autonomy in forest management has been consolidated. Communities throughout the country have extended traditional governance institutions in innovative ways to administer a growing diversity of community forest enterprises (CFE). They have also created complex inter-community alliances to

generate economies of scale and undertake joint ventures. Numerous analyses show that successful CFEs substantially contribute to local development, and that community forest management is as effective as protected areas in conserving natural forests and their services (Bray et al. 2007).

Nevertheless, making small-scale forestry an economically competitive land use alternative remains challenging, even in a country like Mexico, where community forestry is relatively advanced. To compete with cheap wood imports, not to mention illegal material, community forest enterprises in Mexico need to achieve economies of scale, add value to forest products, and institutionalize sound entrepreneurial practices.

A popular strategy for accomplishing this is the creation of second-tier organizations that aggregate production from multiple communities, enable value-added production, and help communities improve quality control, marketing and administrative processes. But achieving efficiency for such

The community of Ixtlan de Juarez manages a forest area of more than 15,000 ha, about 3,500 ha of which is pine-oak forest under production.

*Photo courtesy of TIP Muebles*



second-tier organizations is difficult. Challenges include tensions between egalitarian values and entrepreneurial demands, competition between member communities and competition between the second-tier business and its own member communities.

This case study analyzes TIP Muebles, a retailer and brand name owned by ICOFOSA, a consortium of indigenous communities in the southern Mexican state of Oaxaca involved in managing forests, logging, sawmilling, furniture manufacture and furniture retailing. The central finding of this case study is that it is possible for a second-tier business to strike a balance between community values and market demands. The study also confirms that CFEs can adopt commercially viable business models while maintaining fidelity to values and processes rooted in community institutions.

Specific key findings include:

- TIP Muebles has proven to be a successful, entrepreneurial, community-based enterprise, able to survive internal conflicts, acquire institutional furniture contracts, attract external funding, and increase furniture sales. Critically, TIP Muebles has demonstrated an ability to identify internal problems and then adapt its business model to address them. As this case study demonstrates, TIP Muebles has fundamentally altered its business strategy in response to market signals.
- TIP Muebles has successfully undertaken a fundamental shift in how it conducts business. Initially, the company generated low-volume, high-diversity orders during the same season in which institutional clients placed their orders. The initial arrangement also required each community furniture factory to pay a fixed share of retail costs, which created tensions when a community factory's share of retail sales were low, but its bill to cover fixed retail costs was high. Community presidents and assemblies repeatedly debated whether they should sell their factories or withdraw from the consortium to avoid paying the costs of retail sales.

- With support from the Rainforest Alliance, TIP Muebles developed an alternative model that established a profit-making retailer owned by the community furniture factories. This retailer now buys furniture from the factories that own it and sells it at a mark-up, while covering retail costs.

- This business-model innovation has reduced tensions with communities and decreased TIP Muebles' vulnerability. Under the new model, TIP Muebles places larger stock orders during seasons when the factories are under-utilized, which generates economies of scale in production. This new entrepreneurial approach also includes a line of credit to the retailer, which is then extended to the furniture factories.

- TIP Muebles has thus successfully overcome internal crises that threatened its viability, and has successfully weathered the inherent tension between traditional community institutions and entrepreneurial enterprises.

- Finally, the TIP Muebles case illustrates both the benefits and limits of vertical integration for forest development. As a furniture brand and retailer, TIP Muebles adds value at the top of a supply chain. Yet it utilizes only a small fraction of the wood produced in the community forestry operations, and it generates less revenue, profit, employment, and community benefits than logging or sawmilling. Nevertheless, furniture production generates much greater revenue and community benefits per unit of wood consumed, and those benefits are cumulative.

The case of TIP Muebles offers valuable lessons for second-tier forestry organizations elsewhere, including:

- Entrepreneurial models can be adapted to meet the demands of the market while remaining accountable to community control and aspirations to benefit from local-scale processes.

- Second-tier businesses can achieve economies of scale by supplying markets through the coordinated production of their members.
- New markets for value-added forest products can be created with dedicated financing and aggressive marketing of high-quality, value-added products.
- While adding value through the creation of new markets, second-tier businesses must be careful to adjust their own demand to the productive capacity of their members.
- Second-tier businesses can act as effective conduits granting members access to working capital.
- Through articulation of a compelling public image, second-tier businesses can effectively attract public funding and support for member enterprise development, while winning sales contracts that require consistent supply.
- As critical as a second-tier business can be to transforming member CFEs, processes among member communities have their own market dynamics and community structures, requiring separate technical assistance strategies.

This analysis offers several recommendations for TIP Muebles, as well as for technical assistance agencies working to support similar organizations consolidating community supply chains.

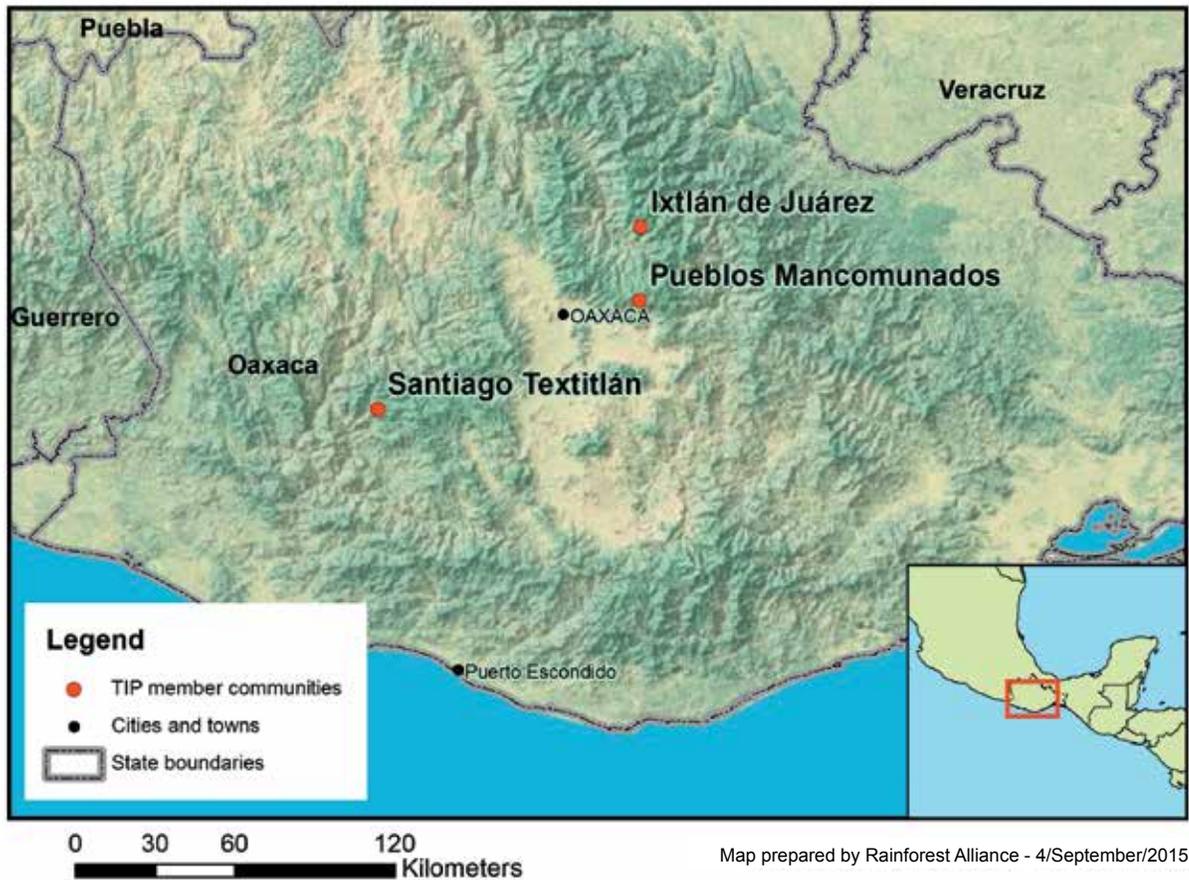
- Establish recurring internal training programs to maintain supply chain quality, including sawmill quality and entrepreneurial best practices.
- Increase community-level understanding of the functions and limits of second-tier organizations and generate reasonable expectations of the benefits of vertical integration.
- Improve community-level supply chain coordination to better capture the potential benefits of intra-chain cooperation, including methods to track costs and revenues at each step of the transformation process.
- The community and environmental benefits of the TIP Muebles brand should be more aggressively marketed; Forest Stewardship Council certification should be better leveraged to market TIP Muebles' products.



Furniture factory and timber yard, Ixtlán de Juárez

*Photo courtesy of TIP Muebles*

Map  
Location of  
the three  
communities that  
own TIP Muebles



## Introduction

Community forestry in Mexico is widely recognized as an effective conservation and rural development strategy (Bray et al. 2005). However, the volume of wood from legal harvests has been decreasing steadily since 2000. Only about half the potential commercial forest area in the country is under legal management. Illegally logged wood provides an estimated 30 percent of domestic consumption, and Mexico runs a US \$6 billion trade deficit in forest products. Given the strong tenure basis for community forestry, the domestic forest product economy could be a motor for rural development and forest conservation, but its potential remains largely untapped.

The state of Oaxaca is a leader and innovator in community forestry on a national and international scale. The size of Switzerland, with just 3.5 million, mostly indigenous inhabitants, Oaxaca has 6.1 million hectares of forest, most of which is owned by communities. Since the 1980s, those communities have exercised significant control over forest management and extraction. Over the decades, communities in Oaxaca – above all in the Sierra Norte region – transitioned from being spectators of forest management undertaken by concessionaires, to working as loggers for those concessionaires, to managing their own forests, logging enterprises, sawmills and kilns to process and dry their wood. Currently about 164,759 ha of Oaxaca’s forests have management plans, most of which are being

implemented by 111 indigenous communities (Madrid 2008).

In 2005, three of the more advanced CFEs in Oaxaca – Santiago Textitlán, Ixtlán de Juárez, and Pueblos Mancomunados – acquired factories to produce furniture from the wood they harvest. The following year, these communities formed an alliance called ICOFOSA (*Integradora Comunal Forestal de Oaxaca, S.A. de C.V.*) to coordinate joint production and marketing of furniture. ICOFOSA subsequently launched a commercial arm, which it branded TIP Muebles, with the aim of retailing member-produced furniture.

Since its inception, TIP Muebles has been guided by several complementary goals:

- Provide member CFEs with greater control over their markets.
- Facilitate retail, marketing and quality improvements.
- Achieve horizontal integration of member furniture factories, resulting in improvements in the vertical integration of each community supply chain, down through sawmills and logging organizations to certified forests.
- Improve the competitiveness of member community forest enterprises.

The Rainforest Alliance has provided assistance to TIP Muebles since its inception, most recently with support from the Multilateral Investment Fund

(MIF). This assistance has focused on growing market demand for TIP Muebles' certified forest products while helping member CFEs to consolidate their supply chains and improve the competitiveness of their value-added forest enterprise operations.

### Community Institutions and Forest Enterprise in Mexico

Collective ownership is the dominant form of natural forest tenure in Mexico. Agrarian reform during the 20th century redistributed land to rural communities under two forms of tenure: *ejidos*, which are land grants to groups of (typically mestizo) individuals, and *comunidades*, rural (mostly indigenous) communities holding titles issued by the Spanish Crown during the colonial period. Although agricultural plots within *ejidos* and agrarian communities are usually individual usufruct, forests are typically held as common property, and managed by a common resources committee (*comisariado*), under the community assembly of *ejidatarios* or *comuneros*, i.e. those community members with voting rights.

This unique governance structure includes a democratic process for electing community leaders (the *comisariado* and a parallel oversight council) every three years. While this rotation of responsibilities has its disadvantages – those elected often lack the capacities that their position demands – in many forest communities, the strong incentive provided by access to valuable forest commons has encouraged broad community participation, the establishment of democratically-established community statutes, vigorous monitoring and clear sanctions for rule breakers. The local governance system also results in important social capital for community forest operations, in a world where traditional authorities and governance are often-ill equipped for the demands of forest and territorial management.

CFEs in Oaxaca are governed by particularly strong and influential community institutions. Community assemblies may either ask the *comisariado* to manage a logging and sawmilling business, or elect other members to serve as business administrators. However, community members chosen to serve as administrators rarely have significant skills or experience in business management. Moreover, they serve terms of three years, often less, and receive no formal training or preparation before occupying their posts (Antinori and Bray 2005).

While such community structures impose levels of authority and accountability missing from conventional private enterprise, there is an inherent tension between the priorities of community institutions and the private sector's demand for business efficiency, continuity, and the ability to plan. The tradition of rotating positions and the perception that managers hold community-service posts contrasts with the business world's empha-

sis on managerial effectiveness. Market values such as labor discipline contrast with community values such as inclusion, whereas the slow time frame and inclusiveness of assembly-level decision-making contrasts with the swift and profit-maximizing decision-making valued by business leaders. However, CFEs have a wide set of objectives and community benefits above and beyond profits. They provide employment, help to generate public goods such as physical infrastructure, road construction and maintenance, and fund communal government, social welfare and celebratory rituals that help define community identity. In addition, CFEs provide a platform for accessing benefits from governmental and non-governmental programs. CFEs are expected to generate profits, and such revenues may be shared directly among community members, or invested in productive infrastructure and diversification that is expected to provide additional revenue and employment.

In response to this tension, various communities, including those that formed TIP Muebles, have established a *gerencial*, or managerial system for their community-owned businesses. Under this system, business managers are paid, and serve indefinite terms at the discretion of community authorities and the assembly. In some cases, business managers are recruited from outside of community membership. This model has the potential to provide a greater degree of professionalism, continuity, and ability to plan while maintaining community control over CFEs.

### ICOFOSA and TIP Muebles: Establishment and Growth

TIP Muebles belongs to three member CFEs: Santiago Textitlán (the "T"), Ixtlán de Juárez (the "I"), and Pueblos Mancomunados (the "P"). The table below provides details on the three member CFEs.

TIP Muebles has its roots in the communities' early experiences with furniture manufacture (Figure 2). When Pueblos Mancomunados and Ixtlán de Juárez began producing furniture in 2005, the Rainforest Alliance helped to link them to their first important market – producing certified furniture for the Oaxaca state school system. In 2006, Textitlán began to produce furniture as well, and also became a supplier for the state school system. The idea of promoting *integradoras* (integrating organizations) as a development strategy was becoming popular at this time, supported by Mexico's Secretary of the Economy, CONAFOR, Rainforest Alliance, and other NGOs. Ultimately, however, the decision to create ICOFOSA was catalyzed by a local political crisis.

In 2006, political upheaval in the city of Oaxaca made it impossible for the CFEs to make deliveries or receive payment under school furniture contracts with the state. In response to this crisis, the three communities formed an informal consortium to help them sell their furniture at a retail level (Klooster 2011). During this time, the Rainforest Alliance

helped the CFEs open their first retail outlet, and financed the legal work to formally register ICOFOSA, followed by the TIP Muebles brand in 2007. ICOFOSA brings together three vertically-integrated, community-owned supply chains, with the retailer TIP Muebles at the top. However, this supply network is complicated, because each member factory also sells furniture to other clients, each sawmill

sells boards to other clients, and logging companies sell logs to other clients. Furniture factories also buy boards from sawmills outside of their community-owned supply chains, at times from sawmills which also buy logs from the community's own forest. TIP is usually the second most important client for the furniture factories and generally accounts for around a quarter of their sales.

**Table 1**  
Comparison  
of the three  
communities  
*Source: INEGI  
Population  
data 2010.*

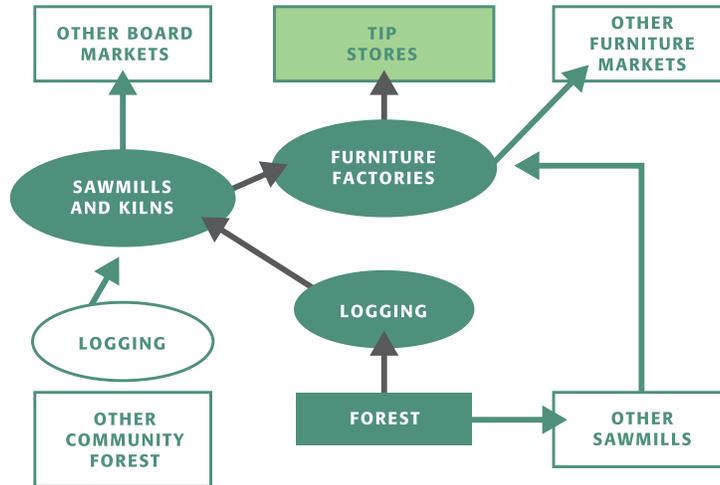
Community	Population	Voting members	Extent of forest (ha)	Annual Allowable Cut (pine)
Santiago Textitlán	4,170	748	16,648	39,591 m <sup>3</sup>
Ixtlán de Juárez	2,718	500	15,749	20,000 m <sup>3</sup>
Pueblos Mancomunados	2,798	950	24,000	7,000 - 50,000 m <sup>3</sup> (salvage harvest, varies annually)

**Figure 2**  
Timeline

- 1950s** Concession forestry on community-owned lands
- 1980s** Beginnings of community involvement in forest management
- 2001** Textitlán and Ixtlán FSC certified
- 2005** Pueblos Mancomunados opens furniture factory
- 2005** Ixtlán opens furniture factory
- 2005** Ixtlán and Pueblos Mancomunados begin to sell wooden school furniture to Oaxaca State
- 2006** Textitlán opens furniture factory begins to sell wooden school furniture
- 2006** Social protest in Oaxaca City results in suspension of school furniture sales
- 2006** First TIP store established
- 2007** ICOFOSA SA de CV is legally constituted
- 2007** Second TIP store established
- 2010** Iniciativa Mexicana recognizes ICOFOSA and awards a 1,000,000-peso prize
- 2011** TIP expands sales through franchises
- 2013** Comercializadora ICOFOSA SRL de CV formed

Workers in the  
Ixtlán de Juárez  
furniture factory





**Figure 3**  
TIP's Position  
within the Oaxaca  
certified wood  
network

Note: In Pueblos Mancomunados, a disagreement between member villages led them to suspend their forest management plan. However, the community logs its extensive forest with a salvage logging permit for bark beetle infestation. This provides an unreliable supply of low-quality logs, so its FSC-certified sawmill buys logs from other communities. Pueblos Mancomunados also buys sawnwood boards from other communities and dries them for resale at a markup.

Despite a competitive and depressed national market for wooden furniture, not to mention a global recession, TIP Muebles sales increased from US\$500,000 in 2007 to US\$1 million in 2013 and points of sale grew from a single store in Oaxaca City in 2006 to 8 retail outlets and several large distributors.

In 2013, the Ixcotel store in Oaxaca City generated more than 40 percent of sales, the Reforma store in Oaxaca City 25 percent, and a store in the city of Puebla 13 percent. Other distributors, which included franchises in Salina Cruz in Oaxaca State, Xalapa in Veracruz, and two in Mexico City, generated 22 percent of sales. In addition, corporate clients such

as Moda en Casa, ProMuebles, Idea Interior and Sears sell ICOFOSA furniture under their own brand names, accounting for additional sales.

Such growth has generated jobs for locals, including members of participating CFEs. As of late 2014, TIP Muebles employed 18 people, including one Textitlán community member, two relatives of community members, and eight women. Two employees work in the Oaxaca warehouse, three in each of the four branch stores, and four administrators oversee marketing and planning for the branch stores, franchises, and distributors.



**Figure 4**  
TIP sales 2007 to  
2013 in US dollars  
*The apparent drop  
in sales volume  
in 2013 is due to  
an institutional  
client (CDI) shifting  
purchases from TIP  
directly to the fac-  
tory-members. Thus  
demand at the fac-  
tory level increased  
despite the drop  
of sales through  
TIP. In contrast to  
TIP's double digit  
increase in furniture  
sales, the national  
market expanded  
at only 2 to 4 per-  
cent a year.*

## External Support

The Rainforest Alliance has been supporting TIP Muebles since its formation. In the earliest days of cooperation among the three communities, in 2005, Rainforest Alliance personnel facilitated the contract for school furniture and promoted the *integradora* concept in community assemblies. Throughout the process, the Rainforest Alliance contributed to proposal development and grant writing, and supported community decision-making for infrastructure acquisition. Rainforest Alliance staff with experience in the furniture industry helped TIP Muebles leadership improve sales procedures, quality control, design, and packaging for shipment. Rainforest Alliance staff provided stability and vision amid frequent changes in community personnel, reducing risks of CFE withdrawal from ICOFOSA.

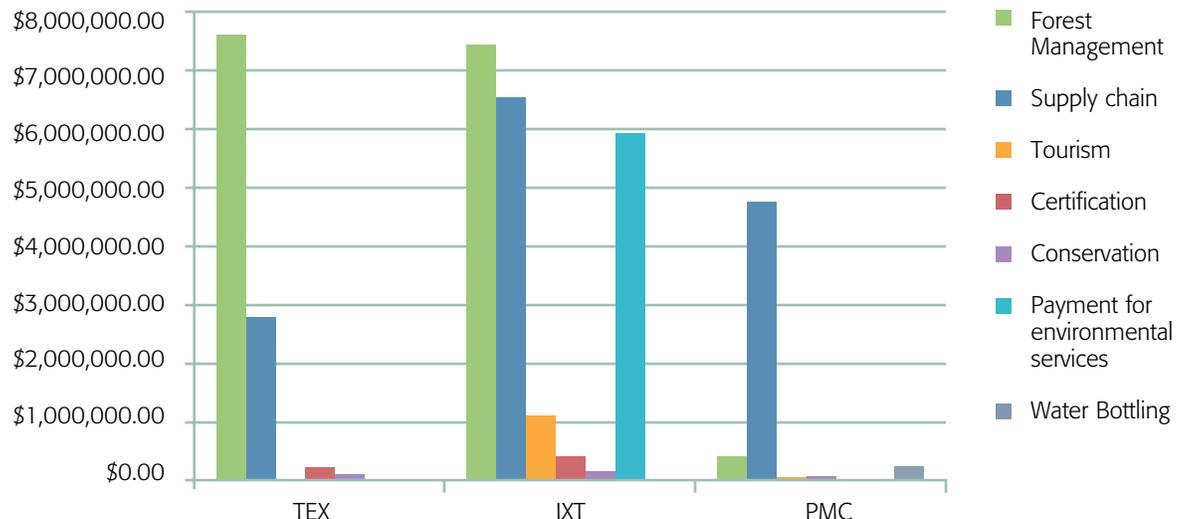
Since 2010, with the start of the MIF project, a significant focus of the Rainforest Alliance support has been on restructuring TIP Muebles to respond more effectively to market demand and member community needs. A critical piece of this work was the establishment of a new retailing entity, the Comercializadora ICOFOSA SRL de CV (described below), in 2012. The Comercializadora was part of a response to an analysis of internal problems in marketing, financing, and aligning demand with factory capacity and community dynamics. The Rainforest Alliance also helped with branding and franchising rules in 2011. Other interventions included diagnostic studies to inform TIP's marketing strategy, certification courses, studies and recommendations to control factory operations, improvements to accounting and planning procedures that have helped factory managers better track and project sales, and business planning and entrepreneurial capacity building activities.

On the marketing side, the Rainforest Alliance provided pivotal support for TIP Muebles to pre-

pare for and participate in Expo Abastur (a trade show for tourism industry suppliers) in 2013. The Rainforest Alliance helped TIP Muebles managers to improve data gathering on client preferences, methods to enhance communication between the sales and design areas, and the adoption of design changes based on an analysis of client reactions to display models. The Rainforest Alliance also helped TIP Muebles managers to evaluate the restaurant supply business, and while the managers decided that TIP could not compete directly with established restaurant furniture suppliers, it could sell to some of those suppliers, such as Promobili. A few weeks after the event, Promobili contracted Pueblos Mancomunados to produce 2 million pesos worth of furniture. It renewed the contract in 2014, with additional small contracts for Textitlán and Ixtlán. The experience also put TIP Muebles in contact with a hotel and restaurant in Xalapa, Veracruz that placed an order worth 200,000 pesos in 2015.

The communities that own ICOFOSA have funded about three quarters of their infrastructure through internal savings, matching grants, and loans. But government subsidy has been critical as well. From 2007 to 2014, CONAFOR contributed about US\$3.5 million dollars, including investments in both member CFEs and ICOFOSA itself. Through its *cadena productivas* (supply chains) program, CONAFOR funded infrastructure, training, feasibility and planning studies, and participation in furniture and forestry expositions. The communities also received significant support from CONAFOR for forest management, including roads and infrastructure, training, forestry studies and forest conservation activities, including reforestation. Half of CONAFOR's support to TIP/ICOFOSA went to marketing studies, training, branding and participation in forest expos, whereas half went to productive and administrative infrastructure (CONAFOR 2014).

**Figure 5**  
Support from CONAFOR to TIP/ICOFOSA communities by category, from 2007 to 2014, in pesos



## TIP Muebles and its Member CFEs

While TIP Muebles has generated a growing number of orders for its three members' furniture factories, they continue to depend on large institutional contracts to cover costs. Assuming that each factory needs MXN \$800,000 per month to cover costs, TIP Muebles would need to purchase MXN \$28.8 million of furniture per year for the factories to break even. However, TIP Muebles generated less than \$13 million pesos of sales in 2013. CFE member furniture factories consequently rely on government contracts to make up the difference.

Historically, the contract for school furniture for the state of Oaxaca has been a crucial factor in the survival and consolidation of the community furniture factories. This contract comprised roughly 50-60 percent of the factories' sales from 2005 to 2008. By 2009, with TIP Muebles and institutional sales, the factories reached equilibrium, with estimated profits at 1 percent for Ixtlán, 3 percent for Textitlán, 3 percent for Pueblos Mancomunados. By 2013, TIP was responsible for about a quarter of each factory's sales, while more than half of each factory's revenue came from just two government contracts. Such contracts could be easily redirected or suspended if budgets were reduced or political priorities shifted (Figures 6a, 6b, 6c), which means the factories remain vulnerable. Diversifying markets remains a critical priority.

## The Factory-Direct Model

Until early 2013, TIP Muebles operated under a factory-direct model. Under this business model, each furniture factory set the retail price of their furniture and paid set fees to cover one third of TIP's operating costs: retail store rentals, salaries and utilities. Furthermore, since ICOFOSA was legally a service organization not authorized to turn a profit, retail invoices for furniture went straight to the factory.

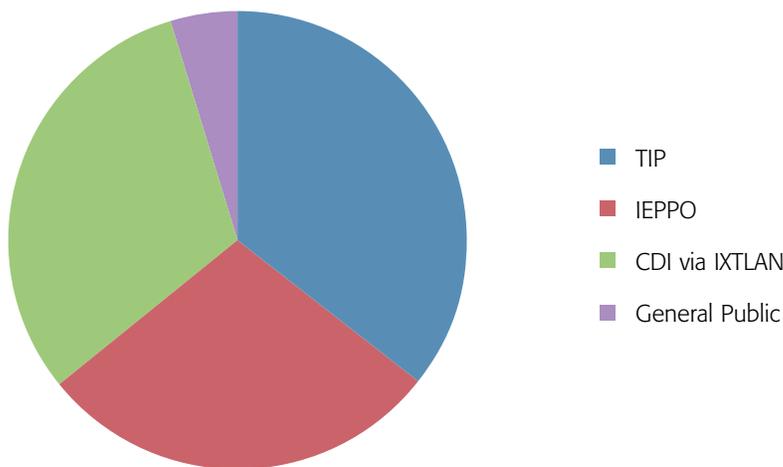
Under the factory-direct sales model, TIP Muebles was often unable to meet demand for its furniture due to delays and shortfalls in supply. Stock was rarely on hand, so clients would place an order and the producing factory had 20 days to deliver the product. Delivery delays often occurred, leading to cancellations, and potential buyers often turned to other suppliers that offered more reliable service.

The factory-direct model made it difficult to achieve sales even when customers walked in the door wanting to buy. The complicated invoicing and billing system also resulted in stocking, delivery and collection difficulties. Furthermore, because the factory quotas covered TIP Muebles salaries whether or not sales occurred, the sales staff had limited motivation to increase sales. Nor did the model allow TIP Muebles to accumulate capital to improve and expand its retail capacity.

A TIP Muebles manager summed it up: "We were swinging in our hammocks. We didn't need to sell anything because the communities would pay us no matter what."

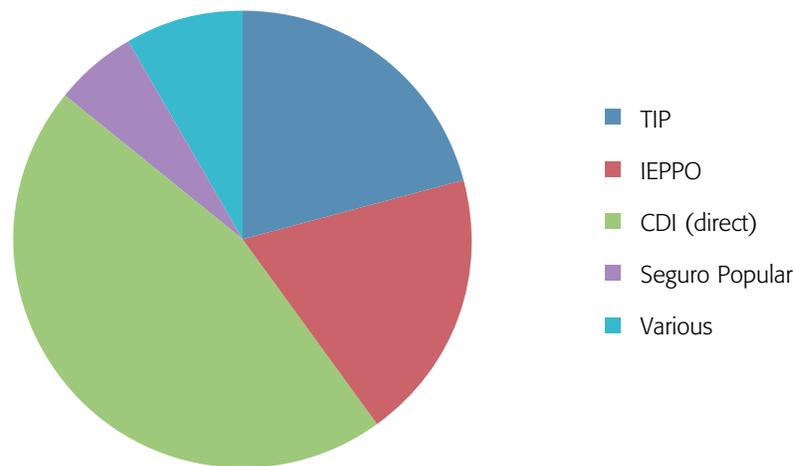
Another problem with the factory-direct model was that it generated inappropriate and ill-timed demand, which precluded economies of scale. TIP Muebles originally generated low-volume orders for a wide variety of furniture, requiring constant modifications to assembly lines and converting high-volume furniture factories into low-volume carpentry workshops with very high fixed costs. Furthermore, retail demand for furniture is highest toward the end of the year, whereas there is little demand in the late spring and summer (Figure 7).

However, major institutional clients place their annual orders in the early fall and expect delivery at the end of January. This creates great pressure on personnel and infrastructure from October through January, whereas demand tends to be less than productive capacity during spring and summer.

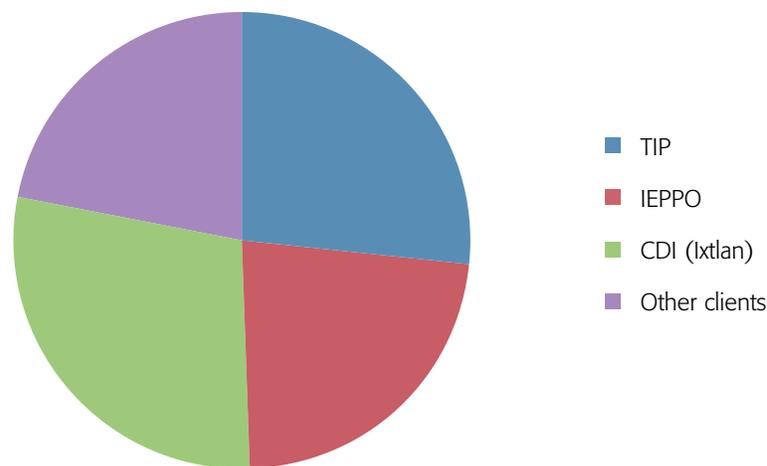


**Figure 6a**  
Textitlán:  
Client share of  
\$11 million pesos  
of furniture sales,  
2013

**Figure 6b**  
Ixtlán:  
Client share  
of \$8 million  
pesos of furniture  
sales, 2013



**Figure 6c**  
Pueblos  
Mancomunados:  
Clients share of  
\$11 million pesos  
of furniture sales,  
2013



During those peak demand months, factory managers preferred to concentrate on meeting the high-volume institutional orders, which contributed to TIP Muebles' problems – delivery deadlines were often missed and clients lost. Meanwhile, factories were underutilized during the late spring and summer.

Another problem hindering the factories was a lack of working capital, which has frequently limited production. TIP Muebles orders were paid only after sales at retail outlets, whereas the most important institutional client paid nothing until five or six months after the delivery of school furniture.

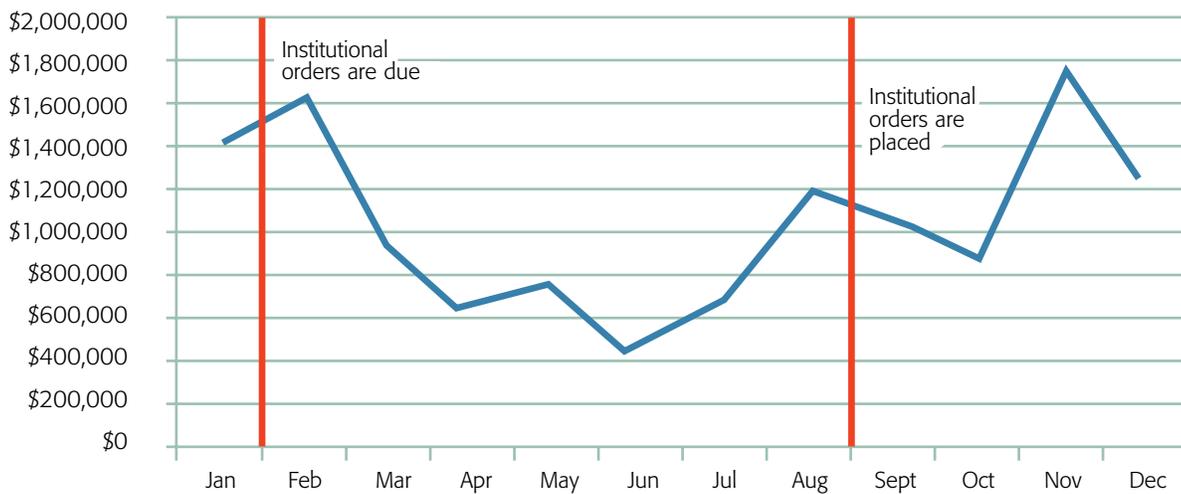
To find the capital for operations, factory managers were often forced to engage in creative financing, such as diverting federal grants for infrastructure purchase to working capital, and then paying for the infrastructure later, with income from furniture sales. In Textitlán and Ixtlán, factory managers receive loans in cash or wood from other community businesses, but these are contentious and not always available. Occasionally, other community sawmills will sell a factory boards on credit as well. In Pueblos Mancomunados, the flow of capital and material

between the logging business, the sawmill and the furniture factory is more reliable.

The factory-direct model also generated problems at the community level. Each factory paid its share to cover TIP Muebles operating costs regardless of sales volumes. It was often the case that one factory sold significantly more through TIP Muebles stores than the others, but since each factory paid the same quota, members with lower sales effectively paid the retail costs of the others. Community authorities and community assemblies perceived this as unfair. This issue became quite contentious, leading CFEs to delay payment of their quota; community assemblies, in turn, threatened to withdraw from the consortium.

### Changing the Business Model

To address these problems, the Rainforest Alliance supported efforts to create a new legal entity called the *Comercializadora ICOFOSA SRL de CV*, which began operation in March 2013. The *Comercializadora* purchases furniture from member factories and resells it at a markup, covering sales



**Figure 7**  
TIP sales in pesos by month in 2013 and approximate dates of institutional orders

Note: These data conform to the general pattern of demand for furniture in Mexico, which is highest between October and January (Chapela 2012).

costs and retaining its own profits and losses (Table 8).

The model is designed to address problems associated with the factory-direct model. Crucially, it improves sales capacity, allowing immediate delivery to retail customers, providing a simpler system for billing and inventory, and providing clearer incentives and motivations for retail operations to make sales. It also generates profits for additional furniture purchases or improvements to sales capacity.

Results from this change were quick to emerge. In the first 10 months of operation, the *Comercializadora* generated a 3 percent profit.

The new model also better aligns demand with factory capacity. The stock purchase strategy bundles TIP Muebles' demand into larger volume orders placed in the late winter or early spring, permitting the factories to achieve economies of scale in production during periods when they are not competing with orders from institutions. The TIP Muebles sales team has also sought out high-volume, low-margin clients such as Idea Interior and Sears in order to make use of excess capacity during months of low demand.

With its changed approach, TIP Muebles also acquired lines of credit with the bank Banorte and the lender FINDECA. This allows it to pay a 50 percent down payment on stock orders, with the balance paid upon delivery. Thus, member CFE factories no longer have to wait for a piece to sell in the showroom to receive payment. TIP Muebles can also provide 90 or 100 days financing to its distributors. Perhaps the most important aspect of TIP Muebles' business innovation is that it improves the relationship between the communities and TIP Muebles, reducing the threat of a community withdrawal from ICOFOSA while increasing TIP Muebles autonomy

from community organizations. Whereas under the factory-direct model, the possibility of a community withdrawing from ICOFOSA threatened TIP Muebles' very survival, since it would decrease its budget by one third, with the *Comercializadora*, TIP Muebles could continue to function with only one community supplier. Furthermore, TIP Muebles can now generate its own profits and use them for market expansion.

Another key difference lies in how member CFEs are paid. Under the factory-direct model, factories were paid a fixed sales cost. Under the new model, they receive a percentage of the final sale price. At low sales volumes, the new model provides a greater benefit to factories. The new model further benefits the factories by increasing overall sales, shifting production to the seasons when factories would otherwise be under utilized, and providing more rapid payment, as well as access to working capital. Furthermore, as partners in the *Comercializadora*, the factories not only earn profits when they sell to TIP Muebles, they also benefit from TIP Muebles' profits at the retail scale.

**Table 8**  
Comparison  
of the factory-  
direct and  
Comercializadora/  
stock purchase  
models

	<b>Factory-direct model</b>	<b>Comercializadora / stock purchase model</b>
Retail costs	Each factory pays 1/3 of the costs	Covered by <i>Comercializadora</i>
Revenue at retail and factory levels	Factories receive full retail sales price; retailer's costs are covered	Factories sell at a percentage of the final price; <i>Comercializadora</i> sells at mark-up and retains revenue
Risk at retail	Factories own the stock and lose if models do not sell	Retailer owns the stock and runs the risk of miscalculating furniture demand
Risk of community withdrawal	High: Because of dissatisfaction paying the quota to cover retail costs	Low: Factories no longer cover retail costs.
Economies of scale in production	Low: TIP ordered small volumes of diverse furniture during the peak-demand season	High: TIP places large volume 'stock' orders during low-demand season
Retail customer delivery	20 days after delivery	Immediate delivery from stock
Role of certification in retail sales	Little role	Little role

### Marketing FSC Certification

FSC certification has helped TIP Muebles and its member communities obtain institutional clients and government support. Although only the school furniture contract explicitly requires FSC certification, clients such as *Moda en Casa* and *Idea Interior* have shown interest in the FSC seal. Furthermore, the growth in franchises followed recognition from the NGO *Iniciativa Mexicana*, an award that was influenced by certification, whereas two distributors in Mexico City, *Muebles La Roca* y *CG Muebles*, have bid on government contracts for which FSC certification could be a decisive factor.

However, neither the factory-direct nor the *comercializadora* models have made much use of FSC certification at the retail level. Although TIP Muebles stores now have FSC Chain of Custody Certification, they do little to promote the FSC label in their stores. Indeed, much of the furniture produced by ICOFOSA factories cannot be FSC certified due to gaps in the supply chain. In 2014, for example, *Textitlán* and *Ixtlán* temporarily lost their chain of custody certifications during legal restructuring, and *Pueblos Mancomunados* only logs its forests through sanitation cuts for bark beetle control (Table 9). The brand's website portrays a "Naturally Sustainable" slogan, and mentions certification, but emphasizes price, quality and other social values over FSC. With support from the Rainforest Alliance and others, TIP Muebles undertook more than 200 customer surveys with open-ended questions about product preference. These surveys revealed negligible interest in FSC certification. Whereas 95 percent of respondents said TIP Muebles furniture is of high quality and a majority reported satisfaction with the service, none said that they were attracted to the store because of social or environmental values. Such findings highlight a considerable challenge, since TIP Muebles has tried to aggressively market the social and environmental values behind its brand. At the same time, however, it is clear that increasing numbers of institutional buyers value the FSC seal. Globally, this is what has driven the growth of FSC, rather than individual consumer consciousness and demand.



Workers in the Pueblos Mancomunados furniture factory

Photo by Daniel Klooster

Community	Forest	Sawmill	Furniture Factory	Point of sale
Textitlán	FM	CoC	CoC	TIP CoC
Ixtlán	FM	CoC	CoC	
Pueblos	NA	Coc	CoC	
Other suppliers	FM	CoC	NA	

Table 9  
FSC certificates current in July, 2014

FM: FSC forest management certificate  
CoC: FSC chain of custody certificate

NA: Pueblos Mancomunados does not have an approved management plan, but produces wood through salvage logging for bark beetle control

### The TIP Muebles Model and the Limits of Vertical Integration

Vertical integration is a guiding goal for community forestry development, based on the premise that it can enhance the benefit of limited forest yields by increasing revenue and employment. Supply chain integration, moreover, is a hallmark of the Rainforest Alliance’s approach in multiple sectors, including forestry. TIP Muebles provides an opportunity to examine the benefits and limits of vertical integration through its member CFEs’ supply chains in terms of revenue, wood volume, community objectives and value along the chain.

TIP Muebles and the furniture factories it buys from constitute a very small part of the supply chain in terms of volume. Furniture factories consume only a few percent of the volume of wood harvested from community forests. Community sawmills have the capacity to process all the logs harvested from their forests, yet in several cases, managers of community logging businesses sell to clients other than their own community’s sawmill, or furniture factories purchase boards from other suppliers.

In Textitlán, for example, the furniture factory bought boards from several suppliers, utilizing a total volume of boards equivalent to 36 percent

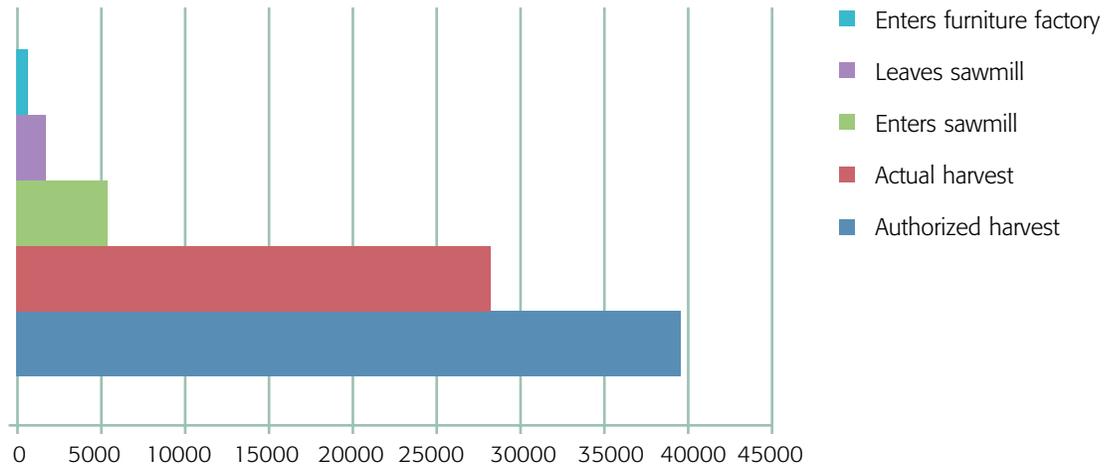
of what its sawmill produced. Operating far below capacity and during only a few months of the year, the sawmill consumed 19 percent of the community’s logs (Figure 10). The large volumes of logs and boards sold outside of the furniture supply chain generate revenue streams and profits that are often higher than for furniture manufacture. Textitlán’s



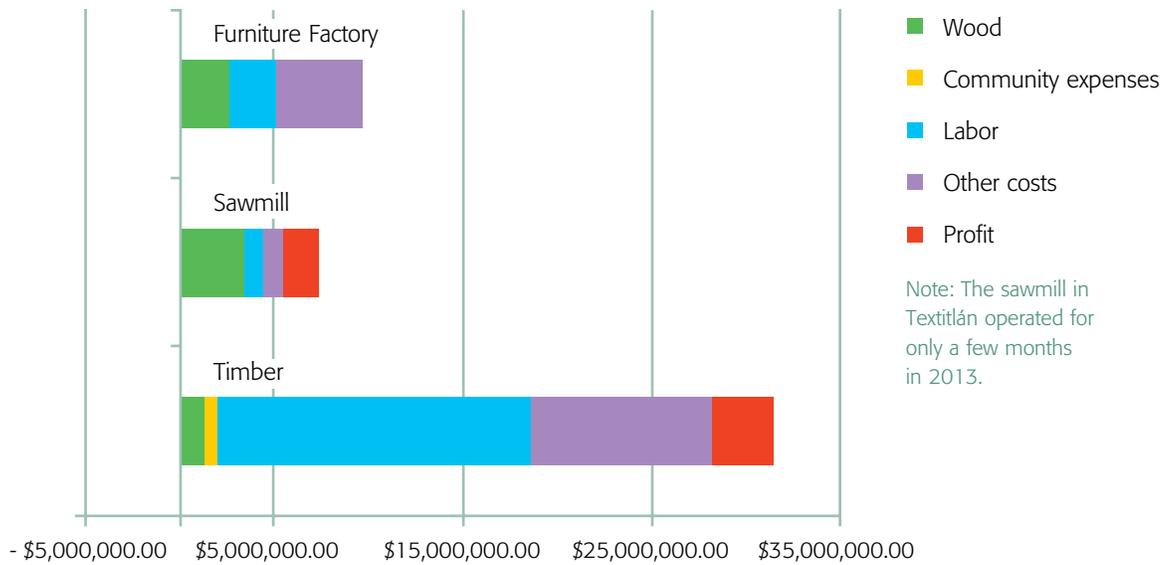
Many women work at the Pueblos Mancomunados furniture factory

Photo by Daniel Klooster

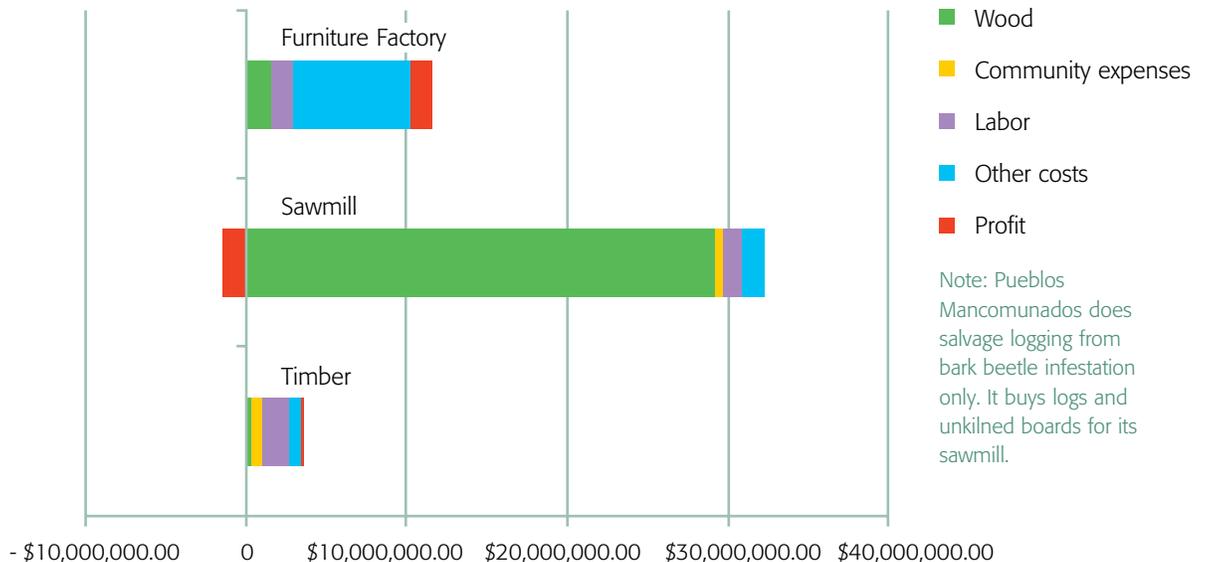
**Figure 10**  
Wood volume  
(m<sup>3</sup>) used in the  
Textitlán supply  
chain (2013)



**Figure 11**  
Textitlán: Costs  
and profits in  
the supply chain,  
pesos (2013)



**Figure 12**  
Pueblos  
Mancomunados:  
Costs and profits  
in the supply  
chain, pesos  
(2013)





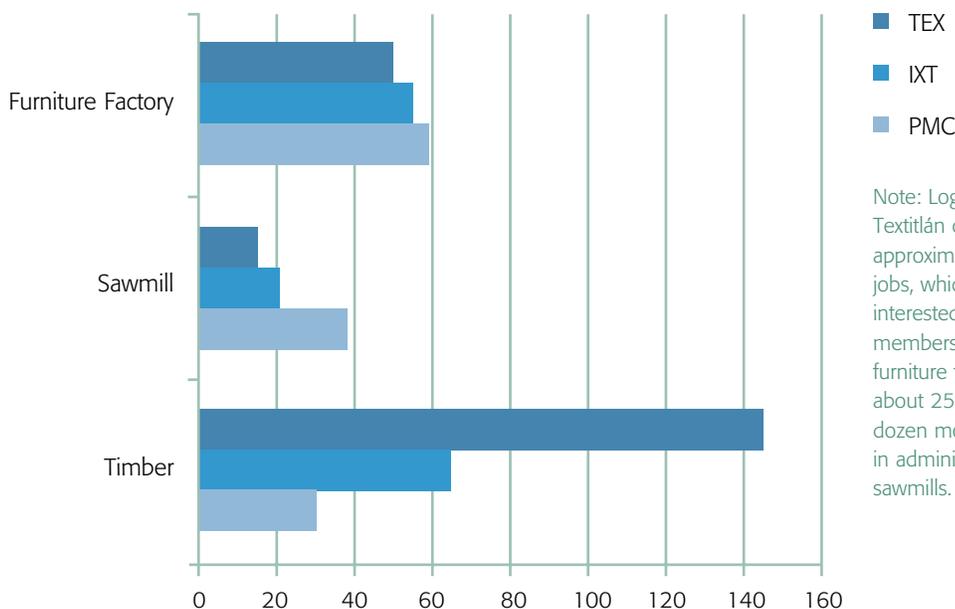
Interior of Ixtlán de Juárez furniture factory  
 Photo courtesy of TIP Muebles

extensive and productive forest generates three times the revenue of its furniture factory, for example. In Pueblos Mancomunados, which buys logs and un-kilned boards from multiple suppliers, the sale of boards generates 2.5 times the revenue of furniture (Figures 11, 12).

Moreover, as noted at the outset, CFEs have multiple objectives beyond profit, chief among them job creation. Several of these appear to be better met at lower levels of the production chain than in the furniture factories. The proportion of revenues that are potentially of direct community benefit decreases higher along the supply chain. For example, labor comprises 22 percent of sawmill revenue in Textitlán and 4 percent in Pueblos Mancomunados. In the furniture factories, labor costs comprises 25 percent of revenue in Textitlán, 20 percent in Ixtlán, and 14 percent in Pueblos Mancomunados (Figure 14). On the other hand, almost all of the 80 women employed in the supply chain work in the furniture factories. Women comprise 17 percent of the CFE workforce

overall, but 84 percent of them work in the furniture factories.

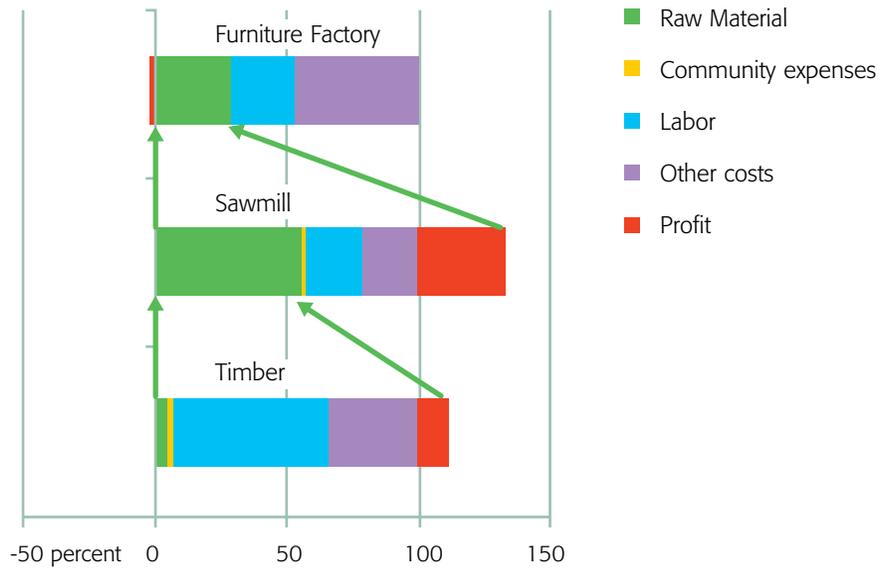
As the graphs illustrate, furniture production consumes only a small proportion of the wood in the supply chains and generates less revenue and fewer jobs for community members than other activities. However, the revenue-added per unit of wood transformed increases substantially up the supply chain. A cubic meter of wood logged in a community forest generates from 700 to more than 1000 pesos of revenue whereas a cubic meter of wood entering a community sawmill produces more than 4,000 pesos of revenue. A cubic meter of wood entering a furniture factory, in contrast, produces from 16,000 to 28,000 pesos of revenue (Figure 15). The revenues are also potentially cumulative. When a furniture factory buys from a community sawmill, its material cost represents sawmill income. When a sawmill buys logs from a community logging business, its raw material cost represents its partner's income.



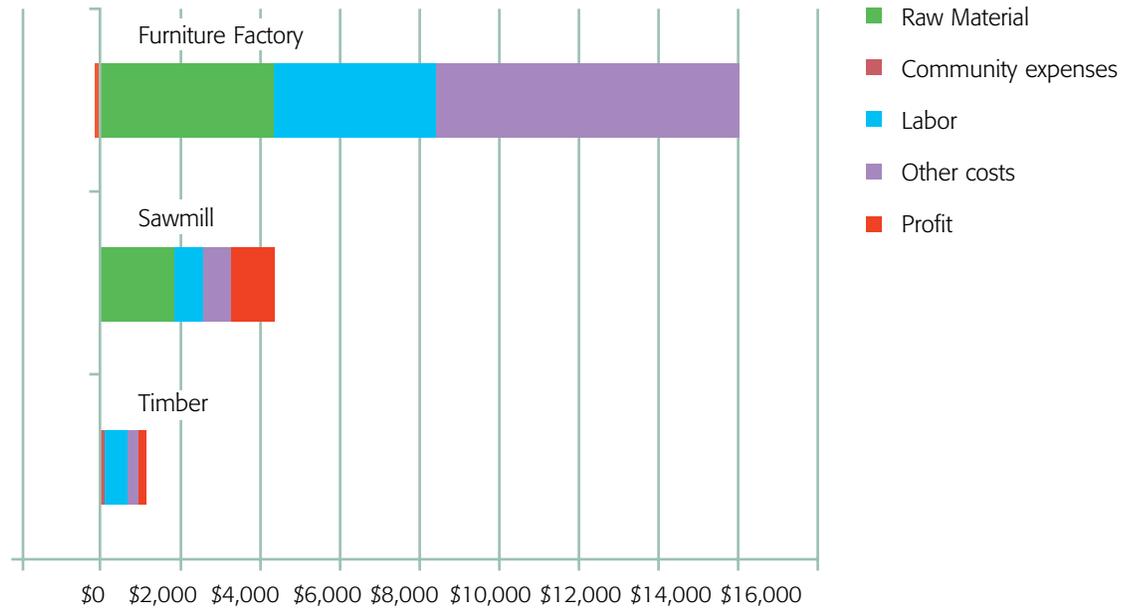
Note: Logging work in Textitlán consists of approximately 80 full time jobs, which rotate among interested community members. Each of the furniture factories employs about 25 women. A half dozen more are employed in administration and in sawmills.

Figure 13  
 Employment by community and activity

**Figure 14**  
Stacked benefits  
along the com-  
munity supply  
chain of Santiago  
Textitlán



**Figure 15**  
Textitlán: costs  
and profits per m<sup>3</sup>,  
pesos (2013)



Pueblos  
Mancomunados  
furniture factory

*Photo by  
Daniel Klooster*





Inauguration of TIP Muebles store in the city of Puebla  
*Photo courtesy of TIP Muebles*

### Conclusion

TIP Muebles has proven itself to be a successful, entrepreneurial, community-based enterprise. Since its establishment in 2006, TIP Muebles has grown significantly, despite local and international economic crises and a challenging national market. Points of sale in the city of Oaxaca have increased from one to three, as well as stores in Mexico City, Puebla and Salina Cruz. TIP Muebles also sells to major Mexican retailers. Furthermore, the CFEs that built TIP Muebles have learned from their experiences and adapted its business model to better serve their members and markets.

Nevertheless, TIP Muebles continues to face challenges. It still generates low-volume, high-diversity orders, primarily during the same months that major institutional clients place their orders, even though the furniture factories are unable to achieve economies of scale with such orders. At the same time, the furniture factories rely excessively on a few government contracts that depend on unreliable sourcing politics and spending priorities. Moreover, furniture factories represent enormous investments that consume community capital that might otherwise have been distributed as profit-shares to members, but have thus far failed to generate the expected profits.

In the face of these challenges, TIP Muebles has been resilient and adaptive to tension and change. Most critically, TIP Muebles managers developed an understanding of the limitations to their factory-direct sales model and adopted an alternative retail model that is better aligned with factory needs. In the process, they reduced community tension and the vulnerability of the business. TIP Muebles has thus overcome internal crises that threatened to dissolve it and has successfully struck a balance between the demands of traditional community institutions and entrepreneurial efficiency.

### Lessons Learned

TIP Muebles offers valuable lessons for a broader category of second-tier organizations in which horizontal integration to improve access to markets influences vertical integration along supply chains.

TIP Muebles' experience demonstrates that communities can adapt entrepreneurial structures and cooperate while maintaining community accountability. It also shows that such community consortia can be politically effective actors, attracting funds and opening institutional markets. At the same time, continued problems with community supply chain management and continued vulnerability to community withdrawal shows that such processes can be time-consuming and aren't linear.

TIP Muebles also illustrates the benefits and limits of vertical integration for forest development. As a brand and retailer, TIP Muebles adds value and resilience to the top of a supply network, even though it isn't the most important economic activity within that network. It consumes only a small fraction of the wood produced by the community forests and generates less revenue, profit, employment and community benefits than other components of the supply chain. Nevertheless, furniture production produces much greater revenue and community benefits per unit of wood than other supply chain components, and its benefits are cumulative.

This analysis also noted the recurring tension



Bunk beds in the TIP Muebles showroom  
*Photo courtesy of TIP Muebles*



between entrepreneurial efficiency and traditional community institutions. The communities often failed to achieve coordination between logging, milling and furniture manufacture. In two of the three communities, there is no person or body dedicated to planning and coordinating the total community forest enterprise, and so logging, sawmill operators and furniture factory managers sometimes ignore the potential benefits of cooperation. When it takes place, community supply chain coordination can bring resilience through multiple productive activities, mitigation of deficits of working capital and possibilities for market-driven product development.

This supply network analysis suggests that while investing at the top has value, the processes at lower levels have their own market dynamics, community structures and logics, and investments at the top of the supply network don't automatically trickle down.

### Recommendations

This analysis offers several recommendations for TIP Muebles and similar organizations that are weaving together community supply chains.

- Establish recurring internal training programs to maintain supply chain quality. Efforts to support furniture retail do not replace programs to maintain sawmill quality and entrepreneurial best practices, for example.
- Increase community-level understanding of the consortium. TIP Muebles is a community-owned business, but it relies on the understanding and support of community assemblies and rotating community leaders. Programs should be developed to promote reasonable expectations of the benefits of vertical integration.
- Improve community-level supply chain coordination to better capture the potential benefits of cooperation within the chains. Communities should be encouraged to analyze and adjust their business structures to improve supply chain coordination without losing the ability to track costs and revenues at each step of the transformation process.
- Promote the community and environmental benefits of the TIP Muebles brand. TIP Muebles has not yet created a niche for its products that captures their social and environmental value. TIP Muebles should sell more than just furniture, it should sell its story as an indigenous organization devoted to sound forest management and sustainable development. FSC certification should be better leveraged to help sell that story.

Ixtlán de Juárez furniture factory workers; the factories provide many jobs for women

Photo courtesy of TIP Muebles



## ANNEX I

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## ANNEX II

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**Josue Vázquez Vázquez**  
Factory Manager, Ixtlán

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Ghana  
Guatemala  
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