

Promising Business Models for Community-Company Collaboration in Brazil and Mexico

by Natália G. Vidal* and Gabriela Donini

Forest Trends
1050 Potomac Street NW
Washington, DC 20007
*e-mail: giugni@interchange.ubc.ca

1. Introduction

The global forest sector is undergoing significant changes. These changes indicate the need to reconcile apparently conflicting goals such as conserving forest ecosystems, meeting the increasing demand for forest products, and, at the same time, promoting sustainable development in order to reduce rural poverty. Forests are closely connected to social issues and play an important role in the livelihood of rural poor (Scherr, White and Kaimowitz, 2003). Furthermore, forest markets are also changing. Even though niche markets for socially responsible products are still in early development stages, niche markets for environmentally friendly products have been increasing over the past decades, especially on Europe and North America (Mayers and Vermeulen, 2002).

Besides, it is becoming increasingly evident that poverty is one of the main drivers of environmental degradation (Nelson, 2002). With the increasing number of forest areas in the developing countries under the control of communities (White and Martin, 2002), it is necessary to develop mechanisms that allow forest communities to have access and benefit from these resources. Scherr, White and Kaimowitz (2003) argue that “fundamental changes underway in the forest sector offer new opportunities for commercial forestry to benefit local people and provide more sustainable pathways of economic development for local communities.”

Agreements between forest companies and forest communities may offer potential solutions to one or more of the conflicting objectives the global forest sector has been required to face. Some studies (Mayers and Vermeulen, 2002; Scherr, White, and Kaimowitz, 2003) have identified characteristics of this type of agreements in several countries. Within this context, this study has

been conducted in Brazil and Mexico with the aim of identifying potential partners in the forest industry that demonstrate interest in linking low-income forest producers to the private forest sector and market opportunities. Specific objectives focused on (1) identifying models of agreements that are obtaining success and that have potential for wider replication; (2) discussing the factors that led these models to be successful; and (3) documenting constraints hindering the involvement of low-income producers.

Section 2 of this paper presents a brief review of the literature related to the origin of forest company-community agreements as well as information about these partnerships in Mexico and Brazil. Section 3 provides information on the methodology of these studies. Main results about the current status of these agreements in Brazil and Mexico are presented in Section 4. Finally, Section 5 discusses successful models and major trends on forest company-community agreements in these two countries.

2. Literature Review

2.1. Background Information on Forest Company-Community Agreements

According to changes underway in the forest sector globally, forest use should be planned to accommodate multiple uses of the resources. Forest management should consider not only timber production but also an array of products ranging from non-timber forest products to environmental services. These changes also indicate that forests are intimately linked to social issues. Around one fourth of the world's rural poor are entirely or partially dependent on forest resources for subsistence (Scherr, White and Kaimowitz, 2003). Furthermore, forestland tenure has been increasingly transferred to forest communities. White and Martin (2002) analyzed available information on 24 of the top 30 forested countries and verified that indigenous and local communities own or have priority access to at least 22 percent of the forested areas in developing countries. Historically, forest lands usually belonged to governments, which were also responsible for managing their resources. However, this situation has begun to change in several countries. Governments started to transfer forest property rights to local and indigenous communities (White and Martin, 2002).

Forests and forest products markets can bring several benefits for the rural poor. Scherr, White and Kaimowitz (2003) consider that “the main contribution of forest resources to rural livelihoods is through providing subsistence products and services, and a *de facto* ‘safety net’.” Forests and forest products markets can also increase income of the rural population. Besides employment in forestry and forest processing activities, local producers can also manage their forest resources for commercialization (Scherr, White and Kaimowitz, 2003). However, community forest management may encounter some internal and external constraints. There are internal challenges in developing governance of its own forest resources. Furthermore, communities are usually in disadvantage regarding public policies and markets, which makes it difficult for them to have market access and compete with large scale suppliers in forest markets (White and Martin, 2002; Scherr, White and Kaimowitz, 2003).

Community-company agreements present potential solutions to some of these constraints. In general, companies develop agreements with communities in order to increase and guarantee access to labor, forestlands, and raw material while also trying to demonstrate their good intentions to their neighbors. On the other hand, communities look for jobs, technology, infrastructure, social services, sources of income, and secure access to several forest products (Mayers and Vermeulen, 2002). These agreements may present a chance for the forest sector to address problems regarding social issues, the need to increase areas under sustainable forest management as well as the increasing demand for forest products and the scarcity of fiber supply.

According to previous studies on this topic (Mayers and Vermeulen, 2002; Scherr, White and Kaimowitz, 2003), models of community-company agreements can be divided into four main types:

- *Joint Venture* – communities manage their forest resources in collaboration with forest companies. Levels of participation and responsibility of both companies and communities may vary considerably;
- *Concessions leased from communities* – forest communities lease harvest rights to forest companies, but still retain substantial control over their forest resources;

- *Out-grower programs* – companies support small landowners and/or forest communities to establish forest activities in exchange for timber supply. Company usually pays market price for their timber supply;
- *Corporate social responsibility project* – companies contribute to local development in exchange for a “social license to operate.”

2.2. Company-Community Agreements in Brazil

Two possible types of agreements between forest companies and communities¹ in Brazil could be observed in the literature. One of them includes forest communities in the Amazon region and the other includes out-grower programs developed by forest plantation companies². The majority of the consulted literature refers to the situation of communities in the Amazon region (Amaral and Amaral Neto, 2000; Armelin, 2001; Arderson and Clay, 2002; Lima et al., 2003). Most of these discuss the situation of community forest management. Little literature was found on agreements developed by plantation companies. Only two cases were intensely documented and will be presented in this section.

2.2.1. Community Forest Management in the Amazon

The Legal Amazon occupies approximately five million square kilometers, accounting for 59% of the Brazilian territory. There is a lack of information on land tenure situation in the Amazon.

¹ For the purpose of this study, the term “communities” will be used as a synonym to “smallholders”. These include: (1) indigenous and other community groups who manage collectively-owned forest resources; (2) local individuals or groups who co-manage or harvest products from public forests; (3) smallholder farmers who manage remnant natural forests or plant trees in or around their crop field and pastures; (4) individuals or groups who engage in small-scale forest products processing; and (5) employees of forest production or processing enterprises (Scherr, White e Kaimowitz, 2003).

² For the purposes of this study, plantation companies refer to those companies that have their timber supply originated from plantation of exotic species such as *Eucalyptus spp.* and *Pinus spp.*. These companies do not necessarily need to have plantation areas, but they have to use timber supply from exotic forest plantations.

However, according to data from Brazilian Institute of Geography and Statistics (IBGE), 24% of the Amazonian territory is declared to be private properties, 29% are legally protected area, and 47% is composed of uninhabited areas and lands under dispute or litigation (Lentini, Veríssimo and Sobral, 2003). Since 1995, the Brazilian Amazon has been experiencing a huge land settlement; about 210 thousand families have been settled in the Amazon between 1995 and 2001 (Macqueen et al., 2003; Lima et al., 2003). Each family receives 100 hectares of which they can clear 20% for agriculture. The remaining 80% are kept as legal reserve and can only be explored with an authorized forest management plan (Lima et al., 2003). In order to be able to clear the land for agriculture or request a forest management plan, the settlers need to have legalized land tenure situation. The process of legalization of land tenure can take a considerable amount of time and resources to prepare the necessary documentation as well as obtain government approval (Lima et al., 2003; Macqueen et al., 2003).

The lengthy processes necessary to acquire secure land tenure may be impacting the development of agreements between companies and communities as well as community forest management. So far, it is possible to verify some cases of community forest management in Brazil. However, these cases are rare and still in a very early stage of development (Armelin, 2001). There are 14 initiatives of community forest management in the Amazon and it has been documented that the forest industry has great interest in purchasing the wood production of these communities (Amaral and Amaral Neto, 2000; Armelin, 2001).

Lima et al. (2003) stated that rural poor in the Amazon occupy around one third of forested areas in this region. In total, this population includes six million people. According to the authors, the difficulty in transporting the wood is one of the main constraints to the direct participation of rural poor in the commercialization of the timber extracted from their properties. These authors analyzed a case of agreements between rural settlement communities and a forest company in the Amazon. They verified that the rural settlements projects could generate benefits to the wood industry. The three most important benefits identified were (1) the attractive price of the wood supply, (2) the low transportation cost due to the existence of roads of the own settlement, and (3) the wood extraction from the rural settlements.

The literature indicates the existence of common limitations to the development of community forest management as well as agreements between forest companies and communities. The most cited ones are as follows (Amaral and Amaral Neto, 2000; Armelin, 2001; Arderson and Clay, 2002; Lima et al., 2003):

- Low production volume and irregular wood supply;
- Absence of quality control systems, which results in the low quality of the manufactured wood products;
- Logistic problems, such as the difficulty buyers have to arrive at communities sites;
- Low technical and managerial qualifications;
- Difficult market access of community forest products;
- Low level of social organization of communities;
- Lack of conflict resolution mechanisms;
- Constant dependence of communities on subsidies and need of high technical and financial investments;
- Conflict of agendas between communities, NGOs and financial agents;
- Conflict of interest with powerful local groups that try to direct the use of forest resources in accordance to their own interests.

Several authors (Amaral and Amaral Neto, 2000; Armelin, 2001; Arderson and Clay, 2002; Lima et al., 2003) also suggest points that should be improved in order to make community forest management plans as well as company-community agreements successful. They are as follows:

- Continuity of investments;
- Land tenure legalization;
- Adaptation of the concept of community forest management to the social, economic, and technical aspects of each community;
- Establishment of achievable objectives;
- Acquirement of critical information about products to be manufactured as well as their markets;
- Find an equilibrium between specialization and diversification of products;
- Add value to products and reduce production costs;

- Development of safe agreements, including those with companies that can provide technical and managerial capacity as well as those with other communities in order to increase bargaining power.

2.2.2. Out-Grower Programs

There is little literature available on out-grower programs developed by plantation companies in Brazil. Most of the information available on these types of agreements comes from the companies' web site and some case studies. The best known examples of this type of programs in Brazil are those of Klabin S/A and Aracruz Celulose S/A.

The Forestry Partners Program of Aracruz was created 13 years ago and includes over 2,500 smallholders in 113 municipalities in the States of Espírito Santo, Minas Gerais, and Bahia (WBCSD, 2001; Hall, 2003). This activity employs around 6,000 people and generates extra revenue for landowners. The average size of properties is 21 hectares, and the company estimates that landowners obtain R\$8,000 (USD 2,750) gross at harvest, or R\$432 (USD 150) average per hectare per year net (Hall, 2003). Farmers participating in this program have three contractual options: seedlings supply, preferential contract, and buy-and-sell contracts. The company provides Eucalyptus seedlings and technical assistance in all contractual options. The costs of these seedlings and technical assistance are not charged from farmers if they sell their wood production to the company. Farmers also have the option of keeping 3% of the production plus residuals for their own use (WBCSD, 2001). In total, there are 55,000 hectares planted under this program, which corresponds to 20% of the company's wood supply requirements. The company's target is to reach 30% in volume terms (Mayers and Vermeulen, 2002; Aracruz, 2003; Hall, 2003).

Klabin S/A has four different contract options in its out-growers program. These options vary according to the size of the area of each producer and also of their individual needs. One of the options includes leasing the land of the small farmer. Another option includes the development of a joint venture between the company and the producer. Farmers can also choose other contractual alternatives that may involve land preparation, planting and maintenance, while the company provides different types of assistance (Mayers and Vermeulen, 2002).

2.3. Company-Community Agreements in Mexico

Mexican forest communities and *ejidos* have a long history and peculiar characteristics when compared with forest communities in other parts of the world. Agrarian reforms launched in the early 1930's by the Mexican Revolution resulted in the transfer of large amounts of forestlands to indigenous communities and *ejidos* (Bray and Merino-Pérez, 2002). Today, around 80% (approximately 95 million hectares) of Mexico's forestlands are owned by forest communities and *ejidos*, 15% are private property owned by small forest landowners, and 5% are national forestlands (Villanueva, 2002; Bray and Merino-Pérez, 2002).

It is estimated that Mexico has a total of 28,058 *ejidos* and communities. Of this total, around 7,200 have forest resources (Villanueva, 2002). The majority of forest community management in Mexico can be found in temperate forests, especially in the states of Chihuahua, Durango, Oaxaca, Michoacan, Guerrero, and Puebla. Most of the tropical forest communities are located in southern Campeche and southern and central Quintana Roo (Bray and Merino-Pérez, 2002). Data on the number of forest enterprises in Mexico is very scarce and not always accurate. Bray and Merino-Pérez (2002) found that, from 1998-2000, 351 logging permits were issued to communities, which represents 21% of the permits issued during this time. According to Villanueva (2002), forest activities constitute the primary source of income to only 421 *ejidos* and communities located in northern Mexico. Table 1 provides more information on *ejidos* in Mexico according to the 1995 *Censo Ejidal*.

Table 1 – Censo Ejidal in Mexico (1995).

Number of forest <i>ejidos</i> in Mexico	6,922
Area	
Larger	604,321 ha
Smaller	6 ha
Shared area in <i>ejidos</i>	Range from 0 to 604,321 ha
Average population in <i>ejidos</i>	148 <i>ejidatarios</i> (range from 15 to 4,322)

Source: Adapted from Villanueva (2002).

There are several ways in which *ejidos* and communities may be classified into categories. This study is taking into consideration the classification proposed by Bray and Merino-Pérez (2002).

Their proposed classification system is based on the degree of vertical integration of communities and *ejidos*, which include five types: (1) potential producers; (2) stumpage communities; (3) roundwood communities; (4) sawmill communities; and (5) finished products communities (Table 2).

Table 2 – Typology of forest communities and community forest enterprises.

Type I – Potential Producers	Potential producers: owners and/or possessors of forestlands with capacity for sustainable commercial production that currently do not carry out logging because they lack an authorized forest management plan or sufficient means to pay for its elaboration.
Type II – Stumpage Communities	Producers who sell timber on the stump (<i>neo rentistas</i>): owners and/or possessors of parcels subject to timber exploitation where the activity is carried out by third parties through commercial contracts, without the owner or possessor participating in any phase of the extraction process, although they may participate as laborers.
Type III – Roundwood Communities (Phase I – Logging Team; Phase II – Extraction Equipment)	Producers of forest raw materials: owners and/or holders of forest properties that have authorized logging, and that participate directly in some phase of the production chain. This category contains two phases: Phase I where the community has its own logging team and Phase II where it acquires extraction equipment such as skidders, winches, and trucks.
Type IV – Sawmill Communities	Producers with capacity for transformation and marketing: producers of raw materials that have infrastructure for its primary transformation and directly carry out the marketing of their products.
Type V – Finished Products Communities	Producers with capacity for processing sawnwood: producers of roundwood that have a sawmill as well as other diversified processing infrastructure to give value-added to sawnwood. These may include driers, furniture and factory moldings, chip mills, etc.

Source: Bray and Merino-Pérez (2002).

It is not known exactly what the contribution of community forest management is to the overall Mexican forest sector. Currently, very few forest *ejidos* and communities are able to compete in the forest products market. *Ejidors* and communities usually prefer to form agreements among themselves in order to have better access to markets as well as access to forest technical assistance (Villanueva, 2002). Almost all forest communities and *ejidos* that manage their forests commercially market their timber production directly, usually to the domestic market. The smaller communities usually sell to state-level markets and the bigger ones to different national markets (Bray and Merino-Pérez, 2002).

Communities and *ejidos* generally face a number of internal problems that may make it difficult to conciliate their own objectives and business strategies. These difficulties include, among others, the tangling of the traditional community governance with enterprise management, the issue of managerial rotation that change every three years, issues of financial management and

business strategy, and the issue of corruption and mismanagement. These difficulties put community forest enterprises to be almost always close to collapse because of mismanagement, inefficient enterprises, high costs, and exploitation by outside forces. According to Segura (2000), “the efficiency of forest community enterprises is a function of the degree of internal organization of the community, and is related to the importance that the forest resource represent to them.” It has been observed, however, that most forest communities managing their forest resources commercially can be profitable. It seems that the higher the degree of vertical integration, the larger the average profits (Bray and Merino-Pérez, 2002).

3. Methodology

This paper presents and discusses the results of a study on forest company-community partnerships in Brazil and Mexico. Due to differences in context, the methodology had slightly different aspects for each country. The first phase of this study in both countries consisted of an exploratory research, including a literature review of agreements between forest companies and forest communities in Brazil and Mexico as well as consultation with forestry and forest products associations, government departments connected to environmental issues, non-governmental associations (NGO) and other forestry specialists.

The second phase of this study consisted of telephone interviews with forest products companies in both countries. Companies that produce lumber, veneer, plywood, wood-based panels (e.g. fiberboard, MDF, OSB, particleboard, and others), pulp, paper, and specialty products (e.g. furniture, treated wood, tools, moldings, doors, windows, etc.) were considered in this study. Non-timber forest products (NTFP) were not included due to the high degree complexity involved in the classification of these products. Both certified and non-certified companies were part of the sample frame. Even though certified companies demonstrate a more responsible behavior towards the use of forest resources, they do not constitute the majority of the population of forest companies in Brazil or Mexico. In order to have a more representative sample of Brazilian and Mexican forest companies, non-certified companies were included in this study. Furthermore, the fact that companies are not certified does not necessarily mean that they are not responsible and/or willing to form equitable agreements with local communities.

According to the information collected in the first phase, companies in Brazil were divided into three groups. Group A included integrated forest companies that have private timber holdings in the Brazilian Amazon. The second category, Group B, included non-integrated forest companies. Companies in this group use tropical wood from the Amazon in their products, but have to purchase all of its timber supply. Finally, Group C included companies that depend on plantation-based timber supply.

In Brazil, twenty-five companies were randomly selected from each group to participate in the interviews. This number of companies was chosen based on the amount of time available to conduct the telephone interviews. Selection of 25 companies within each group was made proportionally to the number of companies in each product segment (e.g. lumber, plywood and veneer, wood-based panels, pulp and paper, and specialty products). Seven additional companies were added to the 25 randomly selected companies in Group C. It was known, prior to the selection of companies, that these seven companies already had out-grower programs. Thus, these companies were considered to be important sources of information for this study. Since this is a qualitative study (i.e. the sample is not large enough to allow for inferences to the entire population of forest products companies in Brazil) with exploratory purposes, the addition of these seven companies in Group C should not interfere in the reliability of the data.

Companies in Mexico were selected from a list provided by the research team of a parallel Forest Trends study, the Mexico Market Assessment. This study consisted of a market assessment of timber and wood segments where communities participate in five states in Mexico. The list consisted of wood processing companies, intermediaries, and forest communities. Only companies that had direct connection with forest communities and *ejidos* were selected to participate. This criterion was used in order to fulfill the objectives of identifying successful business models as well as their success factors and constraints.

Structured telephone interviews and advance letters were designed for each group in Brazil and Mexico in order to address their specific characteristics. However, all versions collected information on (1) the companies' interest in developing agreements with local communities; (2) the main characteristics of these agreements such as the level of involvement and investments the company would devote to these agreements; (3) the factor(s) that favor the development of these

agreements; (4) technical, economic, and political constraints to these agreements; and (5) profile questions such as annual log input, types of manufactured products, types of wood species used, markets and location. Due to qualitative nature of the data collected in this study, only descriptive statistics like means, standards deviations, and proportions were used to analyze the data.

4. Results

4.1. Brazil

Companies' interest in developing agreements with communities - When asked about their interest in purchasing part of their timber supply from forest communities/low-income producers, all of the companies interviewed in Group A (vertically integrated companies in the Amazon region) said that they do have interest in this type of agreement. Fifty-five percent of the respondents indicated that it will be necessary to make changes in their company's policy and management in order to develop these agreements. All of these respondents said to be willing to implement such changes. Changes specified by the respondents are: (1) the need to improve their information technology to deal with a greater number of suppliers; (2) the need to implement employee and community training in wood extraction and development of forest management plans; and (3) the need to invest in long-term relationships with communities / low-income producers.

Eighty-nine percent of the respondents in Group B (non-integrated companies in the Amazon region) stated that they have interest in purchasing part or all of their timber supply from local communities / low-income producers. Respondents that did not show interest in purchasing their timber supply from communities (11%) are service companies (e.g. furniture designer) to whom this situation does not apply. Thirty-eight percent of the respondents believe it will be necessary to make changes in the management and policies of their companies in order to implement these agreements. All of these respondents would be willing to implement these changes that would involve hiring a person responsible for taking care of legal aspects and other procedures as well as adapting their strategic plan (logistics) in order to be able to receive timber supply from communities / low-income producers.

Most of the plantation companies (64%) that were interviewed already have some kind of out-grower program (Figure 1). Those companies that do not have an out-grower program stated that they do not need timber supply in the long term and that there is not a lack of land for forest plantation in their region. Half of the companies planning the implementation of an out-grower program are already selecting land and producers, while the other half is still developing the idea.

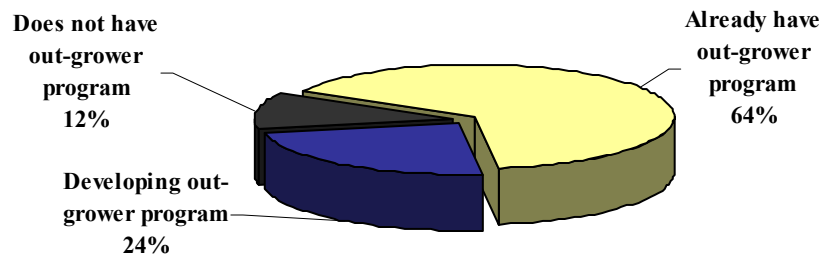


Figure 1 - Current status of companies with out-grower programs in Brazil – Group C.

Plantation-dependent companies that already have an out-grower program as well as those that are considering implementing one stated that the main reasons for establishing an out-grower program were (1) to increase timber supply; (2) to decrease investment in lands; (3) to promote social development for low-income producers nearby company areas; and (4) to promote forestry activities in their community.

Preferred types of agreements and investments - Companies in Groups A and B were asked to choose their preferred type of agreement with communities (Figures 2 and 3). Most companies in Group A (44%) and Group B (64%) would prefer only to purchase wood from communities. Joint venture was the second most preferred type of agreement in both groups.

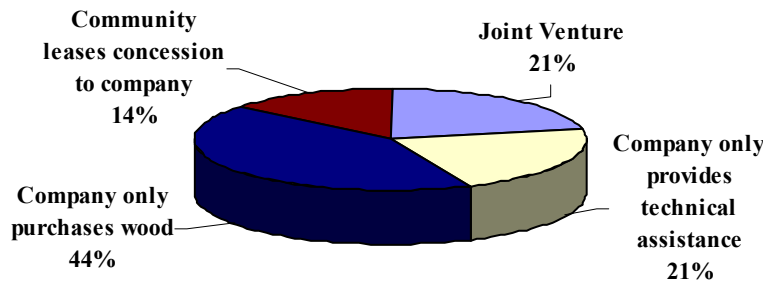


Figure 2 – Preferred type of agreement – Group A.

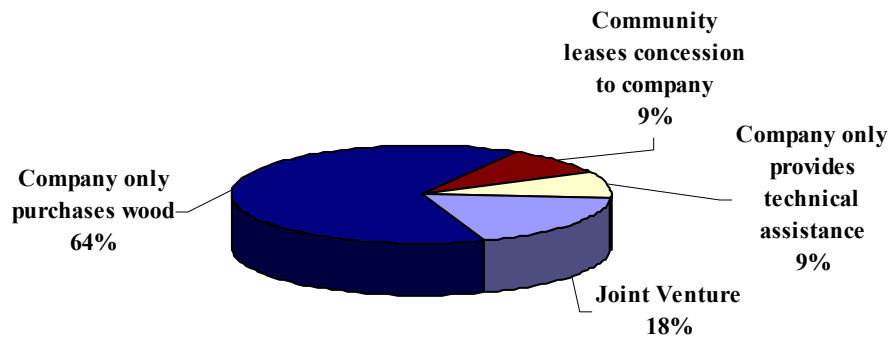


Figure 3 – Preferred type of agreement – Group B.

Respondents from Groups A and B were asked about the types of investments they would be willing to do when developing agreements with communities. Technical assistance was the most common choice for Groups A and B (Figures 4 and 5). Companies in Group A would also be willing to provide training in forest management. The second most common answer for companies in Group B was the willingness to provide loan/financing to communities so that communities could start their forestry activities.

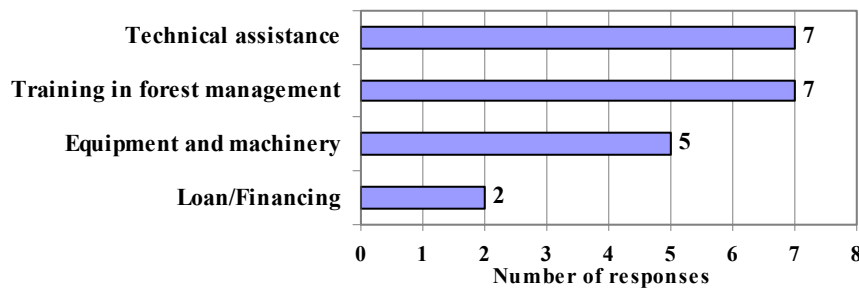


Figure 4 – Preferred types of investment – Group A.

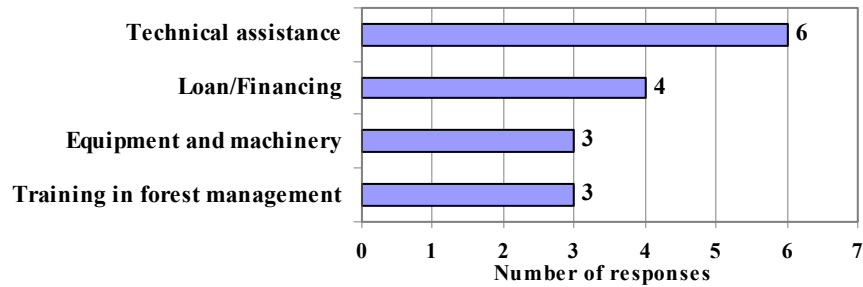


Figure 5 – Preferred types of investment – Group B.

Most companies from Group C (plantation-dependent companies) prefer to make investments in the form of inputs such as seedlings, fertilizers, and pest control. The second most common type of investments is technical assistance (Figure 6). The “Other” category includes: (1) the company leases the land and is responsible for all forestry operations and (2) the company contributes financially to a partner institution that provides assistance to producers.

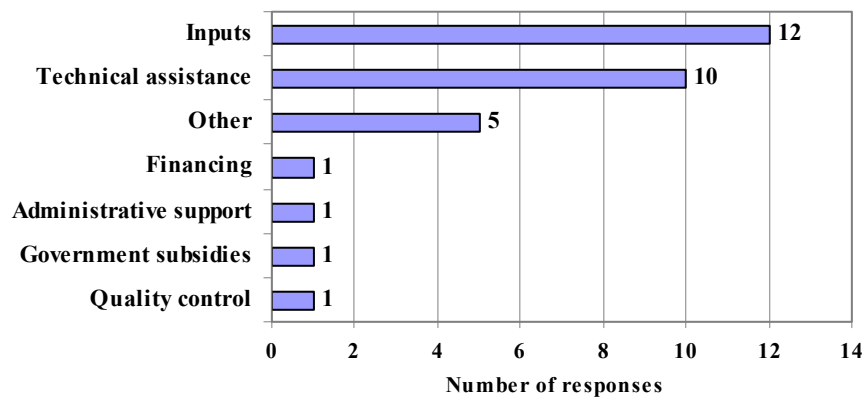


Figure 6 – Preferred types of investment – Group C.

Constraints – All groups of companies were asked to identify current and/or potential technical, political, and economic constraints. Unclear land tenure situation in the Amazon was the major technical constraint cited by companies in Groups A and B (Table 3). The main technical constraint found by companies in Group C was the lack of technical knowledge communities have on forestry activities.

Table 3 – Technical constraints hindering the development of agreements in Brazil.

Group A (Amazon –vertically integrated)	Group B (Amazon – non-integrated)	Group C (plantation)
<ul style="list-style-type: none"> • Unclear land tenure 	<ul style="list-style-type: none"> • Unclear land tenure 	<ul style="list-style-type: none"> • Lack of knowledge of forestry activities
<ul style="list-style-type: none"> • Lack of infrastructure (roads) 	<ul style="list-style-type: none"> • Community forest products have limited market access 	
<ul style="list-style-type: none"> • Development of forest management plans 	<ul style="list-style-type: none"> • Low supply and managerial capacity of communities 	

The lack of initial capital communities need to initiate forestry activities or establish plantations was the main economic constraint cited by all three groups (Table 4). The fact that forestry activities usually have a long-term return on investment was another important economic constraint for both Groups A and C. Competition with illegal logging was another frequently cited economic constraint for companies in the Amazon region (Groups A and B). Respondents stated that it is difficult for their companies to compete with illegal logging due to its much lower cost. Thus, they believe that it is going to be even more difficult for communities and small landowners to do so.

Table 4 – Economic constraints hindering the development of agreements in Brazil.

Group A (Amazon –vertically integrated)	Group B (Amazon – non-integrated)	Group C (plantation)
<ul style="list-style-type: none"> • Lack of initial capital 	<ul style="list-style-type: none"> • Lack of initial capital 	<ul style="list-style-type: none"> • Lack of initial capital
<ul style="list-style-type: none"> • Long-term return on investment 	<ul style="list-style-type: none"> • Competition with illegal logging 	<ul style="list-style-type: none"> • Long-term return on investment
<ul style="list-style-type: none"> • Competition with illegal logging 		

Companies from Groups A and B consider the difficulty of having a forest management plan approved to be the main political limitation for the development of agreements with communities (Table 5). Once the forest management plan has been prepared, it is necessary to submit the document to the Brazilian Institute of the Environment and Renewable Natural Resources (IBAMA), the government agency that analyzes and approves forest management plans. Companies said that this is a very lengthy process that ends up increasing the operational costs of forestry activities. Therefore, it could be a serious constraint for communities. Respondents from all three groups stated that the current legislation results in costs that small landowners and communities will not be able to cover. Thus, the current legislation may also be a potential

constraint to the development of agreements. Finally, plantation-dependent companies (Group C) stated that there should be more government subsidy programs aimed at helping small landowners / communities to establish forestry activities.

Table 5 – Political constraints hindering the development of agreements in Brazil.

Group A (Amazon –vertically integrated)	Group B (Amazon – non-integrated)	Group C (plantation)
<ul style="list-style-type: none"> • Difficult to have a forest management plan approved 	<ul style="list-style-type: none"> • Difficult to have a forest management plan approved 	<ul style="list-style-type: none"> • Forest and environmental legislation is obsolete and inflexible
<ul style="list-style-type: none"> • Forest and environmental legislation is obsolete and inflexible 	<ul style="list-style-type: none"> • Forest and environmental legislation is obsolete and inflexible 	<ul style="list-style-type: none"> • Lack of government subsidies for small landowners

Positive features / benefits – Eighty-two percent of the respondents in Group A (vertically-integrated companies in the Amazon) believe that there are positive features in the actual political and economic situation of the country that may facilitate the development of agreements. The most common features mentioned were (1) the agrarian reform; (2) combat to illegal logging; (3) characteristics of their own companies that can favor the development of these agreements; and (4) government policies motivating agreements between forest companies and communities / low-income producers.

Forty-four percent of the respondents in Group B (non-integrated companies in the Amazon) believe that there are positive features that may facilitate the development of agreements. According to them, there is an increasing demand for wood products in both domestic and international markets as well as an interest of forest companies in securing access to raw material.

Most of the interviewed companies in Group C (plantation-dependent companies) are obtaining benefits from their out-grower programs. The most common financial benefits verified were the possibility to decrease investment in lands for forest plantations as well as the increased supply of wood that helps to stabilize its market price. By far, the most mentioned non-financial benefit was the possibility to collaborate to community development. Other important non-financial benefits include improved relationship with local communities and the possibility to promote and enhance environmental protection.

The most important lessons learned by companies in Group C include the realization that: (1) it is possible to have conscious development with responsibility; (2) it is possible to have a respectful relationship between companies and communities / low-income producers; and (3) it is necessary to show to producers what the advantages of these programs are in order to increase their participation. Other important lessons learned include the fact that communities are interested in participating in the company's activity, the need to understand what producers think for the program to succeed, and the fact that out-grower programs can really meet timber supply needs of the company.

4.2. Current Situation of Agreements in Mexico

Agreements with communities – Ninety percent of companies that were interviewed purchase at least part of their timber supply from communities and *ejidos*. When asked what were the reasons that led their companies to pursue agreements with communities, the most frequent responses were that: (1) companies did not have another choice since the majority of forestlands in Mexico belong to communities; (2) communities supply wood with good quality; (3) company decided to have a social commitment to community development; (4) company prefers to buy Mexican wood; and (5) company sells into domestic market.

General characteristics of communities – On average, around 16 different communities and *ejidos* supply timber to each company³. Companies were asked to classify the communities that supplied to them in categories according to their manufacturing capacity. Figure 7 shows that most communities are sawmill communities (i.e. communities with capacity for raw material transformation and marketing) and roundwood communities (i.e. communities that produce and sell roundwood).

³ Please note that the responses used to calculate this average ranged from three to 40 suppliers.

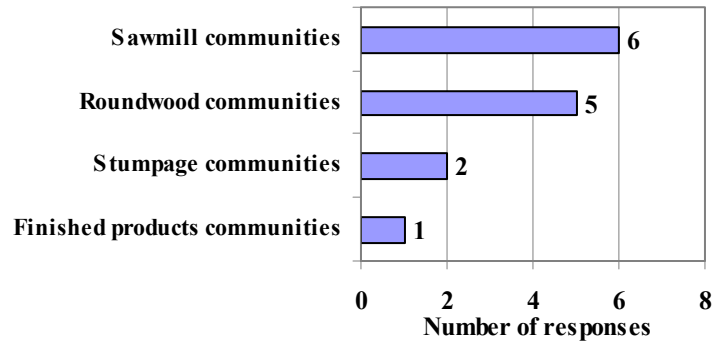


Figure 7 - Types of communities that have agreements with companies in Mexico.

Constraints – Most of the respondents (70% and above) do not believe that there are any technical, economic or political limitations to the development of agreements with communities (Table 6). The fact that communities have to develop and approve a forest management plan was the main technical limitation cited. Economic limitations cited include (a) the need to pay in advance for community products; and (b) the strong market dependency on the part of the companies which limits their capacity to forecast growth and increase number of agreements with communities. Political limitations were mainly related to governmental deficiencies.

On the other hand, nearly 90% of the companies interviewed stated that there are other types of constraints that hinder the development of agreements between companies and communities / *ejidos*. The most cited limitation refers to the lack of loyalty and business ethics from communities and *ejidos*. Most companies found it difficult to trust that communities and *ejidos* would keep their part of the agreement. However, respondents stated that once they learned who to trust they often found good business opportunities with communities. Other less frequent responses included some difficulty to find the right product, the lack of a formal contract and the fact that political conflicts often represent delay in their businesses.

Table 6 – Constraints for the development of agreements in Mexico.

	Are there limitations?	
	Yes	No
Technical limitations	20%	80%
Economic limitations	30%	70%
Political limitations	10%	90%
Other limitations	89%	11%

Positive features – Most of the respondents (63%) believe that there are financial benefits resulting from agreements with communities. Respondents specified that these benefits result from (1) the possibility of using their relationship with communities as a marketing strategy; (2) improved company image; and (3) the good prices and wood quality offered by communities.

Non-financial benefits cited include the fact that these types of agreements with communities are part of the company philosophy and that the experience with communities taught the company how to work with little financing and equipment.

Types of investments – Quality control of product and technical assistance, respectively, were the most common types of investments companies make on agreements with communities (Figure 8). The “Other” category includes medical assistance to community members.

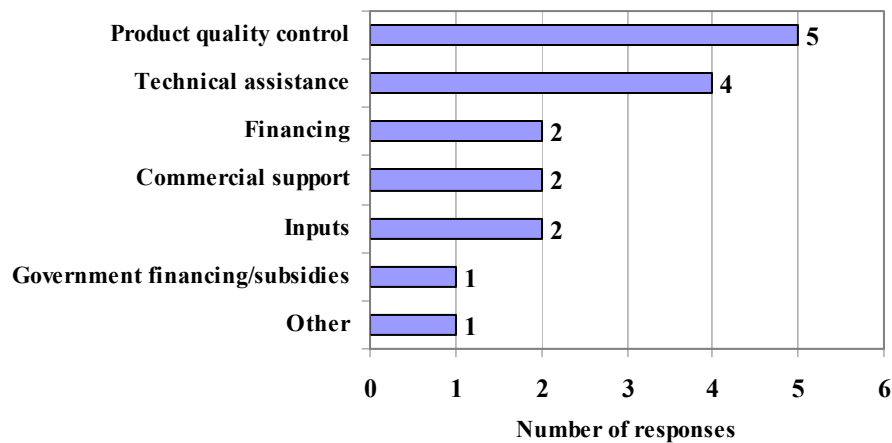


Figure 8 – Types of investments companies make on agreements in Mexico.

The most important lessons learned – Respondents stated that, in order to have successful agreements with communities, (1) it is always necessary to keep and cultivate a good relationship with communities; (2) there needs to be mutual support between company and community; (3) it is necessary to find which communities companies can trust; (4) it is necessary to increase community’s productivity; and (5) it is important not to give big money advancements before receiving the product.

5. Promising Models and Trends

5.1. Promising Models and Trends in Brazil

Data confirmed that there are two main categories of agreements that can be found in Brazil: (1) agreements in the Amazon region with traditional/indigenous communities; and (2) out-grower programs developed by plantation companies. Each one of these categories has unique characteristics including different development phases. Both categories present opportunities for further development, but the situation in the Amazon region presents the richest scenario for action.

Just one company-community agreement was found in the Amazon region (Box 1). There was also the case of another company planning agreements with local communities for timber supply, but that had not been implemented yet (Box 2). Except for these cases, there were no other agreements found among those companies interviewed for this study, which confirms the early stages of these agreements in this region (Armelin, 2001). The current situation suggests that there are more pressing issues that have to be resolved in order to create the necessary basis for the development of company-community agreements. As it had been identified by Scherr, White and Kaimowitz (2003), policy and regulatory constraints can pose a barrier to the development of market opportunities for local communities as well as to the development of company-community agreements. Among the constraints identified by companies in the Amazon region (Groups A and B), development and approval of forest management plans seem to be the area that needs more attention. There is a general view among companies that the entire process is extremely complex and confusing. The major complaint, however, was not about the preparation of the document, but about the long time IBAMA takes to approve each plan. Government programs have been emphasizing the need to make the process more efficient and, thus more attractive to companies (Smeraldi, 2003). However, even though some progress has been made, it does not appear to be enough. The process needs to be simplified and clarified, especially if the participation of smallholders is to increase. Forest management plans are an important tool in guaranteeing the sustainable use of forest resources as well as in increasing access of smallholders to these resources.

Box 1 – The case of agreements of Tramontina Belém S/A and local communities in Brazil.

Tramontina Belém S/A is a forest products company located in Belém, Pará. It is one of the division of the Group Tramontina with headquarter in the State of Rio Grande do Sul in the South of Brazil. Tramontina Belém S/A produces indoors and garden furniture as well as kitchen utensils made of tropical wood from the Amazon. The company does not own forestlands and buy their timber supply from more than 40 suppliers including smallholders and forest communities. The company decided to buy from communities as part of their strategic policies. Smallholders supply sawn wood to the company, which provides communities with technical assistance on sawmill stage. The company does not provide assistance and training in forest activities because it is out of their scope. However, the company lends some machinery to the community as well as provides financing to communities interested in purchasing their own machinery and equipment. At the moment, the company does not verify any financial benefits. However, they benefit from constant supply of the species they need. The largest limitation is the fact that developing agreements with local communities can be very time consuming; the company dedicates more time to smaller than to larger suppliers. The company works directly with some smallholders in some cases, and deals with community associations in other cases. Nevertheless, the company believes that the effort is worthwhile and intends to increase the number of agreements in the future.

Even though agreements are almost nil in this group, there is an enormous potential for development. Different aspects of their economic, political and social situation are naturally leading this region in the direction of development of agreements between forest companies and local forest communities. As the case of Tramontina Belém S/A indicates (Box 1), these agreements are feasible. It is possible that specific management and/or manufacturing characteristics of this company have facilitated the development of agreements with communities, but nevertheless this case represents an important starting point. It seems that the agreement still has points that could be improved since the company has not yet verified financial benefits. Furthermore, there is also the need to access the opinions of the communities participating in the agreement in order to verify their perceptions of benefits and constraints. The case of Cikel Brasil Verde S/A indicates that agreements should be born from long-term relationships with local communities, in a mutual learning process. Both cases indicate that companies should be willing to dedicate time and resources towards the development of these agreements. Most importantly, these cases suggest that in the current situation, promising business models are those that are able to overcome major constraints.

Box 2 - The experience of Cikel Brasil Verde in the development of agreements with local forest communities.

Cikel Brasil Verde S/A is a certified forest products company with headquarters in Curitiba, Paraná in the south of Brazil and a division in Belém, Pará in the Amazon region. The company produces lumber, veneer, and plywood from tropical species from the Amazon. They own 206,000 hectares of forestlands in the Amazon, which provides 95% of their necessary timber supply. The other 5% comes from independent suppliers. The company has started their contact with local communities through the development of an environmental education project. This project was established several years ago and had the primary objective of identifying environmental problems in the company's forestlands that needed solutions. Currently, the company has developed relationships with several communities that usually contact the company in search of access to the wood residuals the company produces. Local communities use these residuals to produce craft wood products sold in local markets.

Cikel has now started to contact communities with the intent of establishing agreements for timber supply. This communication has been developed in several steps as a way to demonstrate to communities and convince them that the company is developing a serious work. The company has contacted the Instituto Internacional de Educação do Brasil (IIEB) that will provide technical support in the development of agreements. Cikel is also characterizing the communities according to types of resources available in their areas. For this step, the company has been working in collaboration with local government offices.

The company identified the same constraints other companies in this group cited as limiting the development of agreements with local communities. These include lack of organizational capacity of communities, undefined land tenure situation, and need to develop a market to community forest products.

The situation of out-grower programs developed by plantation-dependent companies is more advanced and structured than the situation of agreements in the Amazon. Some companies have these agreements for over 10 years (WBCSD, 2001; Hall, 2003) and the number of companies implementing these agreements is increasing (Figure 1). According to the data collected in this study, most programs follow some rules. Therefore, promising business models seem to be those that (1) offer different and clear contract options that better adjust to the situation of out-growers; (2) provide some kind of technical assistance and/or training in forestry activities; and (3) are interested in developing long-term relationships with producers. According to the respondents, agreements with small landowners for timber supply offer several advantages for the company including the possibility to decrease investments in plantation lands as well as stabilized timber

market price due to increased supply. It is likely that, as more companies start to realize these and other benefits, out-grower programs will become a common practice in Brazil.

5.2. Successful Models and Trends in Mexico

It appears that one essential characteristic that companies have to have in order to develop successful agreements is the ability to build a relationship with communities and *ejidos* based on mutual trust. Responses indicated that successful agreements with communities start by identifying, among possible suppliers, those that are trustworthy. Another important characteristic in building successful agreements is the ability to identify those communities and *ejidos* that have production capacity to supply a quality product within pre-specified time. However, if the respondents needed to choose between suppliers that had just one of the above characteristics (i.e. trustworthiness or production capacity), most of them would prefer to find a community they could trust and then make necessary investments in order to build capacity in the community.

Since mutual trust seems to be an important component for a successful agreement, most of the respondents have put a lot of effort in establishing long-term relationships with their community suppliers. The types of investment that companies make on communities consist of an important factor to help build a trustful relationship. Companies interviewed for this study concentrate their investments in product quality control and technical assistance. However, many respondents stated that they have provided other types of assistance such as community infrastructure development and medical assistance.

Results of this study demonstrate that successful models of agreements in Mexico usually include one or more of the following points: mutual respect and trust, fair negotiation process, long-term commitment, practical business development principles, and the goal of improving livelihoods. These points have been identified in other studies as principles that may be important to develop better company-community deals (Mayers and Vermeulen, 2002; Nascimento and Villanueva, 2003).

According to the companies that participated in this study, factors limiting forest company-community agreements in Mexico seem to be related to the lack of trust and business ethics of communities and in some cases, the lack of legal contracts. Companies feel that they are in disadvantage when negotiating with communities. Since communities own most of the available supply of domestic timber, companies believe that they have greater bargaining power. Furthermore, there should be better legal enforcement in order to guarantee that both parties meet their share of the agreement. The case of Carpicientro (Box 3) illustrates the occurrence of all these constraints.

Box 3 – Negative experience in forest company-community agreements.

Carpicientro Perroni S.A. de C.V. produces kiln dried lumber, treated lumber, flooring and molding from tropical hardwoods, especially mahogany. They used to buy most of their timber supply from forest communities. However, due to negative experiences they had with these agreements, the company now imports 95% of its timber supply from other countries in Latin America and buys only 5% from forest communities and ejidos in Campeche and Quintana Roo. Even though it is more complicated to import most of their supply, the company finds it less expensive.

According to Carpicientro, the difficulties in dealing with communities results from their lack of understanding on how to do business and on how markets function. Furthermore, the company considers that there should be better legal enforcements to protect companies when communities do not meet the terms of the agreements. Other complications identified by the company include the fact that most communities do not practice sustainable forest management because it is not economically viable since their lands are not very large.

Carpicientro would change their mind only if the legal frameworks changed and the company could have legal guarantees. They believe that it would be possible only if the government of Mexico changed its paternalistic attitude towards communities. The company also believes that NGOs could be helpful in providing communities with managerial training.

Contracts may be an important part of agreements because they protect the interests of all parties involved and dissipate some of the uncertainties implicated in such agreements. However, these goals are not always met because the initiative of developing a contract usually comes from companies, which results in their interests being better represented in the contract than those of communities (Mayers and Vermeulen, 2002). In order to prevent this to happen, and thus to improve the opportunities for company-community agreements in Mexico, it is necessary to

improve the managerial and technical capabilities of forest communities and *ejidos*. This way they will be able to be an active party in the negotiation of agreements and their contracts, as well as to be able to better meet the expectations of their clients.

During the history of the forestry sector in Mexico, paternalistic and controlling government policies prevented communities and *ejidos* from developing managerial capacity and long-term planning of their forest businesses. Except for a few cases, the government of Mexico has not promoted associations between communities and the private sector. These associations would increase the competitiveness of the forest sector, which is an essential condition to improve the livelihood of forest communities and *ejidos* through market mechanisms. In the case of Mexico, associations between private sector and communities constitute a very important factor since communities and *ejidos* retain more than 80% of the forest resources, but do not control production means and market knowledge (Villanueva, 2002; Segura, 2000). Respondents suggested that government policies could change to include programs that strengthened and promoted the participation of communities in the supply chain and encouraged long-term contracts and concessions. Other important actions that the government can take include better allocation of financing resources and support for institution building to ensure enforcement of laws and regulations (Segura, 2000).

6. Conclusion

Several changes are affecting the global forest sector. There is an increasing demand for forest products and market access of community forest products may offer solutions to several interested parties. Agreements between forest companies and communities offer advantages to both groups. Companies can increase their timber supply at accessible costs. Communities have the chance of increasing their income and improving their quality of life. Furthermore, these initiatives will tend to favor the sustainable management of forests.

Two distinct groups of agreements were found in Brazil. Out-grower programs are the common form of agreements between plantation-dependent companies and communities. Agreements in this group of companies are fairly advanced and well-structured. The oldest and largest

agreements can be found in the pulp and paper sector, with some companies having agreements with local communities for more than 10 years and involving more than 4,000 producers. Other plantation-dependent segments, such as panels and specialty products, are not so advanced, but demonstrated increased interest. Promising business models in this group seem to be those that (1) offer different and clear contract options that better adjust to the situation of out-growers; (2) provide some kind of technical assistance and/or training in forestry activities; and (3) are interested in developing long-term relationships with producers.

The other group of agreements in Brazil involves forest products companies in the Amazon region. Even though agreements are almost nil in this group, there is an enormous potential for development. Different context characteristics are leading this region in the direction of agreements. The few cases of agreements found in this group of companies indicate that agreements should result from long-term relationships with local communities and the willingness of companies to dedicate time and resources towards the development of these agreements. Promising business models seem to be those able to overcome main constraints.

Mexico has peculiar characteristics when it comes to community forestry. Results indicate that company-community agreements can be profitable. According to respondents, profits indirectly result from factors such as improved company image and access to quality raw material at better prices. Results of this study suggest that promising models of company-community agreements in Mexico usually include one or more of the following points: mutual respect and trust, fair negotiation process, long-term commitment, practical business development principles, and the goal of improving livelihoods. Opportunities for action include the need to build managerial capacity in forest communities and *ejidos*, the need of better government programs promoting company-community agreements, and better law and regulation enforcements.

7. References

Amaral, P. e Amaral Neto, M.A. 2000. *Manejo Florestal Comunitário na Amazônia Brasileira: Situação Atual, Desafios e Perspectivas*. Brasília, DF: Instituto Internacional de Educação do Brasil – IIEB, 2000.

- Aracruz, 2003. *Aracruz Annual Report 2002*. Rio de Janeiro, RJ, 2003.
- Armelin, M.J.C. 2001. *Identificação e caracterização de áreas e comunidades com potencial para o desenvolvimento de sistemas comunitários de produção florestal no Estado do Amapá*. Dissertação de mestrado, Piracicaba, SP: ESALQ/USP, 2001.
- Anderson, A. e Clay, J. 2002. *Esverdeando a Amazônia: Comunidades e empresas em busca de práticas para negócios sustentáveis*. Brasília, DF: Instituto Internacional de Educação do Brasil – IIEB, 2002, 202p.
- Bray, D.B. and Merino-Pérez, L. 2002. *The Rise of Community Forestry in Mexico: History, Concepts, and Lessons Learned from Twenty-Five Years of Community Timber Production*. A report prepared for The Ford Foundation, September, 2002.
- Hall, C. 2003. *Aracruz Celulose*. World Bank Forest Investment Forum, Panel on Business and Community. October, 2003.
- Lentini, A., Veríssimo, A. and Sobral, L. 2003. *Fatos Florestais da Amazônia 2003*. Instituto do Homem e do Meio Ambiente da Amazônia – IMAZON, 2003.
- Lima, E. et al. 2003. *Florestas Familiares: Um pacto sócio-ambiental entre a indústria madeireira e a agricultura familiar an Amazônia*. Belém, PA: Instituto de Pesquisa Ambiental da Amazônia – IPAM, 2003.
- Macqueen, D., Grieg-Gran M., Lima E., MacGregor J., Merry F., Prochnik V., Scotland N., Smeraldi, R., Young, C. 2003. *Growing Exports: The Brazilian Tropical Timber Industry and International Markets*. Small and Medium Enterprises (SME) Series. International Institute for Environment and Development, London, UK.
- Mayers, J. e Vermeulen, S. 2002. *Company-community forestry partnerships: from raw deals to mutual gains?* Instruments for sustainable private sector forestry series. London: International Institute for Environment and Development, 2002.
- Nascimento, J.R. and Villanueva, J.L.B.M. 2003. *Instrumentos Institucionales para el Desarrollo de los Dueños de Pequeñas Tierras Forestales: Informe – Resumen del*

- Estudio*. Documento preparado para el Banco Interamericano de Desarrollo, Octubre, 2003. Washington, DC.
- Nelson, J. 2002. *Corporate Social Responsibility: Passing Fad or Fundamental to a more sustainable future?* Sustainable Development International – CSR Features. <http://www.sustdev.org/Features/SDI-7-22.pdf>
- Scherr, S.J., White, A., e Kaimowitz, D. 2003. *A New Agenda for Forest Conservation and Poverty Reduction: Making Forest Markets Work for Low-Income Producers*. Washington, DC: Forest Trends, 2003
- Segura, G. 2000. *Mexico's Forest Sector and Policies: A General Perspective*. Presented at “Constituting the Commons: Crafting Sustainable Commons in the New Millennium”, the Eighth Conference of International Association for the Study of Common Prosperity, Bloomington, Indiana, USA, May31-June 4.
- Smeraldi, R. 2003. *Expedient Plunder? – The New Legal Context for Amazonian Logging*. In: Growing Exports: The Brazilian Tropical Timber Industry and International Markets. Small and Medium Enterprises (SME) Series. International Institute for Environment and Development, London, UK.
- Villanueva, J.L.B.M. 2002. *Estudio de Caso de Integración Vertical: Hispano Mexicana de Puertas y Molduras, S.A. de C.V. México*. In: Instrumentos Institucionales para el Desarrollo de los Dueños de Pequeñas Tierras de Vocación Forestal. Documento preparado para el Banco Interamericano de Desarrollo, Junio, 2002.
- WBCSD, 2001. *Aracruz Celulose: The Forestry Partners Program*. Case studies. World Business Council for Sustainable Development, 2001.
- White, A. e Martin, A. *Who Owns the World's Forests? Forest Tenure and Forest Policy in Transition*. Washington, DC: Forest Trends, 2001.