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FRAME
PHILIPPINES RATTAN VALUE CHAIN STUDY

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EXECUTIVE SUMMARY

Close to one million Filipinos are employed in the rattan industry, including gatherers, permittees, traders, manufacturers, and exporters. In the past decade, the industry has been losing market share primarily due to (a) declining stocks of quality wild rattan, (b) poor quality control at harvesting and post-harvesting stages, (c) widespread corruption and distorted forest taxes, which discourage investment in improvements, and (d) international market saturation from cheap rattan furniture produced by other Asian countries that have reduced rattan’s appeal in more exclusive designer markets (the Philippines niche market).

The FRAME-sponsored study, a program of the United States Agency for International Development (USAID), surveyed actors throughout the rattan value chain in representative rattan production and manufacturing areas of the Philippines. The study mapped the nature, wealth, and power dynamics of the rattan sector of the Philippines. Study results were presented to a cross-section of the rattan actors at a workshop in Quezon City; the following were the top recommendations for improving the sector’s performance.

Reduce corruption in rattan access and increase skills of forest managers to meet government requirements. Make permits less risky, encourage government to stop managing rattan concessions based on political hot topics, reduce the paperwork requirements and opportunities for bribe collection. The “one-stop checkpoint” model developed in Agusan was a model noted to increase transparency. Better horizontal coordination among gatherers and permittees through federations is an effective way to improve rattan production management skills.

Institute uniform quality standards for rattan throughout the industry. Have gatherers collect rattan for specific orders only, institute “just in time” supply practices to reduce rattan pole damage in storage, communicate and enforce a uniform rattan grading and quality system, and communicate margins needed at gatherer and permittee levels to be able to institute quality improvements. Greater vertical integration within the rattan sector will be needed to achieve this goal.

Provide greater access to financing to expand the Philippine’s position in high-end furniture. The study analysis and all the actors agreed that the Philippine’s competitive advantage is in high-end, design-savvy furniture and home accessories. But, financing mechanisms will be needed throughout the value chain to support this strategy, and current financing is lacking, because forest products cannot be used as collateral. Exploring ways to allow rattan concessions to be used as collateral is needed.
1. INTRODUCTION

1.1 RATTAN
Rattan is one of the Philippines’ most important nontimber forest products (NTFP). Rattan belongs to a large subfamily of the climbing palms known as Calamitaceae, which grows throughout the country. Mainly because of the strength, lightness, versatility, and pliability of its stems, rattan is widely used by furniture and handicraft industries, making it an export winner for the country.

Close to one million Filipinos are employed in the rattan industry in various capacities, mostly as gatherers and workers in furniture and handicraft sectors. For many marginalized people living in and on the fringes of the forest, particularly indigenous people, rattan provides cultural richness in household furnishings, building materials, and personal adornment, as well as an opportunity to earn cash. Despite the importance of rattan, the Philippine’s rattan industry is in decline. This value chain report explores the sector’s dynamics and identifies strategies for reversing the decline.

1.2 STUDY SAMPLE, KEY VARIABLES, AND CRITERIA FOR SELECTION OF SITES
FRAME “Knowledge Sharing for the Natural Resource Community,” a USAID-supported program, has sponsored this value chain study for rattan. The FRAME study seeks to open up a dialogue among natural resource managers and stakeholders within the framework of “nature” (environmental management), “wealth” (economic concerns) and “power” (good governance) to understand better the different needs and interests of the various stakeholders involved with this very important natural product.

Both primary- and secondary-level data were collected. Primary data were gathered through surveys, personal interviews, key informant interviews, telephone inquiries, focus group discussions, participant observation, and ocular inspection. The institutions that were sources of data include:

- Department of Agriculture (DA)
- Department of Environment and Natural Resources (DENR) and its bureaus, such as the Forest Management Bureau (FMB) and Ecosystems Research and Development Bureau (ERDB)
- Department of Science and Technology, especially its line agency the Philippine Council for Agriculture, Forestry, and Natural Resources Research and Development (PCARRD)
- Department of Trade and Industry (DTI)
- National Statistics Office (NSO)
- University of the Philippines Los Baños (UPLB)
- USAID
- Nongovernmental organizations (NGOs), such as the Enterprise Works/VITA (EWV) and Cebu Furniture Industries Foundation (CFIF).

In addition to data collection from the groups noted above, four survey instruments were developed to facilitate data gathering from (a) rattan gatherers, (b) kapatas/permittees, (c) traders, and (d) furniture and handicraft manufacturers and exporters. The number of interviews conducted for the entire study was 30 (9 from rattan gatherers, 10 from kapatas/permittees and traders, and 11 from manufacturers).

There were two major groups of study sites representing both ends of the rattan marketing chain: rattan production areas and rattan processing and manufacturing sites. The production areas were chosen to represent the three main legal tenure rights associated with rattan access, and the rattan processing and manufacturing sites were chosen based on concentration of industry members and volume of sales.
1.2.1 PRODUCTION AREAS

The study sites were chosen to represent the most common legal tenure rights and rattan cutting permits, which include (a) Certificate of Ancestral Domain Claim/Title (CADC/T), (b) Community-Based Forest Management (CBFM) Agreement, and (c) negotiated rattan-cutting concessions (RCCs). The study covered the rattan-rich areas of Mindoro in Luzon (CADC/T site), Samar province in the Visayas (CBFM site), and Agusan del Sur in Mindanao (RCC site). Agusan province is the largest rattan-producing area in the country with 4.9 million linear meters production in 2003. It is also the major supplier of rattan to the furniture industry in Cebu. These sites also represent the three major regions of the Philippines.

1.2.2 MANUFACTURING SITES

There are three major furniture-making areas in the country: Cebu, Metro Manila, and Pampanga. Study surveys were conducted in Cebu and Metro Manila. This study focused on Metro Cebu, which is a conglomeration of four cities: Cebu City, Mandaue, Lapu-Lapu, and Talisay. Cebu has the largest-sized rattan, stone craft, and metal furniture industry in the country, whereas the furniture cluster in Pampanga is the second largest. Cebu province accounts for more than 60 percent of the country’s annual furniture export sales.
2. STRUCTURE AND OPERATION OF THE RATTAN VALUE CHAIN

2.1 PHYSICAL FLOW OF RATTAN
One tool for understanding the rattan value chain is “access mapping.” This involves (a) identifying the actors who extract, produce, process, exchange, transport, distribute, and consume the commodity, (b) evaluating income and profit at each level, (c) evaluating the distribution and tracing the mechanisms by which access to benefits is maintained and controlled within each group\(^1\). Figure 1 provides an overview of the physical flow of rattan in the Philippines and the major actors.

![Figure 1: Physical Flow of Rattan in the Philippines](image)

Note: The width of the arrows is proportional to the volume of trade in rattan poles among the actor groups.

2.2 MARKET ACTORS
The rattan market actors in the Philippines are broadly classified into (a) gatherers or cutters, (b) kapatas, permittees, or people’s organizations as the first rattan consolidation point, (c) traders (provincial, national, and wholesale traders), and (d) manufacturers and exporters. The subsector matrix below gives an overview of the major market actors, functions, and skills and technologies employed.

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2.2.1 GATHERERS OR CUTTERS
Gatherers are the first link in the rattan marketing chain. A gatherer harvests rattan and brings it to a kapatas, trader, or people’s organization (local consolidator). Gatherers need to pull the canes down from the trees and remove the spiny sheaths, leaves, and whips. Because rattan clings to the canopy, pulling it down is difficult. Rattan harvesting is a rather dangerous business; dead branches can be dislodged as the rattan is pulled, and ants and wasps can often be disturbed in the process. The larger portion of the rattan stem is often left in the canopy as waste.

Once the rattan has been harvested, they are cut into poles, usually 3 meters long for large diameter canes and 6 meters long for smaller diameter canes. Harvested rattan is normally of mixed species, size, and quality. The gatherers then transport the canes to a temporary stockyard in or near the forest. A gatherer can collect up to 20 poles in two days and may have two production runs in one week. If poles are processed into rattan splits (the next form of rattan product for selling after raw rattan poles), each gatherer can produce 1,500 pieces of rattan splits in a week.

Many gatherers belong to indigenous groups and have settlements in upland areas. Some of the more resourceful indigenous people have moved up the chain and are kapatas, permittees, and/or traders. Some of the rattan collectors have banded together to form associations or cooperatives.

2.2.2 KAPATAS OR PERMITTEES
Kapatas comes from the Tagalog word pataas, which means to file or gather. In rattan trading, a kapatas is a local village entrepreneur who serves as a primary selling point for gatherers. The kapatas buys rattan poles from the gatherers and sells these to a permittee or acts as a point person or local manager in the area for the permittee. A permit from DENR to harvest rattan, based on a computed annual allowable cut (AAC), is required for all rattan harvesting. Cutting without the permit is illegal although common. Permittees are also responsible for collecting information on the species, stock, and locations of rattan in the forest, and rattan replanting, although this is seldom enforced.

The distinction between kapatas and permittees is not as clear-cut as it was a decade ago. Now kapatas and permittees may be the same person or family and even act as local traders themselves. This has reduced the
number of intermediaries and is due to the tight rattan supply and the decreased income in real terms realized from rattan harvesting. The kapatas may also facilitate post-harvest processes (scraping, drying, and scaling).

People’s organizations (POs) now also serve as kapatas. POs are associations formed to seek property and user rights (usually, CADC/T and CBFM agreements) from the government to manage the forests in their communities. They function as community-based enterprises that produce and sell rattan, usually in raw form, using their rattan concessions or permits.

2.2.3 TRADERS
Traders serve as intermediaries between rattan gatherers and permittees and manufacturers. Some traders are “backward integrated” (meaning some traders also organize the gatherers and thus provide the kapatas function) into the kapatas function. Indigenous people are represented among the traders, although trading skills vary according to ethnic affiliations. For example, Manobos of Agusan have good skills and have formed a 47-member cooperative, called the Agusan del Sur Rattan Permittees and Traders Multipurpose Cooperative. Traders need their own capital or credit from buyers or suppliers of trade goods and foodstuffs. Traders advance cash or goods to gatherers through the kapatas to facilitate the gathering process. There is a hierarchy of traders from local to provincial to national wholesalers. There is also a small retailer function for raw rattan supplies, but the bulk of rattan goes through the wholesale trader level to the manufacturers.

Provincial traders are the intermediaries between the rattan-cutting concessionaires and wholesalers that supply manufacturers. Provincial traders get 65 percent of their supply from the RCC permittees, 20 percent from kapatas, and 15 percent from POs. National traders purchase from these groups as well as the provincial traders.

2.2.4 MANUFACTURERS (FURNITURE AND HANDICRAFT) AND EXPORTERS
The manufacturers and exporters of rattan are part of the larger furniture and handicraft industry. The manufacturers purchase raw canes and semiprocessed splits from the traders to work into their designs. The manufacturers are responsible for cultivating buyers, arranging trade credit, product design, and quality control of the final products.

2.3 GROSS OUTPUT VALUES
Figure 3 provides the gross output values by number of rattan poles and major actors. The industry consumed around 53.7 million poles in 2003 with 14 percent of poles imported.
2.4 EMPLOYMENT, DIFFERENTIATING AMONG PERMANENT, SEASONAL, FORMAL, INFORMAL, AND GENDER ROLES

Rattan gathering is a part-time, primarily dry-season job, dominated by men, although the number of female gatherers has been increasing. The rattan permits also limit the amount of gathering, as many gatherers would like more opportunities to gather rattan legally. Rattan gathering contributes 20 to 30 percent of the total household income of a gatherer. Agricultural production provides gatherers with food, whereas the cash-based needs of the family are met through their rattan earnings. Kapatas and permittees work part-time schedules and have both male and female workers. Gatherers and kapatas are considered informal actors, whereas the permittees are considered formal actors and are registered with the government.

Rattan traders have permanent, formal jobs as they stockpile inventory during the dry season collection period and sell supplies throughout the year to the manufacturers. Both men and women traders are found throughout the Philippines.

The manufacturing actors are mixed between permanent employment and part-time subcontracting. The furniture industry is currently composed of 15,000 establishments with 480,000 direct workers and 300,000 others indirectly employed as subcontractors. Manufacturing is dominated by small and medium-sized enterprises (SMEs). Single proprietorships and family corporations are common. It is one of the few export industries in the country that is predominantly Filipino owned. The respondents indicated that the number of indirect workers per subcontractor doubled in 2003 from the previous year. Each subcontractor averages 38 to 50 part-time workers. The respondents also observed a 2:1 ratio for male and female workers. A larger manufacturer may subcontract as much as 80 percent of their total production, but once product demand drops subcontractors are the first to be affected with the loss of job orders. Employment in a manufacturing firm is the most regular and full-time among the groups of rattan workers.
2.5 DESTINATION AND CONCENTRATION OF SALES AMONG MAJOR BUYERS AND TYPES OF BUYERS

It is estimated that 80 to 90 percent of raw rattan poles go into exported furniture. A decade ago when cheap, low quality furniture started to flood export markets from China and Indonesia, the Philippines successfully positioned its furniture with customers who care more about quality and fashion than price. The Philippines enjoys having skilled craftsmen who are reputed to be among the world’s best. Through excellent design flair, the Philippines is considered to be a trendsetter among furniture-producing countries in Asia earning the title “Milan of Asia.” This strategy has not been as successful in the past few years. One Cebu-based manufacturer explained that foreign buyers are now shunning rattan in favor of other materials. Simply put, rattan is not as fashionable as it used to be and has lost its appeal among rich aficionados due to the cheapening of rattan furniture, which can be found in so many lower priced retail outlets in the West. Table 1 shows the main export destinations for Philippines furniture.

Table 1: Main Export Destinations of Philippine Furniture (US$1000s)*

<table>
<thead>
<tr>
<th>Country</th>
<th>Year 2002</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td>210,028</td>
<td>66.5</td>
</tr>
<tr>
<td>Japan</td>
<td>20,063</td>
<td>6.3</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>8,671</td>
<td>2.7</td>
</tr>
<tr>
<td>Australia</td>
<td>6,549</td>
<td>2.1</td>
</tr>
<tr>
<td>Saudi Arabia</td>
<td>6,250</td>
<td>2.0</td>
</tr>
<tr>
<td>France</td>
<td>6,001</td>
<td>1.9</td>
</tr>
<tr>
<td>Netherlands</td>
<td>5,611</td>
<td>1.8</td>
</tr>
<tr>
<td>Other countries</td>
<td>52,842</td>
<td>16.7</td>
</tr>
<tr>
<td>TOTAL</td>
<td>316,015</td>
<td>100.0</td>
</tr>
</tbody>
</table>

* These are overall furniture sales, which include rattan, mixed media with rattan, and nonrattan. Rattan as a contribution to overall furniture is about 45 to 50 percent.

Although the value per unit of rattan furniture has increased, the Philippines overall has had diminishing market share. The Philippine world market share is 0.4 percent compared with China’s 12.6 percent. During the 1980s, the country was the largest exporter of furniture in Southeast Asia. Today, the country ranks a poor fifth among Southeast Asian countries behind Malaysia, Indonesia, Thailand, and Vietnam. Furniture ranks seventh among the Philippines’ non-traditional exports. The Philippines’ domestic sales of rattan furniture have generally been cheap, lower-quality furniture, given most Filipinos cannot afford the high-end designs. The best quality rattan poles flow to export furniture production that reinforces the low quality of domestically available furniture.

2.6 PRICE STRUCTURE

Table 2 gives an overview of the price structure including selling prices, expenses, and margins for the major rattan market actors.

Table 2: Margins, Prices, and Expenses by Major Actors (pesos per pole)

<table>
<thead>
<tr>
<th>Actor</th>
<th>Margin</th>
<th>Selling Price</th>
<th>Expenses*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gatherers</td>
<td>10</td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td>Kapatas</td>
<td>0.60</td>
<td>12</td>
<td>11.40: Made up of pole (10), post-harvest processing (0.80), local taxes (0.60)</td>
</tr>
<tr>
<td>Permittees</td>
<td>0.42</td>
<td>14.61</td>
<td>14.19: Made up of pole (10), forest charges (3.39), post-harvest processing (0.80)</td>
</tr>
<tr>
<td>Provincial traders</td>
<td>1.75</td>
<td>16.50</td>
<td>14.75: Made up of pole (12), local taxes (1.20), transport and warehousing (1.50), SOP (0.05)</td>
</tr>
<tr>
<td>National traders</td>
<td>4.10</td>
<td>26</td>
<td>21.90: Made up of pole (16.50), transport (4.77), warehousing (0.62), SOP (0.02)</td>
</tr>
<tr>
<td>Retailer</td>
<td>7.53</td>
<td>30</td>
<td>22.47: Made up of pole (20), retailing (0.47), admin expenses (1.99), SOP (0.01)</td>
</tr>
<tr>
<td>Manufacturer</td>
<td>14.05</td>
<td>75</td>
<td>60.95: Made up of pole (30), production and admin (30.95)</td>
</tr>
</tbody>
</table>

*Expenses do not include time invested by the player. SOP is standard operating procedures, Philippine term for bribes and unofficial payoffs made throughout the chain to conduct business.
2.7 EVALUATING VERTICAL INCOME AND PROFIT

Table 3 presents the vertical distribution of income and profit, as well as the relative numbers of market actors in the rattan sector of the Philippines.

Table 3: Income and Profit

<table>
<thead>
<tr>
<th>Groups Directly Involved</th>
<th>Group Size</th>
<th>Annual Sales per Participant (millions of pesos)</th>
<th>Average Net Profit, per Year per Participant (millions of pesos)</th>
<th>Distribution within Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual gatherers</td>
<td>56,000</td>
<td>0</td>
<td>0.01 (no cash investment, labor only)</td>
<td>Skewed (10 percent illegal gatherers operate year-round; 90 percent legal gatherers operate 4 months)</td>
</tr>
<tr>
<td>Kapatas</td>
<td>190</td>
<td>1.44</td>
<td>4.32</td>
<td>Fairly evenly distributed</td>
</tr>
<tr>
<td>POS (CBFM, CADC, negotiated RCC)</td>
<td>168</td>
<td>0</td>
<td>1.75</td>
<td>Fairly evenly distributed</td>
</tr>
<tr>
<td>Permittees</td>
<td>450</td>
<td>0.88</td>
<td>7.01</td>
<td>Fairly evenly distributed</td>
</tr>
<tr>
<td>Provincial traders</td>
<td>190</td>
<td>0.40</td>
<td>1.98</td>
<td>Fairly evenly distributed</td>
</tr>
<tr>
<td>National traders</td>
<td>174</td>
<td>3.19</td>
<td>12.78</td>
<td>Fairly evenly distributed</td>
</tr>
<tr>
<td>Retailers</td>
<td>105</td>
<td>0.03</td>
<td>0.15</td>
<td>Fairly evenly distributed</td>
</tr>
<tr>
<td>Manufacturing and exporting firms</td>
<td>15,000</td>
<td>119.45</td>
<td>298.62</td>
<td>Skewed (60 percent earn less than 22.5 million pesos).</td>
</tr>
</tbody>
</table>

2.8 EVALUATING HORIZONTAL INCOME AND PROFIT

Although income in rattan gathering is generally low among all community groups, the research of Gatmaytan indicated that differences in income exist even among the same horizontal earners. For instance, the Mangyan-Alangan of Mindoro are paid between P6 to P14 per pole, whereas the upland producers in Samar are being paid higher or between P7 to P16 per pole.

The factor that greatly influences income, however, is the permit to cut rattan. For example, the Mangyan-Alangans are not selling rattan poles due to a delay in renewal of their permit that dragged on for more than a year. They then found out that an illegal group was able to get a bogus permit and operate in their area. The irony of cases such as this is that illegal poachers may have better access to regular income than those who possess legal rights to use the forest resources.

For the traders, both local and national, income is fairly evenly distributed. Manufacturers are more inclined to buy raw materials that are just enough for their production needs. The purchases may be minimal, albeit constant. These buyer-seller relationships, however, are long term, thus, the income of the traders is more stable, but depends on the manufacturer’s performance. Each trader maintains about three buyers.

The distribution of income among manufacturers, in contrast, is skewed in favor of the large firms, which comprise about 10 percent of the 15,000 registered firms. Their size gives them the ability to market their products abroad. The size of investment is also a source of different income levels across the industry. Some of the large firms, however, also subcontract production to SMEs.

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3 Philippine pesos. Unless otherwise noted, all figures in pesos are Philippine in this document.
3. ANALYZING THE NATURE, WEALTH, AND POWER DIMENSIONS OF THE VALUE CHAIN

This study highlights the (a) natural situation of rattan, (b) rattan’s socioeconomic contribution to and impact on rural and urban communities in the rattan industry, (c) power relationships between and among gatherers, kaputas and permittees, traders and manufacturers/exporters, and (d) impact of government policy on the chain and its actors.

3.1 NATURAL RESOURCE MANAGEMENT MAPPING AND RESOURCE TENURE

3.1.1 CURRENT FORM OF RESOURCE TENURE SYSTEM AND MANAGEMENT SYSTEM

Government forest management programs and policies have evolved from being state-managed and private concession–driven in the 1960s–80s to what it is now referred to as community-based forest management (CBFM) starting in the 1990s.

The most common forms of legal tenure systems at present are the negotiated RCCs, CBFM Agreements, and CADC/Ts for indigenous communities. The private concession counterpart of the negotiated RCC is a “bidded” RCC and still very much operational for rattan production, despite stated policy of community-based forestry.

The CADC/Ts are property rights given to indigenous people who have lived in the area for long periods and established their cultural affiliation to the land. A CBFM is a 50-year agreement between the government—through the DENR—and a PO, which bestows tenure on the people to “own” a forestland and its resources. The agreement covers not just resource use of timber and NTFPs, but also rehabilitation, protection, and sustainable management of the entire forest that is subject to the agreement. CBFM tenure allows harvesting, subject to certain provisions. An annual work plan with resource use plan (how to utilize and manage particular forest resources such as rattan) is required. A negotiated RCC is a 10-year permit given to POs near forest areas where rattan stocks are still believed to be plentiful. The permit is subject to an AAC and other management provisions. Figure 4 summarizes rattan cutting permit requirements by tenure instrument.
3.1.2 EXISTENCE OF TRADITIONAL MANAGEMENT PRACTICES

Rattan-cutting methods remain traditional, handed down through generations of rattan gatherers. Most study respondents claimed that they have learned the procedures from their parents and are now passing them on to their children. The machete remains the basic tool in cutting rattan poles. Poles are hauled manually from the forest down to the village. Succeeding processes of scraping, drying, and scaling are based on traditional practices as well.

Traditional beliefs, especially among indigenous peoples, serve as a strong foundation in managing rattan harvests. One common belief, for example, is the need to conduct ritual prayers at certain locations and natural landmarks in the forests before harvesting rattan; however, especially due to their new role as comanagers and “owners” of the forests, indigenous people are examining traditional practices and how they can complement new management requirements. For example, to meet replanting requirements, indigenous people use rattan wildlings (traditional practice) to replace what they have harvested, whereas rattan nurseries are more popular with the nonindigenous groups. For both types of gatherers, self-managed rehabilitation procedures are among the key strengths of decentralizing forest management.

3.1.3 TRENDS IN ABUNDANCE AND RATTAN BIODIVERSITY, QUALITY, AND HARVEST RATES WITH TIME, AND SUSTAINABILITY IMPLICATIONS

Rattan habitat, abundance, variety of species, and quality of remaining rattan vines are all declining in the Philippines. About 600 species exist worldwide in the rattan palm family. The Philippines has 90 rattan species, of which one-third are endemic to, that is, found only in, the Philippines, or 5 percent of rattan species worldwide. Loss of forest habitat is the major threat to rattan as it needs large trees to climb. In the early 1900s, forest covered 70 percent of the Philippines’ 30 million hectares of total land area (21 million hectares
of biodiversity-rich forest ecosystems). In 2000, only 5.39 million hectares of forests remained, of which only 800,000 hectares are old-growth forests where the greatest rattan biodiversity is found. More than 90 percent of rattan raw materials come from the wild or natural stands.

Obtaining a definitive rattan inventory has proved difficult. The Philippine-German inventory in 1987 was the most authoritative inventory conducted nationwide. It placed rattan resources at 4.6 billion linear meters (lm) broken down into 63 percent less than 2 cm diameter and 37 percent greater than 2 cm diameter poles. One estimate put industry’s annual requirement for rattan poles at 153.71 million lm in 1991. A clear indication of decreasing rattan resources is what gatherers and manufacturers report. Rattan gatherers now walk 3 to 5 days deep into the forest to reach rattan-cutting areas, compared with a decade ago when it took just hours. Smaller, lower quality poles are more common. Manufacturers also complain about the decreased local supply of quality poles, which is verified by forestry statistics on rattan pole production in the past 10 years (table 4). By 2000 the decreased wild supply of rattan also resulted in a decrease in the number of cutting permits issued from 370 in 2000 to only 41 in 2002 with corresponding decreases in legal allowable rattan cutting.

<table>
<thead>
<tr>
<th>Year</th>
<th>Split Rattan</th>
<th>Unsplit Rattan</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>0</td>
<td>6,628</td>
</tr>
<tr>
<td>2001</td>
<td>25</td>
<td>8,767</td>
</tr>
<tr>
<td>2000</td>
<td>97</td>
<td>32,336</td>
</tr>
<tr>
<td>1999</td>
<td>48</td>
<td>15,552</td>
</tr>
<tr>
<td>1998</td>
<td>5</td>
<td>10,463</td>
</tr>
<tr>
<td>1997</td>
<td>2</td>
<td>19,519</td>
</tr>
<tr>
<td>1996</td>
<td>17</td>
<td>24,613</td>
</tr>
<tr>
<td>1995</td>
<td>24</td>
<td>17,457</td>
</tr>
<tr>
<td>1994</td>
<td>4</td>
<td>19,088</td>
</tr>
<tr>
<td>1993</td>
<td>1</td>
<td>24,845</td>
</tr>
<tr>
<td>1992</td>
<td>30</td>
<td>22,693</td>
</tr>
</tbody>
</table>


From the perspective of the rattan furniture and handicraft industries, the rattan supply has become more problematic with time, especially in terms of quality. Lack of grade A and B poles needed for high-end designs started impacting production in the late 1980s. Table 5 shows the grades assigned to rattan based on size, color, and overall quality, based on the country’s national standard (PNS 229-1999) for rattan poles and by-products; however, as in the case of many other products, “these are not mandatory and the Bureau of Product Standards relies mainly on the acceptance of the standards by the stakeholders.”

<table>
<thead>
<tr>
<th>Grade</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Mature, white, well seasoned, very slightly blemished, and free from fungal discoloration, pinholes, scars, bruises, checks, and cracks</td>
</tr>
<tr>
<td>B</td>
<td>Mature, white to yellowish, well seasoned, and slightly blemished by fungal discoloration with few pinholes, scars, bruises, checks, and cracks</td>
</tr>
</tbody>
</table>


### Grade Specification

<table>
<thead>
<tr>
<th>Grade</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>Mature, white to yellowish, well seasoned, and blemished with slight fungal discoloration with few pinholes, scars, bruises, checks, and cracks</td>
</tr>
<tr>
<td>D</td>
<td>Mature, well seasoned, and heavily stained with numerous pinholes, scars, bruises, checks, and cracks</td>
</tr>
</tbody>
</table>

Source: PCARRD 1985

Current rattan supply management practices are not sustainable. Wild supplies require rehabilitation to meet industry demand, even at its current reduced levels. Rattan plantations offer a solution to supplement the decreasing supply in natural stands. Indonesia, which pioneered cultivation, has the largest plantation—at 118,802 hectares—of rattan in the world. A distant second is Malaysia with 23,157 hectares, followed by the Philippines with 17,395 hectares. The DENR through its Forestry Sector Program has developed rattan plantations throughout the Philippines, totaling 11,959 hectares mostly in region 8 (Samar and Leyte provinces) and region 9 (Zamboanga and Basilan provinces).

The results, however, are not encouraging, according to Aida Lapis, chief research officer of the Association of Southeast Asian Nations (ASEAN) Regional Center for Biodiversity Conservation. “Even after 20 years, the rattan seems to be not yet ideal for collection,” Lapis said. Although some poles, depending on the species, may be harvested in these timeframes, based on the successful Indonesia experience, poles are best gathered after 30 years. It appears the Philippines needs to wait longer before it harvests from its plantations and then assess if plantations can help solve the supply problem.

To fill the domestic supply gap, industry has been importing poles (about 10 percent of total poles used) and designing less rattan into furniture and handicraft pieces. Industry is divided on the use of imported and domestic rattan poles. Some industry respondents indicated that they would still prefer domestic rattan to imported poles, if a quality supply was “available.” These members expressed frustration with the complications associated with importing, whereas most industry members indicated that imports are already delivering the quality they need, especially for high-end designs.

#### 3.1.4 IMPACTS OF DISTURBANCES
Forest clearing is the primary reason for declining regeneration of rattan stocks and loss of quality species needed for high-end furniture production. Even where there is still forest cover, gatherers believe that the loss of faunal biodiversity, such as birds and monkeys that eat rattan fruits, has affected the dispersion and germination of seeds, thus affecting regeneration of rattan.

Deforestation is mainly caused by commercial logging and inappropriate upland farming called *kaingin*. Aside from the biophysical impacts of deforestation to rattan production, logging activities also result in illegal access into managed areas (CBFM or CADC). In Samar, for example, the impending reopening of San Jose Logging Co. is expected to expose an estimated 50 percent of rattan stocks in the area to outsiders through peripheral activities of logging.

#### 3.1.5 OPPORTUNITIES FOR TECHNOLOGY APPLICATIONS TO INCREASE PRODUCTIVITY OR RESOURCES
Good quality rattan commands higher prices. Improving the quality of rattan poles is one area of value addition that has long been identified in past studies, but has always remained a challenge for the producers. The quality of raw rattan poles deteriorates because of poor techniques during and after harvesting. After cutting rattan from the forest, improper hauling of poles causes breakage. Insufficient drying causes watermarks and other discoloration and borer attacks, whereas poor storage makes rattan poles brittle and unsuitable for handicrafts and furniture making.

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The manufacturing industry needs good quality rattan, and past studies have found that buyers are willing to pay the marginal costs of acquiring better poles. Local research groups, including the Philippines Council for Agriculture, Forestry, and Natural Resources Research and Development (PCARRD) and the Forests Products Research and Development Institute (FPRDI) have developed improved harvesting and post-harvest technologies, including pole chemical treatments and guidance on storage methods. The issue has been how to train so many dispersed gatherers cost-effectively and get traders to grade poles effectively and pay appropriate prices for the high-quality poles. Because the technologies have not been tried on a wide scale in actual field conditions, the economic viability of the technologies remains in question.

3.1.6 EXTENT OF LOCAL CAPACITY, LEVEL OF SOCIAL LEARNING, AND KNOWLEDGE MANAGEMENT SYSTEMS AVAILABLE

Communities manage their forests largely based on the traditional sociocultural structures in the area. The community leaders (e.g., barangay captains and chieftains) are usually the heads or managers of rattan operations. Unfortunately, many of the local community leaders lack the natural resource management and business skills to manage a rattan operation effectively. Community leaders typically get some monetary benefit from rattan operations and are, therefore, reluctant to allow a professional manager to be hired or even defer to another community member with the required skills.

Development interventions from the government and NGO sectors have worked to improve local management structures by training community leaders and/or encouraging diversification of management structures; however, these management efforts are not building on formerly private concessions that were well managed. Previous private concessions rarely adhered to reporting, sustainable management, and replanting requirements; many bad habits and practices need to be changed. Improved local capacity depends, therefore, on all local actors (community, industry, and government) adhering to sound management practices, as well as making recommended technical improvements, which require access to capital.

3.1.7 ACCESS TO AND USE OF TECHNICAL ADVISORY AND INTERMEDIARY SERVICES, INCLUDING RESEARCH, EXTENSION, AND EDUCATION SERVICES

Most POs that have rattan operations receive support services from the DENR and supporting NGOs. Training and extension services, technical advising, education and information dissemination, and applied research are offered; development interventions include institution building, forest resource management, livelihood development, and policy advocacy. Although many groups are doing commendable work, they are typically underfunded, given the scope of legal requirements to fulfill in a rattan operation, the technical breadth of skills needed (rattan nurseries to rattan post-harvest technologies), and the organizational development needed to generate management and business skills.

NGOs that are actively facilitating technical advisory and intermediary services include the Non-Timber Forest Products Task Force (NTFPTF) and its member organizations Kalahan Educational Foundation, Broad Initiatives for Negros Development, Natripal, Mangyan Mission, Upland NGOs Assistance Committee, and EnterpriseWorks/VITA (EWV). The Foundation for the Philippine Environment; Anthropology Watch; Forests Products Research and Development Institute (FPRDI); University of the Philippines, Los Baños; PCARRD; and World Agroforestry Center (ICRAF)–Philippines are among the national institutions and universities that have a wide variety of services and products for community forestry and rattan operations. Many of these programs are linked and provide implementation services to regional and international programs, such as the International Tropical Timber Organization (ITTO) and the World Agroforestry Center. Although research and development projects are diverse, outreach and field testing are limited and often do not reach communities beyond a pilot effort due to mismatched priorities, small budgets, and inappropriate venues.
3.2 WEALTH MAPPING

Wealth mapping along the value chain shows a direct relationship between financial and managerial capacity investments and income. Like most businesses, the rattan sector in the Philippines indicates that the higher the inputs or investments, the higher the profit or returns.

3.2.1 INDUSTRY PROFITS/MARGINS AND DETERMINANTS OF PRICE AMONG VARIOUS ACTORS IN THE CHAIN

Table 6 gives an overview of the profits/margins among the various actors in the rattan chain.

<table>
<thead>
<tr>
<th>Actors</th>
<th>Selling Price per Pole</th>
<th>Profit per Pole</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gatherers</td>
<td>10.00</td>
<td>10.00</td>
</tr>
<tr>
<td>Kapatas</td>
<td>12.00</td>
<td>0.60</td>
</tr>
<tr>
<td>People’s organizations</td>
<td>14.61</td>
<td>0.42</td>
</tr>
<tr>
<td>Individual permittees</td>
<td>14.61</td>
<td>0.42</td>
</tr>
<tr>
<td>Provincial traders</td>
<td>16.50</td>
<td>1.75</td>
</tr>
<tr>
<td>National traders</td>
<td>26.00</td>
<td>4.10</td>
</tr>
<tr>
<td>Retailers</td>
<td>30.00</td>
<td>7.53</td>
</tr>
<tr>
<td>Manufacturers</td>
<td>75.00</td>
<td>14.05</td>
</tr>
</tbody>
</table>

Note: Gatherers are provided no input other than time and labor, which is not computed in this table.

Gatherers typically have almost no access to financial capital and low managerial capacity. They get paid in cash at the time of delivering poles and have invested time, labor, and harvesting skills or receive small advances of in-kind goods or cash via traders.

*Kapatas*, permittees, and/or community rattan enterprises serving these functions have varying management skills and access to financial capital. At the community level, POs (as holders of permits to harvest rattan) operate their enterprises collectively. The members elect a set of officers as managers of the operations; one important task is to raise money as capital for their operation. Cash capital is sourced externally, and common sources are development project funds and loans from financing firms and buyers. In the case of the Agusan del Sur Rattan, Permittees, Traders Multipurpose Cooperative, its president, Josefa Martinez, said that they were able to obtain P500,000 in seed money from the governor’s office to be paid in two years at no interest. In most cases, community groups do not have access to cash capital and end up subleasing their rattan AAC to private individuals (*kapatas*, financiers, and traders) in exchange for a “royalty” payment.

Traders have capital investments in modest warehouses, utility vehicles (six-wheeler trucks), and working capital to purchase rattan poles for two production cycles. Traders take on the risk of storing rattan to meet year-round buyer demand, but can suffer losses if rattan pole quality deteriorates from fungal and bug infestation during storage. For these reasons, profit margins can be volatile. According to Merlyn Rivera, researcher at the Ecosystem Research and Development Bureau (ERDB), traders prefer to sell to furniture makers as they get a higher profit margin than they do selling to the handicraft industry.

The manufacturers and exporters are the biggest investors along the value chain and consequently have the highest profit margins among the actors. Aside from capital investment in facilities and equipment and working capital for daily operation of their factories, they also spend a lot on product design, research and development, and marketing. Manufacturers and exporters are commonly managed by a single proprietorship.
3.2.2 LIVELIHOOD ISSUES (PERCENT OF HOUSEHOLD INCOME DERIVED FROM RATTAN)

The rattan industries provide livelihoods to thousands of Filipinos, of which the majority are small-scale producers and processors in rural areas. For most rattan gatherers in the upland, rattan is about 20 percent of total household income. An estimated 500,000 weavers and artisans do subcontracted handicrafts and furniture jobs, contributing significantly to the generation of local jobs and employment. Table 7 lists livelihood details by major types of rattan workers.

Table 7: Rattan Income in Relation to Total Household Income

<table>
<thead>
<tr>
<th>Producer</th>
<th>Rattan Income as Percentage of Total Income</th>
<th>Rattan Income in Relation to Income from Other Sources</th>
<th>Regularity of the Rattan Job</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rattan gatherers</td>
<td>20 percent</td>
<td>Main source of cash; alternative livelihood aside from farming</td>
<td>Very irregular; off-peak on rainy days.</td>
</tr>
<tr>
<td>Handicraft subcontractors and artisans</td>
<td>20 to 50 percent</td>
<td>Additional source of cash income for most workers, but the only source of income for some</td>
<td>Irregular (approximately 50 percent of the year; with no specific peak or lean months)</td>
</tr>
<tr>
<td>Rattan furniture workers directly employed by firm</td>
<td>100 percent</td>
<td>Main source of income</td>
<td>Regular</td>
</tr>
</tbody>
</table>

3.2.3 PROCESSING, STORAGE, AND TRANSPORT FUNCTIONS

Table 8 outlines who provides and controls processing, storage, and transport functions in the rattan sector and the related rents imposed.

Table 8: Summary of Functions

<table>
<thead>
<tr>
<th>Major Function</th>
<th>Who is Responsible</th>
<th>Barriers to Entry</th>
<th>Rents Imposed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permitting and licensing</td>
<td>• DENR</td>
<td>• Permitting requirements</td>
<td>• Forest changes on harvested and transported rattan products</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Documentation procedures (resource inventory and monitoring)</td>
<td>• “Grease” money (SOP)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Financial capital</td>
<td>• Illegal cutters, may be reprimanded or excluded from cutting</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Poor post-harvest technique</td>
<td>• Arbitrary suspension of cutting permits</td>
</tr>
<tr>
<td>Cutting (prerequisite function is</td>
<td>• Rattan gatherers</td>
<td>• Permitting requirements</td>
<td>• Damaged rattan poles replaced with new stocks by individual gatherers/contractors, imposed by kapatas, permittees, and POs</td>
</tr>
<tr>
<td>acquisition of licenses/permits)</td>
<td>• POs</td>
<td>• Documentation procedures (resource inventory and monitoring)</td>
<td>• Discounted buying prices to permittees and local traders for bad quality rattan</td>
</tr>
<tr>
<td></td>
<td>• Kapatas</td>
<td>• Financial capital</td>
<td>• Delayed payment for nonsaleable (poor quality, wrong sizes, or wrong species) rattan products</td>
</tr>
<tr>
<td></td>
<td>• Permittees</td>
<td>• Poor post-harvest technique</td>
<td></td>
</tr>
<tr>
<td>Post-harvest processes</td>
<td></td>
<td>• Technology adoption</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Low returns for post-harvest processes</td>
<td></td>
</tr>
<tr>
<td>Shipping and transporting</td>
<td>• Traders (local and national)</td>
<td>• High transport costs, especially inter-island shipping</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Permittees</td>
<td>• “Grease” money (SOP)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Working capital</td>
<td></td>
</tr>
<tr>
<td>Wholesaling and retailing</td>
<td>• Traders, retailers</td>
<td>• Warehouses for storage</td>
<td></td>
</tr>
</tbody>
</table>
3.2.4 PRODUCT QUALITY (CHANGES ALONG THE COMMODITY CHAIN, KEY CONTROLS, AND BARRIERS TO IMPROVING QUALITY)

As rattan moves through the chain, table 9 maps how the quality changes and specified quality controls (although they are not effectively enforced).

Table 9: Product Quality Flow

<table>
<thead>
<tr>
<th>Major Function</th>
<th>Changes in Quality</th>
<th>Key Controls</th>
<th>Barriers to Improving Quality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cutting the rattan stalks</td>
<td>Canes harvested when they are too small; too much of cane left in tree leads to short canes</td>
<td>• Specific species for specific rattan-pole uses</td>
<td>• Social and physical/geographical isolation</td>
</tr>
<tr>
<td>Removal from the canopy</td>
<td></td>
<td>• Sizes and uniformity of pole diameter along its length</td>
<td>• Small producers have limited capital</td>
</tr>
<tr>
<td>Post-harvest processes</td>
<td>Improper drying can start fungal growth, which stains canes and can introduce bugs. Canes cut into short lengths.</td>
<td>• Dried, scraped rattan poles</td>
<td>• Desperate need for cash, harvest even poor quality, and hope for best to be paid something</td>
</tr>
<tr>
<td>Removal of sheath, cutting to uniform length, lowered moisture content</td>
<td></td>
<td>• No damage (discoloration, breakage, pin holes)</td>
<td>• No incentives to invest in improved post-harvesting</td>
</tr>
<tr>
<td>Shipping, transporting</td>
<td>Bundles should be by size and quality, but are frequently mixed</td>
<td>• Rattan poles by sizes (1/2, 5/8, 3/4, 1, 1¼)</td>
<td>• No standard quality control across different sellers and retailers</td>
</tr>
<tr>
<td>Bundling of rattan</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wholesaling, retailing</td>
<td>Rattan poles already damaged from previous functions, cannot correct quality at this stage</td>
<td>• Rattan poles by grade (A, B, and C) and size (1/2, 5/8, 3/4, 1, 1¼)</td>
<td></td>
</tr>
<tr>
<td>Inspected and sorted rattan poles according to sizes and grades</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Furniture and handicraft making</td>
<td>Manufacturers reject inferior poles or they go to lower-end designs that do not require long, quality poles</td>
<td>• Specific species for specific rattan pole uses</td>
<td>• Lack of direct contact with gatherers to explain pole requirements</td>
</tr>
<tr>
<td>Exporting</td>
<td>Manufacturing processes cannot correct damaged poles.</td>
<td>• Uniform pole diameter; correct sizes and grades</td>
<td>• Lack of discipline in chain to promote quality grades</td>
</tr>
</tbody>
</table>

3.2.5. OPPORTUNITIES AND BARRIERS TO INNOVATION

At all actor levels—gatherers, kapatai/permittees, traders, and manufacturers—the number one opportunity is improving the quality of the poles as they move through the chain. The barriers to innovation in quality are uncertainty about returns and timing of payments for added work needed for quality improvements, lack of uniform enforcement of established quality grades, and separation of grades in storage and transport. Access to financing was also noted by the survey respondents as a barrier to innovation, but financing alone will not overcome the quality issue, if the actors are not coordinated on rattan quality improvements.

Another opportunity identified was improved rattan material inventory control (see box). The marginal profit per pole could be increased by keeping rattan material inventory at more efficient levels with just-in-
time delivery. In this scenario, gatherers would harvest a specific order from a manufacturer specifying size and grade of poles. This strategy would require more credible backward linkages among gatherers, traders, and manufacturers. Improved inventory control would also help the quality issue, as less rattan would sit in storage vulnerable to damage.

Manufacturers believe having one standard for their production process and finished products could generate value added. Among the major areas of standardization are product measurement, finishing, and quality of raw materials. This innovation could be championed by the Cebu Furniture Industries Foundation for its members, who are leaders themselves in up-scale Philippine furniture.

3.3 POWER MAPPING
Power mapping looks at the formal and informal access and control procedures, their enforcement, and impact on the rattan sector.

3.3.1 LEGISLATIVE FRAMEWORK
The management of rattan resources is bounded by the land ownership law from the principles of Regalian Doctrine. The Philippine Constitution states:

All lands of the public domain, waters, mineral, coal, petroleum and other mineral oils, all sources of potential energy, fisheries, forests and timber, wildlife, flora and fauna, and other natural resources are owned by the State. With the exception of agricultural lands, all other resources shall not be alienated.

The government through the DENR grants agreements and concessions for limited property rights to citizens (firms or individuals) to manage and utilize forest resources. Beyond these tenure rights, numerous other policies (summarized in table 10) impact the rattan sector; note that general local zoning and business permits that are applicable to all businesses are not listed.

<table>
<thead>
<tr>
<th>Sector Function</th>
<th>Laws and Policies</th>
</tr>
</thead>
</table>
| Overall forestry management | • Total log ban in 15 of the country’s 16 regions.  
• Community-Based Forest Management law (Executive Order 203) and the Indigenous Peoples’ Rights Act (IPRA) law (Republic Act 8371) in the 1990s paved the way to recognize communities as forest managers.  
• DAO 25 (1992): The NIPAS implementing rules and regulations focusing on the twin objectives of biodiversity conservation and sustainable development. |
| Rattan extraction and production | • DENR Administrative Order No. 04 Series of 1989 prescribed the computation of AAC for rattan and contained rules governing cutting, gathering, transporting, and disposal. Revised DAO 4-I contained a special provision for processing rattan applications within areas reserved or areas occupied by cultural minorities.  
• DAO 315 (1991): Encourage establishment of bamboo and rattan plantations. |
| Forest charges | • DAO 39 (1993): Rates and forest charges pursuant to RA 7161. An important provision is that charges are levied on the basis of a certificate of minor forest product origin. Harvesting of poles is subject to inspection by DENR before transporting. An officer inspects and checks the rattan according to indicated volume in allowable cut. After this, corresponding forest charges are computed. If the inspection finds no problems, the permit holder pays the forest charges due.  
• DAO 63 (2000): New rates of forest charges pursuant to RA 7161 and based on the 1999 FOB market price of forest product. |
### 3.3.2 TRADITIONAL LAWS
The cultural practices and beliefs among indigenous peoples still play a part in their forest protection and management procedures. The tribal chieftains remain the decision makers in assigning and coordinating cutting areas and quotas among the people. Also, certain procedures have to be followed, such as offering a prayer before harvesting and thanksgiving rituals at the end of every season.

These traditional practices do not violate any of the principles of the DENR regulations, but the DENR maintains that these traditional practices may not necessarily be enough to cover the entirety of the requirements of the law such as nursery establishment, resource inventory, resource use plan, and others.

### 3.3.3 LEGAL AND EXTRALEGAL RULES AND PROCEDURES THAT GOVERN ACCESS
In practice, violations of laws are still widespread with illegal cutting, recycling of permits, and/or encroachment and bogus awarding of permits. These practices are referred to as “standard operating procedures.” The collection and payment of fees not mandated by legal rules may be difficult to abate as long as the amounts derived from doing these illegal activities are higher than the costs (e.g., sanctions from the government). The national office of the DENR, particularly through the Forest Management Bureau, recognizes this “economy” and is committed to improvement, but it is a slow process. If improvement happens, more benefits would be brought back to the people because the impacts of SOP costs are most severe on smaller actors and gatherers.

Although not illegal, the different application and interpretation of forestry laws and policies can be just as costly as SOP payments for community groups attempting to manage their forest areas and rattan concessions. It is not uncommon for the various local DENR officials referred to as Community Environment and Natural Resource Offices (CENROs) and Provincial Environment and Natural Resources Offices (PENROs) to have different interpretations of how basic required documents should be completed. There is a lack of uniform training from the national level down to the local level on how to complete, submit, obtain signatures, and generally facilitate required legal paperwork. The result is that many groups are not in compliance and even those who make honest efforts to complete the requirements can be tied up for months and years by conflicting advice from numerous officials.

### 3.3.4 MECHANISM OF ACCESS CONTROL AND MAINTENANCE

| Rattan gatherers (people in the community) | Legal access to resources, but heavily influenced by DENR (delays in issuance of permits), traders (financial debts), and local governments (barangay and municipal taxations) |
| Kapatas or the PO as the first assembly point | Control of supply of basic household needs in exchange for labor (rice and sardines), control access to labor (for gathering and post-harvest processing) |
| Provincial traders | Control selling price at the local level |
| National traders and wholesalers | Control supply of rattan products in the market |
| Manufacturers | Control access to market (domestic and export), financial capital, and technologies |

### 3.3.5 ELITES AT THE VARIOUS STEPS IN THE COMMODITY CHAIN
At the community level, the majority of the people belong to small-scale producer groups. Often the leaders (chieftains) are the ones managing the rattan-cutting operation; they are the elites at this level. Many of the
community rattan gatherers are indigenous people. Although women participate in rattan gathering, the job is still mainly dominated by men. Women are numerous in the contracted labor force for handicraft making, whereas men dominate furniture production.

Among the traders, a few names are considered “big” and industry leaders; as such, they have influence on price. They maintain good networks with small-scale and local traders who are often their relatives and associates. The large firms in the manufacturing sector are the sources of production jobs for many of their colleague companies in the industry. Large firms also are the design leaders and, hence, have the upper-end market connections overseas. The elites in this portion of the chain are urban Filipinos.

### 3.3.6 THOSE WHO MAKE, IMPLEMENT, AND ENFORCE THE RULES

The DENR is the main policymaker (through administrative orders) and rule enforcer. The regulations are administered at the village level by CENROs. Kapatas and village leaders may informally make and enforce harvesting rules among their members.

### 3.3.7 LEGITIMACY OF THE POWER OF RULE MAKERS

The power of DENR as the rule maker is all legitimate through the authority vested in it by the state. In some instances, however, this authority is corrupted when extralegal payments are demanded and bribes accepted in the course of policy application. CADC/T chieftains generally have more legitimacy than CBFM leaders. This is because CBFM leadership is a new concept within the communities.

### 3.3.8 POSITIVE AND NEGATIVE SANCTIONS THAT ARE USED TO ENFORCE RULES

The sanctions for not following DENR policies can be as severe as temporary or permanent cancellation of permits to operate a rattan concession or even cancellation of the forest tenure instrument. Minor regulatory sanctions are administered among CENROs and permit holders and usually produce mandatory requirements for fulfilling the policies obstructed (e.g., reconducting a resource inventory for failing to indicate a valid inventory in the resource use plan). Within DENR-approved plans, CADC/T and CBFM groups may specify who can harvest where and how much from the areas based on approved permits and administer sanctions to individual members who violate the rules.

In the past five years, blanket and rather arbitrary sanctions issued by DENR secretaries have had serious negative consequences on rattan concessions and overall forest management. For example, in response to a few egregious overharvesting situations, all resource use permits for forest products, including rattan, were suspended nationwide in 2003. Reactivating of the permits has been arbitrary from region to region. In January 2006 the severity of the situation was shown when the newest Secretary of the DENR canceled 8,000 community forest tenure instruments across the Philippines. Within a couple of weeks, the cancellation declaration was modified to exempt communities that are being assisted by foreign donors. The manner in which negative sanctions are applied is a clear disincentive for communities to invest in rattan replanting, nurseries, and other forest management improvements that would improve the quantity and quality of rattan.
4. POLICY AND MACROECONOMIC CONTEXT

4.1 ROLE OF TAXES AND TARIFFS
There are several levels of taxes on rattan. First, Philippine law says that the DENR can collect 10 percent of freight on board price on rattan poles. How this is implemented results in actual rates as high as 28 percent FOB for rattan poles, based on the FOB prices the permittees receive. The reason for the higher actual rate is that the DENR in practice uses the average selling price of the highest quality and largest pole to compute the taxes collected. For example, a large grade A pole sells for P30.00 at the manufacturer level and P3.39 tax is collected (about an 11 percent tax rate). In actual practice, most poles only sell for about P12.00 as they are smaller and of lower grades. When the P3.39 tax is collected on these poles, the result is an actual tax rate of 28 percent.

In addition to the national-level DENR tax, traders during the FRAME Workshop held December 2005 said that local governments also impose their own taxes on rattan poles ranging from P0.10 to P0.25 per linear meter. The local barangay and/or municipal taxes that may be imposed on rattan gathering and trading depend on the discretion (through ordinances) of the concerned local government units as sanctioned by the Local Government Code. The practice varies from having no local tax to as much as 10 percent of the selling value of rattan in some barangays. These taxes are usually levied on the permit holders or kapatas. When added to the highest actual DENR rates, taxes levied on rattan poles can reach 38 percent of the pole value at the permittee level.

4.2 EXPORT BANS, PRODUCTION CONSTRAINTS (QUOTAS AND PERMITS), AND RESOURCE EXTRACTION BANS
One of the earliest laws (PD930) targeting rattan domestic supplies in 1976 banned exportation of rattan poles. The furniture manufacturers in Cebu obtained the ban after complaining of rattan shortages, because the traders preferred to export the poles rather than sell them locally. More recently, domestic supply shortages have been exacerbated when the DENR unilaterally suspended and canceled rattan cutting permits. This has contributed to lack of supply for the industry and made it difficult for harvesting communities to build supplier relationships with buyers.

Philippine patent system weaknesses are also cited as a production constraint and discourage investment. With unabated design piracy, even among local manufacturers, intellectual property rights protection is greatly needed, as firms increasingly rely on proprietary designs to remain competitive. Manufacturers complained that when a firm develops and introduces a new product, the likelihood of the product being prematurely mass produced by other firms retards growth in the high-end markets. The mass-produced copies are also of lower quality, which further affects the impression of the buyers. High-end buyers do not want to see their latest designer furniture purchase featured as a cheap knock-off copy in a national chain weekly advertisement.

4.3 INVESTMENT PLANS FOR THE RATTAN SECTOR OR LACK THEREOF
Investment plans for the manufacturing segment of the rattan sector are more developed and coordinated than for the rattan pole supply side of the sector. The furniture industry is one of the investment priority sectors of the country. The Department of Trade and Industry and other investment promotion agencies, such as the Philippine Confederation of Exporters in the Philippines (PhilExport), are promoting the industry
through market expositions and investment-generating policy advocacy. Technology development is an important investment area being promoted, which encourages machine modernization and production capacity improvements. For example, a new policy (Executive Order 313) reduces import duties on capital equipment, spare parts, and accessories from 1 to 10 percent to less than 1 percent.

There are also several investment promotion programs for the industry that development agencies are supporting. The Canadian International Development Agency, for instance, is working with the Department of Trade and Industry on the Private Enterprise Accelerating Resource Linkage Project, a five-year project that started in 2002 and is mandated to create more jobs and investment opportunities for SMEs.

On the rattan pole supply side, there is no coordinated investment plan for the Philippines. In the 1990s, a number of bilateral donors and private foundations had invested in the rattan sector, but have either ended support for this sector or switched support to bamboo. Although not specific to rattan, programs supported by USAID and other bilateral donors fund community tenure programs, for example, projects implemented by EWV, the NTFP Task Force, ITTO, International Network on Bamboo and Rattan (INBAR), and Foundation for the Philippine Environment. There is investment in overall forest management and protection of forests, but these programs may not specifically mention rattan conservation and management as a goal.

4.4 INTEREST IN RATTAN BY OTHER DONORS AND THE PRIVATE SECTOR IN GENERAL

More investment in the rattan industry is needed to recognize the substantial contribution furniture and handicraft industries make to the economy. Programs that support forest conservation need to acknowledge and support the sustainable management of rattan as a natural resource. New investments often have provisions for resource management, but only spotty interest among donors and the private sector to support the sustainability of rattan and the industry.

The CBFM group in Samar and its federation are soon to start a U.N. Development Programme project that is intended to, among others, enhance the sustainability of rattan resources in the forests around Samar Island Natural Park. ITTO is also in the process of launching a rattan project in the Philippines.
5. DEVELOPING AN INTERVENTION STRATEGY FOR RATTAN

5.1 IDENTIFYING COMPETITIVE ADVANTAGE

5.1.1 KEY END-MARKET DEMAND CHARACTERISTICS
The global market for rattan furniture has moved from a high-end designer good that represented quality and exclusive taste to a product that is being mass produced and purchased at nonexclusive market outlets. The advancement of resin and plastic technologies allows furniture manufacturers to mimic the look of rattan, but deliver durability for outside conditions in temperate climates.

In the past decade, there has been a significant increase in demand for rattan furniture in the west. No longer is rattan reserved for the rich, as middle-class families can find rattan in many chain stores. Mass marketing of rattan has had two impacts on the market. First, rattan has become common and cheapened in the eyes of discerning buyers. Pier 1 Imports, a large home accessories chain in the United States, recently announced it would be phasing out its rattan line due to this market factor. Second, mass marketing of rattan did not educate consumers on the proper care of these natural pieces. Efren Sarmiento, proprietor of Detalia Aurora explains: “Rattan furniture is suited for indoor conditions, but Western stores positioned the products as garden and outdoor furniture. This created an image problem for rattan as buyers soon discovered that rattan furniture is easily damaged by the elements, especially in temperate climates.”

Another key end-market demand characteristic is buyers’ interest in overall home concepts, instead of just buying pieces of furniture. Demand has also grown for “contract furniture” from institutional buyers such as government offices and hotels that buy their entire furniture requirements from only one source or contractor. Across buyers, innovative applications using multiple natural materials, including rattan, are well received, especially abroad.

5.1.2 WAYS ENTERPRISES CAN TAKE OWNERSHIP OF A PRODUCT’S UNIQUE DEMAND CHARACTERISTICS
The Philippines competitive advantage is in high-end, cutting edge rattan furniture and home accessory designs that use the highest quality raw materials, weaving, construction, and finishing skills. The Philippines’ ability to design innovative mixed-medium designs that use rattan and natural, indigenous materials is also a competitive advantage. Distinguishing between natural, indigenous, cutting-edge rattan designs for indoor use in contrast to weather-durable plastic furniture in a rattan pattern will be key to the Philippines’ competitive advantage. Because the Philippines sometimes has higher labor and transport costs than its competitors, such as China, Indonesia, and Malaysia, investing in Filipino design excellence to distinguish their products is a good strategy.

5.1.3 MARKET STRATEGIES FOR ACCESSING NEW REGIONAL AND INTERNATIONAL MARKETS
A growing number of manufacturing firms have started selling directly to retailers and agents in international markets and are exploring nontraditional markets (e.g., the Middle East, Spain, and China) to complement existing markets in North America and Japan. This enhances traditional channels and brings new sources of value addition for the products. An organized marketing information system would help this strategy be more successful.

The Center for International Trade Expositions and Missions (CITEM) is also helping manufacturers through marketing campaigns, trade missions, and participation in prestigious trade fairs abroad. The Cebu
Furniture Industries Foundation (CFIF), in particular, has a very sophisticated marketing program and exhibit (see box).

The Chamber of Furniture Industries of the Philippines (CFIP) creates incentive-based programs that support member manufacturers who pioneer in expanding global markets. In connection with this strategy, CFIP also suggests that new products introduced in the market be exclusively produced, first by the firms that created the products, until these have been fully accepted by the market. This strategy is intended to bring appropriate returns to developers of the new products and encourage others to also develop new designs and products.

**5.1.4 STRATEGIES FOR CHANGING ANY NEGATIVE OR LIMITING PERCEPTIONS OF REGIONAL AND/OR INTERNATIONAL MARKET ACTORS**

Most of the new and improved marketing strategies are mainly to address the decreasing market share in the global market brought about by the proliferation of low-quality, mass-produced items from other Asian producing countries. Some Philippine exporters have lost their international buyers to these competitors; thus, industry is addressing the situation by focusing on more defined market segments (e.g., high-end designer markets) that are different from those of competing countries. This strategy necessitates top-quality products at all times and continuous innovation in design and product development. Industry self-regulation on quality standards was recommended by the industry representatives who attended the December 2005 FRAME rattan value chain workshop.

**5.2 COMMERCIALLY UPGRADING THE INDUSTRY TO REALIZE COMPETITIVE ADVANTAGE**

**5.2.1 ENABLING ENVIRONMENT**

**5.2.1.1 CONSTRAINTS AND OPPORTUNITIES RELATED TO THE LOCAL ENABLING ENVIRONMENT**

The major constraints and opportunities in the enabling environment come from (a) regulatory policies governing land use where rattan is found, (b) lack of uniform quality requirements for rattan poles that are used nationwide and among all the actors (see box), and (c) insufficient linkages between industry and government, especially in research areas associated with rattan supply and quality.

**5.2.1.2 ACTIVITIES THAT REDUCE THE EFFECTS OF POOR OR CORRUPT LOCAL ENFORCEMENT PRACTICES, INCLUDING ADVOCACY, COST ANALYSES, AND PRIVATE SECTOR SERVICES**

To reduce the effects of poor or corrupt local enforcement practices, study respondents as well as workshop participants suggested (a) reducing the number of checkpoints, (b) good ecological governance for rattan, rather than political-based governance, (c) transparency in governance, (d) more development of local industry clusters, and (e)
development and support of champions within the bureaucracy. Workshop participants offered three specific examples.

**Transparency and good governance.** A number of NGOs and donor programs, including USAID’s Eco-Governance Program, have advocacy efforts to lobby the government for change and more effective control of corruption. The NTFP-TF, EnterpriseWorks/VITA, and various environmental journalists have done studies and articles on the cost implications of corruption on rattan.

**Need for more local industry clusters.** Corruption can also put local small-scale furniture shops out of business and undermines domestic sales. For example, local entrepreneurs in Agusan and Butuan City, with their proximity to rattan supplies and seeing Cebu’s furniture industry success, opened their own furniture shops; however, as told by one entrepreneur in Agusan del Sur, after a few years all have closed due to constant hassles from local officials, the police, and DENR representatives asking for products. Activities that have helped local industry clusters to organize, like in Cebu, have been effective in curbing this dynamic.

**Reduction of checkpoints.** A major source of dishonesty in the rattan industry is the presence of too many checkpoints. The traders from Agusan estimated that transported rattan must pass through at least 50 checkpoints from the cutting area alone to the stock house and another 30 checkpoints before it reaches the port or buyers. “Uniformed extortionists” will always ask for money before letting you pass, one permittee said. All these bribes push the prices of furniture up, which is then passed on to buyers. A more lasting effect, however, is that it poisons traders’ relations with authorities and bureaucrats. But a new “one-stop shopping checkpoint” is changing this dynamic (see box).

5.2.1.3 ACTIVITIES TO IMPROVE ENABLING ENVIRONMENT, INCLUDING INCENTIVES FOR TRANSPARENT BUSINESS PRACTICES AND REDUCING INFORMALITY

Transparent business practices that better support local organizations, whether formal or informal, culture based or not, have become important in the goal of reducing informality in rattan harvesting, which is impacting overall supply and quality. The activities noted during the study interviews that could improve the enabling environment include (a) designation of protected or reserved areas that are effectively guarded, (b) designation and rotation of cutting areas, (c) prescription of specific species, sizes, and volume of rattan poles to be harvested, (d) distribution of cutting jobs among community members, (e) harvesting only when there are orders from traders, and (f) better recognition of women’s participation in the cutting and processing activities. Most of the organizations interviewed for the study acknowledged a need for capacity building to strengthen their group’s capability to promote more transparent business practices.

5.2.1.4 ACTIVITIES THAT COUNTER THE EFFECTS OF POLICIES THAT WEAKEN KEY SUPPORTING MARKETS LIKE FINANCE

Because the current forest tenure agreements cannot be used as collateral for financing, this restricts the gatherers’ ability to access financing that potentially could break them of their dependence on current trade structures. Traders are informally using purchase orders from buyers as collateral to obtain foodstuffs and cash to advance to harvesters.

An activity that could improve this dynamic is for traders to take specific orders on pole sizes and grades from the manufacturers and deliver these to the permittees, *kapatas*, and harvesters based on their experience on who can supply which types of poles. Instead of advancing financing and in-kind support for a specific number of poles, more specific order guidelines could be given. DENR could also explore how they could support collateralization of forest products to expand financing options in the rattan sector.
5.2.1.5 ACTIVITIES THAT SUPPORT CREATION OF A MORE FAVORABLE INTERNATIONAL ENABLING ENVIRONMENT

Multiple efforts are underway to create a more favorable international enabling environment for rattan, but almost all, including World Trade Organization (WTO) efforts, focus on scientific research and/or are dominated by scientists in their peer review processes and implementation. Greater outreach to industry and rattan manufacturers and finished products buyers is needed to inform the efforts better. Specific activities currently operating or planned for 2006 include workshops and field-level projects.

The ITTO, INBAR, and International Center for Bamboo and Rattan (ICBR) all have international programs that seek to improve the nontimber forest products sector and specifically rattan. ITTO in particular is in the process of launching a rattan project in the Philippines. ITTO, INBAR, and ICBR are sponsoring an International Workshop on Sustainable Development of the Global Rattan Sector in June 2006 in China.

WTO efforts in rattan typically fall under its trade and environment section. The European Commission under WTO trade and environment efforts is funding a project that runs through 2008 in Kalimantan, Indonesia, entitled Improving the Rattan Resource Management and Trading System in Kalimantan: an Integrated Approach towards Conservation and Regeneration of Natural Resources and Economic Development in Kalimantan. In addition, specifically in the Philippines, the NTFP-TF continues to work on a variety of issues that impact NTFPs and rattan specifically and will be holding forums and meetings throughout 2006.

5.2.2 VERTICAL LINKAGES

5.2.2.1 CONSTRAINTS AND OPPORTUNITIES RELATED TO VERTICAL INTERFIRM COOPERATION

Timing, quality, variety, and volume of rattan supplies to the furniture and handicraft manufacturers are major concerns that need to be addressed to improve interfirm cooperation. It is precisely these issues that are pushing local manufacturers to source their rattan needs from abroad despite available local supplies (see box).

The availability of quality rattan materials very much depends on the credibility of the rattan-cutting concessions to produce within the desired period. It is common for suppliers not to deliver on their promise despite advance payments. Among the frequent reasons why production cannot be met on time are (a) delays in complying with documentation requirements, (b) shortage of financial capital to finish the entire operation, and (c) indiscriminate delays by the authorities (DENR, Philippines national police, military, etc.) on rattan permits for cutting and transport. The traders complain that they advance funds and harvesters or permittees do not deliver. The manufacturers are rarely in direct contact with permittees and harvesters, and lack of understanding on both sides on pricing considerations can change this.

PROMISING VERTICAL INTEGRATION MODEL

Research conducted by the NTFP Task Force in 2004 on labor valuation of rattan gathering among indigenous peoples, modeled vertical integration between an indigenous peoples rattan-producing community and a furniture manufacturing company to evaluate the equilibrium price, at which both parties derive optimal levels of utilities from each other (quality rattan supply from the indigenous peoples and increased buying prices from the manufacturer). The NTFP Task Force is now working on implementation of this vertical integration. Also, the NTFP Task Force has been attending a series of product development trainings conducted by CFIP, through which both parties hope to roll out the skills learned and technologies to the rattan-producing communities (which include Mindoro and Samar).
To improve vertical integration, the rattan gatherers and permittees need assistance on (a) accomplishing legal and technical requirements to ensure continuous rattan operations, (b) improving their operating and management skills (especially in post-harvest handling of the poles), and (c) learning to negotiate better with buyers to achieve better distribution of gains if they deliver better quality poles. Improved backward integration, such as contract selling, could also help narrow the gap between large-scale businesses and small producers. A specific effort led by the NTFP Task Force shows promise that this strategy will improve vertical integration (see box).

5.2.2.2 WAYS TO PROVIDE NEW INFORMATION, SKILLS, AND KNOW-HOW TO ENTERPRISES

Table 12 summarizes some the leading ways new information, skills, and know-how are being provided to rattan sector actors.

<table>
<thead>
<tr>
<th>Resource institutions</th>
<th>New Information, Skills, and Know-How</th>
<th>Methodology of Services</th>
<th>Target Beneficiaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industry associations (CFIP)</td>
<td>Information exchange • Sources and uses of different raw materials • Standardization of measurement, quality, and other product specifications across the industry • Brokering supplier and subcontractor services</td>
<td>Development and use of management information system</td>
<td>Manufacturing firms and subcontractors</td>
</tr>
<tr>
<td>NGOs (NTFP Task Force, etc.)</td>
<td>Capability building • Technology transfer • Managerial skills training • Business development services • Product development • Marketing</td>
<td>Training and consultancy</td>
<td>Community producers and POs</td>
</tr>
<tr>
<td>Government agencies (CITEM, etc.)</td>
<td>Marketing support • Exposition missions and trade fair participation • Licensing and accreditation</td>
<td>Trade fairs and exhibits</td>
<td>Producers and manufacturers</td>
</tr>
</tbody>
</table>

5.2.2.3 WAYS TO ORGANIZE ENTERPRISES TO LIMIT THE EFFECTS OF HIGH TRANSACTION COSTS, AND LACK OF CAPACITY TO ACHIEVE ECONOMIES OF SCALE

Production of rattan poles could be improved if rattan producers organized around their common permits to cut and sell rattan and implemented quality and grading programs at the start of the commodity flow.

This model has been done in Agusan and has allowed producers to reduce transaction costs when they obtained the “one-stop shopping” checkpoint. Agusan, by federating its members, has also reduced transaction costs for transport and warehouse services as well as in dealing with buyers on sales and the government on permits and documentation requirements. Representatives from Agusan indicated that they still need assistance and more direct information from end buyers to improve quality. An encouraging sign was that manufacturers present at the workshop were just as eager to be able to work with an organized group of collectors/permittees like Agusan.

For the manufacturing industries, the CFIP and CFIF are administering common services and facilities, so that each of the firms does not have to invest and spend for these. Services include technology adoption training, skills improvement program, trade fairs and exhibits, and market matching or brokering and linking suppliers and buyers.
5.2.3 HORIZONTAL LINKAGES

5.2.3.1 CONSTRAINTS AND OPPORTUNITIES RELATED TO HORIZONTAL INTERFIRM COOPERATION
Interfirm cooperation at the manufacturing level is fairly well developed, and the various industry associations already discussed continue to provide opportunities for further collaboration. Because gatherers and permittees reside in more remote rural areas and are geographically dispersed, interfirm cooperation is difficult. Strengthened and federated POs that represent the gatherers and permittees are needed to facilitate cooperation and would make enforcement of quality standards and delivery of technical services more efficient. In addition, agreement by traders to enforce common quality standards and organize to work collectively with industry to facilitate stronger backward linkages in the rattan sector would benefit the entire industry.

5.2.3.2 WAYS TO SHARE MARKET INFORMATION, REDUCE UNIT COSTS AND TRANSACTION COSTS THROUGH BULK PURCHASES, GENERATE LEARNING, AND ALLOW FOR FUNCTIONAL UPGRADING
The Department of Trade and Industry and its support bureaus, and the industry chambers are providing industrywide services on market information exchange and logistics management, including laboratory support and research information by the Department of Science and Technology and academia.

Similar to possible opportunities on vertical integration discussed earlier, the rattan industry is likewise capable of creating new opportunities for higher economic returns as these interfirm concerns are being addressed. For example, for the problem on unutilized production capacities of some firms (only one of four manufacturers is operating at full capacity) the CFIP is developing a scheme in which other firms with excess production requirements may utilize the surplus capacities of others. In this way, industry investment would be maximized and additional production costs could be minimized.

5.2.3.3 WAYS FOR ENTERPRISES TO DEVELOP VOLUME AND BARGAINING POWER TO ESTABLISH MORE MUTUALLY DEPENDENT RELATIONSHIP WITH LEAD FIRMS AND BUYERS
Improved relationships by which rattan gatherers and permittees transact efficiently with manufacturers require improvements on current practices. First, gatherers must have security to operate their rattan-cutting concession continuously to be able to present credible production capacity for financing and filling orders. Second, gatherers need freedom from illegal transactions and greater technical capacity to abide by DENR requirements. Third, if gatherers' and permittees’ quota (annual allowable cut or resource use permit) is not enough for the requirement of the buyer, they need to tie up with organizations in other areas with similar concessions to form federations. This may sound difficult, but the cost savings in integrating transaction and marketing costs among producers and the promise of a pole supply that better meets manufacturers’ needs would increase value throughout the chain.

5.2.4 SUPPORTING MARKETS FOR PRODUCTS AND SERVICES

5.2.4.1 CONSTRAINTS AND OPPORTUNITIES RELATED TO THE FINANCIAL SERVICES
Although government institutions exist that have credit programs, there is a general lack of available capital or financing to expand or improve business. Access to financial services is acute among gatherers. Even the microfinance NGOs usually categorize gatherers’ needs as “agricultural loans” and, therefore, they are not eligible for microcredit. Rattan traders also cannot get loans from banks for lack of collateral. Nelson Calo, a trader from Agusan, said that no bank would give out loans for a rattan business, considering the seasonality and risk. The majority of manufacturers also complain about the lack of financial support to buy equipment to improve and increase output, thus limiting their production.

5.2.4.2 WAYS TO DELIVER VIABLY FINANCIAL SERVICES
NGOs, such as the Foundation for Philippine Environment, have small amounts of money for rattan operations; this could be further augmented if financial institutions would match these equity funds and provide loans to the POs. But, again, the problem that POs are nonbankable remains the issue for most of these firms. A scheme of guarantee funds for small businesses may help the POs access loans. Also, securing advance production orders from manufacturers may also help guarantee the financing.
For the manufacturing side, the industry is continuously exploring ways to generate and mobilize external funding. For example, Industrial Support Services for Expansion Program II (ISSEP II) recently provided a 35.35 billion yen credit facility for the manufacturers and exporters through Japan Bank for International Cooperation.

**5.2.4.3 MARKETING (INCLUDING PACKAGING, ADVERTISING, CERTIFICATION, ETC.)**

Given the current state of the industry, market rejuvenation hinges on innovative marketing for both local and overseas markets. CFIP noted that the Philippines does not have an identity in the global market, although this is starting to change through the efforts of the Cebu cluster. The Cebu cluster seems to have positioned itself better in the market by distinguishing itself from other Philippine rattan products. They have excelled in uniqueness of designs, functionality of the product, and novelty and diversity of the materials used. This marketing approach is similar to the Bali Handicrafts success, wherein Bali had a cluster of good quality manufacturers linked to small- and medium-scale production units that could meet buyers’ demands. Attractive showrooms, prestigious trade fairs, and ease of shopping made buyers want to do business with Bali. The Cebu cluster is well on its way to establishing a similar shopping experience for furniture and home accessories.

**5.2.5 ENSURING THE SUSTAINABILITY OF COMPETITIVENESS**

**5.2.5.1 WAYS TO FOSTER MORE TRANSPARENT, LONG-TERM AND FOCUSED RELATIONSHIPS**

The industry believes that its sustainability greatly depends not just on the individual viability of the firms, but also on maintaining a common ethical standard among its members. CFIP expressed its plan of developing a protocol on coexistence across the industry and advocates that all members adopt this standard. One aspect of the standard is for members to self-regulate their processes and support environmental management through cleaner production programs.

The manufacturers also network with government and other stakeholders to work on common issues concerning the industry, such as natural resource management. They have requested a simplification of importation procedures for raw materials, because the complicated steps only encourage illegal transactions. They have also participated in research that is intended to improve the sustainability of rattan resources. Greater efforts to engage the gatherers and permittees are necessary for the Philippines to sustain their competitiveness. The industry representatives’ offer to host gatherers, permittees, and other actors at their facilities and at the upcoming Expo X in Cebu is an example of how actors want to collaborate more to be more competitive as an industry. Each set of actors needs to build into their respective projects and programs mechanisms that foster more interaction among the main rattan actor groups.

**5.2.6 LEARNING AND INNOVATION**

**5.2.6.1 WAYS TO INSTITUTIONALIZE LEARNING MECHANISMS**

A number of learning mechanisms are institutionalized for the manufacturing segment of the rattan sector, but need attention on the production side. CFIP, CFIF, and concerned national agencies, such as the Department of Trade and Industry and Technical Education and Skills Development Authority are implementing skills training programs on production processes and technologies. Also in line with this objective is the integration of education and technology development in schools to promote the industry and develop furniture enthusiasts among the youth. The University of the Philippines in Cebu has adjusted their courses and subjects to provide the needed expertise, especially on design aspects, as well as offering short technical courses on furniture making using modern equipment. The Philippine Trade and Training Center is one key
institution that assists the industry in learning the ropes of exporting and importing. Under Executive Order 133, this agency is mandated to develop modules and conduct training programs on foreign trade and other marketing courses.

The same attention academia and the government have provided targeted programs for the manufacturing segment of the rattan sector should be given to the production side. For example, forestry colleges could incorporate courses on preparing tenure and concession compliance paperwork as well as offer intern programs to work with community groups on forest management issues. A grouping of permittees and traders could be supported to pilot a quality control and rattan pole-grading program with a research institution’s support.

5.2.7 BENEFITS

5.2.7.1 WAYS TO ENHANCE THE BREADTH AND DEPTH OF BENEFITS

In conclusion, the study identified several key areas that would enhance the breadth and depth of benefits: reduced corruption, better pole quality, more financing, etc. Most of these findings are not new to the industry. What is new is the way some segments of the industry (e.g., the Cebu cluster) have approached the problems of a declining rattan industry with creativity and an open mind. This same attitude is needed to expand benefits throughout the sector. All rattan actors and participants—government, communities, industry, research, academia, and NGOs—need to set aside stereotypes that hinder innovation and change (e.g., officials are corrupt, communities cannot manage the resources, no good local markets exist for rattan, research institutions do not meet field need, etc.).

Among the study and workshop participants, there were numerous examples of groups departing from stereotypes with success and facilitating and achieving positive change:

- CFIP is increasing its activities targeted to domestic markets. The recent Philippine Furniture Show in November 2005 was entirely dedicated to domestic buyers. Also, instead of the usual practice of selling export overruns to domestic markets, manufacturers are now investing in the production of new designs and products that are specific to the conditions and needs of local buyers.

- The Agusan del Sur DENR officials and local government officials came together to have one checkpoint and reduce corruption and bribe taking.

- NGOs supported by donor programs successfully strengthened community groups and their abilities to meet forest management requirements and improve their rattan concessions.

- Examples, such as PCARRD, which is now taking an industrywide, rather than commodity, approach to its research work, is an effort to respond to where markets are leading the rattan sector of the Philippines.

Actors from throughout the rattan sector discuss the study findings and forge collaborations at the Rattan Value Chain Workshop held in December 2005 in Quezon City.
REFERENCES


Philippine Council for Agriculture, Forestry and Natural Resources Research and Development. 1998. Chemical Treatment, Drying, and Seasoning of Rattan Poles. PCARRD: IDRC.

Philippine Council for Agriculture, Forestry and Natural Resources Research and Development. 2002. R&D Status and Directions: Bamboo and Rattan.


State of the Sector Report on Philippine Furniture 2004, in:

http://www.policyaim.edu.ph/download/CHAMBER%20OF%20FURNITURE%20INDUSTR Y%20REPORT%202004%20%5BREAD-ONLY%5D.PDF