An Overview of the Louisiana Primary Solid Wood Products Industry

Working Paper #2
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Preface

This report is a companion study to the Louisiana Forest Products Laboratory Working Paper #1 that examined the Louisiana secondary wood products industry (Vlosky et al. 1994). The broad goal of this second study is to profile the primary solid wood products industry. In addition to determining the industry structure, the research seeks to find out how the Louisiana Forest Products Laboratory can better serve Louisiana companies in this industry sector. Results include a discussion of the raw materials mix used in the production of primary wood products as well as marketing and business strategy issues. The value of products shipped, market areas served by the industry, distribution channels, promotion methods and factors that contribute to or detract from the success of this industry in Louisiana are among the topics discussed.

Executive Summary

* The primary solid wood products industry in Louisiana consists of 81 companies compared to approximately 750 companies in the secondary wood products sector.

* Just over 36 percent of companies surveyed have 50 employees or more and 18.2 percent have 200 or more employees.

* Nearly 50 percent of companies surveyed had sales of $10 Million or more in 1993 from Louisiana facilities.

* Geographically, the largest percentage of sales in 1993 was made to states outside Louisiana (47%) with 41 percent of respondent company sales in Louisiana and 12 percent of sales to export markets.

* A majority of respondents are strictly softwood producers (45.5%), while 30.3 percent are strictly hardwood producers and 24.2 percent are producers of both softwood and hardwood products.

* Respondents indicated that the primary methods used to promote their products are word-of-mouth followed by distributor support and company salespersons.

* Product quality, company reputation and the development of long-term relationships with customers were identified as the primary competitive factors contributing to success in the marketplace.

* Securing a consistent supply of quality raw materials, closely followed by volatile pricing were identified as the greatest impediments to success for respondent companies.

* The factors that most influence respondents decisions to expand current facilities or build new facilities in Louisiana are workman's compensation, proximity to raw materials, taxes, availability of capital, labor issues and community industrial climate.

* Respondents indicated an interest in receiving information and training from the Louisiana Forest Products Laboratory in a number of areas including log grading, drying, cost reduction and financing.

Introduction

Louisiana's forests represent an important resource for the state, both in terms of income to landowners and as inputs to the forest products industry. In 1987, the harvest of timber, which is Louisiana's number one agricultural crop in terms of both gross income and value-added, supported a forest products industry that consisted of almost 900 separate primary (including pulp and paper) and secondary manufacturing establishments (Jacob et al. 1987). The forest products industry in Louisiana is strongly interrelated with many other industries which sell raw materials to, or purchase output from the forest products industry. Accordingly, changes in the forest products industry would have far-reaching effects throughout the state's economy. This study contributes to the understanding of the foundation of the Louisiana wood products sector. Combined with previous work on the secondary wood products industry and ongoing research in policy issues, the goal of this research is to help develop a superior market position, both nationally and internationally, for Louisiana wood products.

Methodology

Using a directory of Louisiana primary wood products industries compiled by the Louisiana Forest Products Laboratory 81 primary solid wood products companies were surveyed (Chang et al. 1994). All companies were called to confirm that they in fact are solid wood primary producers.

The study was conducted using mailed surveys. Survey development and implementation generally followed methods and procedures recommended by Dillman and described as the Total Design Method (TDM) (Dillman, 1978). Accordingly, the mail questionnaire procedures included two survey mailings and follow-up phone calls, resulting in an adjusted response rate of 41% percent or 33 usable surveys from 81 companies surveyed.

Key informants and titles were identified for all survey recipients through the use of a Louisiana Forest Products Laboratory wood products manufacturer directory and through follow-up phone calls.

Results

Demographics

The primary wood products industry in Louisiana can be characterized as concentrated and consisting of many large establishments. As seen in Figure 1, just over 36 percent of companies surveyed have 50 employees or more and 18.2 percent have 200 or more employees. As seen in Figure 2, 24 percent of the companies surveyed plan to add 148 new employees in 1995 and 30 percent plan to add 460 employees over the subsequent four years. If these numbers are extrapolated to the entire Louisiana primary solid wood products industry, 81 companies would add 1,481 new employees by 1999.

Figure 1.

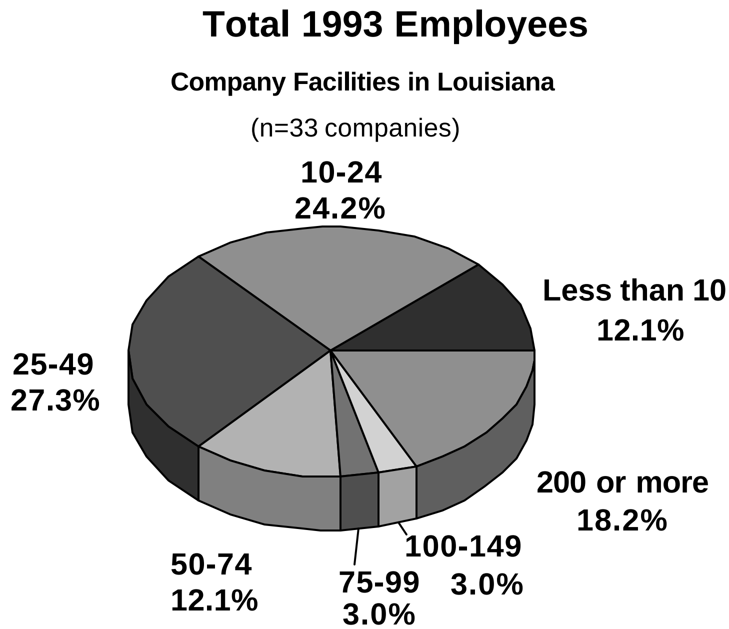
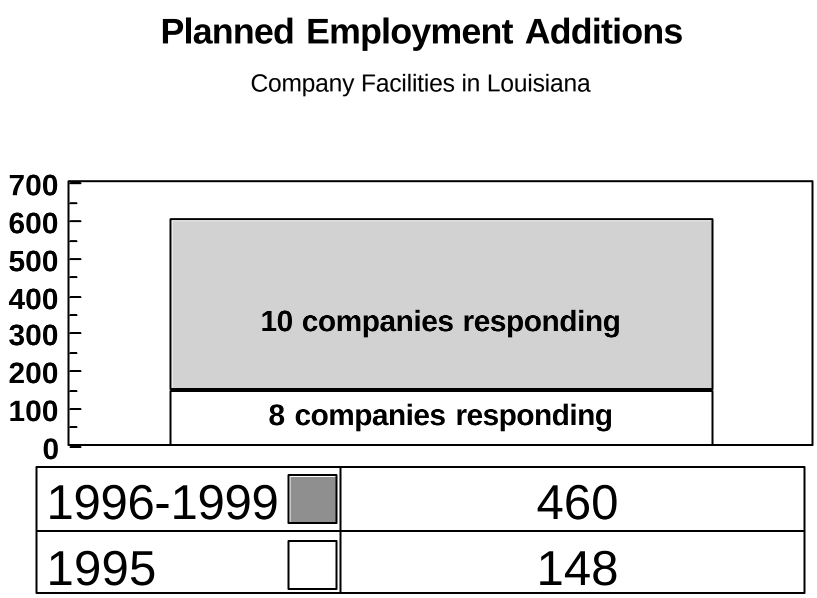


Figure 2.



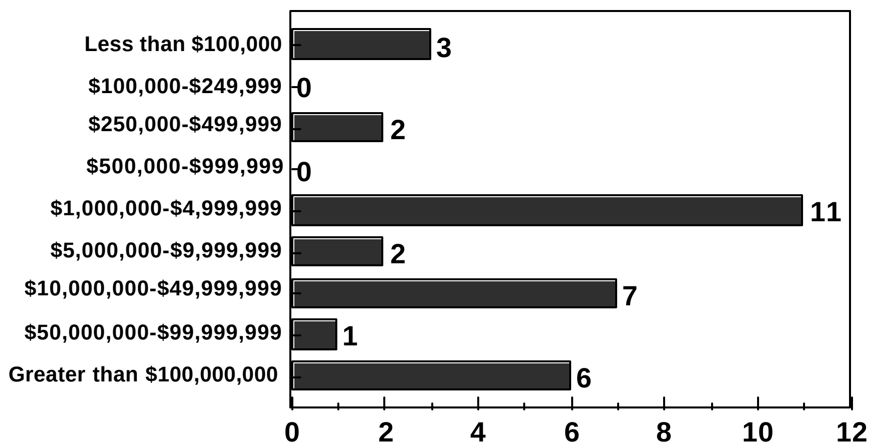
Nearly 50 percent of companies surveyed had sales of $10 Million or more in 1993 from Louisiana facilities (Figure 3). If the midpoints of each sales range are multiplied by the number of companies in each range, the estimated 1993 sales for respondent companies is

$893.4 Million or an average of $27 Million. If the balance of the industry follows a similar pattern of sales, the total 1993 Louisiana industry estimate would be $2.19 Billion.

Figure 3.

Total 1993 Sales

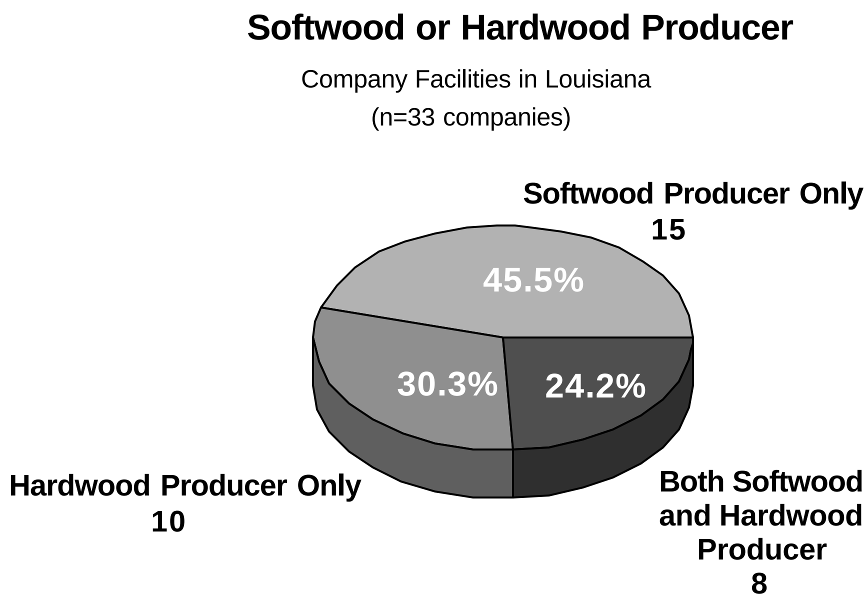
Company Facilities in Louisiana
(n=33 companies)



Raw Material Inputs

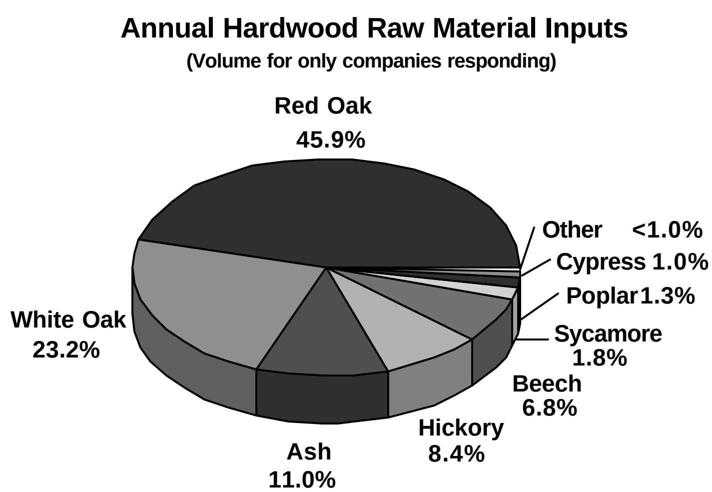
As seen in figure 4, nearly half of respondent companies produce only softwood products, just over 30 percent are hardwood producers and nearly a quarter produce both softwoods and hardwoods. Softwood logs comprised the vast majority of raw material used at Louisiana facilities in 1993 by the 29 respondents that answered this question with 1.018 Billion Board Feet. Hardwood logs accounted for about a tenth of that figure, or 122.6 Million Board Feet.

Figure 4.



Softwood species used as raw materials was nearly exclusively southern pine. As Figure 5 shows, red and white oak combined accounted for nearly 70 percent (by volume) of hardwood species used in 1993.

Figure 5.



Products Produced

For all respondents taken as a group, the primary products (for both softwood and hardwood producers) produced in 1993 in Louisiana were grade lumber and residues from primary product production processes (Table 1).

Table 1.

Top Five Products Produced By Respondents in 1993
(By Sales)
Number of Companies*

Product	No. 1	No. 2	No. 3	No. 4	No. 5	Total Occurrences
Grade Lumber	9	9	7	1	0	26
Bark/Chips/Shavings	3	6	5	2	4	20
Plywood	4	1	0	1	0	6
Treated Lumber/Timbers	3	1	0	0	0	4
Pallets	3	0	0	1	0	4
Landscape Timbers	1	0	3	0	0	4
Cross Ties	1	3	0	0	0	4
Industrial Particleboard	1	2	0	0	0	3
Pulpwood	0	0	1	2	0	3
Poles	2	0	0	0	0	2
Green Lumber	1	0	1	0	0	2
Dimension Lumber	1	1	0	0	0	2
Hardwood Veneer	1	0	0	0	0	1
Pine Veneer	0	0	0	1	0	1
Pallet Stock	0	0	0	1	0	1

* Each cell is the number of companies indicating each product is either their number 1, 2,3,4 or 5 product. For example, 9 companies said grade lumber was their number 1 product and 7 companies said grade lumber was their number 3 product, by sales, in 1993.

Markets Served

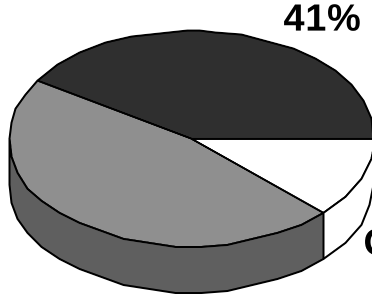
Although the study did not identify customer base characteristics, information regarding market scope and channels of distribution were collected. A majority of respondent companies market their products outside Louisiana to other states (47%), with 41 percent and 12 percent selling products in Louisiana and international markets, respectively (Figure 6).

Figure 6.

Market Regions

Average Percent of Total Louisiana Sales in 1993

(n=33 companies)



It was important to find out why primary solid wood product companies sell their products to customers outside of Louisiana because, compared to neighboring Southern states with similar secondary forest product industry profiles, Louisiana has the lowest ratio of value-added per dollar of value of shipment by the sawmill industry (Table 2) (Chang et al. 1992). Value-added, an important indicator of industry health and success is defined as "a measure of manufacturing activity derived by subtracting the costs of materials, supplies, containers, fuel, purchased electricity, and contract work from the value of shipments for the products manufactured". Thus, value-added equals value of shipments minus production inputs, and represents the amount available for wages, salaries and profits in an industry. Value-added is a better indicator of industry activity than value of shipments because value-added excludes the costs of inputs of other industries (Jacob et al. 1987). The low ratio means that Louisiana is shipping most of its sawmill products away to other states, not adding much of any value to the lumber products that stay in the state, and buying secondary wood products from out-of-state producers. Even if the state would set a modest goal of achieving a ratio of 0.94, the average of Louisiana's neighboring states (i.e., Texas, Mississippi, Arkansas, Oklahoma, Alabama, and Tennessee), the state could have a secondary wood manufacturing industry that is nine times larger than what exists today (Chang et al. 1992).

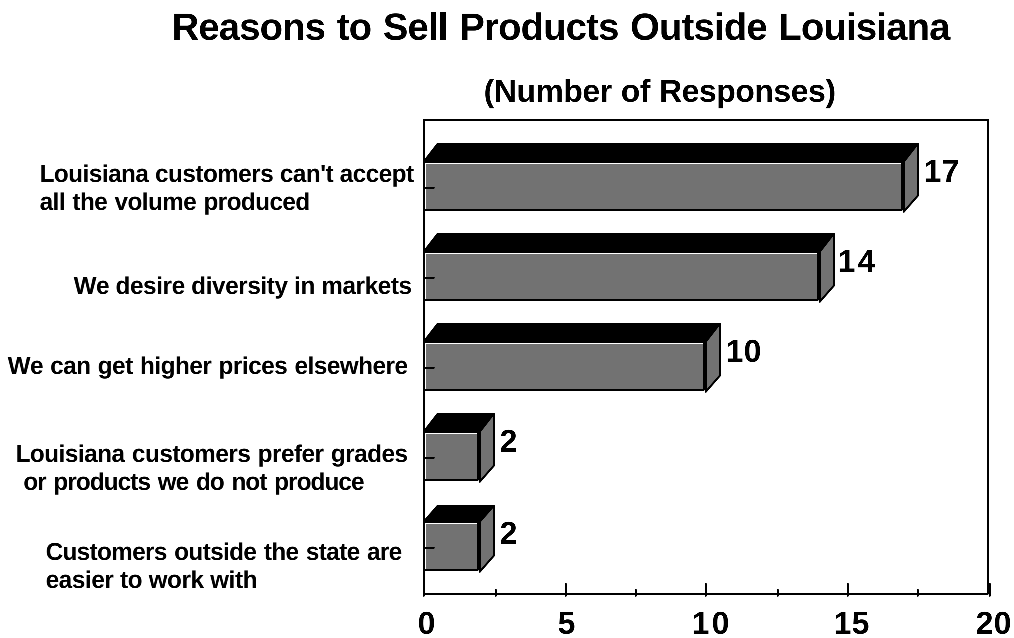
Table 1. Ratio of Value-added by the Secondary Wood Manufacturing Industry Per Dollar of Value of Shipment by the Sawmill Industry in 1987. (Chang et al. 1992)

State	Ratio
Louisiana	0. 11
Texas	1. 65
Mississippi	0.78
Arkansas	0.47
Oklahoma	0.85
Alabama	0.52
Tennessee	1.38
Average of Neighboring States*	**0.94**
Florida	2.50
Michigan	10.79
North Carolina	3.21
Indiana	5.62
United States	**2.05**

* Neighboring states: Texas, Mississippi, Arkansas, Oklahoma, Alabama, and Tennessee

As seen in Figure 7, the main reason that primary producers sell to out-of-state customers is that there is more production than Louisiana customers can accept. The second and third most cited reasons were a desire to diversify markets and the ability to get higher prices elsewhere.

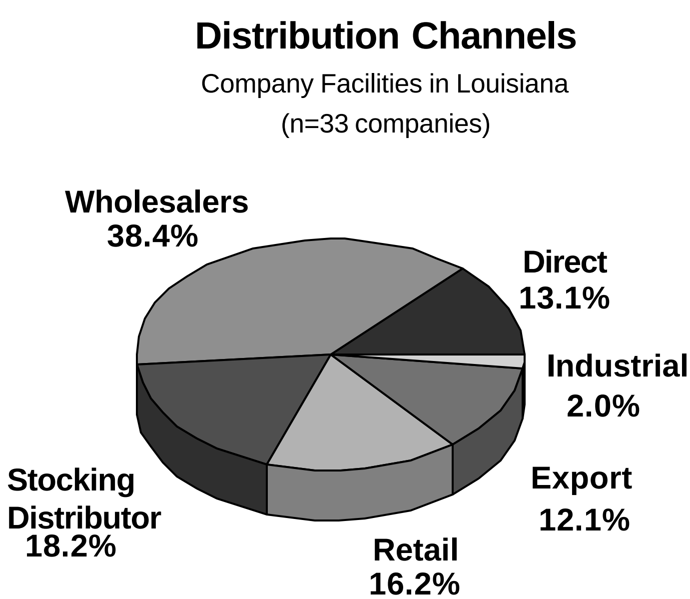
Figure 7.



Channels of Distribution

The far-ranging geographic scope and large size of companies in the primary solid wood products industry in Louisiana lead to heavy reliance on distribution intermediaries to get product to market (Figure 8). The balance is almost equally distributed directly to end-users, through retail channels or goes into export and industrial markets.

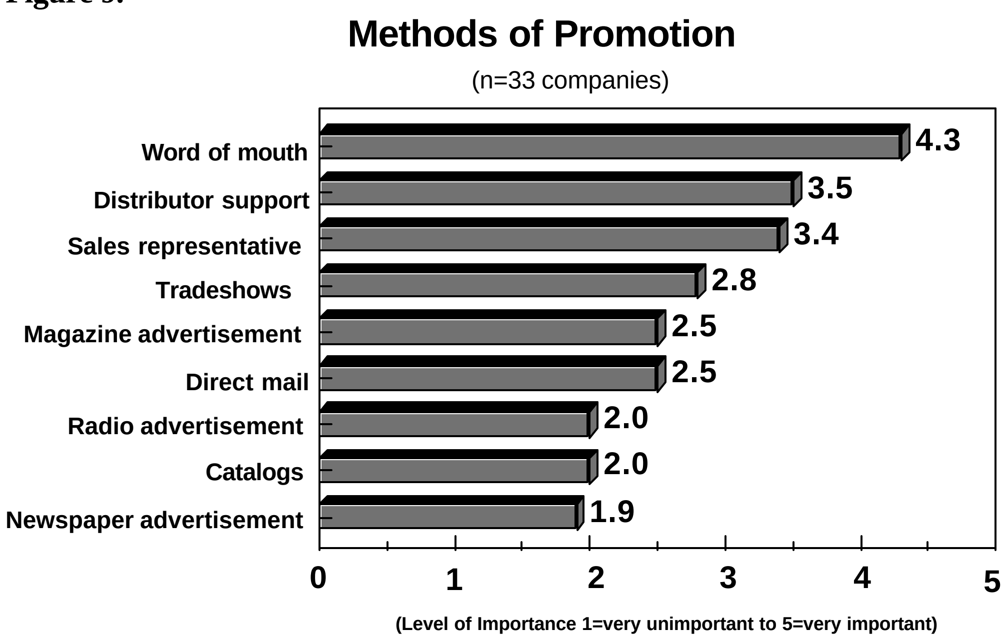
Figure 8.



Marketing

Marketing activities seem to be minimal in the Louisiana primary wood products industry with only 9 companies (27.3%) having any sort of a budget for marketing activities in 1993. Respondent companies that had a marketing budget allocated an average of 4.6 percent of their total operating budgets to marketing activities. The primary promotional methods for respondent company products are word-of-mouth, followed by support from distribution intermediaries and salespeople (Figure 9). The use of other modes of promotion, either printed media, advertising or other forms of outside support are minimal.

Figure 9.



Industry Location Decision Analysis

Overview

Attracting companies to develop a primary wood products manufacturing industry in Louisiana is a complex problem that deserves special consideration because of its social and economic significance. In particular, community action groups and development agencies working to attract wood industries to Louisiana need to know what factors are deemed most important in making location decisions by potential immigrant firms and expansion decisions by established companies. Although these issues have been examined from an economic development perspective (Chang et al. 1992), they have received little attention from a marketing perspective.

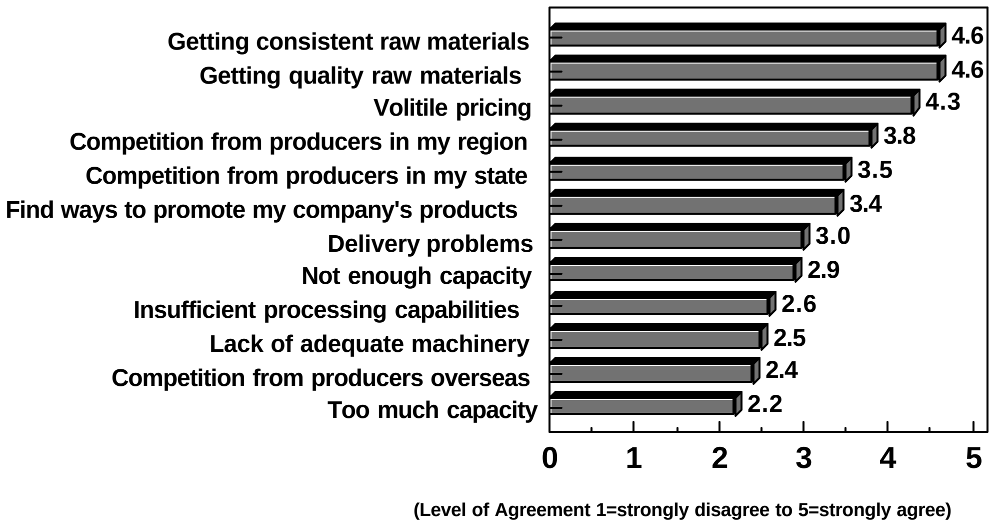
This exploratory study sought to identify the factors critical to success as well as factors that are impediments to the success of the primary wood products industry in Louisiana. Identification of these factors should be used as inputs in developing policies to attract and sustain the primary solid wood product industry. As seen in Figure 10, respondent companies ranked product quality, company reputation and the development of long-term customer relationships as the main contributors to their success. Conversely, the biggest impediments to success for Louisiana primary producers center around raw material issues, pricing and competitive factors (Figure 11).

Figure 10.

Figure 11.

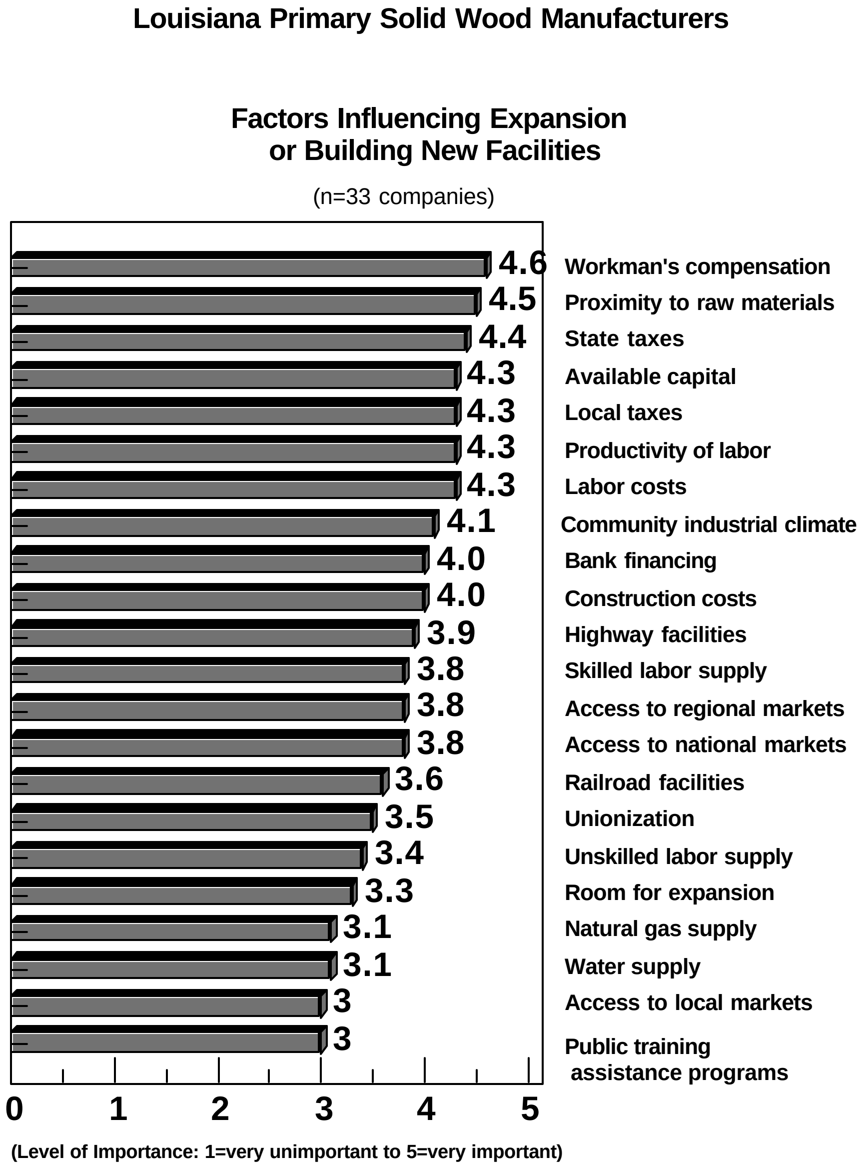
Impediments to Company Success

(n=33 companies)



A question that specifically identified the factors that influence corporate decisions to expand current facilities or build new facilities in Louisiana yielded the results seen in Figure 12. Interestingly, workman's compensation ranked highest followed by issues involving raw materials, taxes, labor costs and financing. Once again, this information should be considered in policy formulation for this industry sector.

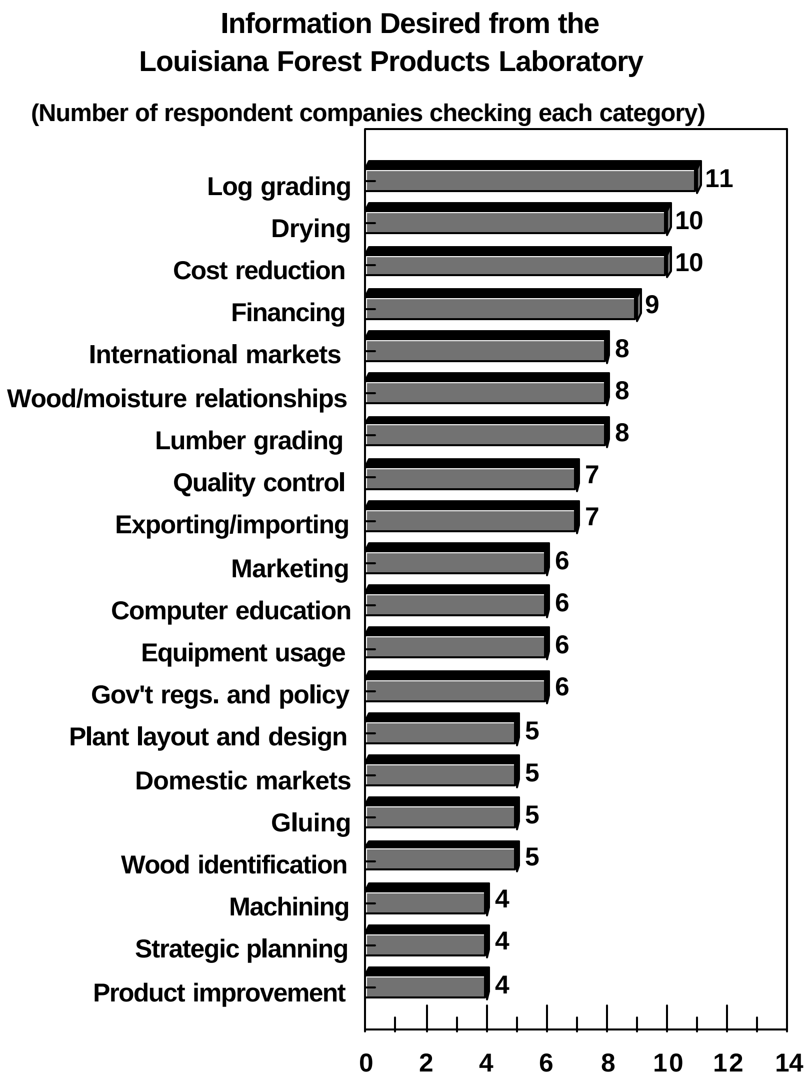
Figure 12.



Outreach Needs

The last survey question identifies information that is desired from the Louisiana Forest Products Laboratory. As seen in Figure 13, there is a wide array of primary wood products industry outreach needs. The top three categories are grading, drying and cost reduction. This information will be useful in tailoring outreach efforts by the Louisiana Forest Products Laboratory.

Figure 13.



Recommendations

This study has revealed a number of issues that warrant further investigation. The following recommendations are intended to stimulate discussion on ways to increase competitiveness and development of the Louisiana primary wood products industry.

1) Identify characteristics of primary wood products industries in states that have similar resource profiles. Success factors as well as challenges and obstacles should be identified with this research.

2) Investigate ways that in-state secondary wood products manufacturers might purchase more output from Louisiana primary producers, thereby increasing the value added contribution to the resource. An example could be an investigation of

the plausibility of developing secondary producer buying and manufacturing cooperatives that could create purchasing and sales/marketing leverage through economies of scale.

3) Expand the roles of the Louisiana Forest Products Laboratory and the Louisiana Cooperative Extension Service as providers of information and training to the primary wood products industry.

Summary

The Louisiana primary solid wood products industry is comprised of 81 companies that produce primarily grade lumber. The geographic scope of the industry markets is dispersed with accompanying long and complex distribution channels. Most companies are production oriented and do not rely on marketing techniques as part of their business strategy. Company respondents identified a number of factors that both contribute to, and are an impediment to growth and development of the primary wood products industry in Louisiana.

References

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