

AN ANALYSIS OF STATE-LEVEL ECONOMIC DEVELOPMENT PROGRAMS TARGETING THE WOOD PRODUCTS INDUSTRY

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ABSTRACT

States in regions with abundant forest resources are developing new approaches to stabilize rural economies and maximize economic contribution. An evaluation of public sector infrastructure resources and private sector capabilities shows that value-added forest resource-based programs are emerging as areas that can contribute to employment growth. In this study, development agency respondents identify program goals and objectives as well as the methods they use to actualize strategic program plans. The primary goals of these programs are to increase employment and attract new industry. Attributes that contribute to successful development programs include having a substantive forest resource base and strong government leadership.

Natural resource industries do not always provide the best opportunity for economic growth and development (11), but where conditions are favorable, economic development of industries based on natural resources is being enhanced by federal, state, local, and private development programs. Many regions are pursuing value-added, natural resource processing strategies to diversify their forest resource sector, aided by state and local industrial development programs (1,9,10,12). Kentucky, Louisiana, Maine, Oregon, Pennsylvania, and Washington are examples of states that are taking advantage of abundant resources to improve economic conditions within their borders (9). One of the prime reasons for this increased interest in value-added processing is the huge shift in traditional resource availability in regions that no longer have access to public timber (Oregon, Washington, California, etc.). Economic planners are attempting to diversify toward secondary processing to sustain employment levels.

Economic growth and development strategies typically center on either re-

taining and expanding existing companies or attracting new industrial investment. In addition, industry development efforts generally focus on value-added secondary processing (dimension products, furniture, flooring, etc.) as opposed to primary production (lumber and plywood). In areas where jobs are in short supply, locally generated jobs in the secondary forest products industry that create transferable skills may offer a viable alternative to forced migration to maintain or increase employment (12). If wage differentials between local forest products manufacturing companies and other manufacturers are not dramatic, many workers would likely choose to stay in communities rich in forest resources. Further, secondary forest products wages often exceed average wages of other jobs in rural areas, adding incen-

tives for recruiting and development efforts aimed at secondary forest products industry companies (12). In addition, companies involved in exporting may offer rural communities added benefits because exports have the potential for enhancing the multiplier effect of forest-based economic activity (2).

This paper reviews a sample of established forest products oriented development efforts in the United States and discusses a study that evaluated wood products industry development policies and programs initiated at the state level. This exploratory study identified elements of successful programs targeting economic development in the forest products industry throughout the United States. Specifically, the study examined how forest products development programs are initiated, planned, funded, promoted, and evaluated. Further research will seek to identify strategies used to implement these elements of success.

CURRENT EFFORTS IN FOREST PRODUCTS INDUSTRY ECONOMIC DEVELOPMENT

Economic development of the secondary forest products industry is a high priority in many areas of the United States. While policies and strategies differ between regions, the common denominator seems to be focusing on regional or state-specific opportunities based on unique constraints or param-

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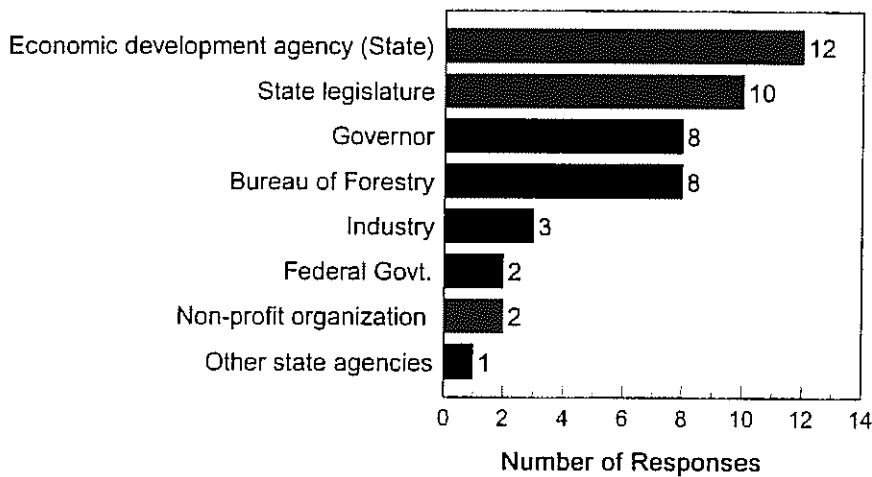


Figure 1. — Initiating entity for funded programs.

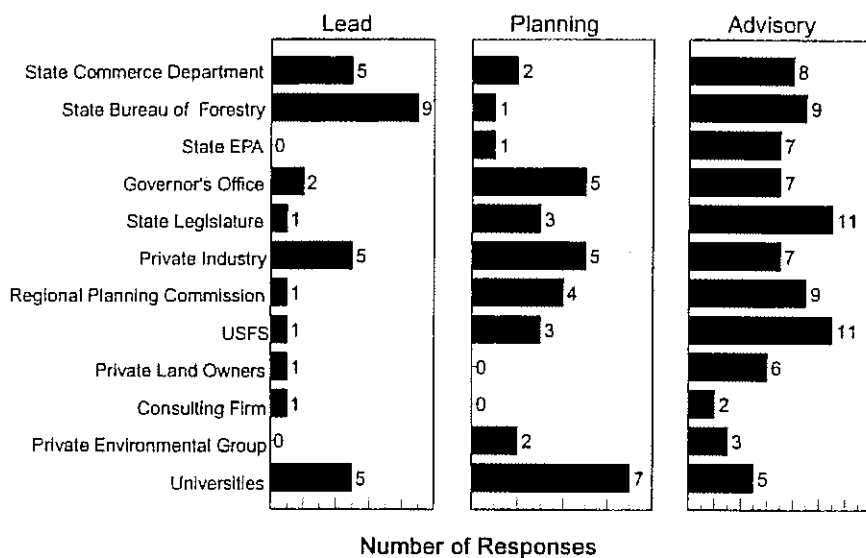


Figure 2. — Roles played by development participants.

ters. The literature reveals a plethora of federal, state, and local programs, most of which lack a history of coordination (2,5,11). Recent thinking calls for greater local input in program development as well as increased local control of implementation and greater coordination among agencies to improve efficiency of operation of the programs being planned or implemented (3,6,7). Following is a sample of forest products sector development programs in the United States. Because circumstances change from situation to situation, we have attempted to identify in broad terms the structures of these programs. Future research will study in depth the specifics of the programs discussed to determine how and why their most important program ele-

ments were identified and implemented.

KENTUCKY

In 1986, the Kentucky Legislature directed Morehead State University to develop a comprehensive forest products industry expansion plan (9). Along with other state agencies and representatives from the forest products industry, a long-range expansion and development plan was created to be implemented over a 5-year period.

Based on the Morehead State University plan, the state established a Forest Products Industry Task Force to continue the planning process in 1988 (14). In 1990, House Bill 417 created the East Kentucky Economic Development and Jobs Creation Corporation. The corporation is budgeted at \$450,000 per year,

with an estimated one-third of its annual allocation targeting wood industry development activities (14). In 1992, a full-time director of Wood Product Industries was added to the staff, funded by a combination of state and local funds.

Additionally, the Cabinet for Economic Development, the Division of Forestry, universities, other state agencies, and local government entities have joined forces to promote the development of the secondary wood industry (13). Based on the Secondary Wood Manufacturers Directory, in the 2-year period between 1992 and 1994, the state realized a 10 percent increase in the number of new companies, with a gain of 3.5 percent in the number of employees.

LOUISIANA

During the 1980s, the demise of the petroleum production industry in Louisiana created a need to diversify the state's economic base. In response to that situation, several economic recovery programs were created.

With regard to forest sector development, Louisiana made a significant investment in the Louisiana Forest Products Laboratory (LFPL) at the Louisiana State University (LSU) Agricultural Center in Baton Rouge and at Louisiana Tech University in Ruston. The laboratory was funded by the Louisiana Legislature in 1992 after a feasibility study indicated the secondary forest products industry represented high economic development growth potential. Housed in the LSU School of Forestry, Wildlife and Fisheries, the LFPL is charged with providing technical assistance and training to all segments of forestry and forest products industries located in Louisiana. Specific strategic areas include marketing, community outreach, and graduate education.

The Louisiana Department of Economic Development (LADED) Office of Business and Development Services also operates a number of economic development programs. Included in the Office of Business Development Services are the Resident Industry Visitation Program, the Match Maker Program, the Quality Management Program, and numerous award programs. While secondary forest products development programs are not specifically targeted by the department, secondary forest products companies may avail themselves of the resources of the LADED.

MAINE

The forest products industry in Maine is the largest single contributor to the state's economy (9). Several economic development programs to promote the industry have been executed by various agencies within the state. The Finance Authority of Maine (FAME) provides financial assistance to natural resource firms within the state through loans, grants, and tax incentives in both the domestic and international arenas.

In addition to the FAME program, in 1987 a grant by the Kellogg Foundation provided funding to establish a database of the forest products industry and its business environment. In 1988, the Department of Environment Conservation, the Department of Economic and Community Development, as well as other state agencies, implemented a program to promote forestry education, technology transfer, and technical assistance.

OREGON

Oregon's Economic Development Department (EDD) implemented the Flexible Networks for Oregon Business, Key Industries Development Program, in 1991. The effort, a tripartite involving the public sector, the business community, and selected industry associations, is intended to enable the development of flexible manufacturing networks (FMN). The Key Industries Development Program sponsors a \$10,000 matching challenger grant incentive to help in the formation of FMNs (1).

An additional effort to stimulate forest sector development was the establishment in 1991 of the Oregon Wood Products Competitiveness Corporation (WPCC). The WPCC was originally funded through the Oregon Legislature but has since reverted to a private sector program with funding supplied by participating wood products industry companies. The mission of the WPCC is to assist the state's secondary forest products industry to become "the finest, most competitive, value-added producer in the world."

PENNSYLVANIA

The Pennsylvania hardwood industry has an immense economic impact. The industry employs more than 90,000 people with over 1,700 hardwood companies (8). With the support of the governor and the state Legislature, Pennsylvania initiated a multifaceted aggressive hard-

wood initiative in early 1989 to elevate the economic yield of the state's forest products industry.

As a result of the hardwood initiative, Pennsylvania has secured several major new hardwood companies and increased employment at existing companies (8). In addition, millions of dollars in state financial assistance has been provided to existing companies within the industry. The Bureau of Forestry and the Pennsylvania State University School of Forest

Resources have played an integral role in the overall hardwood initiative by providing forest management techniques, research, and education.

WASHINGTON

The Governor's Timber Team represents Washington's response to wood industry development issues. Established in 1990, the program assists local companies as well as unemployed timber industry workers. The team, which coordinates with other groups, is comprised of

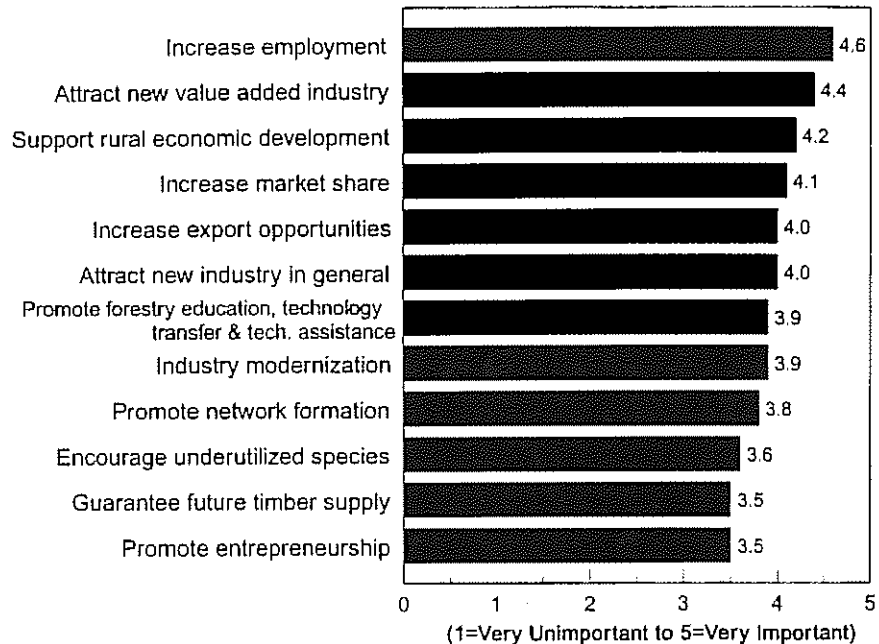


Figure 3. — Goals of economic development policies and programs.

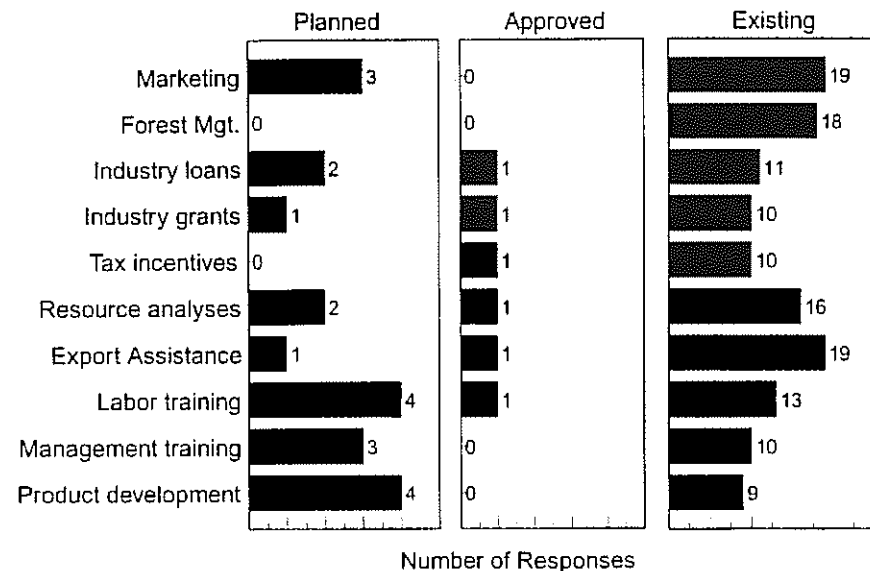


Figure 4. — Elements of wood products industry economic development programs.

state program managers serving wood-related industries who advise the governor and the Legislature on timber industry problems and issues (1).

In addition, the Washington State Legislature created the Export Assistance Center in 1990. Closely tied to the Washington Department of Trade and Economic Development (DTED), the Export Center provides export financing assistance to small and mid-sized businesses (1). The Forest Products Division of

DTED provides policy development, initiates programs, and gives technical assistance to small and medium-sized forest product companies (1).

RESEARCH OBJECTIVES

The objectives of this research were to 1) document the status of policies and programs that target wood product industry economic growth and development by state agencies in the United States; and 2) identify characteristics of successful programs.

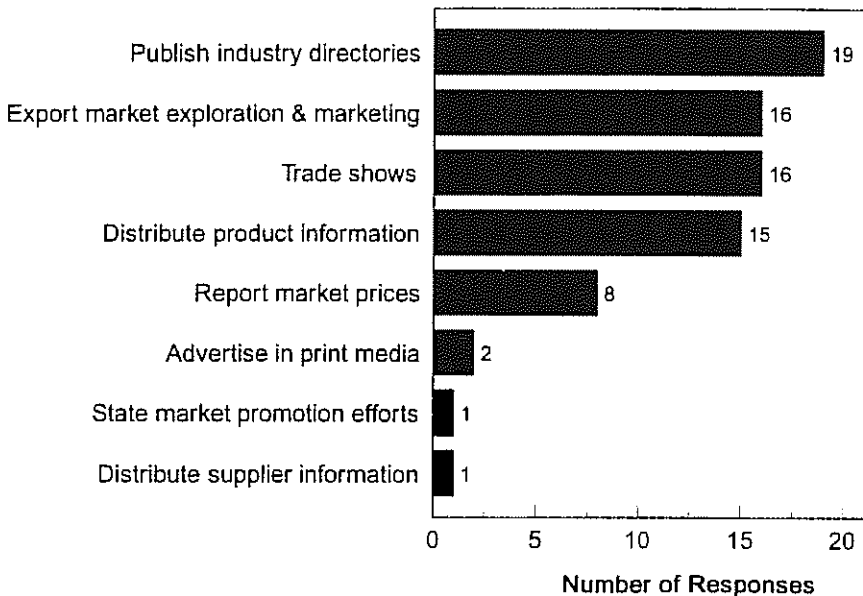


Figure 5. — Methods to promote new markets for existing industries.

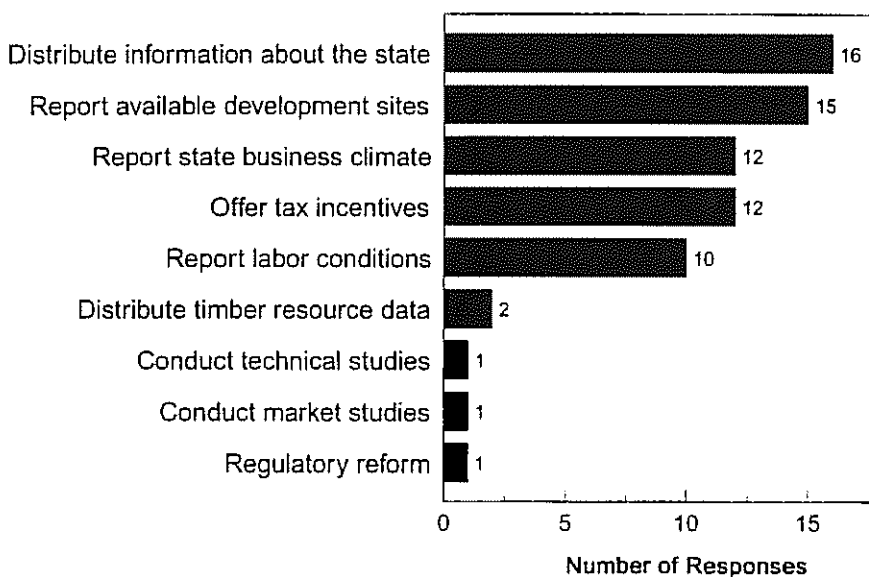


Figure 6. — Methods to attract new wood products industries.

METHODS

An unbiased research effort was designed to focus on perceptions of state agencies regarding programs that pertain to forest products economic development. A thorough literature review of rural economic development and renewable literature was conducted to provide an understanding of the complexity of the issue facing natural resource development programs and to assist in the development of the sample frame utilized in the study. The referenced citations are limited to those deemed most relevant to the study and analysis.

Utilizing directories of state agencies, telephone books, journal and magazine articles, and personal references, a sample containing 37 state agencies and private organizations was identified. Potential survey sites were limited to states that indicated the existence of agencies involved in forest products industry economic development. All sample set members were contacted by telephone to confirm the appropriateness of the sample set. The sample set included state forestry agencies, state economic development agencies, universities, and private not-for-profit entities.

DATA COLLECTION AND RESPONSE RATE

Evaluating the current status of state-level wood products industry economic development was accomplished by using mailed surveys. Questions were adapted from Jones and Koester (9) and designed for economic development agencies to identify the planning, implementation, and maintenance phases of development programs. Survey development and implementation followed methods and procedures recommended by Dillman and described as the Total Design Method (4).

The survey developed for this project included closed-ended, open-ended, rating, and scaled questions. After sample set development and phone calls, a pre-notification personalized letter was sent to targeted recipients to remind them to expect the survey. One week after the introductory letter was sent, a survey and cover letter were sent, followed 1 week later with a follow-up telephone call to ensure the survey documents were received. Those members of the sample set who indicated they had not received the initial mailing were sent a second survey. Two weeks later, a second survey document and reminder letter were sent to non-respondents.

After receiving the survey documents, 3 of the 37 agencies in the initial group determined that their particular agency was not the appropriate agency to respond to the inquiry. New contacts were recommended and the survey documents were either forwarded by the initial agency contacted or new survey documents were mailed to the newly identified contact agencies. Ultimately, of the 40 agencies contacted, 32 (80%) provided usable responses, 2 provided unusable data, and 6 did not respond.

RESULTS

PROFILE OF RESPONDENTS

Eighteen states¹ representing 32 targeted programs in various stages of planning and implementation are represented. The earliest program was started in 1977 and the most recent in 1995. The average funding for the 23 wood product industry economic development programs identified by respondents that answered this question was \$2.4 million. The total for these projects was \$93.4 million and ranged from \$30,000 to \$80 million.

STATUS OF FOREST INDUSTRY ECONOMIC DEVELOPMENT PROGRAMS

Respondents indicated that their states have 15 forest industry economic development programs established; an additional 5 are funded and are in the implementation phase; 4 are currently being researched for best program options; 2 are in development; and 1 has been approved and awaits funding. Development of an existing secondary value-added wood products sector has the highest priority (33% of responses) of development efforts followed by attracting new secondary industry (23%), developing the existing primary industry (23%), and attracting new primary industry (20%). The majority of programs target market development for wood products, rural economic development, and enhanced utilization efforts.

A myriad of agencies and other entities are involved in wood sector economic development efforts. While state economic development agencies are most often the impetus for development programs (Fig.

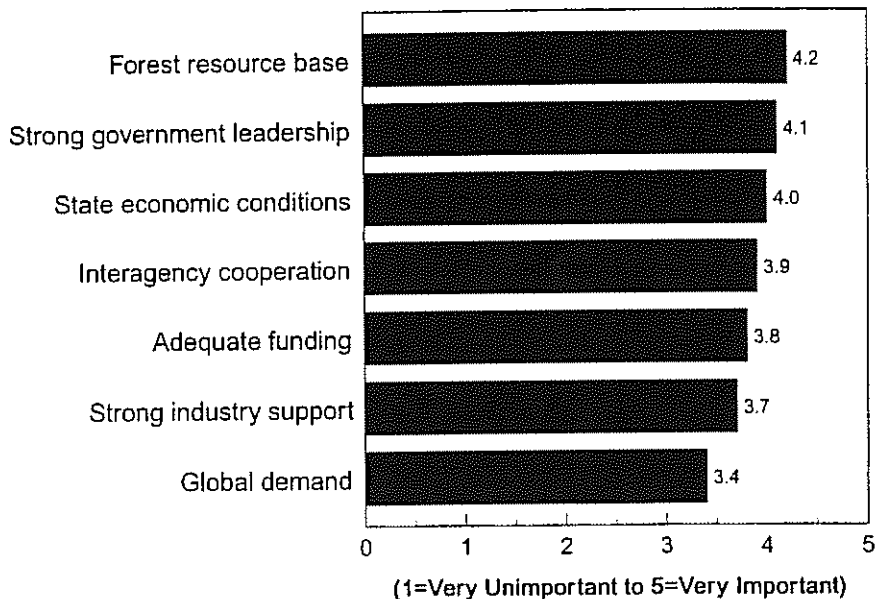


Figure 7. — Success factors in establishing state programs.

Table 1. — Elements of successful wood products economic development programs.

Access to capital
Accurate forest resource information, i.e., forest inventory analysis data
Analysis of existing industry (primary and secondary)
Brokering consultants
Establishing a forest products industry development council
Export assistance
Export directory
Forest resources inventory tracking
Formation of a regional hardwood utilization group
Governor's support
Implementation of an annual survey to assess timber harvest volume in the state
Infrastructure development
International marketing
Labor training
Loan guarantees
Local development councils
Long-range planning
Marketing and promotion
Marketing bulletin and industry directories
Primary and secondary forest industry state directories
Prospects being able to get immediate access to professional assistance
Provide technical assistance on forest products to other economic development entities and practitioners
Provide trade lead contact point for handling inquiries
Providing focal point in state government for forest products industry
Recognition of being a quality information source both in state and out of state
Recruitment of new wood products industry and expansion of existing industry
Relationship improvement between state government and the forest products industry
Rural economic development program
Strategic plan for effective use of manpower
Tax incentives
Technical assistance
University forest products marketing program

1), state government at the legislative and executive levels initiated programs in many states. Beyond initiating development activities, a number of entities are involved in program development. Respondents indicate that state forestry oriented agencies have the highest frequency of leading pro-

gram efforts while universities are most often found in a planning role (Fig. 2). Many entities play an advisory role including, in ranked order of responses, private industry, private land owners, the USDA Forest Service, and state forestry agencies, among others.

¹ Alabama, Arkansas, Florida, Georgia, Indiana, Kentucky, Louisiana, Maine, Michigan, Mississippi, North Carolina, Oregon, Pennsylvania, South Carolina, Tennessee, Texas, Virginia, and Washington.

Table 2. — Prerequisites to successful wood products economic development programs.

Access to forest resource information
Adequate funds for research and market analysis
Becoming established as a part of the state economic development alliance network
Communication between individuals and program participants
Communities realizing that they can no longer depend on outside sources to solve their forest sector development problems
Effective use of resources
Excellent resource base
Experience and knowledge of personnel involved
Focus on concrete issues
Government support
Grant for demonstrative pilot project to test how manufacturers active in a trade association are most likely to invest in new technology
Having goals and working toward them
Identification of barriers to growth
Industry leadership participation
Industry general support
Knowing who existing forestry players are by publishing a state forest products directory
Local presence
Long-term broad-based focus
Organization of a secondary wood products innovative trade association as a delivery mechanism for manufacturing extension
Providing customized resource statistics
Public interest
Receptive industry
Receptive legislature
Sources of outside funding to implement specific projects.
Staff commitment and dedication
Strategic plan in place that avoids a patchy inconsistent approach
Strong industry associations
Sufficient staff
The state's position and experience in world trade

Table 3. — Least successful attributes of wood products economic development programs.

Adequate funding has not been available for all activities seen as needed
Administrative leadership is lacking
Developing independent recruiting contacts has been a slow process
Establishing an aggressive recruiting network among all economic development partners
Extension services to existing forest industry
Follow-through on program activities
For-profit sales and marketing organization has not worked
Getting project-specific funding
Inability to get adequate personnel
Interagency coordination is poor
Lack of available resources to implement strategies
Lack of cohesive interagency cooperation
Lack of local support by other agencies
Lack of printed support materials for this industry segment
Leadership development
Legislative leadership
Level of legislature funding
Loss of dedicated forest products personnel
Loss of Forest Products Industry Development Council
Maintaining a positive image in the public's eye for the wood products industry
Market research capability to identify target industries
Marketing programs have developed slowly
Membership from industry should be expanding at a faster rate
Need better utilization of credit programs
Network development
No new industry recruits
Obtaining full funding of that allocated by the state legislature
Recognition of forest industry value for active recruitment
Recruiting large forest-based industry (primary and secondary)
Still have trouble recognizing that the forest products industry is important

A more detailed view of development goals and priorities can be seen in **Figure 3**, which depicts mean responses of ranked attributes answered using a five-point scale where 1 = very unimportant and 5 = very important. All criteria rated greater than 3.0 (neutral), suggesting that all of the goals listed are important. The differences are in relative response magnitude. The top six categories (4.0 and above) support the notion that development programs in the forest products sector focus on rural economic development and growth. The tactics to accomplish this include attracting new industry and concurrently increasing employment as well as focusing marketing efforts on both domestic and export opportunities.

Figure 4 details specific planned, approved, and existing elements of state development programs. Marketing efforts (marketing and export assistance) are key existing program elements. Resource-based analyses and forest management are also highly ranked program components. Elements of lesser importance include financial incentives (loans and tax incentives), employee training (labor and management), and product development.

Respondents described methods used to develop existing wood product industries and to attract new industry. Existing industry market development (**Fig. 5**) centers on market promotion and research. Publication of industry directories ranks highest, followed by market research to explore export market opportunities, attendance at trade shows, and product information dissemination through other venues.

In contrast, efforts to attract new industrial growth and development centers on "selling the state" to potential participants (**Fig. 6**). In addition to distributing promotional material about the state, specific information on potential development sites and the general business environment is disseminated. Offering tax incentives for investment was also cited as an important method to attract new industry.

PROGRAM SUCCESS AND DEFICIENCY ATTRIBUTES

Respondents were asked to evaluate factors that lead to success in establishing development programs. **Figure 7** shows mean responses for ranked attributes. Respondents believe that the most important attribute is having an adequate forest

resource base to sustain development efforts. This is closely followed by the need for strong government leadership, the need to have favorable state economic conditions, and interagency cooperation. The remaining success factors, all receiving a rank greater than 3.0, include the need to have the program adequately funded, strong industry support, and the need for demand for current or potential products resulting from industry development.

Open-ended questions were posed to respondents regarding the elements that contribute to the success of wood product industry development programs as well as the least successful attributes. **Table 1** conveys specific elements that contribute to program success. Responses are numerous and vary widely categorically. Respondents were asked to list and discuss the prerequisites necessary for success in their development efforts (**Table 2**). Once again, the responses indicate that there is no one basis for success. **Table 3** details the factors that have led to pitfalls and roadblocks in industry development efforts. The list of attributes that hinder development is as long as the list of success attributes. Inherent in these tables is a rich body of information offering insight for future and current development practitioners across a spectrum of issues. The factors listed in **Tables 1, 2, and 3** are diverse, which makes any interpretation about frequency or ranking impossible. The point of the tables is to show this diversity. An examination of strategies used to implement success factors and mitigate program development

problems will be conducted in subsequent research.

SUMMARY

Although national studies indicate that economic development based in natural resources is risky and of limited potential, some states are targeting rural development of the wood products industry. States in regions with abundant forest resources are developing new approaches in an attempt to stabilize rural economies and maximize economic contribution. By combining public sector infrastructure resources and private sector capabilities, value-added forest resource-based programs are also emerging as targeted stimuli for employment growth. However, defining and implementing effective wood products industry economic development programs at the state level are daunting tasks complicated by a myriad of factors. In this study, development agency respondents identify program goals and objectives as well as the methods they use to actualize strategic program plans. Attributes that contribute to respondent program success as well as those that have hindered development may serve as input for current and future forest sector economic development planners.

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