

FRA Gulf-States Forest Products International Trade Center (GULFPIC)

The Louisiana Forest Products Laboratory was successful in working with the Mississippi State Forest Products Laboratory and the Auburn Wood Products Development Center in receiving a Fund for Rural America Planning Grant (FRA) to establish an International Trade Center for the Southern Region. Out of 600 initial proposals, only 35 received a grant. The planning grant will be used to develop a proposal which, if funded, will provide funds to establish an International Trade Center. About 50% of the 35 planning grants will be funded. At stake is up to \$4 million over a 4-year period.

The FRA Gulf-States Forest Products International Trade Center (GULFPIC) will be designed to enhance the involvement and understanding of international trade for southern forest products industries. These industries are very important to rural economies. A regional approach will be taken through the cooperative efforts of forest products associations, universities, and government agencies throughout the Southern states. Since international trade issues are very broad, a combination of research, extension, and educational activities will be developed. This will provide a broader and more complete base of expertise that can be easily accessed by all interested.

Initially, GULFPIC will provide information on foreign markets and

trade issues in forest products. Working directly with forest products companies and other identified groups should provide a better understanding of specific issues. These issues combined with environmental concerns will be used to formulate mission-oriented research and outreach efforts. Resulting information will help increase our competitiveness in global markets. In addition, information will be developed to provide knowledge for long-term strategic planning for rural areas. This combination of efforts will enhance the ability to provide the most short- and long-term information desired.

Inherent in all projects will be the wise use of our forest products to obtain the greatest value added prior to leaving our shores. In addition, a better understanding of forest products that originate outside the US and compete in or supplement our domestic markets will be developed.

Technology transfer will be provided through a comprehensive interactive database that can be accessed through the Internet as well as through direct contacts, workshops, conferences, newsletters, media articles, fact sheets, and reports. In addition, extensive cooperative efforts with university and Foreign Agricultural Service extension personnel will be developed and maintained.



Log Yard Profile: Louisiana Style

When logs and pulpwood are brought to a mill, they are usually stored in a yard until actually needed by the mill. This assures that there will be enough logs nearby to keep the mill operating during wet weather. Dr. Niels de Hoop and Susan Kleit (formerly with the LFPL) have compiled some general descriptive information about log yards in Louisiana. They identified 129 log yards in the state. Thirty-seven responded to the questionnaire, representing both small and large companies.

The yards averaged 18 acres in size (° to 46 acres) with a capacity of 47,700 tons (or about 1600 truck loads). Half of the yards had a one-acre paved portion. Sixty-one percent of the yards handled pine species almost exclusively. The rest handled mixed hardwood species and some pine. Seventeen percent of the yards handled or stored wood chips. Virtually none of the yards handled shortwood.

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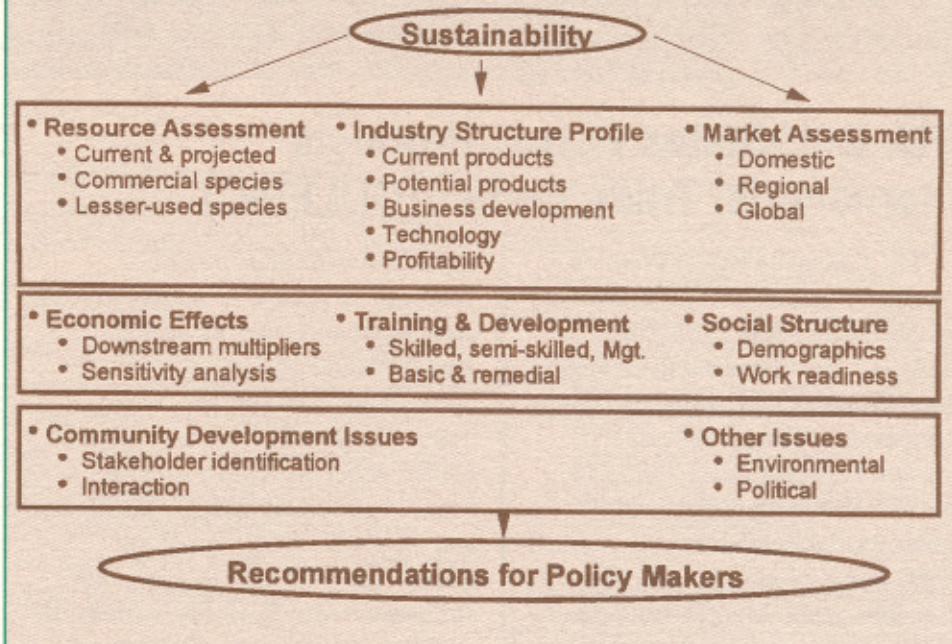
It is now important that we hear from you to learn of your desire to work in the international trade arena as well as provide issues that you would like to have information on. Please contact Ramsay Smith (504) 338-4155 or e-mail wsmith@lsu.edu with comments or for additional information. ■

Lab Researchers Develop Methodology for Forest Products Industry-Driven Economic Development

As is the case with most economic development efforts, forest sector strategies rely on either retention and expansion of existing companies or attracting new industrial investment or recruitment. In addition, most industry development efforts focus on value-added secondary processing (i.e. dimension products, furniture, flooring) as opposed to primary production (i.e. lumber and plywood). In locales where jobs are in short supply, locally generated secondary forest products industry jobs that create transferable skills may offer a viable alternative to forced migration to maintain or increase employment.

This article discusses a systematic and holistic methodology devised by Dr. Richard Vlosky and Researcher Paul Chance at the Louisiana Forest Products Lab for developing a value-added forest sector economic development plan. This approach has been applied to three research studies in Louisiana and is the foundation for recommendations generated by a Governor's Task Force on Forest Products Industry Development in the state. Although this methodology is

Integrated Market-Based Value-Added Forest Sector Economic Development



being applied to the solid wood products value-added sectors in the United States, it is being considered for applications in other countries as well.

Part of a broader planning process anchored on an analysis of

the secondary forest products industry, the approach addresses markets for existing and new products, labor skill requirements of existing employees, and capabilities and training needs for new hires as market-driven job creation occurs. The upshot is to develop sustainable strategies for forest products industry development that will add value to existing resources, create employment opportunities with transferable skills, and foster stewardship of renewable resources in rural communities.

The figure below shows the structure of this approach for forest products sector-driven economic development. The concept of sustainability of resources, industry development, and markets are foundations of the model and research approach. All components need to move in tandem and in a coordinated fashion for successful forest sector development to occur. ■

Log Yard Profile: Louisiana Style

(continued from page 1)

While most yards featured both storage and handling of logs, 25% of the yards were used exclusively for storage. Almost three-quarters of the yards utilized sprinkler systems for long-term storage (without a system to keep logs soaked, pine logs can begin to spoil in as little as two weeks; hardwoods usually last longer). Log yards were found on virtually all soil types.

Almost three-quarters of the yards had a stormwater pollution

prevention plan in place. About two-thirds of the yards stored an average of 3,000 gallons of fuel, 564 gallons of lubricants, and/or 23 gallons of solvents.

Two-thirds of the yards had their stormwater runoff gather into 1 to 5 discharge points before leaving the site. Over one-half had the water enter into a ditch.

For more information, contact the LFPL at (504) 388-4255 for current papers on the study. ■

Studies on Oriented Strand Board Underway at the Lab

A research project aimed at investigating dimensional stability and durability of oriented strand board (OSB) is underway at the LFPL under the direction of Dr. Qinglin Wu. The Louisiana Board of Regents, through its Louisiana Educational Quality Support Fund - Research Competitiveness Subprogram (LEQSF-RCS), provided \$41,600 for the project. In addition, the USDA National Research Initiative Competitive Grants Program (NRICGP) has committed \$49,000 to the project. Michigan State University (through Dr. Otto Suchsland - a leading international expert on the subject) and a local OSB mill in Louisiana have been cooperating on the project and provided part of the testing panels.

OSB is a structural panel used as sheathing, floor underlayment, and I-beam web in building construction. Based on the current industry announcements, OSB capacity will reach 18.4 million m³ in 1997 with production projected at 15.5 million m³. The largest OSB share is located

in the southern U.S.; capacity is projected to be 6.8 million m³. The product can be made with small stem wood from various softwood and hardwood species, which allows forest owners recover greater value from their timber resources.

OSB swells significantly when the product is exposed to high humidity conditions. The swelling is often accompanied with permanent strength loss and sometimes product failure. This has led to lawsuits against major OSB manufacturers in the country. The purpose of this project is to quantify the effect of the processing variables on the swelling behavior of OSB and to assess the extent of associated strength/stiffness loss.

In the study, single-layer and cross-laminated three-layer OSB panels were manufactured in the laboratory under various combinations of flake orientation, density, resin content, and for the three-layer boards, face-to-core weight ratios. Tests will be conducted to determine flake alignment distribution, vertical

density gradient, linear expansion (LE), thickness swelling (TS), bending stiffness and strength, and stress-wave modulus. Effects of the processing variables on the swelling and strength retention properties of the OSB will be examined and quantified. Using the data from the single-layer panels, a mathematical model will be developed to predict LE and TS of the three-layer, cross-laminated panels of different constructions. Through model analysis, importance of the various factors' significance in controlling the swelling behavior of the OSB will be investigated.

It is expected that a successful completion of the project will lead to a fundamental understanding of the controlling mechanisms of the swelling behavior in OSB. This will allow OSB manufacturers to adjust the manufacturing process to minimize their effects. ■

Search Begins for Forest Products Processing Professor

The Louisiana Forest Products Laboratory is in the process of searching for an Assistant Professor in Forest Products Processing. The responsibilities of this position will include conducting forest products processing research activities related to the development of the wood-using industry in Louisiana, primarily small secondary manufacturing firms. This will help these businesses become more efficient in processing and more competitive in the workplace. The person selected will establish a close working relationship with the forest products industry in Louisiana as well as with other public and private agencies and professional organizations.

The position will be filled as soon as a qualified candidate is found. ■

FAREWELL

Dr. Rado Gazo, Post Doctorate Researcher at the Louisiana Forest Products Laboratory, has accepted an Assistant Professor position in Forest Products Processing at Purdue University in West Lafayette, Indiana. While he was with the LFPL he helped initiate a study analyzing types of equipment and machinery found in the secondary industry in Louisiana by manufactured product and company size; developed a bar-code based labor and material tracking system; studied how employee training affects productivity and manufacturing costs in the woodworking industry; completed a study on a 32-mm cabinet system for a local cabinet maker; completed a comparison study of different software products for improving productivity of designing, drawing, optimizing, organizing etc. in a cabinet shop; and completed an Electronic Catalog (electronic version of Louisiana Collection, a furniture catalog published by the Louisiana Furnishings Industry Association on floppy disk and on the Internet).

We want to wish Rado good luck in his new job! ■



Calendar of Events And Workshops

October 4-8, 1997 **1997 Society of American Foresters Convention.** Held in Memphis, Tennessee. For more information contact the Society of American Foresters at (301) 897-8720, Ext. 109.

November 12-14, 1997 **ScanPro '97.** 7th International Conference on Scanning Technology and Process Optimization for the Wood Products Industry. Held at the Adams Mark Hotel, Charlotte, North Carolina. For more information call (415) 905-4940.

September-December **Louisiana Furnishings Industry Association (LFIA)** holds regular monthly meetings at the Ponchatoula head quarters. If you are interested, call LFIA at (504) 386-0471 for the date and time.

January 27, 1998 **Louisiana Cooperative Extension Service Workshop on Improving Wood Utilization for Small Wood Products Businesses.** Held in Lake Charles, LA at the Calcasieu Parish Extension office. For more information contact Jerry Whatley, County Agent, Calcasieu Parish, at (318) 475-8812; Thomas Strawn, Area Agent (Forestry), at (318) 639-4376; or Dr. Todd Shupe of the Louisiana Cooperative Extension Service at LSU at (504) 388-4087.

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