

Indiana's Hardwood Industry

Input to 2008 ISDA Strategic Planning Discussion through PU AGEC
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Retrospective of the Past 2-3 Years

Indiana's hardwood industry was subject to severe competition from Asian furniture manufacturers and suppliers of hardwood lumber and panels. This resulted in plant closures and downsizing, especially in the veneer sector. The easy gains in lumber productivity have been made with changes from circular to band saws, and some automation in grading and sorting lines. Decreased demand reduced volume of timber harvested along with prices, except for a few species with strong log export demand. Reduced lumber demand resulted in lower prices, however, stumpage and log prices declined less than proportionately because timber owners' reservation prices are inelastic. Signs of demand for certified lumber, veneer, panels, and furniture and fixtures became apparent, however, the industry has been slow to respond. The industry remained highly segmented with little vertical or horizontal integration. Scattered supply sources, bulky raw material – logs - and high transportation cost restrict economies of scale. Some lumber processors out sourced lumber production to small portable band contract mills that saw logs provided by lumber processors.

Next 2-3 Years

These trends will continue. Significant improvement in markets can't be expected until the US housing market returns to at least 1.25 million starts annually. However, niche markets will grow rapidly for green certified hardwood products, including lumber and veneer, as well as furniture and fixtures produced from certified wood products in facilities with chain-of-custody certification. Green certification for buildings under LEED and similar programs will create a demand for locally produced and certified dimension lumber. Increased efficiency gains will be needed to reduce labor cost. Since logs are the largest cost for both lumber and veneer producers, technology that maximizes the value added to each log will be adopted. This will be possible with increased sorting and merchandising of scanned logs.

Actionable strategic vision for the area - Viable economic development policy

Generally - ISDA should conduct a highly responsive program that pulls together all available resources to respond to rapidly changing conditions for specific segments of the industry, and for individual firms. Activities should be expanded beyond market development. Likely scenarios for which responses will be needed in the next 2 to 3 years include (1) substantial declines in lumber exports, (2) increased kitchen cabinet exports from Asia, (3) further declines in the dollar, (4) increased demand for wood for fuels, *inter alia*.

Timber production – Ownership pattern continues to evolve to smaller tract sizes as landowners maximize liquidation value by parcelizing in response to the demand for small tracts for homes sites. This reduces the number of owners interested in management for timber production. In addition, recent changes in assessment procedures are drastically increasing the property tax liability of non-classified land. This sector is also adjusting to increased concern for management and harvesting practices that meet international environmental quality standards. These take the form of “green certification.” Although the demand for certified wood is increasing, Indiana is not able to capture the economies of scale available for certification of large ownerships of private land. Export markets for logs, lumber, and veneer are a major factor driving timber prices. Certification of the timber itself, and the firms involved in the chain of custody of these products from the woods to purchase by manufacturers of final products is crucial if export markets are to remain viable. The timber that is available for purchase at some price is price inelastic, that is increasing the price offered for timber results in a proportionately lower percentage increase in the volume offered for sale, or at which owners are willing to sell. Part of this inelasticity is due to landowner’s reservation price which is determined in part by its *in situ* value given for its private recreational use.

Timber and log procurement - Although owners selling with the assistance of a professional forester by taking bids receive a higher than average price than those taking the price offered by a single buyer, the viability of the industry is determined by the average cost of timber and

logs for individual firms. Loggers and mills are currently caught between a highly elastic lumber market and the inelastic timber and log market. The resulting cost squeeze is a significant factor in the downsizing of the industry.

Harvesting – Logging firms must become more sophisticated to remain profitable. However, it's likely that there will continue to be a role for individual operators who are undercapitalized and enter and exit the industry based on availability of other employment opportunities. Higher unit costs result from harvesting smaller tracts and selling to a larger variety of log buyers. Merchandizing is required for loggers to be competitive in the stumpage market. Selling logs into the certified wood market will require BMP training and documented compliance, and chain of custody certification. Where harvesting involves clear cuts, as opposed to the selective harvesting dominant in Indiana, firms have been able to reduce unit costs by replacing labor with capital in the form of highly efficient equipment to cut down trees and process them into logs. The procedures used in Indiana have not fundamentally changed since the introduction of rubber tired skidders. Trees continue to be felled and bucked by chain saw cutters working on the ground and subject to risks not incurred by operators in the cabs of modern automated equipment. Unless there's a dramatic change in how timber is managed in the state, it's unlikely that this will change dramatically, but opportunities for use of modern equipment should be explored.

Lumber industry – The major need is increased automation. This generally means increasing the capacity of large mills, however, there will continue to be role for small capacity mills located close to the source of logs, and shipping green lumber to larger mills and concentration yards. These small mills are typically 1 or 2 person part-time operations that do not directly pay for most of the required labor since the operator is the owner. Conversion to band saws with thinner saw kerfs, computer controlled head saw and edgers have been adopted in most of the major mills. Some automation in the grading line is available, and drop sorters are used in a few

mills, but by-and-large the system used to grade and sort lumber has been resistant to automation.

Veneer industry – Although this sector has adjusted to export demand by changing slicing, trimming, and packaging practices, additional efforts are needed, including slicing thinner. Most importantly, they must have access to certified logs, and receive chain of custody certification to retain traditional markets that now require certified product. This is necessary to compete against log export buyers. Increased automation is also necessary to the extent possible given the amount of hand work required.

Wood residue utilization – The strategic focus must remain on value added activities, but these should include adding value to by-products by direct conversion to energy, cellulosic ethanol at some point, landscaping products, and other uses. The greatest need is to assist in bringing producers and users together within reasonable travel distances.

Specific Programs (e.g., policies) that should be advanced to meet this vision

Timber: (1) Increase the acreage of private forest land that is FSC certified using group certification procedures to maximum possible extent. Promote certification on other private lands with cost share payments for acreages above a specified minimum. (2) Facilitate markets that provide payments for environmental services from forest land. (3) Promote green building standards to increase demand for locally grown wood products. (4) Promote the development and manufacture of certified dimension lumber for local markets. (5) Broaden the definition of “agriculture” for property tax assessment purposes to reflect multiple use management of forest land. (6) Promote the use of professional forestry assistance.

Logging: (1) Facilitate training for loggers in BMP’s and chain of custody certification. (2) Investigate the potential for increased mechanization of logging by trials of a range of equipment in a variety of terrains and timber management methods. (3) Investigate the

potential for tree-length logging with bucking at log concentration and merchandizing yards offering the potential for achieving the economies of scale required for log scanning, green wood fuel, and unitized shipments of logs sorted by end use.

Lumber: (1) Investigate ways to assist firms to become more efficient in terms of sourcing, processing, and targeting market niches, including certified wood markets, (2) promote chain of custody certification for mills producing grade lumber, and certified hardwood dimension lumber, (3) seek opportunities for firms to partner in mutually beneficial ways while maintaining individual autonomy, and (4) expand the branding program to include certification logos for qualifying firms.

Veneer: (1) Promote chain of custody certification to allow mills to sell certified products to green markets, (2) Encourage firms to participate in the Indiana certified branding program and incorporate certification logos for qualified firms.

Furniture and Fixtures: (1) Facilitate the adoption of mass customization for cabinet shops and other small capacity firms, (2) facilitate the adoption of chain of custody certification for major manufacturers servicing large markets.