

# **The Forests and Wood Products Sector in Appalachian Kentucky:**

**What We Heard and What We Learned**

Summary Report on Regional Learning  
Project for The Ford Foundation



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# Background on the Process

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For almost a year, a group of individuals representing diverse non-profit organizations committed to rural economic development has been engaged in a discovery process supported by The Ford Foundation and facilitated by Yellow Wood Associates. We have been exploring sustainable economic development practices that offer hope for rural communities and regions. When we talk about sustainability, we are focused on strategies that generate positive economic, environmental and social outcomes for rural places — often referred to as the Triple Bottom Line. By examining sustainability within the context of our own organizations and fields of interest, we have learned a great deal about the questions that need to be addressed and the work that needs to be done in order for rural places to participate in economic development that helps them become more resilient and generate wealth that improves their lives. But we also found ourselves limited by discussions that were not rooted in a common place and sector — bringing us to the forestry and wood products sector in Appalachian Kentucky.

With the support of one of our member organizations, MACED, we designed a regional learning opportunity focused on the forests and the wood products sector in Appalachian Kentucky. The goal of this field work was to bring members of the group together to learn how people engaged in a specific sector in a particular place viewed the opportunities and challenges associated with that sector. We hoped to achieve two very concrete outcomes from this learning process:

1. Develop insights into the forestry and wood products sector in Appalachian Kentucky related to the opportunities for achieving more sustainable outcomes within the sector that could be applied to our broader discussion of sustainable rural economic development.
2. Provide insights that would be useful to MACED in its ongoing economic development work in the region and this particular sector.

This latter outcome was important since we wanted this field experience to result in something of potential value to the region and the sector, not to simply provide a learning opportunity for our group.

This report is designed as a first step in bringing some of the value from the field visit back to the participants. The first section shares what we heard from the diverse individuals who agreed to share their time and insights with us — landowners, foresters, primary and secondary wood products producers, individuals engaged in education and economic development.<sup>1</sup> The second section shares what we learned from this process — some of the insights we gained when we put together what we heard throughout our visit.

As with most reports, however, there is a caveat to be added. This learning project was designed as a way for our group to quickly get grounded in a particular rural place and sector. It was not meant to be a thorough, in-depth case study of the forestry and wood products sector in Appalachian Kentucky. While we heard from many voices during our short visit, some were noticeably absent — for example, we were unable to talk with loggers or with workers in wood products companies, both of whom are pivotally important to this sector. A more focused case study of this sector would require interviews with a broader cross section of secondary products producers, large and small, and their employees, as

<sup>1</sup> See list of participants in focus groups and individual interviews at the end of this report.

well as with landowners, loggers, foresters (both public and private) and other service providers across the region and the state. What this report contains is an accurate reflection of what we heard from the gracious participants in our interviews and focus groups. What we learned provides a glimpse into the importance of this sector to the region and suggests opportunities for learning more in the future.



## What We Heard

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Kentucky and its Appalachian region have large forested areas with diverse and valuable species, making this a very valuable asset in the long-term. However, its condition is significantly degraded and under threat.

Years of poor logging practices, including high grading, have significantly diminished the vigor of the forests. That has made them highly vulnerable to damage from disease, ice storms, droughts, fire and other disturbances. It has also left a lot of low-quality wood in the forests. Yet the region is heavily forested, particularly in eastern Kentucky, and the data suggest it is experiencing net growth overall. There is some perception that growth is different in different parts of the region — for example, more gain in non-coal counties than coal counties because of the impacts on the forests of strip mining.

There is very little active management or awareness of forest management in the state, and the region faces the challenges of significant fragmentation of private ownership into small plots and absentee ownership of larger tracts of land. There is little economic incentive for landowners to manage their land.

Kentucky's forestland is overwhelmingly privately-owned, most often in small plots that are held by families. Southeast Kentucky has the highest percent of forested acres and the fewest acres involved in management. Absentee owners are also prevalent and lack a personal relationship to the land — their ownership is most often associated with coal mining, for which the trees are cleared in the case of strip mining or mountaintop removal (and only sometimes harvested and sold). But some landowners have a profoundly personal connection to their land and a deep commitment to its legacy. The land has been in their family for generations — “It's in my soul to grow wood. I care what I leave to my children and grandchildren.” According to the Kentucky Woodland Owners Association, forest land that has not been managed is only 25 percent as productive as it could be. However, those who are managing their land are doing so for more than the economic benefits, because you “can't afford to grow a tree from an economic standpoint.” “I really believe in trying to grow good timber — not for money but for the good of the country, the good of the people down the road.” When management plans are developed, they often are not implemented because of the cost associated with them. Many landowners see property taxes as a challenge, and the long timeline to grow valuable trees (80 years) forces many landowners to harvest unsustainably to generate quick cash. Arson and timber theft also continue to be issues.

Kentucky has reduced the infrastructure of support for both forest management and wood industry development.

The Kentucky Division of Forestry has 25–30 people to help with stewardship plans for 11 million acres of forests; at one time, the division had three times that number but has faced budget cuts.

Their services are free, but there is a long waiting list to get a forester to come out and help develop a management plan. A task force recently recommended hiring 36 new positions to fill the demand, but positions were reduced instead. There are only 19 consulting foresters in the entire state, and many people are unable or unwilling to pay for those services. The state also at one time had a wood products competitiveness corporation, which provided assistance and networking support for secondary wood companies, and a wood products marketing specialist in the Department of Agriculture, but both have been eliminated. Many companies do get training and other help from the University of Kentucky's forestry extension service.

### The primary wood industry faces significant consolidation in a tight market and challenges in finding loggers to provide wood.

Most sawmills in the state are family-owned and small, employing 5–10 people. Medium to larger mills are becoming more prevalent as smaller mills can no longer survive. More successful mills are integrating newer technologies that are cutting costs, and lots of smaller mills are going out of business. Two of the largest sawmills in the state are in eastern KY. Larger mills have foresters on staff and some own land to provide a portion their own wood. Kentucky is processing and drying more wood than it used to— beginning to add value to the wood rather than shipping raw lumber.

### The secondary wood industry has experienced some growth in recent years because of access to the resource, but faces serious challenges with the housing slump and has had less success gaining a foothold in eastern Kentucky, where the resources lie.

Kentucky traditionally has had little secondary wood industry compared to the volume of trees logged, and competition from China has hurt this industry. It has also been hurt by changes in style demands, particularly as there is less interest in oak which is the most prevalent tree species in the region. But Kentucky now has a solid flooring industry and, to a lesser extent, cabinets, millwork/molding, pallets, railroad ties, barrel staves and other products. Secondary wood products are an important employer, but are defused across the state and have a low profile. As a result, the sector has been relatively neglected by economic development officials. Industry tends to be concentrated in the Louisville area and in London/Somerset, while eastern Kentucky (the home of most of the trees) has few facilities. Many secondary wood companies are smaller homegrown businesses serving a particular niche or niches; others are branch plants of national companies that choose to locate in the region to be close to the wood basket. Workers compensation costs are a challenge. Some argue that the key to the industry's success is finding the markets for the product, and technology is seen as important to staying competitive. "Technology in woodworking business is like oxygen to your body."

### Markets for low-quality wood and wood waste are seen as emerging and potentially important to the region.

Years of high-grading have led to the prevalence of low-grade and small-diameter trees in the forests of the region which need to be thinned, but there are inadequate markets and incentives for those trees. Many see the state and some of the existing companies as having inappropriately discouraged the development or location, in the past, of new companies that would utilize that low-grade wood. But many see the need to develop those opportunities, including for biofuels and biomass-based electricity production. It was noted that the coal industry would actively oppose such efforts, and that there are risks and unintended consequences in terms of promoting the harvesting of low-quality wood without putting into place safeguards for sustainable harvesting. Existing wood waste will be insufficient to meet

the biomass for energy needs since most wood industries in the region reported that while they previously dealt with mountains of wood waste, they are now finding markets for that waste — in animal bedding, industrial briquettes, paper, wood pellets, and other products. Some smaller companies are not utilizing or gaining value from their waste, but many larger companies are.

**There is increasing interest in certification and green products, largely because there is expected growth in future market share rather than any existing price premium. Certification of land is challenged by the cost of certification coupled with the fragmentation of land ownership.**

The wood products industry in the state is increasingly engaging with and learning about certification issues, although there is very little wood that is currently certified in the state. Those firms that are exporting, particularly to Europe, are more interested in certification because in those markets Forest Stewardship Council (FSC) certification is valued. The paper industry has done more because markets demand it. Certification is in some cases — especially with American Tree Farm and Sustainable Forestry Initiative (SFI) — being driven by an interest in doing the right thing and showing oneself in a good light. There is concern that the state will miss out in the growing adoption of LEED (Leadership in Energy and Environmental Design) certified building standards because of its preference for FSC-certified wood. The state must deal in some way with the costs of certification for its many moderate-income private landowners who with small tracts will not be able to easily afford certification. There is functionally no FSC-certified land, about 800 American Tree Farm-certified properties, and only one SFI-certified ownership in eastern KY.

**Logging is a business where the economic challenges are overwhelming, making it more difficult to sustainably harvest the wood needed.**

Logging is most often done in family-owned businesses with an average of 2–4 employees. The economic challenges faced by these loggers are almost insurmountable. Workers compensation premiums for non-mechanized jobs are about equal to wage costs, fuel costs are significantly higher than they once were, and the price of wood loggers can get is low because of the current abundance of wood and the slumping market. An estimated 85-90 percent of non-mechanized loggers avoid workers compensation costs either by operating illegally or organizing as independent contractors. Logging is particularly costly in eastern Kentucky, where the cost of production is 50 percent higher. Those higher expenses include the haul cost to sawmills, the cost of building roads and the topography which requires more non-mechanized jobs. The Forest Conservation Act, through the Master Logger program, requires basic training for those who do logging and requires following Best Management Practices (BMPs). The Certified Master Logger program provides a new opportunity for better logging practice. Many foresters say that there are too few highly-trained loggers operating, and too many people who take advantage of landowners and degrade the resource.

**There are significant workforce challenges and training gaps in the wood products industry.**

Many in this sector report trouble finding both skilled and unskilled labor. At the unskilled level, pay is fairly low and some companies do not provide health insurance; there is high turnover and too many people cannot pass drug tests. Companies report problems with basic math skills and reliability. There are some training opportunities for higher-skilled jobs that are utilized by companies through industry associations and University of Kentucky extension. However, there was once a forestry tech program



at Hazard community college that provided hands-on production skills and was viewed by some as successful, but has been eliminated. Some industries have hired immigrant workers, but a large wood products industry in London/Somerset was recently raided by immigration officials and 12 undocumented workers were deported. It is important to note that these labor force issues do not reflect any input from employees of these firms; a more thorough understanding of these issues would require interviews with workers, young and old, to get their sense of this sector as a source of employment and career advancement.

## There are generational issues related to views on the importance of the sector, the importance of forest management, and opportunities for employment and advancement in this sector.

Given the history of the forest sector in Appalachian Kentucky — heavy cutting at the beginning of the 20th century — and the slow growth of the hardwood forest, there is no culture of management of forest land in the region. Establishing that culture requires training on management practices but also may require a generational shift in ownership of these forest lands. At the same time, there is a need to educate the public, policy makers, landowners and secondary producers to establish the view “of the forest as a sustainable resource” that is vitally important to the future growth of the wood products industry. There is also a generational issue with respect to wood processing. “The industry has run from change for 200 years.” Technology is generally not used to its greatest advantage by processors. “That culture will change with the new generation coming along.”

# What We Learned

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Through this learning process, we were able to talk with people who are at different places in the sector—from landowners to cabinet producers, from sawmill operators to foresters, from molding manufacturers to economic developers. In some cases, we were able to bring people together to exchange ideas, highlighting the connections between them. In other cases, we were able to see these connections as we held individual interviews throughout the region. The following are general insights gained through this process, including some specific actions that were raised as part of our discussions.

## Incentives and new institutional models may be needed to encourage sustainable management of forest lands.

Figuring out how to aggregate land so that owners can collectively manage (with the help of a professional forester) and then certify (by sharing the cost) their forest lands appears to be a critical first step in moving toward a more sustainable forest resource. It is not practical or financially feasible to manage small land tracts (e.g., 30 acres) responsibly given current markets and supports. However, this is not just a matter of providing incentives; this is a question of social structure and social relationships and cultural attitudes and practices. And figuring out how to aggregate the raw resource in this way is critical to the ability of wood products companies in the region to respond to the development of green markets— e.g., it is hard to respond to LEED building opportunities if there is no certified timber coming from Kentucky. Specific actions that might be taken to address this challenge include:

- Creating forest landowner cooperatives that bring together multiple forest tracts and put them under a single forest management plan or somehow share the costs of certification.

- Enacting legislation similar to the Indiana Classified Forest Act to create a tax incentive for better forest management.
- Promoting development of markets for ecosystem services, including carbon credits and water quality, and developing an education campaign after MACED's first sale of carbon credits.
- Promoting markets in other sustainable uses of land like hunting rights and low-impact recreation.
- Creating in statute a permanent Forest Health Task Force to examine, bring attention to, and address the issues related to long-term forest health and forest management.

## Market development is needed to address the needs of both forest landowners and wood products producers.

From all sides, we heard about the challenge of the market — the lack of a market for low-grade timber is an obstacle to selective timbering that could improve the resource; the lack of a market for eco-services is a disincentive for sustainable management of the resource; and the lack of demand for green products serves as a disincentive to producers. Much of the secondary wood products market is located outside eastern Kentucky and sometimes outside the US. “We’re exporting our wealth.” “Government should provide incentives for harvested wood to be turned into secondary products in the region and shipped elsewhere.” Market development appears to be a key opportunity for achieving more sustainable practices in the sector and increasing the wealth-creating opportunities for land and business owners. Several concrete suggestions were to:

- Promote development of stronger markets for low-grade wood with an incentive to harvest that wood, including through co-generation of wood and coal, woody biomass-based electricity production and ethanol, and other products.
- Promote the development of carbon credit markets for the wood industry through the use of wood fuel for energy in place of fossil fuels.
- Promote non-timber forest product development.
- Examine and exploit the opportunities of moving back onshore some wood products industries that had previously moved offshore but might return due to fuel costs.
- Explore the possibility of a Kentucky-branded program for wood products like Kentucky Proud for agriculture.

## Certification is an opportunity that must be responded to positively in order for this sector to grow in the future.

Certification can increase market access and have a positive impact on both landowners and wood products manufacturers. Kentucky is not currently in a position to capitalize on certification in spite of the strong commitment to BMPs through the Forest Conservation Act. There was evidence, however, that certification can drive behavior — “When certification is required, the industry will favor it.” For example, LEED certification in the building industry is driving the demand for certified wood. Several actions related to certification include:

- Gain recognition for Kentucky forestland by certification bodies, especially Pan European Forest Council (PEFC), for the practices required under the Forest Conservation Act and the evidence of the growth of Kentucky forests.
- Get state building standards laws that help facilitate the purchase of Kentucky-grown certified wood, not just certified wood.

## The size of the industry merits increased attention and supportive policy by regional and state economic development leaders in both the public and private sectors.

The solutions to the challenges in this sector are not all market solutions. There is a role for public policy, particularly as it relates to understanding the importance of the sector to the region, allocating resources accordingly, and recognizing how public incentives can induce private behavior that benefits the individual, the sector, the region and the state. Some specific actions that would address this issue include:

- Increase the budget of the Division of Forestry to hire more foresters to provide assistance to landowners with stewardship plans.
- Invest \$5 to \$10 million in a cost-share program for landowners to develop and implement management plans.
- Revisit the model of the wood products competitiveness corporation to provide enhanced support to the wood products industry in a new fashion.
- Reinstate the wood products market specialist in the Department of Agriculture.
- Promote the expansion of the Certified Master Logger program, including the involvement of non-mechanized loggers.
- Address the issue of logging in the Daniel Boone National Forest to promote sustainability and a mutually beneficial solution.

## Overcoming some of the challenges of the sector is dependent, in part, on forming stronger connections between wood products firms and landowners, and on collaboration among these groups.

Although some of the companies interviewed said they were members of the Kentucky Forest Industry Association, and some landowners are involved with the Kentucky Woodland Owners Association, the forestry and wood products sector could innovate much more rapidly with greater collaboration. More effective collaboration could simultaneously improve resource management, increase financial returns all along the chain, and open market access through aggregation of management units and achievement of certification. As a first step, leaders could facilitate greater collaboration among associations and agencies. Our experience in other settings leads us to believe that innovative solutions could best be generated by partnerships across normal boundaries in the sector, including, for example, foresters, landowners, loggers, primary and secondary manufacturers and public agency leaders. Germinating and supporting such partnerships requires skill and resources, but we believe that the skills are present in the region and that the resources could emerge with the right leadership.

- Promote development of beneficial, longer-term relationships between foresters, landowners, loggers, mills and their customers in order to increase the viability of quality logging and the returns to all involved.
- Convene landowners, loggers, primary and secondary wood products producers and their customers together with education and economic development leaders in a facilitated process of analysis, planning, and pilot projects to seed a better future for the industry.





# Conclusion

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Interviews with landowners, foresters, wood products producers, and regional education and economic development leaders in Appalachian Kentucky provided an opportunity to become grounded in a particular rural sector and place — an essential part of our work to better understand the promise of sustainable rural economic development practice. This regional learning opportunity re-confirmed the importance of understanding the unique assets of a rural place as a precursor to any type of economic development action. And it demonstrated how multi-layered and complex any sector is — requiring attention to the history, politics, motivations and challenges that make up the context for that sector.

While we admit to exploring only the tip of the iceberg that is the forest and wood products sector in Appalachian Kentucky, we did observe opportunities for exploring potential solutions to some of the challenges the industry faces. However, there is no silver bullet to address these challenges or to seize the opportunities. Following up on the insights and specific actions raised in this summary report will require two things — leadership and demonstration. Leadership is required to promote the sector and to lead the efforts at facilitating dialogue, insights and creative action among the many actors in this sector. Demonstration is needed to pilot new approaches and methods of addressing challenges and opportunities — people need to see alternative models put in place in the region so that they can experience the results and see the benefits of doing things differently.

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## Participants

The following individuals participated in interviews or focus groups as part of this learning process. All responsibility for the content of the report, including any errors, rests with the project team and not with the participants.

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