

2022 Report on Economic Contributions of Arkansas Forest Industries

Fact Sheet F2022-1

Nana Tian and Matthew Pelkki



Direct Effects of Forestry

The data used in this report reflects the economy of Arkansas in CY 2020¹, and because of the COVID-19 pandemic, the state’s economy experienced a substantial decline, as did all forestry sectors. Table 1 shows the direct contributions of forestry to Arkansas’s economy in 2019 and 2020. Direct contributions are those made only by industries within those sectors, they do not include “multiplier effects.” When compared to the 2019 data, all indicators are in decline except for forestry and logging employment and labor income for solid wood products (SWP).

Table 1. Direct Contribution of Forestry in 2019 and 2020.

2019			
Sector	Employment	Labor Income	GDP
Forestry	535	\$38,101,009	\$37,984,837
Logging	3606	\$234,259,722	\$234,280,956
SWP	10321	\$558,305,874	\$1,065,173,203
Paper	9648	\$821,757,707	\$2,066,610,597
Furniture	3592	\$155,622,007	\$226,849,940
Total	27,702	\$1,808,046,319	\$3,630,901,533
2020			
Sector	Employment	Labor Income	GDP
Forestry	553	\$32,688,859	\$34,536,540
Logging	3,675	\$200,301,441	\$204,636,342
SWP	9,938	\$573,364,572	\$989,815,662
Paper	9,031	\$797,230,665	\$1,461,120,938
Furniture	3,318	\$153,430,409	\$217,437,408
Total	26,515	\$1,757,015,946	\$2,907,546,890

Note: the dollar values are not adjusted for inflation

The overall direct changes in the forestry economy were -4% in employment, -3% in labor income, and -20% in contributions to GDP. It should be noted that labor income for SWP increased by more than \$15 million even though the sector experienced a loss of 383 jobs (-4%) in 2020. Labor income includes payments to proprietors

(owners), and the gains made by the SWP sector reflect the extraordinary increases in lumber prices in 2020.

Payments to landowners

Landowners suffered greatly during the pandemic. Payments for standing timber in 2020 were \$367 million, down 17.5% from the \$445 million received in 2019. Total harvesting fell by 7% in the state; severance tax data shows harvests of 24,196,972 tons in 2019 fell to 22,504,984 tons in 2020². The high prices for softwood lumber (+51%) in 2020 did not translate into increased payments for forest landowners due to increased transport costs and retained profits by lumber wholesalers, retailers, and sawmills. Pine saw timber stumpage prices paid to landowners fell by 3.2% in 2020. Statewide growth in pine timber exceeds harvests by 11 million tons annually; this increasing supply of timber is a factor in holding down stumpage prices.

Total Contributions of Forestry

The direct contributions described above are the employment and GDP directly from the forest products industry. The input-output analysis estimates the total contribution to the state’s economy through economic multipliers. This analysis traces the trade flows of the forest industry through all the sectors of the economy and includes household spending by those employed directly in the forest products industry and the household spending of those employed in industries that directly trade with the forest products sector. The overall contributions to the state’s economy from the forest products industry for 2019 and 2020 are displayed in Table 2.

The decline in forestry’s total contribution to employment (-11%), labor income (-13%), and state GDP (-16%) is a reflection, in part, of consumer spending patterns in 2020.

¹ IMPLAN data has a two-year time lag; the data in this report is from 2020 and 2019 data from the U.S. Department of Commerce.

² Data from State of Arkansas Department of Finance and Administration Timber Tonnage Reports.

2022 Report on Economic Contributions of Arkansas Forest Industries

Fact Sheet F2022-1

Nana Tian and Matthew Pelkki



Table 2. Total Contribution of Forestry in 2019 and 2020

2019			
Sector	Employment	Labor Income	GDP
Forestry	925	\$54,384,913	\$63,784,698
Logging	6,206	\$345,800,568	\$414,341,088
SWP	20,447	\$1,063,042,553	\$1,941,764,531
Paper	27,950	\$1,740,465,899	\$3,699,373,551
Furniture	5,984	\$268,785,849	\$423,318,876
Total	61,512	\$3,742,479,782	\$6,512,582,744
2020			
Sector	Employment	Labor Income	GDP
Forestry	893	\$46,864,108	\$55,837,581
Logging	5,603	\$285,076,330	\$339,797,355
SWP	18,178	\$1,008,077,086	\$1,731,322,823
Paper	25,025	\$1,671,708,058	\$2,958,129,397
Furniture	5,282	\$251,316,550	\$386,446,401
Total	54,982	\$3,263,042,132	\$5,471,533,557

Note: the dollar values are not adjusted for inflation

For example, in the paper sector, the direct decline in GDP was 29%, but the overall contribution decline was only 20%. The most likely explanation is that overall consumer spending on sanitary tissue for residential use increased as many people worked from home in 2020. The Georgia-Pacific paper mill at Crossett is a major producer of sanitary paper products. While other paper mills experienced a decline, paper mills producing sanitary products experienced, if not growth, at least smaller losses. Furthermore, the total contributions calculated for Table 2 include household spending, which, in the case of sanitary papers, increased dramatically. In all other forestry sectors, the direct decline was also multiplied into larger losses on a total and a percentage basis statewide in employment, labor income, and GDP.

Forestry Economic Outlook

Arkansas's economy is the most forestry-dependent of all the southern states³ with 5% of the state's GDP depending on forest industries. The outlook for the forest industry is

generally positive for 2022. Housing demand continues to exceed supply, and capacity at Arkansas sawmills has increased through investment in upgraded processing machinery, new, and reopening of mills. There is additional growth in mass timber and bio-energy areas. The recovery of the economy is largely very strong which will lead to continued growing demand for wood products.

There are some hitches likely in the 2022 economic recovery. Mortgage rates will almost certainly rise as the Federal Reserve attempts to tamp down on inflation. The consumer price index rose 7% in 2021, a rate that has not been seen since the early 1980s. By raising interest rates, inflation will be slowed, but all kinds of consumer goods and mortgage rates will rise slowing growth. Labor shortages continue to cause a rise in wages and an inability to increase capacity at manufacturing facilities. Global supply chain issues affect sawmills and paper mills and logging equipment, all of which depend on microprocessors and often on replacement parts made overseas.

Finally, net timber growth continues to exceed harvests by more than 11 million tons annually in pine and 7 million tons annually in hardwoods. Total standing timber in the state has doubled since 1978. This massive supply often called a "wall of wood" is downward pressure on timber prices. However, seasonal weather and local demands are causing some local markets to show good stumpage price increases – emphasizing the fact that local market information is critical for landowners to maximize returns from growing timber.

For additional information, go to the Arkansas Forest Business Center website:

<https://www.uamont.edu/academics/CFANR/acfb.html>

³ Pelkki, M. and G. Sherman. 2020. Forestry's Economic Contribution in the United States, 2016. Forest Products Journal 70(1):28-38.