February 2009

2008 Harvest of Forest Products[1]

MTN **Forest Economics**

The Mississippi forest industry harvested and delivered $1.08 billion worth of forest products to mills and other processors over the course of 2008. The forest industry in Mississippi and the harvest volumes in this report include all producers and harvesters of forest products paying a severance tax collected by the Mississippi Tax Commission. The total estimated value of the 2008 Mississippi timber harvest delivered to the point of first processing (such as a pulpwood yard or sawmill) was $1,079,991,214. The estimated volume and value of the 2008 timber harvest by product is presented in Table 1. The 2008 harvest value is 1.9% lower than in 2007 (See Table 2). This decline resulted from lower harvest volumes and lower prices, particularly for pine sawlogs (See Table 3). The year 2008 was the 16th straight year Mississippi's timber production value was over $1 billion. Timber was the second most valuable agricultural commodity in 2008. Poultry and eggs were the most valuable at $2.34 billion. Timber was second at $1.08 billion. Soybeans were third at $604 million. Mississippi's forest landowners collected $575.3 million for their standing timber in 2008, a decrease of 8.8% from the previous year. The estimated value of the logging and transportation sector, which is the difference between the delivered and standing values, increased 7.3% over the previous year to $503 million.

Severance tax collections on forest products were $3,303,444 in 2008, which is 6.6% lower than in 2007. Twenty percent of severance tax collections, or about $662,717, were returned to counties where the timber was harvested. Eighty percent, or about $2,642,755, went to the Forest Resource Development Program (FRDP) to provide cost share funds to nonindustrial private forest landowners for reforestation and other forest management practices.

A comparison between 2007 and 2008 harvest volumes and delivered values by product category is presented in Table 2. The harvest volume of pine sawlogs decreased by 11.1%, and its value declined 13.4%. Pine pulpwood volume increased by 0.2% while the value increased 11.8%. The volume of pine poles decreased 9.1% while their value decreased 15.7%. Hardwood sawlog volume decreased 4.9% while value increased 2%. Hardwood pulpwood harvest volumes were reduced by 1% while value increased by 19.7%. Christmas tree harvests

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declined 1% from the previous year and value rose by 1.8%.

There were a number of major economic factors in 2008 that influenced the harvest of forest products in terms of volume and value resulting in Mississippi's 2008 delivered value to decrease 1.9% and the standing value to decreased 8.8% from the previous year. Foremost among these economic factors were the troubled residential construction sector and record setting fuel prices that peaked during the summer of 2008. The primary factor contributing to the lower harvest and value of timber products was the worsening housing market. Due to the oversupply of housing on the market resulting from the continuing effects of the subprime mortgage crises, the level of U.S. monthly housing starts decreased from 1.08 million units at the beginning of 2008 and ended the year at an all time recorded low of 550,000 units. Compare that with housing starts in excess of 2 million units a month during 2006. This massive decline in new home construction has greatly reduced demand for sawtimber sized timber products. Reflecting this decreased demand, the 2008 Mississippi average delivered prices for pine sawtimber decreased by 2% from the previous year with volume and value down by 11.1% and 13.4%, respectively.

Diesel fuel prices, a primary variable cost in harvesting and transporting timber products, rose to historic levels over the spring and summer of 2008. The south-wide annual average price for diesel fuel increased 33% in 2008 over the previous year. With less demand for sawtimber and increased cost of diesel fuel, the 2008 standing price for pine sawtimber declined by 13% over the previous year as a portion of these increases in diesel costs were passed on to landowners. This rise in diesel prices contributed to a greater disparity between standing and delivered values for forest products in 2008, as higher diesel prices increased costs for harvesting and transporting timber products. As a result, the estimated value of the Mississippi logging and transportation sector increased 7.3% over the previous year to $503 million.

Pulpwood demand increased throughout 2007 and well into 2008. This was due in part, to reduced lumber production; as the housing market declined so has the demand for lumber. This reduced level of lumber production resulted in a reduced supply of woodchips produced as a byproduct of lumber manufacture, a source that the paper industry has come to rely upon. As a consequence, the pulp and paper industry bought more of its raw material directly as pulpwood. Also, while the lumber industry was declining over 2007-2008, the demand for pulp and paper products was comparably strong. Pulp and paper market conditions have since changed drastically as the global recession has reduced orders for paper products starting early in the 4th quarter of 2008. Reflecting this increased demand for pulpwood in 2008, the delivered price for pine and hardwood pulpwood was 20.7% and 13% higher than in 2007. While increased demand for pulpwood was one of the few bright spots in 2008, demand for mixed hardwood sawtimber was also greater in 2008 as evidenced by an 11.7% increase in delivered prices over the previous year. This resulted in part from the increased oil drilling spurred by recorded crude oil prices in 2008. Wood products such as board road and mats produced from hardwood timber are used at oil drilling sites, and demand for these products increased in 2008 as did demand for mixed hardwood sawtimber.

The outlook for timber demand during the first half of 2009 remains dim as both the residential construction and pulp and paper industries reduce production. Demand for newly constructed homes declined over the course of 2008 as the sale of new homes plunged to the lowest on record and were down 37.8% from the previous year. Elevated inventories of both new homes and existing homes will continue to put downward pressure on new home sales and reduce residential construction. However, the current downturn in residential construction is expected to improve slightly during the latter half of 2009, which may improve demand for sawtimber later in the year. Pulpwood prices will likely decline from recent highs seen over much of 2008 as the pulp and paper industry continues to downsize as a result of the global recession. However, wood energy projects are expected to increase over the next several years which should help improve pulpwood demand. In spite of the current troubles facing the residential construction and paper industries, which have contributed to a recent decline in timber prices, the long-term outlook for timber production in Mississippi remains favorable. Timber markets are cyclical in nature and the current market downturn will pass as the economy recovers from the current recession and as the housing sector improves.

Harvested volumes by product and by country obtained from the Mississippi State Tax Commission are presented in Table 4. For information on current Mississippi timber prices, consult the Mississippi Timber Price Report available on-line at www.msucares.com. Select “Forestry” then “Timber Price Reporting for Mississippi.” For more information on timber marketing, harvesting, or prices contact your local County Extension Service or the Mississippi State University Department of Forestry, Box 9681, Mississippi State, MS 39762.

Table 1. Estimated volumes and values of the 2008 timber harvest.

Product/Unit[1]	Volume	Standing[2] Value($)	Delivered[2] Value($)
Pine Sawlogs, MBF, D	1,175,476	320,867,228	475,750,884
Hardwood Sawlogs[3], MBF, D	319,388	97,973,431	142,257,158
Pine Pulpwood, Cords	4,282,399	107,387,132	314,016,884
Hardwood Pulpwood, Cords	1,600,100	34,700,366	124,630,939
Poles, MBF, D	31,599	13,629,496	20,324,120
Crossties[4], MBF, D	3,097	705,799	1,243,176
Stumpwood[5], Tons	2,426	12,213	68,052
Christmas Trees[6], Tree	49,000	**	1,700,000
Total Value		**575,275,664**	**1,079,991,214**

[1] Unit abbreviations: MBF = thousand board feet, and D = Doyle log rule.
[2] Standing and delivered values calculated using regional (north and south Mississippi) volumes reported by the Miscellaneous Tax Division of the Mississippi Tax Commission and product prices from sources such as Timber Mart-South.
[3] Composite price for hardwood sawlogs calculated under the assumption that hardwood sawmills cut 70% oak and 30% mixed hardwood.
[4] Crosstie values calculated using standing and delivered values for mixed hardwood sawtimber prices by region.
[5] Stumpwood values calculated using pine pulpwood prices.
[6] Christmas trees value and volumes estimated by Mississippi State University Extension Forester Stephen Dicke.
** Not reported since most trees are sold as choose-n-cut.

Table 2. Comparison of 2006 and 2007 harvest volumes and delivered values by product.

	2007		2008			
Product/Unit[1]	Volume	Value	Volume	% Change	Value	% Change
		-Dollars-			-Dollars-	
Pine Sawlogs, MBF, D	1,322,737	549,067,911	1,175,476	**-11.1%**	475,750,884	**-13.4%**
Hardwood Sawlogs, MBF,D	335,916	139,511,597	319,388	**-4.9%**	142,257,158	**2.0%**
Pine Pulpwood, Cords	4,275,004	280,786,211	4,282,399	**0.2%**	314,016,884	**11.8%**
Hardwood Pulpwood, Cords	1,616,272	104,104,987	1,600,100	**-1.0%**	124,630,939	**19.7%**
Poles, MBF,D	34,748	24,107,268	31,599	**-9.1%**	20,324,120	**-15.7%**
Crossties, MBF,D	4,935	1,833,910	3,097	**-37.2%**	1,243,176	**-32.2%**
Stumpwood, Tons	596	37,548	2,426	**307.1%**	68,052	**81.2%**
Christmas Trees, Tree	49,500	1,670,625	49,000	**-1.0%**	1,700,000	**1.8%**
Total Value		**1,101,120,057**			**1,079,991,214**	**-1.9%**

[1] Unit abbreviations: MBF = thousand board feet, and D = Doyle log rule.

Table 3. Comparison of 2008 and 2007 Mississippi Major Product Prices[1].

		Standing Prices				Delivered Prices			
			Statewide Average				Statewide Average		
Product / Unit[2]	Region	Average	2008	2007	% Change	Average	2008	2007	% Change
Pine Pulpwood, Cords	North	22.67	24.59	21.03	17.0%	73.33	74.26	65.73	13.0%
	South	26.52				75.19			
Hardwood Pulpwood, Cords	North	22.84	21.76	16.07	35.4%	81.39	78.10	64.70	20.7%
	South	20.67				74.82			
Pine Sawtimber, MBF,D	North	247.75	268.13	308.13	-13.0%	402.25	404.38	413.25	-2.1%
	South	288.50				406.50			
Mixed Hardwood Sawtimber, MBF,D	North	225.50	256.13	216.25	18.4%	400.75	408.75	365.88	11.7%
	South	286.75				416.75			
Oak Sawtimber, MBF,D	North	298.75	317.88	272.13	16.8%	452.50	459.75	447.25	2.8%
	South	337.00				467.00			
Pine Poles, MBF,D	North	473.50	443.88	448.00	-0.9%	743.67	673.08	623.96	7.9%
	South	414.25				602.50			
Pine Pulp, Ton	North	8.43	9.17	7.85	16.8%	27.36	27.71	24.53	13.0%
	South	9.90				28.06			
Oak Pulp, Ton	North	7.88	7.50	5.55	35.3%	28.07	26.93	22.31	20.7%
	South	7.13				25.80			

[1] Data source: Timber Mart-South.
[2] Unit abbreviations: MBF = thousand board feet, and D = Doyle log rule.

Table 4. Mississippi's 2008 harvested timber volumes by product and county.

	PINE	HARDWOOD	PINE	HARDWOOD	PINE	HARDWOOD	PINE	STUMP			PINE	HARDWOOD
	LUMBER	LUMBER	SAWLOGS	SAWLOGS	PULPWOOD	PULPWOOD	POLES	WOOD	CROSSTIES	OTHER	LOGS	LOGS
COUNTY	**MBM**	**MBM**	**MBF,D**	**MBF,D**	**CORDS**	**CORDS**	**C CU FT**	**TONS**	**MBF,D**	**MBF**	**TONS**	**TONS**
NORTHERN REGION												
ALCORN			3,466.00	2,309.41	26,396.67	12,662.22	0.28			24.00		1.33
ATTALA	582.67	152.25	30,281.40	2,309.33	123,937.73	30,235.91	10.15					
BENTON			2,742.00	473.33	16,840.00	7,177.78	0.99					
BOLIVAR			2.90	1,686.67	954.17	16,746.18				306.67		
CALHOUN			19,879.87	1,400.00	58,330.57	6,413.20	3.55					
CARROLL		143.31	7,376.02	4,149.33	85,720.33	25,997.60	0.75					
CHICKASAW			12,011.41	326.67	31,912.37	4,133.69	7.31					
CHOCTAW		9.13	24,621.79	965.33	72,312.83	16,563.78	13.70					
CLAY			11,936.89	1,452.00	24,736.90	7,788.49	1.54		4.00		215.57	
COAHOMA			3.00	2,242.67		2,127.96						
DESOTO			252.00	978.67	753.33	1,086.71	0.24					
GRENADA			3,428.99	1,094.67	31,877.00	4,323.29					214.41	
HOLMES		2.37	3,314.27	7,236.00	52,943.50	42,098.00						
HUMPHREYS			-	69.33		1,417.78						
ISSAQUEENA			3.00	4,700.00	30.00	15,505.56						
ITAWAMBA			16,764.00	8,089.33	37,810.00	49,826.67	5.61					1,008.00
KEMPER		211.61	59,949.51	2,468.00	107,191.37	69,906.13	35.11				234.71	
LAFAYETTE			6,941.14	1,436.73	29,136.23	3,612.44	1.49					157.33
LEAKE		16.60	16,213.06	2,628.00	78,714.50	25,629.47	10.55				98.08	
LEE			6,210.25	1,445.33	6,153.33	8,702.22	0.48					206.67
LEFLORE			13.00	1,853.33	28.37	4,697.69		24.00				
LOWNDES			6,297.16	336.00	24,042.90	18,269.60	0.37		473.33		337.15	
MADISON	12.00	2.37	4,523.39	2,256.00	41,554.63	19,882.76	6.67					
MARSHALL			4,450.00	1,609.33	13,976.60	10,753.38	0.27					
MONROE			18,987.79	3,942.67	23,863.23	15,821.24	5.30				51.96	5.33
MONTGOMERY		4.39	7,580.83	1,376.00	44,941.50	18,646.13	5.81		2.67			2.67
NESHOBA		86.64	16,188.94	2,685.33	61,807.50	40,908.09	2.38		12.00		111.49	
NOXUBEE		16.85	20,325.24	4,821.33	80,535.43	26,640.13	4.75				201.37	
OKTIBBEHA		1.35	17,033.13	1,274.67	46,795.37	12,409.47	17.70		1,792.00		448.44	
PANOLA			6,014.00	2,041.33	15,691.43	20,225.42					3,502.67	118.67
PONTOTOC		24.00	16,773.00	639.17	28,555.00	3,003.20	0.52		25.33			64.00
PRENTISS		81.33	9,100.00	2,473.49	16,560.00	22,004.44	0.19		208.00			20.00
QUITMAN			109.00	80.00		48.89						
SHARKEY			41.00	1,008.00	23.33	4,478.71						
SUNFLOWER			-	-		53.33						
TALLAHATCHIE		11.71	201.00	792.00	14,864.60	5,453.47			22.67			
TATE			1,298.00	1,322.67	2,589.40	1,286.67						
TIPPAH			7,234.00	1,014.67	36,950.00	22,333.33	1.55					
TISHOMINGO			6,561.11	1,981.56	67,530.00	33,204.44			152.00	61.33		
TUNICA			221.00	1,036.00		902.22						
UNION			8,862.40	1,502.73	18,613.33	12,902.22	0.58					137.33
WASHINGTON			506.33	1,746.67	21.80	8,938.49						
WEBSTER	104.00	3.11	26,372.25	1,330.67	78,899.40	20,924.85	14.12		241.33		44.88	
WINSTON		133.15	26,681.62	2,494.67	128,608.00	44,804.93	11.15		42.67		44.83	
YALOBUSHA			13,050.00	2,188.00	59,098.23	9,657.07	2.51		1.33			
YAZOO			544.97	6,832.00	7,224.97	18,448.80						
NORTHERN TOTAL	**698.67**	**900.17**	**444,366.66**	**96,099.11**	**1,598,525.87**	**748,654.05**	**165.61**	**24.00**	**2,977.33**	**392.00**	**5,505.56**	**1,721.33**

Table 4. Mississippi's 2008 harvested timber volumes by product and county (cont.).

COUNTY	PINE LUMBER MBM	HARDWOOD LUMBER MBM	PINE SAWLOGS MBF,D	HARDWOOD SAWLOGS MBF,D	PINE PULPWOOD CORDS	HARDWOOD PULPWOOD CORDS	PINE POLES C CU FT	STUMP WOOD TONS	CROSSTIES MBF,D	OTHER MBF	PINE LOGS TONS	HARDWOOD LOGS TONS
SOUTHERN REGION												
ADAMS			4,618.93	10,889.33	30,604.93	20,817.56	0.09					
AMITE		966.67	40,645.75	5,593.63	161,401.97	48,804.71	57.85				28.99	
CLAIBORNE		17.23	4,871.89	19,306.67	21,892.30	26,113.96	0.69					
CLARKE		38.19	41,322.62	2,941.33	106,074.67	28,218.40	125.18		4.00		1,898.11	13.33
COPIAH		7.85	45,294.41	8,752.00	95,483.33	51,729.29	8.81				549.59	
COVINGTON		91.99	14,598.75	3,874.67	65,858.60	9,337.42	2.62				2,611.08	86.67
FORREST		24.65	6,655.65	333.33	24,366.07	4,744.98	5.29	2,022.04			806.59	
FRANKLIN		290.81	15,278.12	4,134.67	97,587.07	21,071.20	5.91					
GEORGE		4.23	4,527.26	1,434.67	35,241.70	1,068.09	2.54				451.72	
GREENE		5.11	12,813.52	2,232.00	182,548.53	18,668.89	11.49				1,753.33	
HANCOCK	34.39		13,974.08	59.95	37,579.30	6,826.67	0.31				1,951.07	
HARRISON		2.36	9,228.76	24.00	57,116.23	2,445.91	0.18				357.05	
HINDS		36.45	4,329.94	9,261.33	41,526.30	26,423.07					29.27	30.67
JACKSON		3.04	5,836.41	542.67	41,615.10	823.38	1.08	380.00			194.81	
JASPER		242.55	23,814.79	7,674.67	110,388.40	49,082.44	12.39				6,388.32	848.00
JEFF DAVIS		41.61	35,461.04	3,313.33	84,284.00	24,814.00	3.18				2,547.11	372.00
JEFFERSON		2.48	11,429.60	9,720.00	47,153.83	27,138.67	1.56				4.99	
JONES		89.64	21,041.06	13,332.00	80,842.97	8,973.51	6.68		50.67		2,246.44	398.67
LAMAR		30.67	17,286.90	662.67	56,128.20	6,935.24	11.73				1,301.95	
LAUDERDALE		251.56	34,588.89	2,424.00	70,944.53	47,656.31	21.38				1,076.95	6.67
LAWRENCE		47.11	48,075.72	4,969.33	102,277.03	26,767.96	0.81				1,144.21	148.00
LINCOLN	17.24	24.17	33,217.91	6,354.67	120,620.87	36,903.91	17.60				563.73	
MARION	145.33	45.93	23,597.09	3,224.00	88,321.40	31,523.20	0.58				3,164.31	365.33
NEWTON		180.36	28,470.06	3,977.33	50,060.23	46,738.00	21.19				2,082.91	
PEARL RIVER	65.91	17.09	26,319.03	1,110.67	97,371.07	14,151.42	1.10				628.68	61.33
PERRY		13.81	11,763.41	839.12	93,637.57	19,770.67	14.03				2,766.89	
PIKE		121.96	18,225.08	2,309.65	44,734.87	13,037.51	22.71				333.96	30.67
RANKIN		127.55	19,744.10	11,338.21	105,239.27	30,772.71	20.46		65.33		1,769.71	
SCOTT		32.73	10,763.92	4,541.87	42,259.07	15,220.89	3.58				647.73	301.33
SIMPSON		511.49	37,584.88	8,937.33	97,264.57	44,755.02	5.64				2,523.19	208.00
SMITH		565.64	30,135.06	11,001.01	74,371.23	18,120.53	4.67				3,767.77	1,033.33
STONE		13.33	9,710.35	257.33	37,995.13	4,070.49	1.33				518.49	
WALTHALL			11,699.95	4,932.00	59,317.57	15,361.33	1.17				1,006.09	34.67
WARREN			644.00	21,540.00	2,061.37	30,706.13						
WAYNE		21.33	35,539.32	16,592.16	116,252.93	29,366.71	9.14				1,274.95	41.33
WILKINSON	12.00	678.67	17,027.43	9,017.17	83,490.93	40,450.00	5.94					
SOUTHERN TOTAL	**274.87**	**4,548.27**	**730,135.68**	**217,448.77**	**2,663,913.13**	**849,410.18**	**408.91**	**2,402.04**	**120.00**	**-**	**46,389.98**	**3,980.00**
GRAND TOTAL	**973.53**	**5,448.44**	**1,174,502.34**	**313,547.88**	**4,262,439.00**	**1,598,064.22**	**574.52**	**2,426.04**	**3,097.33**	**392.00**	**51,895.54**	**5,701.33**