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Evaluating Economic Impacts of COVID-19 for Arkansas' Agriculture and Forestry Sectors in 2020

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Abstract

Agriculture and forest industries are major contributors to the Arkansas economy. As such, the impacts of COVID-19 on the agriculture sector, forest sector, and overall economy of Arkansas differed by county and region of the state. Using IMPLAN data for 2019, 2020-Q2, 2020-Q3, and 2020, we compared the direct effects of the pandemic on agriculture and forestry sectors for all 75 counties in Arkansas and the entire state. Differences in pandemic effects were found to vary based on the type and intensity of agriculture and/or forest activity across counties. For this study, we focus on counties that appear to exhibit disproportionate economic shifts within sectors related to the production and/or processing of agricultural and forest products throughout the first year of the pandemic. For these select counties, we evaluate and discuss key factors driving observed economic shifts.

1. Introduction

Arkansas is a major producer and exporter of grain, oilseed, fiber, meat, and forest products. The state consistently ranks in the top ten in the nation for the production of several commodities including rice, broilers, cotton, catfish, turkeys, peanuts, and chicken eggs. In terms of value, broilers, soybeans, and rice are the state's top commodities, with each often generating upwards of \$1 billion in value per year. Located in the heart of the nation's wood basket, timber is also a large industry for The Natural State. Covering roughly 19 million acres, forest land represents 57% of Arkansas' total land area and generates a quarter billion to half a billion dollars annually. In 2019, activity in Arkansas' aggregate agriculture and forest industries provided almost 254,500 jobs, \$12.2 million in labor income, and \$19.4 million in value added to the state economy. This represents roughly 15% of jobs, labor income, and value added across the state (English et al., 2021). With agriculture and forestry playing such a large role in upholding the state economy, evaluating the impacts of COVID-19 within these sectors could provide insight into factors affecting economic resilience across the state during times of crisis.

The first case of COVID-19 was detected in Arkansas on March 11, 2020, prompting Governor Asa Hutchinson to sign an executive order declaring a public health emergency (Arkansas Democrat Gazette, 2020). The following day, five more cases were reported across three additional counties in central Arkansas. By the end of the week, twelve cases had been reported across the state with evidence indicating community spread. As a result, schools in Pulaski, Saline, Jefferson, and Grant counties were closed (Herzog & Kruse, 2020). On March 17, all public schools and casinos across the state were closed. This was followed by an order on March 19th to close all restaurant dining rooms, bars, indoor entertainment venues, and gymnasiums (Davis, 2020). Under this order restaurants were allowed to offer carry-out and delivery options, and were temporarily allowed to sell beer and wine with takeaway and delivery orders. By the end of March all non-essential in-person operations (i.e. barbers, body art establishments and schools, cosmetology establishments, massage therapy clinics/spas, and medical spas) were closed, drastically restricting economic activity across several industries.

Closures were maintained through April with additional orders being issued requiring businesses, manufacturers, construction companies, and places of worship to implement social distancing protocols. While most agricultural and forestry production operations were not directly affected by state-wide restrictions and mandates, impacts were felt through disruptions in processing capacity and availability of markets for some agricultural goods. Agricultural operations relying on farm-gate or farmer's market sales and/or agritourism activities were required to adhere to state regulations affecting essential businesses and retailers. Most general farm production activity was allowed to proceed throughout the course of the pandemic. However, the industry was affected by restaurant and school closures as many farmers rely on these institutions for a portion of their revenues (Anderson et al., 2020). Restaurants were allowed to resume dine-in service on May 11th at one-third of total capacity with restrictions further loosened in June as the state moved into Phase II reopening protocols (Roberts, 2020). Most universities and public schools across the state returned to in-person instruction on August 24 (Cushman, 2020).

State-wide and nationally, the most notable impacts of the pandemic were felt in the retail and tourism sectors, with sit-down restaurants being among the hardest hit (Marchesi & McLaughlin, 2022). While many restaurants were forced to either scale-back service or close entirely, most food production facilities and food retail stores remained open. However, by late April crowded working conditions and shortages of personal protective equipment caused a spike of worker illnesses at meat processing facilities, resulting in the closure of at least 15 plants across the U.S. (Telford & Kindy, 2020). On April 28, 2020 President Trump signed an executive order invoking the Defense Production Act, classifying meatpacking plants as critical infrastructure that must remain open, impacting major meat processors including Arkansas-based Tyson Foods (Telford et al., 2020). Although food away from home (FAFH) activity declined, there was an increase in food purchases for home consumption. Although demand for food products remained high overall, food processing facilities had to rapidly adjust production lines to meet the higher demand for products sold for retail consumption (Krumel & Goodrich, 2021).

Throughout the pandemic, many industries were supported by government assistance programs. Prior to the pandemic, many ag commodity producers received aid through existing Farm Bill programs such as the Market Facilitation Program (MFP), Agricultural Risk Coverage (ARC), and Price Loss Coverage (PLC). At the onset of the pandemic, benefits to farmers were expanded through economic relief bills passed by Congress. Using funding supplied by the

Coronavirus Aid, Relief, and Economic Security (CARES) Act, the United States Department of Agriculture (USDA) established the Coronavirus Food Assistance Program (CFAP) which was specifically targeted to assist farm operations. Many agriculture and forestry operations received additional aid through other federal programs such as the Paycheck Protection Program (PPP), Economic Injury Disaster Loan Program (EIDL), with some households and individuals being eligible for Economic Impact Payments (EIP) and expanded benefits from the Federal Pandemic Unemployment Compensation (FPUC) program (Durand-Murat et al., 2020; Giri, 2021).

During the initial stages of the pandemic Arkansas communities reliant on farming, logging, and food and wood product manufacturing were forced to adapt to rapidly changing conditions. This paper evaluates how COVID-19 affected the agriculture and forestry sectors across the state in 2020. Annual state-level contributions are estimated and compared for 2019 and 2020, highlighting changes presumed to be caused by pandemic policies and consumer spending patterns. County-level values are used to evaluate economic shifts within industries occurring across different regions at various points through the first year of the pandemic. Five counties exhibiting large shifts in agricultural and/or forestry employment are identified and further evaluated.

2. Methods

This analysis relies primarily on state and county-level data obtained from IMPLAN, Inc. (IMPLAN, 2022). State-level annual data were used to conduct contribution analyses of the agriculture and forestry sectors for 2019 and 2020. Results of these analyses were compared to identify changes in employment, labor income, and value added believed to be caused by pandemic effects in 2020.

IMPLAN typically releases data on an annual basis. However, in 2020 the company compiled a series of special datasets using available quarterly data from the Bureau of Labor Statistics' (BLS) Current Employment Statistics program, BLS data on labor productivity, and the Bureau of Economic Analysis' (BEA) aggregate preliminary data on components of GDP and Value Added (Clouse, 2020). These datasets titled "Evolving Economy – COVID 2020" provided annualized estimates of economic activity for the second and third quarters of 2020 (2020-Q2 and 2020-Q3). These data products, combined with IMPLAN's complete datasets for 2019 and 2020, were used to evaluate shifts in economic activity occurring at the state and county-level at different points throughout the first year of the pandemic.

2.1 State-level Contribution Analysis

Economic contribution of Arkansas' agriculture and forestry sectors were computed using data and input-output (I-O) modeling software (IMPLAN version 3.1) from IMPLAN, Inc. (IMPLAN, 2022). Contributions are reported in terms of employment, labor income, and value added. Employment includes all wage and salaried employees, as well as self-employed workers (proprietors) in a given sector. Labor income consists of proprietary income and wages. Proprietary income includes all income received by self-employed individuals. Wages include all worker salaries, payments and fringe benefits paid by employers. Value added includes labor income plus indirect taxes and other property-type income such as payments for rents, royalties and dividends. All labor income and value added figures are reported in 2020 dollars.

This portion of the study follows steps for conducting a multi-industry contribution analysis detailed in English, Popp, and Miller (2021). Here, the agriculture sector is broadly defined as industries involved in the production or processing of crops and livestock. The forestry sector includes industries involved in the production or processing of forest products. Industries included as part of the agriculture and forestry sectors are those directly producing agricultural and forest products, processing raw agricultural and forest products, or providing services to agriculture and forest producers. Any sector not directly tied to agriculture and forestry production or processing (e.g. restaurants, grocery stores, fertilizer manufacturers, or distributors) is not included as part of the agriculture or forestry sectors. Industries related to agriculture and forest production (i.e. commercial fishing, commercial hunting and trapping, and support activities for agriculture and forestry) are denoted as “agriculture-related” and included as a separate sector. A listing of industries included within each sector can be found in Appendix A.

Total economic contributions are made up of three separate components: 1) direct contributions - generated by farm production and processing of crops, poultry, livestock and forest products; 2) indirect contributions - generated when agricultural firms purchase materials and services from other Arkansas businesses; and 3) induced contributions - result when employees of agricultural firms and their suppliers spend a portion of their income within Arkansas. Each of these contributions makes up an important part of the total economic contribution of the Arkansas agriculture sector. For this study, employment, labor income, and value added are reported for each contribution component, then summed to show the total contribution.

Contributions are calculated for 2019 and 2020 and reported in 2020 dollars. Resulting values are compared to evaluate shifts in contributions occurring between years.

2.2 County-Level Comparison

While the state-level analysis evaluates shifts in total economic contributions for employment, labor income, and value added across the state, this portion of the study focuses only on changes in direct employment contributions occurring at the county-level (i.e. indirect or induced effects are not accounted for). This approach was taken for two reasons: 1) evaluating indirect and induced contributions across all individual counties in a state could bring misleading results as summed contributions would widely overestimate economic activity; and 2) IMPLAN does not recommend the use of their Evolving Economy datasets for conducting full contribution analyses as each dataset is annualized and prepared based on the best available data at the time of release. Therefore, in evaluating total direct, indirect, and induced economic contributions for 2020, they recommend utilizing the most recent data available, which is represented by their 2020 annual dataset.

For the county-level comparison IMPLAN baseline (direct) economic values for all 75 Arkansas counties were collected for 2019, 2020-Q2, 2020-Q3, and 2020¹. These data include estimates of total output, wage and salary employment, employee compensation, proprietor employment, proprietor income, other property income, and tax on production and imports. Wage and salary and proprietor employment values were summed to estimate total employment for each

¹ Individual datasets were not available for 2020-Q1 or 2020-Q4, therefore annual datasets for 2019 and 2020 were used as points of reference to evaluate impacts resulting from economic disruptions that occurred in the second and third quarters of 2020.

industry. Employee compensation and proprietor income were summed to estimate labor income for each industry. Value added represents the sum of labor income, other property income, and tax on production and imports. While labor income and value added impacts were computed, this analysis focuses only on employment shifts experienced within each county. Agriculture and forestry sectors are defined as described in section 2.1 with included industries listed in Appendix A.

Employment values were used to identify 5 counties exhibiting the largest shifts (increasing or decreasing) in agricultural and/or forestry sectors from 2019 to 2020. Once identified, values for employment were compared across each time period (2019, 2020-Q2, 2020-Q3, and 2020 final) to evaluate pandemic impacts occurring at different points throughout the first year of the pandemic.

3. Results and Discussion

3.1 State-level Contribution Results

In terms of direct contributions, there appears to be minimal losses for the combined agriculture and forest sectors. Taken together agriculture and forestry saw a 0.4% decrease in employment, a 1.1% increase in labor income, and a 0.1% decrease in value added from 2019 to 2020. However, substantial losses by agricultural producers, forestry producers, and forestry processors was largely offset by gains in the agricultural processing sectors (Table 1).

On the production side, livestock producers saw substantial losses, while crop producers recognized gains of 14.0% in employment and 6.1% in labor income. Losses to livestock producers are likely caused by a reduction in processing capacity seen early on in the pandemic, causing producers to hold on to livestock longer, increasing costs and driving down prices received for their animals (Vaiknoras et al., 2022). Most crop producers experienced less difficulty in marketing their products throughout the pandemic as crop commodity markets remained relatively stable, with the exception of corn which was impacted by decreased demand for ethanol (Renewable Fuels Association, 2020). Forest producers saw modest gains in employment, but losses in labor income and value added. The losses in income for forestry producers were largely offset by PPP loans (Table 1).

On the processing side, agricultural processors saw minimal overall change in employment with gains found in labor income (7.3%) and value added (21.0%). Crop processors saw a slight decrease (0.3%) in employment, while labor income and value added increased by 6.0% and 27.8%, respectively. Although livestock processors experienced some initial difficulty in maintaining their labor force and transitioning to meet lower restaurant and higher grocery demand, by the end of 2020 things appear to have stabilized as livestock processors in Arkansas saw overall increases in employment (0.2%), labor income (8.1%) and value added (15.5%). As demand for finished wood products decreased, forest processors saw declines in employment (5.4%), labor income (2.0%) and value added (21.5%). PPP loans for forestry processors represented 73.3% of the labor income losses (Table 1).

Table 1: Change in Direct Contributions for Arkansas: 2019 to 2020

	Employment			Labor Income			Value Added		
	(Jobs)			(Million 2020 \$'s)			(Million 2020 \$'s)		
	2019	2020	Change	2019	2020	Change	2019	2020	Change
<u>Agriculture Sector</u>									
Ag Production									
Crop Production	27,367	31,207	14.0%	1,110	1,178	6.1%	751	703	-6.3%
Livestock Production	21,317	18,081	-15.2%	459	336	-26.8%	610	493	-19.1%
Ag-Related	10,613	10,614	0.0%	370	355	-3.8%	383	371	-3.2%
Total Production	59,297	59,902	1.0%	1,939	1,869	-3.6%	1,744	1,567	-10.1%
Ag Processing									
Crop Processing	19,962	19,905	-0.3%	1,125	1,192	6.0%	2,000	2,556	27.8%
Livestock Processing	37,967	38,036	0.2%	1,847	1,998	8.1%	2,451	2,830	15.5%
Total Processing	57,929	57,941	0.0%	2,972	3,190	7.3%	4,451	5,386	21.0%
Ag Sector Total	117,226	117,843	0.5%	4,912	5,059	3.0%	6,195	6,954	12.3%
<u>Forestry Sector</u>									
Forest Production									
Forestry	535	553	3.3%	39	33	-15.3%	38	35	-10.2%
Logging	3,606	3,675	1.9%	237	200	-15.6%	237	205	-13.7%
Total Production	4,141	4,228	2.1%	276	233	-15.5%	276	239	-13.3%
Forest Processing									
Solid Wood Products	10,321	9,938	-3.7%	565	573	1.4%	1,079	990	-8.2%
Pulp and Paper	9,648	9,031	-6.4%	832	797	-4.2%	2,093	1,461	-30.2%
Furniture	3,592	3,318	-7.6%	158	153	-2.6%	230	217	-5.4%
Total Processing	23,561	22,287	-5.4%	1,555	1,524	-2.0%	3,401	2,668	-21.5%
Forestry Sector Total	27,702	26,515	-4.3%	1,831	1,757	-4.0%	3,677	2,908	-20.9%
<u>Ag & Forest Sector</u>									
Ag and Forest Production	63,437	64,130	1.1%	2,215	2,102	-5.1%	2,019	1,807	-10.5%
Ag and Forest Processing	81,491	80,228	-1.5%	4,527	4,714	4.1%	7,852	8,055	2.6%
Ag and Forest Total	144,928	144,358	-0.4%	6,743	6,816	1.1%	9,872	9,861	-0.1%

Taking into account indirect and induced effects, at the state-level total economic contributions for agriculture and forestry in Arkansas decreased from 2019 to 2020, with total employment contributions falling by 4.4%, labor income by 1.9%, and value added by 3.3%. However, losses varied across sectors and type of contribution (Table 2).

From 2019 to 2020, direct employment in the agriculture sector increased slightly (0.5%). This is likely due to the early recognition of agricultural production and processing as being essential industries. Indirect employment also saw an increase of 4.1%. However, induced employment fell by 18%. The forestry sector recognized losses across all impact areas with a 4.3% reduction in direct employment, with indirect and induced employment falling by 5.8% and 21.7%, respectively. Altogether, the agriculture and forestry sectors saw a 0.4% loss in direct jobs, a 1.3% increase in indirect jobs, and 19.1% loss in induced employment. This brought the total employment contribution of agriculture down by 4.4% over 2019 (Table 2).

Labor income and value added contributions exhibited similar shifts with the agriculture sector gaining in direct and indirect income contributions, while showing a decrease in induced contributions. The forestry sector showed losses of 4.0%, 1.4%, and 19.4% for direct, indirect, and induced labor income contributions with value added contributions falling by 20.9%, 4.4%, and 19.7%, respectively. Altogether, the agriculture and forestry sectors gained 1.1% and 4.7% in direct and indirect labor income value, with induced contributions falling by 17.1%. Direct value added for agriculture and forestry fell slightly (0.1%), with indirect contributions increasing 2.8% and induced contributions falling by 16.9% (Table 2).

Impacts to the agriculture sector were mitigated, in part, by aid stemming from various government programs that were put in place both prior to, and during the pandemic (Durand-Murat et al., 2020; Giri, 2021). The forestry sector experienced greater losses across the board as home construction slowed dramatically. While retail construction lumber sales soared, the sawmill industry is geared to construction length and sized lumber and was unable to shift to meet the retail demand. Government payments to forestry producers offset labor income losses for smaller firms. However, the paper industry was substantially impacted as there were few government payments to offset the losses in the pulp and paper sectors. As seen in many industries nationwide, induced contributions decreased across the agriculture and forestry sectors as these contributions reflect the spending of employee and proprietor wages, which fell in 2020 as pandemic-related fear and uncertainty led to lower spending and increased personal savings (Nealy, 2021).

Table 2: Change in Direct, Indirect and Induced Contributions for Arkansas: 2019 to 2020

	Employment (Jobs)			Labor Income (Million 2020 \$'s)			Value Added (Million 2020 \$'s)		
	2019	2020	Change	2019	2020	Change	2019	2020	Change
Agriculture Sector									
Direct	117,226	117,843	0.5%	4,912	5,059	3.0%	6,195	6,954	12.3%
Indirect	35,959	37,426	4.1%	2,141	2,292	7.1%	3,662	3,869	5.7%
Induced	41,574	34,096	-18.0%	1,801	1,513	-16.0%	3,253	2,745	-15.6%
Total Contribution	194,759	189,365	-2.8%	8,853	8,864	0.1%	13,110	13,568	3.5%
Forestry Sector									
Direct	27,702	26,515	-4.3%	1,831	1,757	-4.0%	3,677	2,908	-20.9%
Indirect	13,914	13,108	-5.8%	824	812	-1.4%	1,439	1,376	-4.4%
Induced	18,101	14,177	-21.7%	802	646	-19.4%	1,402	1,126	-19.7%
Total Contribution	59,717	53,800	-9.9%	3,457	3,215	-7.0%	6,518	5,409	-17.0%
Ag & Forest Total									
Direct	144,928	144,358	-0.4%	6,743	6,816	1.1%	9,872	9,861	-0.1%
Indirect	49,873	50,534	1.3%	2,965	3,105	4.7%	5,101	5,245	2.8%
Induced	59,675	48,273	-19.1%	2,602	2,159	-17.1%	4,655	3,870	-16.9%
Total Contribution	254,476	243,165	-4.4%	12,310	12,079	-1.9%	19,628	18,977	-3.3%

County-level Comparison Results

For this analysis, we focus on 5 counties exhibiting substantial increases and/or decreases in agriculture and/or forestry employment from 2019 to 2020. The following table shows shifts in agriculture and forestry employment, as well as the total change in employment for each of the five counties under analysis from 2019 to 2020 (Table 3). When looking at county employment as a whole, out of 75 counties, 20 counties saw net gains in 2020. However gains and loses with counties varied by industry. For instance, the agriculture sector saw net employment gains in 40 counties, with forestry adding jobs in 39. Many counties showing increases in agriculture and/or forestry saw an overall decrease in jobs, indicating that agriculture and forestry likely played an important role in mitigating job losses in areas disproportionately affected by the pandemic.

Table 3: County rank by change in employment: 2019 to 2020

County	Agriculture	County Rank	Forestry	County Rank	County Total	County Rank
Benton	500	2	101	3	6459	1
Faulkner	452	3	-220	73	-1914	70
Pope	-1575	75	206	1	-2746	71
Sebastian	-515	74	103	2	-4772	74
Washington	974	1	90	4	-4443	73

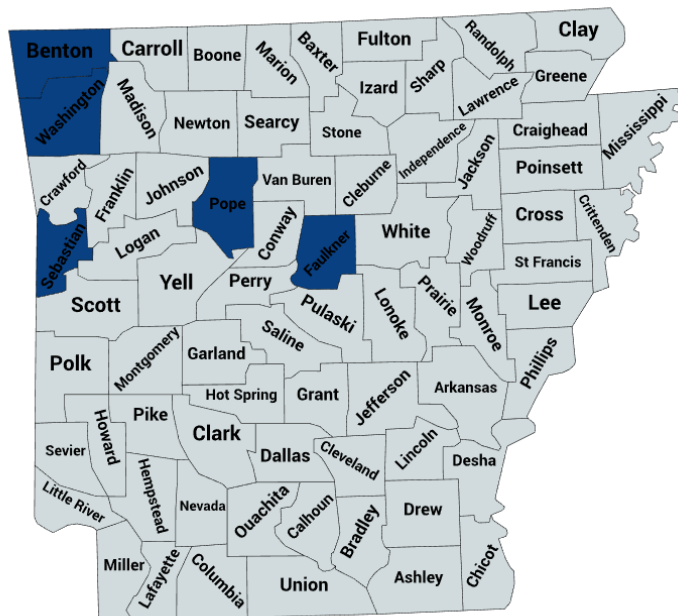


Figure 1: Selected Arkansas counties for analysis

Benton County in northwest Arkansas appeared to fare well economically throughout the pandemic. This county showed the highest overall increase in employment. Therefore, it was unsurprising that the county also exhibited employment increases in the agriculture and forestry industries. For agriculture and forestry, Benton County had the second highest increase in agricultural employment and third highest increase in forestry employment. Although Washington County lost more jobs throughout the pandemic than most other counties, the county ranked first in number of agriculture jobs gained and fourth in forestry jobs gained from 2019 to 2020 (Figure 2).

Faulkner, Pope, and Sebastian counties each recognized substantial county-wide job losses from 2019 to 2020. However, each of these counties saw notable offsetting gains and losses in either agriculture or forestry employment (Figure 2). Faulkner County had the third highest increase in agriculture employment and third largest decrease in forestry employment. Pope County had the largest decrease in agriculture employment and largest increase in forestry employment. Sebastian County had the second largest decrease in agriculture employment and second highest increase in forestry employment (Table 3).

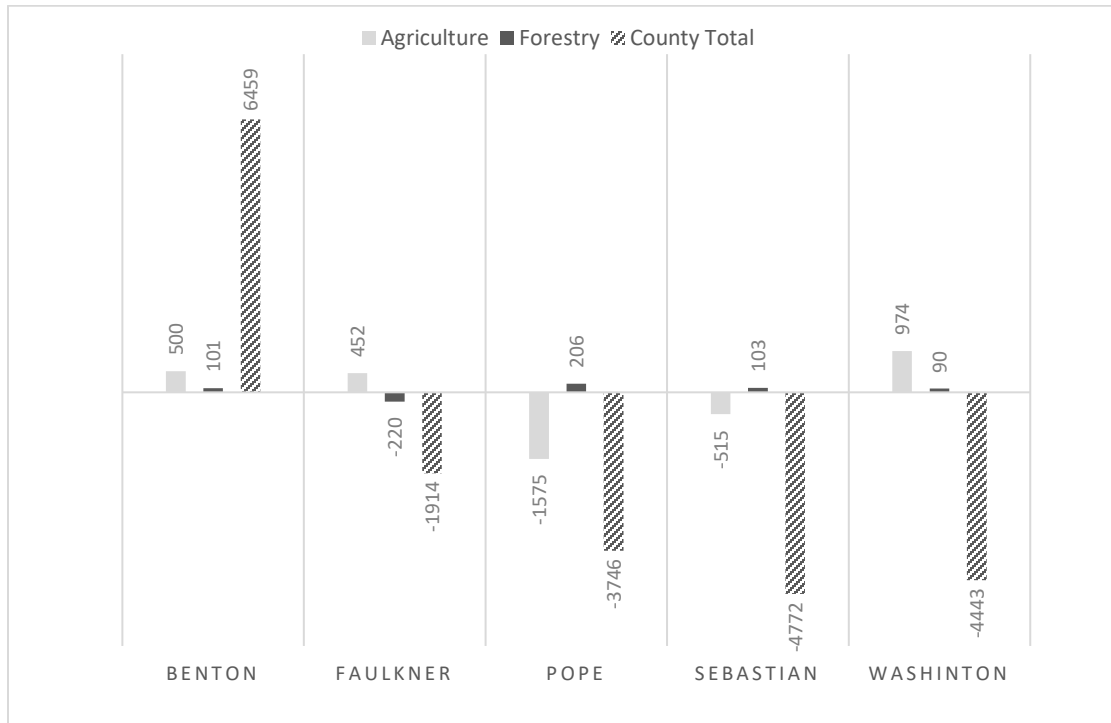


Figure 2: Change in employment by county: 2019 to 2020

When looking a bit deeper into employment shifts across the agriculture and forestry sectors, the largest shifts occurred in the crop processing sector with Pope County showing a large drop in crop processing while Washington County saw substantial gains over 2019. Livestock production was down across all five counties, with impacts to livestock processing being mixed (Figure 3).

Shifts in forest production and processing were mixed. Pope and Washington counties showed gains in forest production and processing employment. Benton and Sebastian counties showed slight losses in production employment with gains in processing jobs. Alternately, Faulkner County showed a gain in production and loss in processing employment (Figure 3).

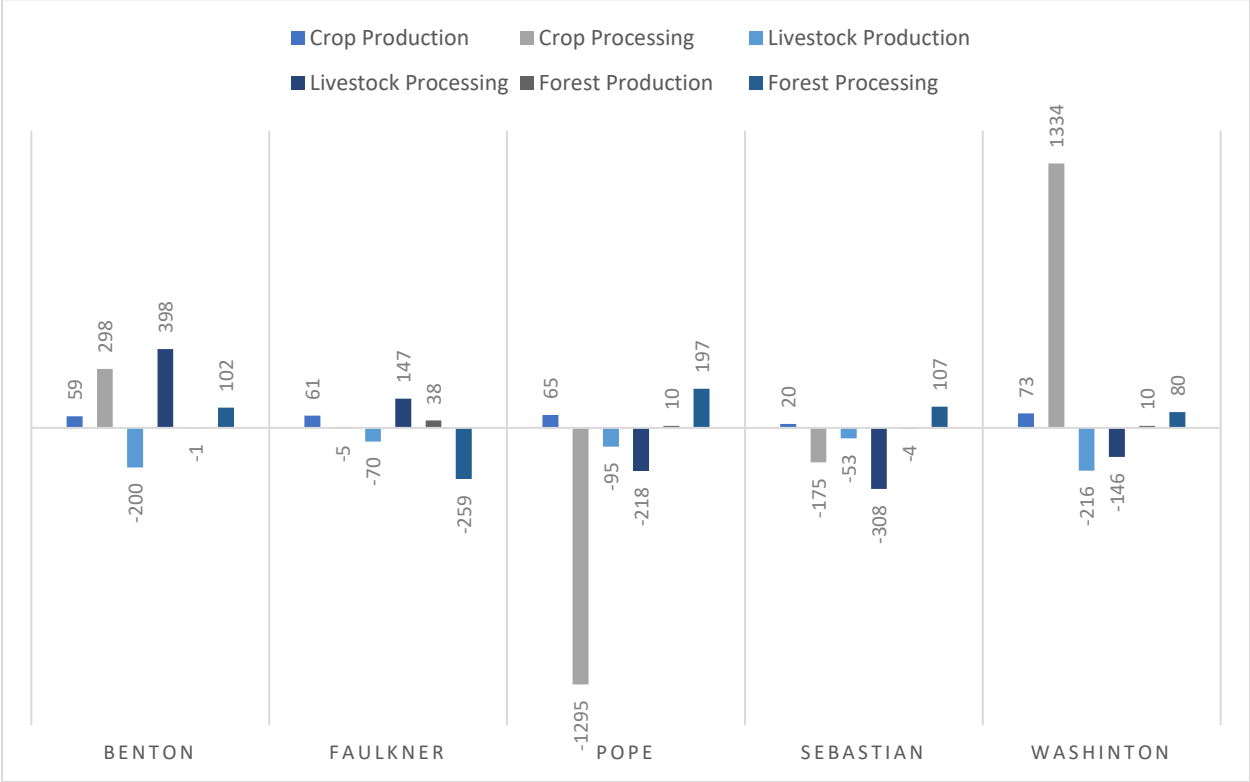


Figure 3: Change in employment by industry and county: 2019 to 2020

In the following sections, we dig a bit deeper into the drivers of these shifts, and evaluate how industries were affected at various points throughout the first year of the pandemic.

3.1.1 Benton County

In 2019 total employment in Benton County was 169,868 with agriculture and forestry representing almost 6.2% of employment, or 10,478 jobs. Of those 10,478 jobs, 87.3% stemmed from the agriculture sector, 9.0% from forestry, and 3.7% from ag & forest related industries. Livestock processing represented the largest share of ag and forestry jobs, making up 2.5% of all jobs in Benton County and 40.0% of jobs within the combined ag and forestry sectors. Crop processing was also a relatively large industry representing 1.8% of total jobs in the county and 29.8% of jobs in the aggregate ag and forestry sector (Figure 4).

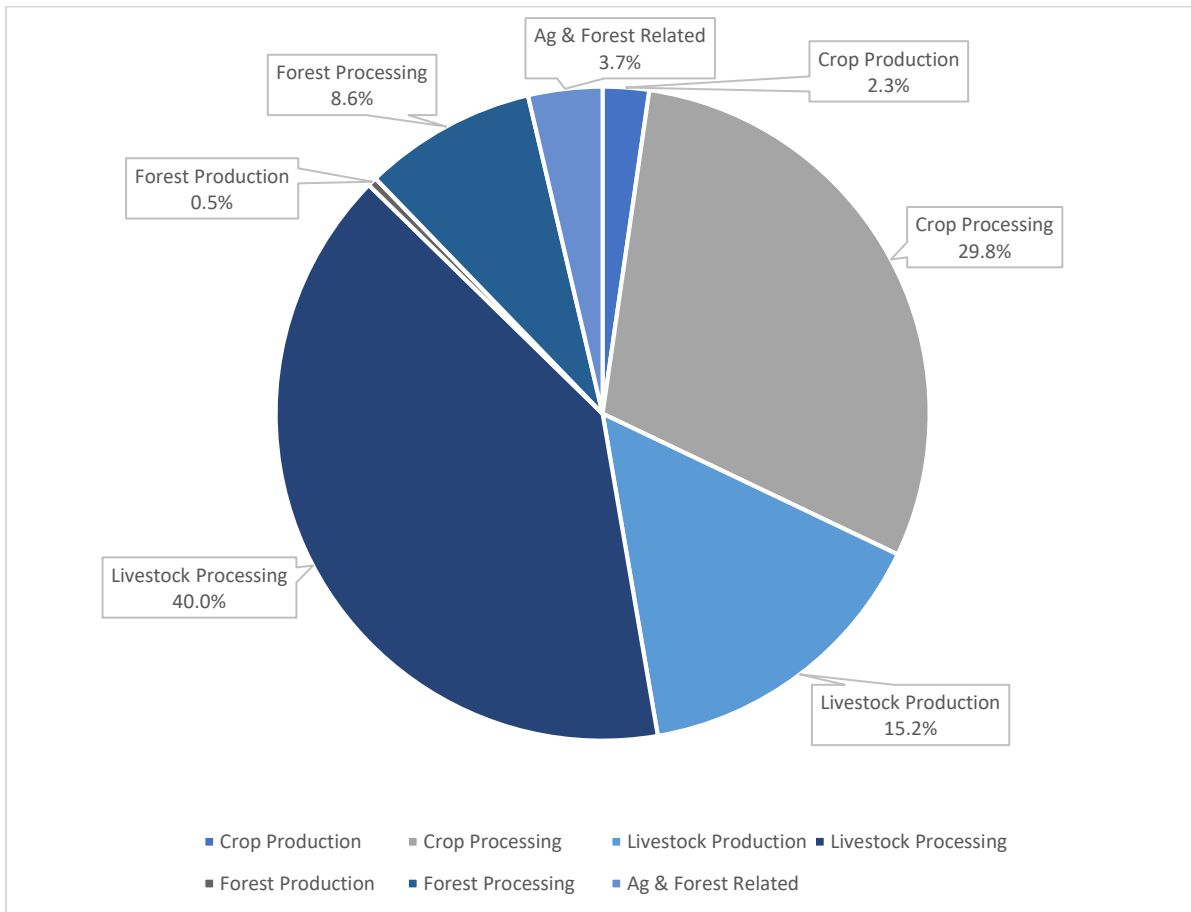


Figure 4: Share of employment in ag, forest, and related industries in 2019 – Benton County

From 2019 to 2020 Benton County gained 6,459 total jobs, representing a 3.8% increase in county employment. During this time, employment in the aggregate ag and forestry sector rose at a slightly higher rate of 5.7%. Within the aggregate ag and forestry sector, ag processing gained 696 jobs, through increases in both crop and livestock processing employment. Forest processing also saw gains with the industry adding 101 net jobs through increases in solid wood product and pulp and paper manufacturing (Table 4).

Although ag and forest processing industries saw growth in 2020, ag and forest production sectors each recognized net losses throughout the first year of the pandemic. On the agriculture

side, employment in crop production grew by 59 jobs, while employment in livestock production fell by 200 jobs, resulting in a net decrease in ag production employment of 7.7%. A portion of the drop was attributable to decreases in the beef cattle production, however, the bulk of the loss stems from a decline in poultry and egg production employment (which is the largest ag production employer in the county). On the forest side, employment in forestry fell by 6 jobs, while logging employment grew by 5, resulting in a net decrease in forest production employment of 2.5% for Benton County.

While growth was ultimately recognized across the aggregate agriculture and forestry sectors in 2020, this was not apparent early on in the pandemic as agriculture and forestry each saw downward overall shifts in employment across the second quarter of the year. In the third quarter gains in crop processing and ag-related employment were offset by losses in ag production and livestock processing resulting in a further net loss of agriculture jobs. Forestry saw a net gain in Q3 of 20 jobs, but these were not enough to offset the losses experienced in Q2. By the end of 2020 net gains across most agriculture sectors offset losses seen earlier in the pandemic with the notable exception of livestock production and ag-related industries. Although forest production saw gains in Q2, these gains were offset by losses later in the year, resulting in a net loss of one job in 2020. Forest processing experienced an opposite impact with employment falling during Q2, then rising to a net gain of 101 jobs across 2020.

Table 4: Annualized Employment – Benton County

	Total Employment				Change	
	2019	2020-Q2	2020-Q3	2020	2019 to 2020	
<u>Benton County Total</u>	<u>169,868</u>	<u>159,280</u>	<u>160,192</u>	<u>176,327</u>	<u>6,459</u>	<u>3.8%</u>
<u>Ag & Forest Sector Total</u>	<u>10,478</u>	<u>10,206</u>	<u>10,011</u>	<u>11,079</u>	<u>601</u>	<u>5.7%</u>
<i>Agriculture Sector</i>	<i>9,149</i>	<i>9,164</i>	<i>8,945</i>	<i>9,705</i>	<i>555</i>	<i>6.1%</i>
Ag Production	1,834	1,885	1,806	1,693	-141	-7.7%
Crop Production	240	239	225	299	59	24.6%
Livestock Production	1,594	1,646	1,581	1,394	-200	-12.5%
Ag Processing	7,316	7,279	7,139	8,012	696	9.5%
Crop Processing	3,122	2,704	2,720	3,420	298	9.5%
Livestock Processing	4,194	4,575	4,420	4,592	398	9.5%
<i>Forestry Sector</i>	<i>944</i>	<i>703</i>	<i>723</i>	<i>1,045</i>	<i>101</i>	<i>10.7%</i>
Forest Production	48	72	66	47	-1	-2.5%
Forestry	11	28	27	4	-6	-60.0%
Logging	37	43	39	42	5	13.9%
Forest Processing	896	632	657	999	102	11.4%
Solid Wood Products	39	30	30	130	91	235.2%
Pulp and Paper	184	156	152	205	21	11.4%
Furniture	673	446	475	663	-10	-1.5%
<i>Ag and Forest Related</i>	<i>384</i>	<i>338</i>	<i>344</i>	<i>329</i>	<i>-55</i>	<i>-14.4%</i>

Note: Datasets for 2020-Q1 and 2020-Q4 were not released. Therefore, values presented for 2020 are annualized and are not necessarily indicative of shifts occurring between 2020-Q3 and 2020-Q4. They represent the estimated outcome for all changes that occurred throughout the entire year.

3.1.2 Faulkner County

In 2019 total employment in Faulkner County was 61,143 with agriculture and forestry representing almost 4.9% of employment, or 2,969 jobs. Of those 2,969 jobs, 39.7% stemmed from the agriculture sector, 60.0% from forestry, and 0.3% from ag & forest related industries. Forest processing represented the largest share of ag and forestry jobs, making up 2.6% of all jobs in Faulkner County and 53.4% of jobs within the combined ag and forestry sectors. Crop production was also a relatively large industry representing 1.0% of total jobs in the county and 19.8% of jobs in the aggregate ag and forestry sector (Figure 5).

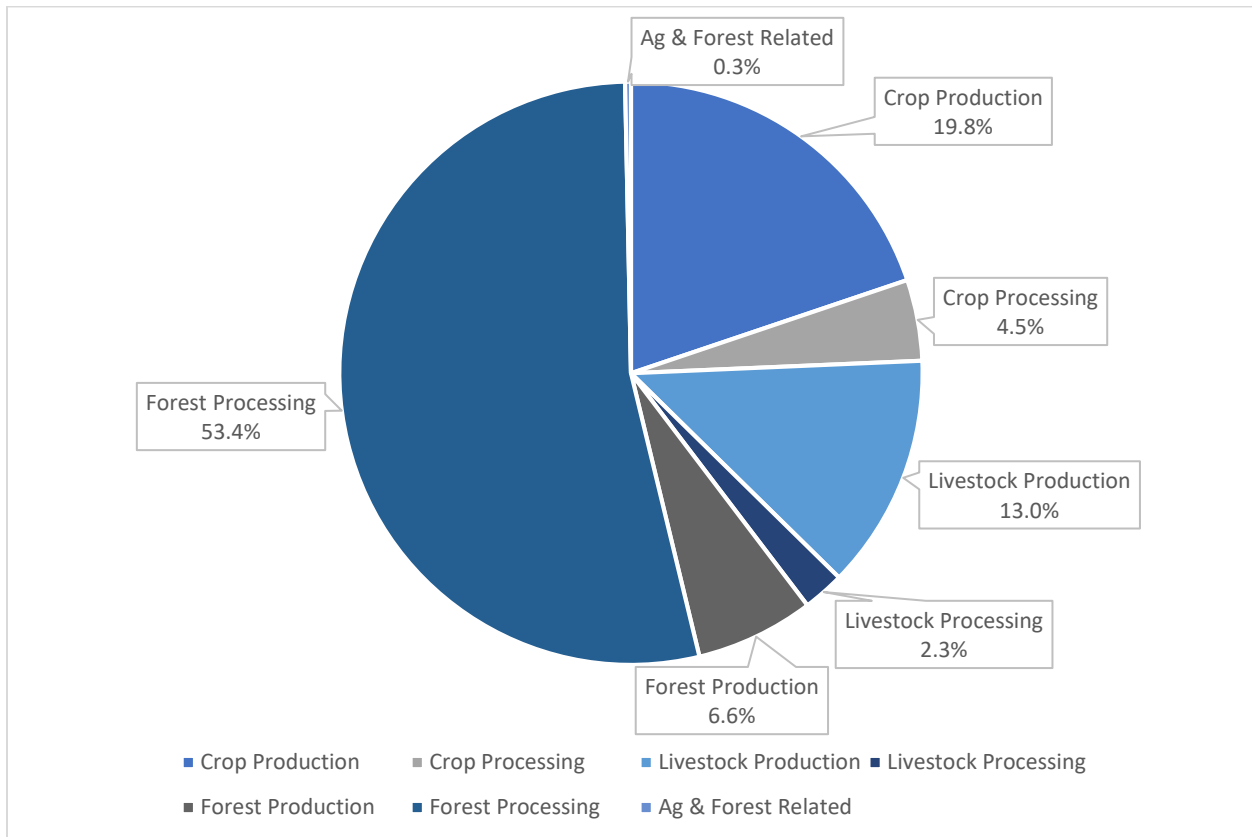


Figure 5: Share of employment in ag, forest, and related industries in 2019 – Faulkner County

From 2019 to 2020 Faulkner County lost 1,914 total jobs, representing a 3.1% decrease in county employment. During this time, employment in the aggregate ag and forestry sector rose at a rate of 7.8%. Although the aggregate ag and forestry sector recognized net growth in 2020, the forest processing sector saw the largest shift, losing 259 jobs, largely within the furniture and pulp and paper industry. These losses were offset by gains seen in the forest production, ag processing, and ag and forest related sectors. On the production side, ag production saw a net loss of 9 jobs, resulting from decreases found in livestock production, specifically within the beef cattle industry (Table 5).

Faulkner County did not experience any substantial losses in its ag and forest sector at the initial onset of the pandemic. In fact, employment in 2020-Q2 was on the rise in several industries,

most notably livestock processing which saw a net increase of 96.9% over 2019. This increase appears to stem from growth in the leather and allied product manufacturing industry which was aided through the acquisition of PPP loans by at least one large producer in the county (FederalPay.org, 2022). Growth was also seen in the logging and pulp and paper industries. In Q2 logging employment increased by 70.4%, with pulp and paper product manufacturing rising 22.6% over 2019. This rise could be explained by increased demand for paper products such as toilet paper and sanitary products as people began stocking up on supplies at the onset of state and national lockdowns. In Q3 some of the growth experienced in Q2 started to subside. Annualized values for 2020 indicate potential sustained growth in livestock processing and logging over 2019, with pulp and paper manufacturing showing a net decrease in employment by the end of the year.

Table 5: Annualized Employment – Faulkner County

	Total Employment				Change	
	2019	2020-Q2	2020-Q3	2020	2019 to 2020	
Faulkner County Total	61,143	57,093	57,527	59,229	-1,914	-3.1%
Ag & Forest Sector Total	2,969	3,462	3,299	3,200	231	7.8%
Agriculture Sector	1,177	1,279	1,206	1,311	134	11.4%
Ag Production	976	1,015	942	967	-9	-0.9%
Crop Production	588	618	574	650	61	10.4%
Livestock Production	387	397	368	317	-70	-18.0%
Ag Processing	202	264	264	344	142	70.6%
Crop Processing	133	129	132	129	-5	-3.5%
Livestock Processing	68	134	131	215	147	215.5%
Forestry Sector	1,782	2,152	2,064	1,562	-220	-12.4%
Forest Production	195	331	294	233	38	19.7%
Forestry	3	3	3	3	0	-3.4%
Logging	192	328	292	231	38	20.0%
Forest Processing	1,587	1,821	1,769	1,328	-259	-16.3%
Solid Wood Products	38	40	40	28	-10	-25.6%
Pulp and Paper	1,080	1,324	1,292	883	-197	-18.2%
Furniture	469	457	438	417	-52	-11.1%
Ag and Forest Related	10	31	29	327	318	3303.6%

Note: Datasets for 2020-Q1 and 2020-Q4 were not released. Therefore, values presented for 2020 are annualized and are not necessarily indicative of shifts occurring between 2020-Q3 and 2020-Q4. They represent the estimated outcome for all changes that occurred throughout the entire year.

3.1.3 Pope County

In 2019 total employment in Pope County was 35,975 with agriculture and forestry representing 13.3% of employment, or 4,789 jobs. Of those 4,789 jobs, 73.4% stemmed from the agriculture sector, 12.6% from forestry, and 14.0% from ag & forest related industries. Crop processing represented the largest share of ag and forestry jobs, making up 3.8% of all jobs in Pope County and 28.5% of jobs within the combined ag and forestry sectors. Livestock processing was also a relatively large industry representing 3.7% of total jobs in the county and 28.0% of jobs in the aggregate ag and forestry sector (Figure 6).

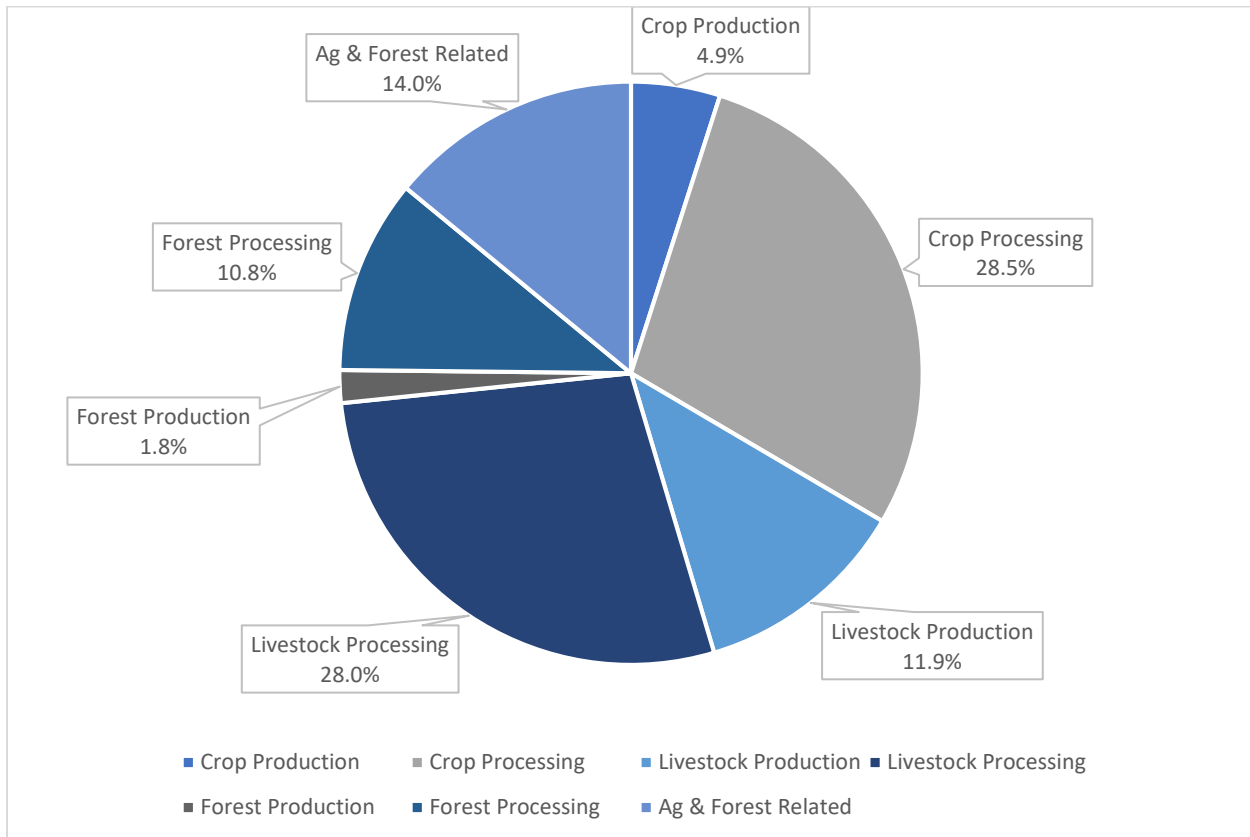


Figure 6: Share of employment in ag, forest, and related industries in 2019 – Pope County

From 2019 to 2020 Pope County lost 2,746 jobs, representing a 7.6% decrease in total employment. During this time, employment in the aggregate ag and forestry sector fell at a substantially higher rate of 28.6%. This drop in ag and forestry employment is almost entirely attributable to losses seen in the crop processing sector. This industry alone lost 1,295 jobs between from 2019 to 2020. Livestock production and processing also saw net losses of 95 and 218 jobs, respectively. Meanwhile, the forestry sector saw a net increase of 206 jobs, primarily from growth in the pulp and paper sector (Table 6).

Pope County saw minimal employment decreases at the onset of the pandemic, with employment remaining stable, or increasing for several sectors in 2020-Q2. Although decreases are shown for many industries in Q3 over Q2, these decreases were fairly minimal. While Q2 and

Q3 data indicate growth and resilience for several Pope County ag and forest industries, 2020 full year values suggest substantial losses may have occurred during the fourth quarter of the year, specifically for crop processing which saw a 94.8% drop in employment from 2019 to 2020. This drop was attributable to a total loss of employment (1,218 jobs) in the frozen specialties manufacturing industry, as well as losses shown in bread and bakery products (77 jobs) and ice cream and frozen dessert manufacturing (59 jobs).

Like most other counties, Pope County saw losses in employment for livestock production and processing. Jobs in beef cattle ranching appear to have fallen steadily across 2020 with decreases in Q2, Q3, and the 2020 annual datasets. Poultry and egg production showed a rise in Q2 before showing losses across Q3 and 2020 as a whole. Losses in livestock manufacturing were entirely the result of a decrease of employment in the dog and cat food manufacturing industry which saw jobs fall from 206 in 2019 to 35 by the end of 2020.

Table 6: Annualized Employment – Pope County

	Total Employment				Change	
	2019	2020-Q2	2020-Q3	2020	2019 to 2020	
<u>Pope County Total</u>	<u>35,975</u>	<u>35,259</u>	<u>35,385</u>	<u>33,229</u>	<u>-2,746</u>	<u>-7.6%</u>
<u>Ag & Forest Sector Total</u>	<u>4,789</u>	<u>4,769</u>	<u>4,680</u>	<u>3,420</u>	<u>-1,369</u>	<u>-28.6%</u>
<i>Agriculture Sector</i>	<i>3,513</i>	<i>3,586</i>	<i>3,482</i>	<i>1,970</i>	<i>-1,543</i>	<i>-43.9%</i>
Ag Production	808	838	792	778	-30	-3.7%
Crop Production	237	249	231	301	65	27.4%
Livestock Production	571	589	560	477	-95	-16.6%
Ag Processing	2,705	2,748	2,691	1,192	-1,513	-55.9%
Crop Processing	1,366	1,430	1,420	71	-1,295	-94.8%
Livestock Processing	1,339	1,318	1,271	1,121	-218	-16.3%
<i>Forestry Sector</i>	<i>604</i>	<i>557</i>	<i>550</i>	<i>810</i>	<i>206</i>	<i>34.2%</i>
Forest Production	87	98	95	97	10	11.2%
Forestry	1	1	1	1	0	0.8%
Logging	86	96	94	96	10	11.3%
Forest Processing	517	460	455	713	197	38.1%
Solid Wood Products	393	338	335	390	-3	-0.7%
Pulp and Paper	123	122	120	322	199	161.4%
Furniture	1	0	0	1	0	46.3%
<i>Ag and Forest Related</i>	<i>672</i>	<i>626</i>	<i>648</i>	<i>640</i>	<i>-32</i>	<i>-4.8%</i>

Note: Datasets for 2020-Q1 and 2020-Q4 were not released. Therefore, values presented for 2020 are annualized and are not necessarily indicative of shifts occurring between 2020-Q3 and 2020-Q4. They represent the estimated outcome for all changes that occurred throughout the entire year.

3.1.4 Sebastian County

In 2019 total employment in Sebastian County was 85,566 with agriculture and forestry representing almost 7.7% of employment, or 6,547 jobs. Of those 6,547 jobs, 72.0% stemmed from the agriculture sector, 27.6% from forestry, and 0.4% from ag & forest related industries. Livestock processing represented the largest share of ag and forestry jobs, making up 3.5% of all jobs in Sebastian County and 45.7% of jobs within the combined ag and forestry sectors. Forest and crop processing were also relatively large industries. Forest processing represented 2.1% of total jobs in the county and 27.3% of jobs in the aggregate ag and forestry sector. Crop processing represented 1.4% of total county jobs and 18.3% of jobs in aggregate ag and forestry (Figure 7).

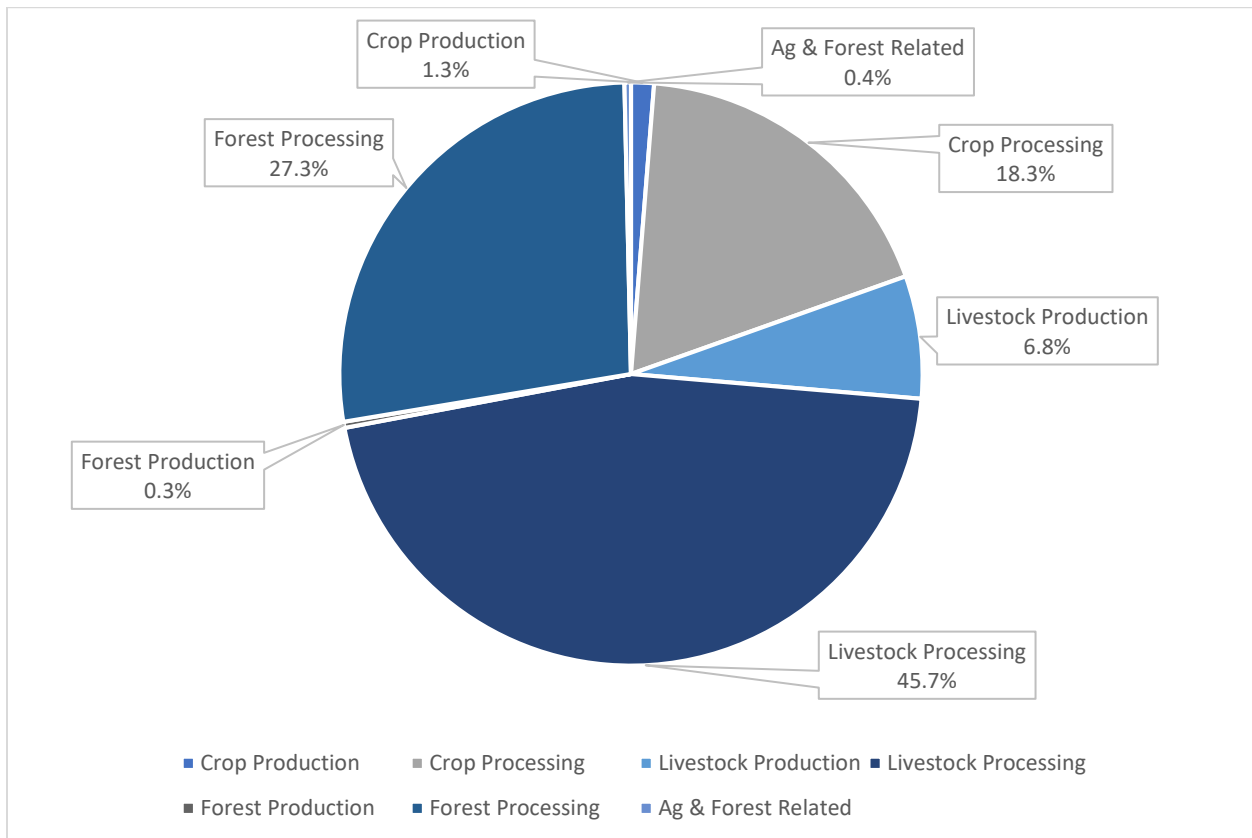


Figure 7: Share of employment in ag, forest, and related industries in 2019 – Sebastian County

From 2019 to 2020 Sebastian County lost 4,772 jobs, representing a 5.6% decrease in total employment. During this time, employment in the aggregate ag and forestry sector fell at a slightly higher rate of 6.3%. The decline in aggregate ag and forestry employment is attributable to the agriculture sector which saw a net decrease of 412 jobs from 2019 to 2020. This was largely due to losses in ag processing which showed declines in employment for both crop and livestock processors. While gains were seen in crop production employment, losses in livestock production resulted in a net loss of 33 jobs across ag production industries. The forestry sector saw gains in 2020, specifically in forest processing which saw growth across all processing industries (Table 7).

In the initial stages of the pandemic, agriculture and forestry sectors showed resilience, with employment in most agriculture and forestry sectors increasing in the second quarter of 2020. The only exceptions were found in the solid wood products and furniture manufacturing industries which showed employment losses of 21.1% and 6.5%, respectively, over 2019. By 2020-Q3 some pandemic effects appeared to set in as employment in several industries began to fall below 2019 levels. The largest downward shifts in Q3 were seen in the livestock processing, solid wood products, and furniture industries. Although livestock processing gained 88 jobs in Q2, by Q3 employment in the industry began showing signs of decline, with employment losses of 308 jobs for the sector reported from 2019 to 2020. Crop processing employment appeared to hold strong throughout Q2 and Q3, but annual 2020 values show a loss of 175 jobs from 2019, indicating a potential decline for the industry by the end of the year.

In Q2 and Q3 of 2020, the pulp and paper sector grew in Sebastian County, where Glatfelter is a manufacturer of air-laid paper, used in baby wipes and disinfectant wipes. However, most of these gains were temporary, though the sector did report a 3% increase in employment in 2020. The opposite trend happened in furniture and solid wood products. The initial response to COVID was a shutdown of the furniture industry and a decline in wood windows and doors. However, a strong remodeling demand produced growth in wood window and door manufacturing in the county.

Table 7: Annualized Employment – Sebastian County

	Total Employment				Change	
	2019	2020-Q2	2020-Q3	2020	2019 to 2020	
Sebastian County Total	85,566	80,539	81,651	80,794	-4,772	-5.6%
Ag & Forest Sector Total	6,547	6,987	6,798	6,135	-412	-6.3%
Agriculture Sector	4,716	5,024	4,886	4,201	-515	-10.9%
Ag Production	528	551	516	495	-33	-6.2%
Crop Production	83	84	77	103	20	24.2%
Livestock Production	445	467	438	392	-53	-11.9%
Ag Processing	4,189	4,473	4,370	3,706	-483	-11.5%
Crop Processing	1,198	1,394	1,404	1,023	-175	-14.6%
Livestock Processing	2,991	3,079	2,967	2,683	-308	-10.3%
Forestry Sector	1,807	1,929	1,880	1,910	103	5.7%
Forest Production	22	27	25	18	-4	-18.9%
Forestry	3	3	3	3	0	3.2%
Logging	19	24	22	15	-4	-22.6%
Forest Processing	1,785	1,901	1,855	1,892	107	6.0%
Solid Wood Products	350	276	269	354	4	1.2%
Pulp and Paper	1,075	1,289	1,258	1,107	32	3.0%
Furniture	361	337	328	432	71	19.7%
Ag and Forest Related	24	34	33	24	1	3.7%

Note: Datasets for 2020-Q1 and 2020-Q4 were not released. Therefore, values presented for 2020 are annualized and are not necessarily indicative of shifts occurring between 2020-Q3 and 2020-Q4. They represent the estimated outcome for all changes that occurred throughout the entire year.

3.1.5 Washington County

In 2019 total employment in Washington County was 155,485 with agriculture and forestry representing almost 7.6% of employment, or 11,741 jobs. Of those 11,741 jobs, 82.1% stemmed from the agriculture sector, 10.0% from forestry, and 7.9% from ag & forest related industries. Livestock processing represented the largest share of ag and forestry jobs, making up 3.2% of all jobs in Washington County and 42.0% of jobs within the combined ag and forestry sectors. Crop processing and livestock production were also relatively large industries. Crop processing represented 1.8% of total jobs in the county and 23.4% of jobs in the aggregate ag and forestry sector. Livestock production represented 1.1% of total county jobs and 13.9% of jobs in aggregate ag and forestry (Figure 8).

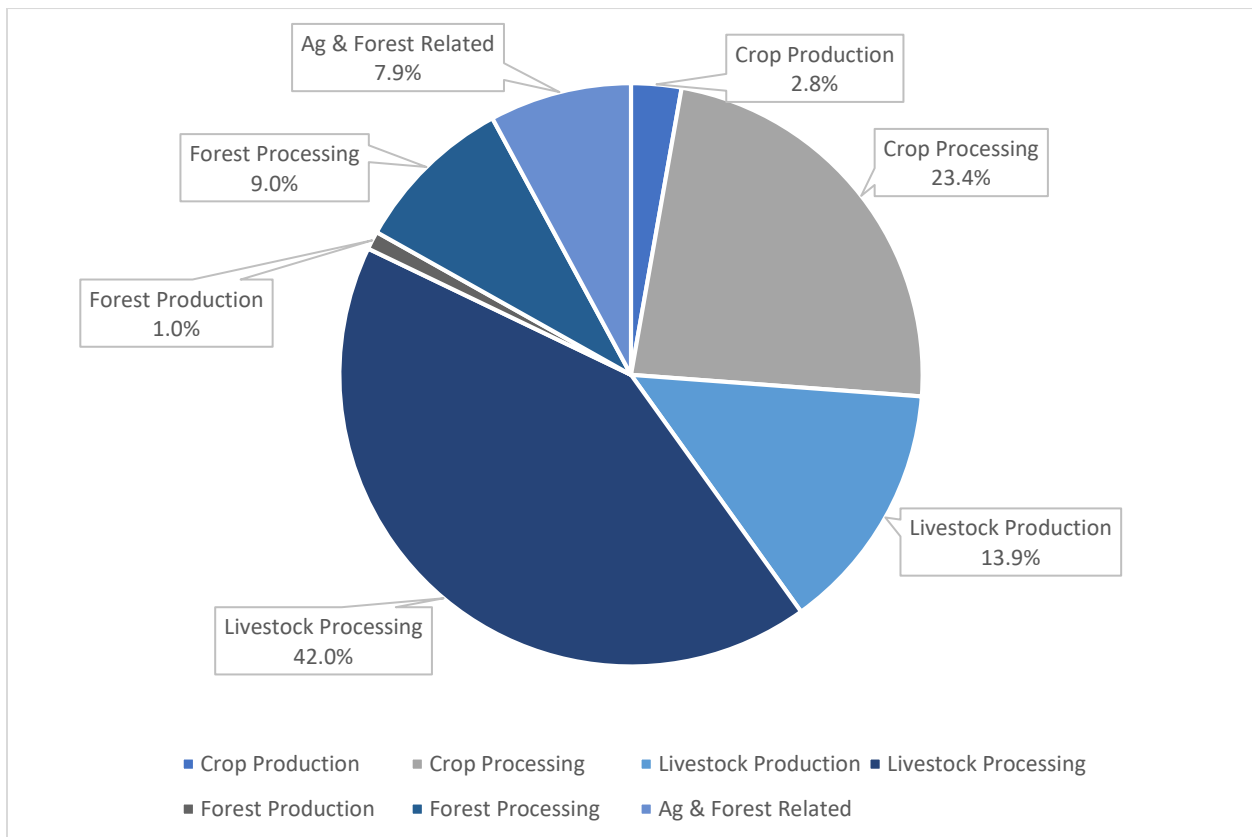


Figure 8: Share of employment in ag, forest, and related industries in 2019 – Washington County

From 2019 to 2020 Washington County lost 4,443 jobs, representing a 2.9% decrease in total employment. During this time, employment in the aggregate ag and forestry sector rose at a rate of 9.1%. (Table 8). Much of this rise is attributable to an increase in the crop processing industry which gained 1,334 jobs from 2019 to 2020. The crop production sector showed a net employment loss of 7.3%, resulting from a decrease of 216 jobs in livestock production. The forestry sector showed a net gain in employment of 7.7%. This gain was largely attributable to growth in the solid wood products industry (Table 8). However, the pulp and paper sector, which contributes greatly to value-added, negated most of the economic growth in Washington County.

At the onset of the pandemic employment in livestock processing showed growth, while crop processing recognized a loss in Q2 from 2019. In Q3, livestock processors began to show losses as well as the industry dealt with labor issues and constraints related to meeting COVID safety protocols. Annualized totals for 2020 show a net increase of 1,334 jobs in the crop processing sector, with the bulk of jobs stemming from increased employment in frozen specialties manufacturing.

In the forestry sector, the initial response was a major decline in the pulp and paper sector and solid wood products sector. However, the pulp and paper sector recovered rapidly as Rockline Industries, a major manufacturer of personal and baby wipes, saw demand increase and the sector recovered more than one-third of its losses. The solid wood products sector, led by gains in the container and pallet manufacturing sector, grew by 35.5% in the last half of 2020.

Table 8: Annualized Employment – Washington County

	Total Employment				Change	
	2019	2020-Q2	2020-Q3	2020	2019 to 2020	
Washington County Total	155,485	143,779	144,874	151,042	-4,443	-2.9%
Ag & Forest Sector Total	11,741	11,429	11,014	12,805	1,064	9.1%
Agriculture Sector	9,642	9,508	9,198	10,686	1,044	10.8%
Ag Production	1,960	2,022	1,920	1,816	-144	-7.3%
Crop Production	327	328	307	399	73	22.2%
Livestock Production	1,633	1,694	1,614	1,417	-216	13.2%
Ag Processing	7,682	7,485	7,278	8,870	1,188	15.5%
Crop Processing	2,747	2,186	2,180	4,082	1,334	48.6%
Livestock Processing	4,935	5,299	5,098	4,789	-146	-3.0%
Forestry Sector	1,173	965	917	1,263	90	7.7%
Forest Production	119	329	295	129	10	8.8%
Forestry	10	11	11	11	1	5.5%
Logging	109	318	285	119	10	9.1%
Forest Processing	1,054	636	622	1,134	80	7.6%
Solid Wood Products	347	283	273	470	123	35.5%
Pulp and Paper	630	273	265	574	-56	-8.9%
Furniture	77	81	84	89	13	16.6%
Ag and Forest Related	926	957	899	855	-71	-7.6%

Note: Datasets for 2020-Q1 and 2020-Q4 were not released. Therefore, values presented for 2020 are annualized and are not necessarily indicative of shifts occurring between 2020-Q3 and 2020-Q4. They represent the estimated outcome for all changes that occurred throughout the entire year.

4. Conclusions

The aggregate agriculture and forestry sectors suffered relatively minor losses throughout the first year of the pandemic with direct employment falling by only 0.4%, value added falling by 0.1%, and labor income increasing 1.1% from 2019 to 2020. While the sector as a whole saw minimal shifts, impacts varied across industries.

Strong commodity markets and aid from both pre-existing and COVID-related stimulus programs resulted in growth across Arkansas' crop production sector in 2020. Livestock producers, however, were not as fortunate. Reduced capacity in meat packing facilities limited markets for producers to sell their livestock (beef and pork, in particular), leading to higher production costs and lower prices. As a result, employment, labor income, and value added for livestock production fell across the state in 2020.

During the pandemic, demand for high-end beef cuts and pork products fell as consumers opted for relatively cheaper meats. Arkansas is a major producer and processor of poultry products therefore in 2020 the state saw a minor increase in employment, and more substantial increases in labor income and value added stemming from increases in worker salaries across the meat processing industry. A similar trend was also seen in other food processing industries in the state as demand for packaged and frozen food products rose.

The forestry industry, by and large, saw declines in 2020 that are persistent. Arkansas is a leading producer of softwood lumber for construction, and as long as there are labor issues in the construction industry, recovery will be slow. However, strong housing demand, even though it is moderated by increased interest rates, will result in recovery and good growth in the forestry sector in 2021 and beyond. Forest production will have a slower recovery as increased value-added in the production sector trickles slowly down to loggers, foresters, and landowners. Forest landowners saw a decline in payments for their crops, from \$445 to \$368 million dollar, a decline of 17.4%. In Arkansas, as well as the rest of the US South, there is a tremendous physical oversupply of timber growth which will keep price growth for timber slow for the foreseeable future.

Impacts of the pandemic were more pronounced at the county-level as many counties rely on fewer industries to uphold their smaller regional economies. Because crop production was less affected by the pandemic, counties in the Delta experienced lower shifts in employment than those more reliant on livestock production, or food and forest processing activity. This was recognized in the county-level analysis as counties identified as having the most substantial shifts in agricultural and/or forest employment each fall under one or more of these categories. While many industries experienced volatility throughout the second and third quarters of 2020, most, with the exception of livestock production and processing, appeared to show signs stabilization by the end of 2020. Many counties showing increases in agriculture and/or forestry saw an overall decrease in jobs, indicating that agriculture and forestry likely played an important role in mitigating job losses in areas disproportionately affected by the pandemic.

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Appendix A: Description of IMPLAN Sectors and Aggregation Schemes

Aggregate Sector	Sector ID	IMPLAN Sector
CROPS PRODUCTION	1	Oilseed farming
	2	Grain farming
	3	Vegetable and melon farming
	4	Fruit farming
	5	Tree nut farming
	6	Greenhouse, nursery, and floriculture production
	7	Tobacco farming
	8	Cotton farming
	9	Sugarcane and sugar beet farming
	10	All other crop farming
CROPS PROCESSING	65	Flour milling
	66	Rice milling
	67	Malt manufacturing
	68	Wet corn milling
	69	Soybean and other oilseed processing
	70	Fats and oils refining and blending
	71	Breakfast cereal manufacturing
	72	Beet sugar manufacturing
	73	Sugar cane mills and refining
	74	Nonchocolate confectionery manufacturing
	75	Chocolate and confectionery manufacturing from cacao beans
	76	Confectionery manufacturing from purchased chocolate
	77	Frozen fruits, juices and vegetables manufacturing
	78	Frozen specialties manufacturing
	79	Canned fruits and vegetables manufacturing
	80	Canned specialties
	81	Dehydrated food products manufacturing
	87	Frozen cakes and other pastries manufacturing
	93	Bread and bakery product, except frozen, manufacturing
	94	Cookie and cracker manufacturing
	95	Dry pasta, mixes, and dough manufacturing
	96	Tortilla manufacturing
	97	Roasted nuts and peanut butter manufacturing
	98	Other snack food manufacturing
	99	Coffee and tea manufacturing
	100	Flavoring syrup and concentrate manufacturing
	101	Mayonnaise, dressing, and sauce manufacturing
	102	Spice and extract manufacturing
	103	All other food manufacturing
	104	Bottled and canned soft drinks & water
	105	Manufactured ice
	106	Breweries
	107	Wineries
108	Distilleries	
109	Tobacco product manufacturing	
110	Fiber, yarn, and thread mills	
111	Broadwoven fabric mills	
112	Narrow fabric mills and schiffli machine embroidery	
113	Nonwoven fabric mills	

	114	Knit fabric mills
	115	Textile and fabric finishing mills
	116	Fabric coating mills
	117	Carpet and rug mills
	118	Curtain and linen mills
	119	Textile bag and canvas mills
	120	Rope, cordage, twine, tire cord and tire fabric mills
	121	Other textile product mills
	122	Hosiery and sock mills
	123	Other apparel knitting mills
	124	Cut and sew apparel contractors
	125	Mens and boys cut and sew apparel manufacturing
	126	Womens and girls cut and sew apparel manufacturing
	127	Other cut and sew apparel manufacturing
	128	Apparel accessories and other apparel manufacturing
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ANIMAL PRODUCTION	11	Cattle ranching and farming
	12	Dairy cattle and milk production
	13	Poultry and egg production
	14	Animal production, except cattle and poultry
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ANIMAL PROCESSING	63	Dog and cat food manufacturing
	64	Other animal food manufacturing
	82	Cheese manufacturing
	83	Dry, condensed, and evaporated dairy product manufacturing
	84	Fluid milk manufacturing
	85	Creamery butter manufacturing
	86	Ice cream and frozen dessert manufacturing
	88	Poultry processing
	89	Animal, except poultry, slaughtering
	90	Meat processed from carcasses
	91	Rendering and meat byproduct processing
	92	Seafood product preparation and packaging
129	Leather and hide tanning and finishing	
130	Footwear manufacturing	
131	Other leather and allied product manufacturing	
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FORESTRY PRODUCTION	15	Forestry, forest products, and timber tract production
	16	Commercial logging
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FORESTRY PROCESSING	132	Sawmills
	133	Wood preservation
	134	Veneer and plywood manufacturing
	135	Engineered wood member and truss manufacturing
	136	Reconstituted wood product manufacturing
	137	Wood windows and door manufacturing
	138	Cut stock, resawing lumber, and planing
	139	Other millwork, including flooring
	140	Wood container and pallet manufacturing
	141	Manufactured home (mobile home) manufacturing
	142	Prefabricated wood building manufacturing
143	All other miscellaneous wood product manufacturing	
144	Pulp mills	
145	Paper mills	
146	Paperboard mills	
147	Paperboard container manufacturing	

	148	Paper bag and coated and treated paper manufacturing
	149	Stationery product manufacturing
	150	Sanitary paper product manufacturing
	151	All other converted paper product manufacturing
	365	Wood kitchen cabinet and countertop manufacturing
	366	Upholstered household furniture manufacturing
	367	Nonupholstered wood household furniture manufacturing
	369	Institutional furniture manufacturing
	370	Wood office furniture manufacturing
	371	Custom architectural woodwork and millwork
	373	Showcase, partition, shelving, and locker manufacturing
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AGRICULTURE	17	Commercial fishing
RELATED	18	Commercial hunting and trapping
	19	Support activities for agriculture and forestry
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