

Economic Contribution of Agriculture¹ to the Arkansas Economy in 2018

Leah English
Program Associate -
Center for Agricultural
and Rural Sustainability

Jennie Popp
Area Director -
Center for Agricultural
and Rural Sustainability

Wayne P. Miller
Professor -
Community, Professional
and Economic Development

Agriculture is important for the livelihood of many Arkansans and is a key economic driver of the state. With more than 42,000 farms, 19 million acres of forests, and agriculture product manufacturing firms in every part of the state, the scope and impact of agriculture is felt by many households across Arkansas. The state consistently ranks as a top 5 producer in the nation for several commodities including rice, broilers, catfish, cotton and turkeys. While agriculture is important for providing food and other related goods and services, the agriculture sector provides nearly 270,000 jobs for Arkansans. This fact sheet summarizes the findings of a recent study undertaken to analyze the total economic contribution – as measured by jobs, income and value added² – of Arkansas’s Agriculture Sector in 2018.

Measuring Economic Activity of Arkansas’s Agriculture Sector

The economic contribution of agriculture includes all economic activity generated within industries that make up the Agriculture Sector (e.g. agricultural production, agricultural processing, agriculture-related industries). This includes jobs supported, wages paid, and value added to state economy -

a measure similar to state Gross Domestic Product (GDP). While these “direct” contributions are important, additional value is generated as Arkansas agribusinesses and related industries purchase inputs from local suppliers and when workers spend their earnings within the state. These additional contributions are described as indirect and induced effects, respectively. The sum of the direct, indirect and induced contributions provides a more complete understanding of the total economic contribution of agriculture to the state economy.

Agriculture’s Contributions

In 2018, economic activity generated by agriculture accounted for \$20.9 billion³ of value added to the Arkansas economy. That’s 16 cents of every \$1 of value added in the state. Agriculture sustained nearly 270,000 jobs, which was more than 1 in every 6 jobs in Arkansas. Along with these jobs came \$12.9 billion in labor income, representing 16% of the state’s total labor income. Direct effects – those coming directly from the Agriculture Sector – constituted the majority of contributions for employment (54%) and labor income (54%), and over half of all value added (51%) generated by agriculture (Figure 1, next page).

*Arkansas Is
Our Campus*

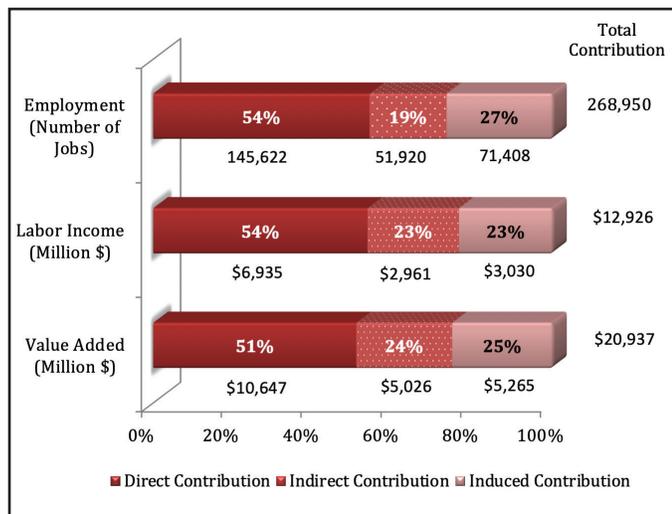
Visit our website at:
<https://www.uaex.uada.edu>

¹ Agriculture, as defined in this publication, includes timber production and forest product manufacturing in addition to agricultural products as defined in English, Popp, and Miller (2020).

² Value added is the sum of employee compensation, proprietary income, other property type income, and indirect business taxes. The sum of value added for all industries is a measure of the size of the state economy.

³ Contributions are reported in nominal 2018 dollars.

Figure 1. The Agriculture Sector's Contribution to the Arkansas Economy in 2018



Source: IMPLAN, 2020; English, Popp, and Miller, 2020

Contributions by Industry Type

The Agriculture Sector includes businesses involved in agricultural production, agricultural processing and agriculture-related activities. Agricultural production relates to the production and/or harvesting of agricultural commodities including crop, livestock and forestry products. Agricultural processing includes industries that take those agricultural commodities and process them into various products such as packaged food products, clothing and furniture. The agriculture-related category includes fishing, hunting and trapping, and support activities for agriculture and forestry.

In 2018, agricultural production contributed more than \$5.1 billion in value added to the Arkansas economy with activity in this sector providing more than

88,000 jobs and generating over \$3.7 billion in labor income across the state. Agricultural processing contributions were estimated to be \$15.2 billion in value added, supporting more than 168,000 jobs and generating \$8.8 billion in labor income. Agriculture-related activities contributed nearly \$0.6 billion in value added, \$0.4 billion in labor income, and nearly 11,900 jobs (Table 1).

The agricultural processing industry represented the greatest share of agriculture's contribution to the state economy, followed by the agricultural production and agriculture-related industries. Agricultural processing generated 73% of value added, 63% of employment, and 68% of labor income, with poultry processing being the primary economic contributor to the processing industry.

How Does Arkansas Compare?

The share of total state GDP⁴ contributed by agricultural production, agricultural processing, and agriculture-related industries is greater for Arkansas than for all surrounding states⁵. Agriculture's share of GDP is also higher in Arkansas than averages shown for the Southeastern U.S.⁶, and the U.S. as a whole (Figure 2, next page).

This represents a share of GDP from Arkansas's Agriculture Sector that is:

- 4.6 times greater than in Texas
- 2.9 times greater than in Louisiana
- 2.6 times greater than in Oklahoma
- 2.1 times greater than in Missouri
- 2.0 times greater than in Tennessee
- 1.2 times greater than in Mississippi
- 2.0 times greater than for the Southeast region
- 2.8 times greater than for the U.S. as a whole

Table 1. Total Economic Contribution of Agriculture by Industry Type, 2018

Industry Type	Employment (jobs)	Labor Income (million \$)	Value Added (million \$)
Production	88,422	\$3,712	\$5,183
Processing	168,631	\$8,771	\$15,204
Ag Related	11,897	\$443	\$550
Total Contribution	268,950	12,926	20,937

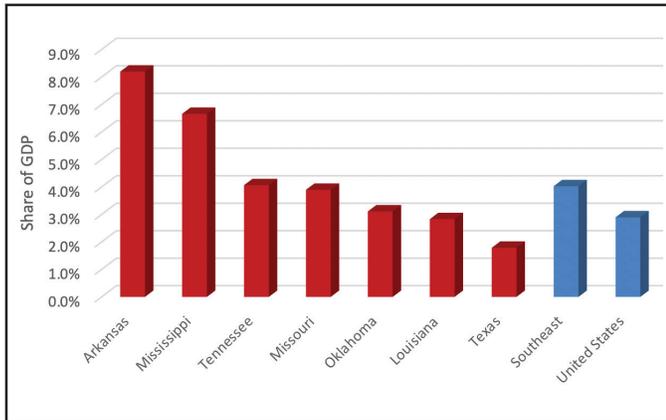
Source: IMPLAN, 2020; English, Popp, and Miller, 2020

⁴ GDP by state is the market value of goods and services produced by the labor and property located in a state. GDP does not factor in the impact of subsidies and taxes on products, which are presented in value added estimates.

⁵ Calculations based on the percent of the direct contribution of the Agriculture Sector to state GDP. This includes value generated by agricultural production, processing and ag-related industries, but excludes contributions of associated wholesale and retail industries.

⁶ The Southeast is defined by BEA to include the states AL, AR, FL, GA, KY, LA, MS, NC, SC, TN, VA and WV, and is not the sum of Arkansas' contiguous states listed in the table.

Figure 2. Agriculture's Share of Total State GDP, 2018*



Source: USDC BEA, 2020

*Represents the direct contribution of agricultural production, processing and ag related industries. Wholesale and retail activities are excluded.

Conclusion

Agriculture contributes greatly to the Arkansas economy by providing jobs and income for Arkansas residents and generating over 16% of the state's value added. As has been the case for many years, agriculture contributes a higher proportion of state GDP in Arkansas than it does in any of the surrounding six states. Continued strength of agriculture is of paramount importance to the social and economic fabric of Arkansas communities and to the infrastructure and services that translate into quality of life for residents.

References

English, L., J. Popp and W. Miller. 2020. *Economic Contribution of the Agricultural Sector to the Arkansas Economy in 2018*. Research Report 1000. Arkansas Agricultural Experiment Station, University of Arkansas System Division of Agriculture, Fayetteville.

IMPLAN (IMPLAN Group, LLC). 2020. IMPLAN System (data and software): 2018 Arkansas state package. www.implan.com.

USDC BEA (U.S. Department of Commerce Bureau of Economic Analysis). 2020. Regional Economic Accounts: Annual Gross Domestic Product (GDP) by State. <http://www.bea.gov/regional/>.

No endorsement is implied or discrimination intended for firms or references included or excluded from this list.

LEAH ENGLISH, program associate, and **JENNIE POPP**, area director, are with the Center for Agricultural and Rural Sustainability. **WAYNE P. MILLER** is a professor of community, professional and economic development. All are with the University of Arkansas Division of Agriculture, Cooperative Extension Service in Little Rock.

Pursuant to 7 CFR § 15.3, the University of Arkansas System Division of Agriculture offers all its Extension and Research programs and services (including employment) without regard to race, color, sex, national origin, religion, age, disability, marital or veteran status, genetic information, sexual preference, pregnancy or any other legally protected status, and is an equal opportunity institution.

FSA63-PD-12-2020N