Agriculture and Natural Resources

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Economic Contribution of Agriculture¹ to the Arkansas Economy in 2021

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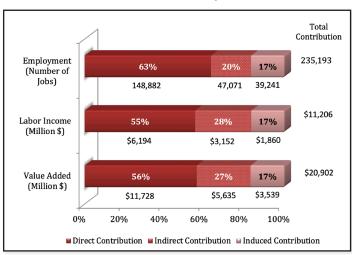
Agriculture is important for the livelihood of many Arkansans and is one of the state's key economic drivers. In 2021, Arkansas' economy was upheld by the presence of 42,000farms, 19 million acres of forests, and various agricultural product manufacturing firms. As a result, the scope and impact of agriculture is felt by workers and households across the state. Arkansas consistently ranks as a "top 5" producer in the nation for several commodities including rice, broilers, catfish, cotton, turkeys and bringing dollars into the state through the export of these and other commodities. While agriculture is important for providing food and other related goods and services, the agriculture sector provides more than 235,000 jobs for Arkansans, through direct, indirect, and induced economic contributions. This fact sheet summarizes the findings of a recent study undertaken to analyze the total economic contribution – as measured by jobs, income and value $added^2 - of Arkansas'$ Agriculture Sector in 2021.

Measuring Economic Activity of Arkansas' 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.

¹Agriculture as defined in this publication, includes timber production and forest product manufacturing in addition to agricultural products as defined in English and Popp (2023).

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.



Source: IMPLAN, 2023; English and Popp, 2023

Agriculture's Contributions

In 2021, economic activity generated by agriculture accounted for \$20.9 billion³ of value added to the Arkansas economy. That's 14 cents of every \$1 of value added in the state. Agriculture sustained more than 235,000 jobs, which was 1 in every 7 jobs in Arkansas. Along with these jobs came \$11.2 billion in labor income, representing 12.6 percent of the state's total labor income. Direct effects – those coming directly from the Agriculture Sector - constituted the majority of contributions for employment (63 percent), labor income (55 percent), and value added (56 percent) generated by agriculture (Figure 1)⁴.

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 2021, agricultural production contributed almost \$5.2 billion in value added to the Arkansas economy, with activity in this sector providing almost 83,000 jobs and generating more than \$2.4 billion in labor income across the state. Agricultural processing contributions were estimated to be \$15.2 billion in value added, supporting more than 141,000 jobs, and generating \$8.3 billion in labor income. Agriculture-related activities contributed \$492 million in value added, \$413 million in labor income, and more than11,200 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 72.9% of agriculture's value added, 60.0% of employment, and 74.5% of labor income, with poultry processing being the primary economic contributor to the processing industry.

How Does Arkansas Compare?

The share of total state GDP⁵ accounted for by the direct contribution of agricultural production, agricultural processing, and agriculture-related

Industry Type	Employment (jobs)	Labor Income (million \$)	Value Added (million \$)
Production	82,897	\$2,449	\$5,178
Processing	141,011	\$8,344	\$15,233
Ag Related	11,285	\$413	\$492
Total Contribution	235,193	\$11,206	\$20,902

Table 1. Total Economic Contribution of Agriculture by Industry Type, 2021

Source: IMPLAN, 2023; English and Popp, 2023

³Contributions are reported in nominal 2021 dollars.

⁴Previous analyses include induced contributions from state and local government institutions. We are no longer able to estimate these contributions, therefore induced values for 2021 appear lower than prior years. ⁵GDP 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 the previous value added estimates.

Figure 1. The Agriculture Sector's Contribution to the Arkansas Economy in 2021

industries is greater for Arkansas than for all surrounding states⁶. Agriculture's share of GDP is also higher in Arkansas than averages shown for the Southeastern United States⁷, and the United States as a whole (Figure 2).

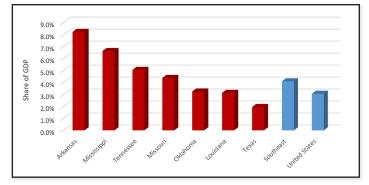
This represents a share of GDP from Arkansas' Agriculture Sector that is:

- 4.2 times greater than in Texas
- 2.6 times greater than in Louisiana
- 2.5 times greater than in Oklahoma
- 1.9 times greater than in Missouri
- 1.6 times greater than in Tennessee
- 1.2 times greater than in Mississippi
- 2.0 times greater than for the Southeast region
- 2.7 times greater than for the US as a whole

Conclusion

Agriculture contributes greatly to the Arkansas economy by providing jobs and income for Arkansas residents and generating 14 percent 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, the Southeast region, and the US as a whole. 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.

Figure 2. Agriculture's Share of Total State GDP, 2021*



Source: USDC BEA, 2022

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

References

- English, L. and J. Popp. 2023. Economic Contribution of the Agricultural Sector to the Arkansas Economy in 2021. Research Report 1010 (Forthcoming) Arkansas Agricultural Experiment Station, University of Arkansas System Division of Agriculture, Fayetteville. <u>https://economicimpact-of-ag.uada.edu/arkansas/</u>.
- IMPLAN (IMPLAN Group, LLC). 2023. IMPLAN System (data and software): 2021 Arkansas state package. <u>www.implan.com</u>.
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⁶Calculations 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.

⁷The 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.

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