

ECONOMIC
Impact
of Arkansas
Agriculture



2008

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\$15,934,000,000

Agriculture accounted for \$15.9 billion of value added to the Arkansas economy in 2006.

That's 18 cents of every \$1 of Value Added.*

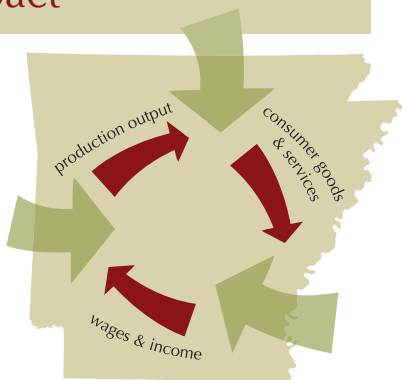
*Value Added is the sum of employee compensation, proprietary income and indirect business taxes.

Source: "Impact of the Agricultural Sector on the Arkansas Economy in 2006," by J. Popp, N. Kemper and W. Miller. Research Report 981. Arkansas Agricultural Experiment Station, University of Arkansas Division of Agriculture, Fayetteville. Forthcoming 2008.

Computed using 2006 Arkansas database from Minnesota Implan Group, Inc. (Latest year for which relevant data were available.)

Total Impact

The total economic impact of the agricultural sector includes three areas of wealth and job generation.



- **Direct Impacts** are generated by farm production and processing of crops, poultry, livestock and forest products.
- **Indirect Impacts** result when agricultural firms purchase materials and services from other Arkansas businesses — a very important part of the economy in many communities.
- **Induced Impacts** result when employees of agricultural firms and their suppliers spend a portion of their income within Arkansas.

These impacts are reported in terms of Employment, Labor Income and Value Added.

- **Employment** includes all wage and salary employees, as well as self-employed workers in a given sector.
- **Labor Income** consists of two parts. First is proprietary income, which includes all income received by self-employed individuals including private business owners, doctors, lawyers, etc. Second is wages, which includes all worker salaries, payments, and fringe benefits paid by employers.
- **Value-Added** includes all payments to workers (labor income) plus indirect taxes and other property-type income such as payments for rents, royalties, and dividends. Value added is directly comparable to Gross Domestic Product (GDP) by state, but it is not an equivalent measure.

Government payments — payments made directly to some recipients in the farm sector — are included in these impacts.

Aggregate of value added by the agricultural sector in Arkansas, 2006

Impact Area	Million \$	% Total Impact	% State Total
Production	2,759	17.3	3.1
Processing	5,527	34.7	6.2
Ag-Related	255	1.6	0.3
Total Direct	8,541	53.6	9.5
Indirect	4,363	27.4	4.9
Induced	3,031	19.0	3.4
TOTAL	15,934	100.0	17.8

Agriculture Provides

- 274,150 jobs, which is more than one in every six jobs in Arkansas.
- \$9.11 billion in labor income, or 16% of the state's total labor income.



Arkansas Counts on Agriculture

The contribution of the agricultural sector as a percentage of the Gross Domestic Product (GDP) by State in Arkansas is greater than in any contiguous state as well as the averages for the Southeast region and the United States.

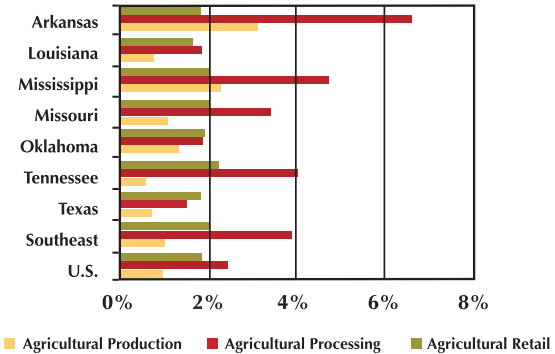
Agricultural Sector as a percentage of Gross Domestic Product by State, 2006

State/Region	Percent of GDP by State
Arkansas	11.62
Louisiana	4.27
Mississippi	9.09
Missouri	6.58
Oklahoma	5.14
Tennessee	6.87
Texas	4.07
Southeast	6.94
U.S.	5.22

Source: U.S. Department of Commerce, Bureau of Economic Analysis, Regional Accounts Data, 2008

Agricultural sector includes production, processing and retail.

Agricultural Production, Processing and Retail as a percentage of Gross Domestic Product by State, 2006



Source: USDC, BEA, 2008

For comparison among states, only the direct impacts of agricultural production, processing and retail are used as a percentage of Gross Domestic Product (GDP) by State and GDP for the United States.

GDP by State is similar to, but not the same as, value added in the analysis of aggregate impacts.

Total Impact


The Natural State

Agriculture and forestry are vital to the diverse, interactive economy of Arkansas as well as to our very identity as “The Natural State.”

National Ranking

- **No. 11 in total farm receipts**, with 46,500 farms on 14,300,000 acres. (USDA: ERS, 2007)
- **No. 4 in timber production**, with about 18,000,000 acres of forest land representing approximately 56% of the total land base. (Arkansas Forest Resources Center, 2005)



A close-up photograph of cotton bolls on a branch, with some bolls open and white cotton visible. The background is a clear blue sky.

Arkansas is in the top 25 states in the production of 19 agricultural commodities.

- **No. 1 in Rice**
- **No. 2 in Broilers**
- **No. 2 in Cotton**
- **No. 2 in Cottonseed**
- **No. 3 in Catfish (foodsize)**
- **No. 4 in Turkeys**
- **No. 5 in Grain Sorghum**
- **No. 8 in Chicken Eggs**
- **No. 10 in Soybeans**
- **No. 10 in Pecans**
- **No. 13 in Beef Cows**
- **No. 14 in Grapes**
- **No. 14 in Watermelons**
- **No. 15 in Tomatoes**
- **No. 17 in Wheat**
- **No. 18 in Hay**
- **No. 20 in Corn**
- **No. 21 in Hogs**
- **No. 21 in Cattle and Calves**

National Agricultural Statistics Service, data for 2007

Highlights of Arkansas' Agriculture 2003-2007

	Year	Production (thousands)
Rice	2005	108,792 cwt.
Broilers	2005	6,313,800 lbs.
Chicken eggs	2003	3,590 eggs
Turkeys	2007	601,400 lbs.
Cattle and calves	2003	580,979 lbs.
Beef Cows	2005	984 head
Catfish – foodsize	2005	64,000 lbs.
Hogs	2005	129,835 lbs.
Cotton	2006	2,525 bales
Cottonseed	2006	861 tons
Soybeans	2004	122,850 bushels
Grain Sorghum	2007	20,210 bushels
Corn	2007	99,120 bushels
Wheat	2004	32,860 bushels
Hay	2004	3,570 tons
Grapes	2004	5,400 lbs.
Tomatoes	2005	414 cwt.
Watermelons	2007	418 cwt.
Pecans	2003	3,800 lbs.

Highest commodity production levels for the years 2003-2007.
National Agricultural Statistics Service, various dates.



Direct Impact

Crops Sector

The crops sector includes all enterprises engaged in the production and processing of cotton, food and feed grains, oil bearing crops, fruits, nuts, vegetables, and hay and pasture.

Direct impact of crops

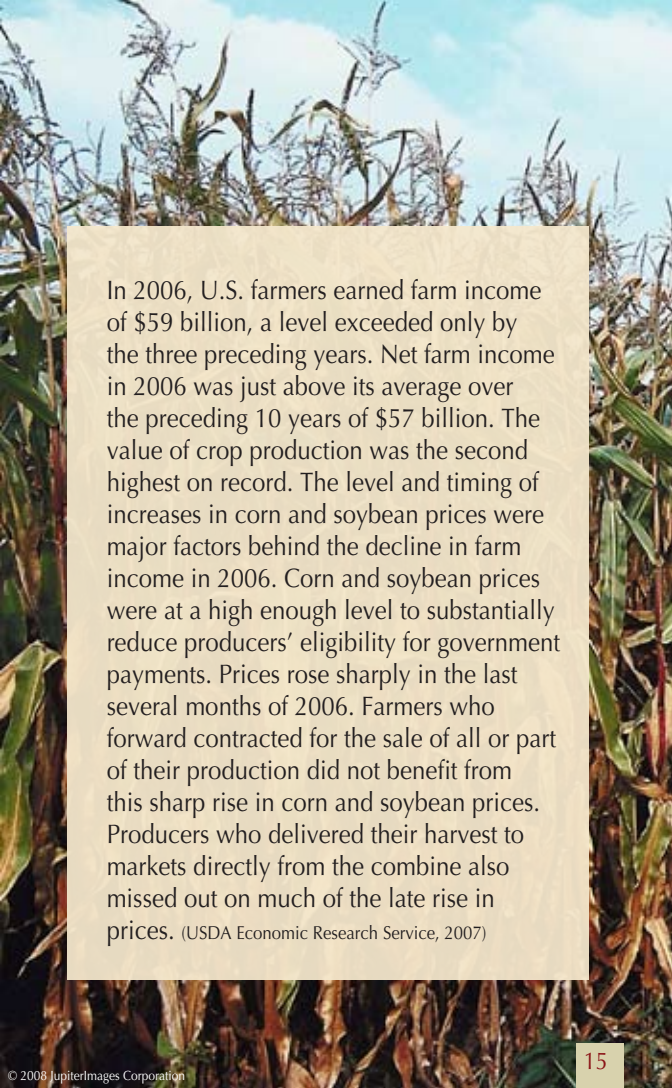
Employment	51,863 jobs
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Wages	\$925 Million
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Labor Income	\$1.30 Billion
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Value Added	\$2.73 Billion
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In 2006, U.S. farmers earned farm income of \$59 billion, a level exceeded only by the three preceding years. Net farm income in 2006 was just above its average over the preceding 10 years of \$57 billion. The value of crop production was the second highest on record. The level and timing of increases in corn and soybean prices were major factors behind the decline in farm income in 2006. Corn and soybean prices were at a high enough level to substantially reduce producers' eligibility for government payments. Prices rose sharply in the last several months of 2006. Farmers who forward contracted for the sale of all or part of their production did not benefit from this sharp rise in corn and soybean prices. Producers who delivered their harvest to markets directly from the combine also missed out on much of the late rise in prices. (USDA Economic Research Service, 2007)

Direct Impact

Strength in Diversity

Soybeans, rice, wheat, corn, grain sorghum and cotton accounted for 35% of value added, 57% of jobs and 28% of labor income in the crops sector in 2006.

The other 65% of value added was from a variety of locally important crops. This diversity is a major asset in weathering downturns in a given commodity. Other crops are hay and forage, melons, fruits, vegetables, pecans, turfgrass and ornamental plants.



2007 Commodity Production

Commodity	Acres Harvested (thousands)	Production (thousands)	Value (thousand \$)
Rice	1,325	94,487 cwt.	1,039,357
Cotton	850	1,880 bales	461,126
Cottonseed		653 tons	97,950
Soybeans	2,790	100,440 bushels	984,312
Hay	1,580	3,022 tons	278,070
Wheat	700	28,700 bushels	142,065
Corn	590	99,120 bushels	371,700
Grain Sorghum	215	20,210 bushels	72,999
Broilers		6,213,200 lbs.	2,609,544
Chicken eggs		3,288,000 eggs	371,857
Turkeys		601,400 lbs.	312,728
Cattle and calves		562,426 lbs.	483,335
Catfish – foodsize		90,400 lbs.	67,800
Hogs		129,427 lbs.	84,147
Total	8,050		7,376,990

Source: National Agricultural Statistics Service, 2008




Animal Agriculture Sector

The animal agriculture sector includes production and processing of poultry, eggs, beef and dairy products, hogs and pigs and other animals.

Beef cattle and poultry are companion enterprises on many farms, with poultry providing cash flow and fertilizer for pastures.

Aquaculture is a major enterprise and is often a companion to row crop farming in the Delta region.



A photograph of a large indoor poultry farm. The floor is covered with hundreds of white chickens. In the center, there is a long, green, multi-tiered feeding system with red troughs. The background shows the dark structure of the farm building with some light coming from windows.

Direct impact of animal agriculture

Employment	61,960 jobs
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Wages	\$1.40 Billion
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Labor Income	\$1.63 Billion
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Value Added	\$2.64 Billion
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Protein Power

Arkansas is a leading producer, processor and marketer of protein products.

Poultry and egg production and processing is the leading industry, with direct impacts of:

- 1 in 4 agricultural jobs; and
- \$1 in every \$4 of agricultural wages, income and value added.

Cattle are raised in every county, with a January 1, 2008, inventory of 1,810,000 head. The swine inventory for December 1, 2007, was 290,000 hogs and pigs. Arkansas foodsize catfish numbered 46,400,000 on January 1, 2008.

(National Agricultural Statistics Service, 2007-2008)





Direct impact of poultry

Employment 43,060 jobs

Wages \$1.16 Billion

Labor Income \$1.39 Billion

Value Added \$2.26 Billion

Direct Impact

Forestry Sector

The forestry sector includes forest products, furniture and wood and paper processing.

Forest species include about 27% pine, 17% mixed hardwood and pine, 39% upland oak-hickory forests and 16% bottomland species including oak, cypress, cottonwood and elm. (Arkansas Forest Resources Center)





Direct impact of forestry

Employment	35,490 jobs
Wages	\$1.61 Billion
Labor Income	\$1.73 Billion
Value Added	\$2.92 Billion

Direct Impact

Economic Engine

Forestry is the leading employer in South Arkansas — one of the nation's leading timber-producing regions.

Sawmills, logging, paper and paperboard mills contribute:

- 45% of forestry jobs;
- about half of wages and income; and
- 54% of value added.

A Multifaceted Resource

Forest-based tourism, recreation, watershed protection, wildlife habitat and aesthetic values are vital to the economy, environmental health, culture and identity of Arkansas.



Arkansas Game and Fish Commission

Direct impact of sawmills, logging, paper and paperboard mills

Employment	15,892 jobs
Wages	\$770 Million
Labor Income	\$854 Million
Value Added	\$1.59 Billion

Total Impact

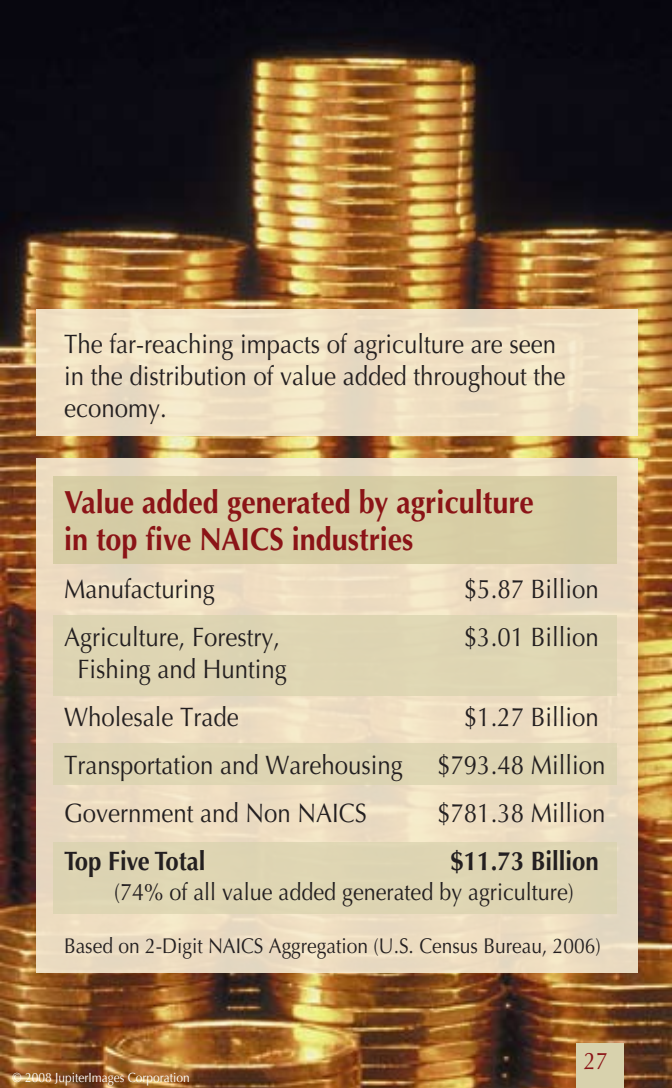
Across the Board

Arkansas agriculture generates jobs in all 20 industries in the North American Industry Classification System (NAICS) used for economic analysis.

Employment generated by agriculture in top five NAICS industries

Manufacturing	89,996 jobs
Agriculture, Forestry, Fishing and Hunting	74,220 jobs
Retail Trade	14,030 jobs
Health and Social Services	13,313 jobs
Transportation and Warehousing	12,813 jobs
Top Five Total	204,521 jobs (75% of all jobs generated by agriculture)

Based on 2-Digit NAICS Aggregation (U.S. Census Bureau, 2006)

The background of the entire page is a close-up photograph of several stacks of gold coins. The coins are arranged in a way that creates a sense of depth and value, with some stacks in the foreground and others in the background. The lighting is warm, highlighting the metallic texture of the coins.

The far-reaching impacts of agriculture are seen in the distribution of value added throughout the economy.

Value added generated by agriculture in top five NAICS industries

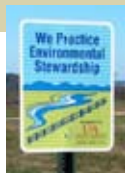
Manufacturing	\$5.87 Billion
Agriculture, Forestry, Fishing and Hunting	\$3.01 Billion
Wholesale Trade	\$1.27 Billion
Transportation and Warehousing	\$793.48 Million
Government and Non NAICS	\$781.38 Million
Top Five Total	\$11.73 Billion
(74% of all value added generated by agriculture)	

Based on 2-Digit NAICS Aggregation (U.S. Census Bureau, 2006)

Promoting Sustainability in Agriculture

Environmental Stewardship

To recognize individuals making important contributions to conservation efforts, an **Environmental Stewardship Program** was created to reward individuals of the community whose actions promote the long term health of the environment.*



Showcasing Best Practices on the Farm

- The **Watershed Research and Education Center** will encompass 235 acres within an area subject to both urban storm water and agricultural runoff. A diverse group of technical experts will test best management practices and offer hands-on education for biological, chemical and physical assessment of soils, sediments and streams.
- **Undertaking On-Farm Research** will measure impacts of adopted strategies to better position farmers to address the sustainability of on-farm practices.

* This project is funded through a USDA CSREES CEAP grant number 2005-48619-033334.

The Center for Agricultural and Rural Sustainability

The Division of Agriculture's **Center for Agricultural and Rural Sustainability (CARS)** provides leadership in balancing the demands of community, agriculture, and ecosystems in order to meet the needs of current generations while enhancing the opportunity for future generations to meet their needs. The mission of the Center is to enhance and sustain prosperity in rural Arkansas.

To accomplish its mission, the Center will:

- **Develop** credible resources for analysis of potential economic development for agricultural communities in Arkansas;
- **Assess** the impact of economic, agricultural, and environmental policy on rural prosperity;
- **Provide** linkages between communities, businesses, non-profit organizations, academics, and policy leaders to foment/facilitate the implementation of best sustainable practices.
- **Create** criteria for assessing and implementing best sustainable practices at farm and regional levels.

Achieving the promise of sustainability will require a renewed effort in education, adaptation and innovation at the farm and community levels.

Arkansas is Our Campus

The University of Arkansas System's Division of Agriculture conducts research and extension programs to support Arkansas agriculture in its broadest definition.

Our employees include Cooperative Extension Service faculty in all 75 counties, Agricultural Experiment Station scientists and Extension specialists on five university campuses and at five research and extension centers, and support personnel at 10 branch experiment stations and other units.

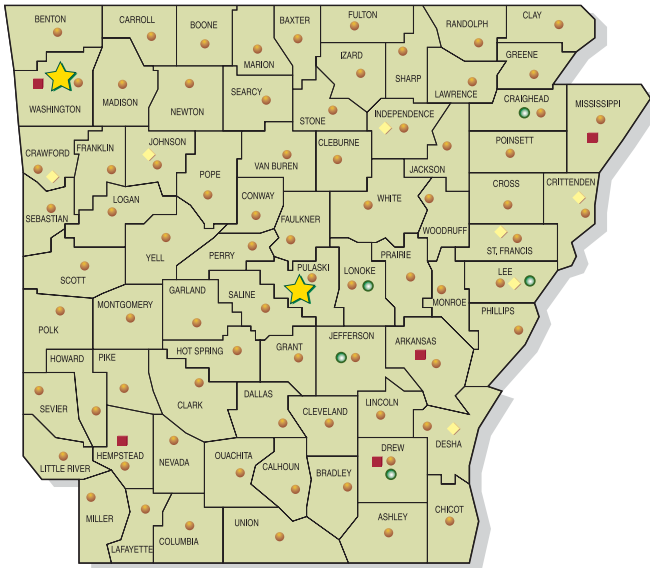


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UNIVERSITY OF ARKANSAS
DIVISION OF AGRICULTURE

Locations



-  Division & CES Headquarters, Little Rock
AAES Headquarters, Fayetteville
-  Research & Extension Centers
-  Research Stations
-  Other Locations
-  County Extension Offices



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