

Crossroads Resource Center

7415 Humboldt Ave. S. / Minneapolis, Minnesota 55423 / 612.869.8664
kmeter@crcworks.org www.crcworks.org

Tools for Community Self-determination

Arkansas Farm & Food Economy

Highlights of a data compilation

by Ken Meter, Crossroads Resource Center (Minneapolis)

for

Heifer Project International

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Arkansas (Bureau of Economic Analysis, 2008):

2.9 million residents receive \$93 billion of income annually (2008). Real personal income has increased three-fold since 1969, in part due to a population increase. The largest single source of personal income is transfer payments (public payments such as pensions or other benefits) to individuals, totaling \$19 billion, or 20% of personal income. Government jobs rank second, with total earnings of \$12 billion. Manufacturing ranks third, at \$9.2 billion, but has declined from \$10.5 billion in 2001. This erosion of manufacturing income led the state's overall decline in personal income from 2007 to 2008. Health care workers earn \$7 billion of personal income. Retail workers rank fourth, with \$4.3 billion of personal income.

In the food sector, food manufacturing generates \$1.9 billion in personal income, while dining service workers earn \$1.5 billion of personal income, and retail food workers earn \$0.5 billion.

Although population has increased by 50% since 1969, there has been only limited public planning to assure a secure and stable food supply for Arkansas residents. Most of the population growth has occurred in metro areas of Arkansas. Rural population increased slightly, from 955,000 in 1969 to 1.1 million, while metro population rose from 958,000 to 1.7 million over the same years.

Issues affecting low-income residents of Arkansas:

Over 920,000 residents (35%) earn less than 185% of federal poverty guidelines. At this level of income, children qualify for free or reduced-price lunch at school. These lower-income residents spend an estimated \$1.9 billion each year buying food, including \$440 million of SNAP benefits (formerly known as food stamps) and additional millions in WIC coupons. 11,461 farmers in the state (23%) receive an average combined total of \$713 million in subsidies (22-year average, 1987-2008), mostly to raise crops such as rice, corn or soybeans that are sold as commodities, not to directly feed state residents. *Data from Federal Census of 2000, Bureau of Labor Statistics, & Bureau of Economic Analysis.*

Thirteen percent of Arkansas households (more than 357,000 residents) earn less than \$10,000 per year. *Source: Federal Census of 2000.*

15% of adults aged 18-64 in the Little Rock metro area have no health insurance. *Source: Centers for Disease Control.*

Food-related health conditions:

22% of Little Rock metro area residents reported in 2007 that they eat five or more servings of fruit or vegetables each day; 78% do not. This is a key indicator of health, since proper fruit and vegetable consumption has been connected to better health outcomes. *Source: Centers for Disease Control.*

27% of Little Rock metro area adults report they have little physical activity. *Source: Centers for Disease Control.*

11% of Little Rock metro area residents have been diagnosed with diabetes. *Source: Centers for Disease Control.* Medical costs for treating diabetes in Little Rock are estimated at \$390 million per year, and for the state of Arkansas as a whole are estimated at \$1.6 billion per year. *Source: American Diabetes Association medical cost calculator.*

63% of Little Rock metro area residents are overweight (34%) or obese (29%). *Source: Centers for Disease Control.*

Arkansas' farms (Agricultural Census, 2007)

Agriculture Census data for 2007 were released February 4, 2009

Land:

The Census of Agriculture defines a "farm" as "an operation that produces, or would normally produce and sell, \$1,000 or more of agricultural products per year."

- Arkansas had 49,346 farms in 2007. This is a 4% increase in farms over 2002.
- 3,181 (6%) of these were 1,000 acres or more.
- 17,700 (36%) farms were less than 50 acres.
- The most prevalent farm size was 50-179 acres, with a total of 16,916 farms (34% of farms) in this category.
- The next most prevalent farm size was 10-49 acres, with 15,119 farms (31%).
- The third most prevalent farm size was 180-499 acres, with 8,590 farms (17%).
- Average farm size was 281 acres.
- The state had 13.9 million acres of land in farms, a decrease of 4% since 2002.
- Arkansas farms had 7.4 million acres of harvested cropland.
- 5,393 (11%) farms had a total of 4.5 million acres of irrigated land.
- Average value of land and buildings per farm was \$658,732.

Sales (Note that there may be discrepancies between Ag Census data and Bureau of Economic Analysis data, below): With the exception of foods sold directly to consumers (see below), farmers typically sell commodities to wholesalers, brokers or manufacturers that require further processing or handling to become consumer items. The word "commodities" is used in this report to mean the crops and livestock sold by farmers through these wholesale channels. The term "products" encompasses commodity sales, direct sales, and any other sales.

- \$7.5 billion of crops and livestock were sold (2007).
- This is a 52% increase in sales over 2002 sales of \$4.9 billion, mostly due to rising crop prices.
- Total farm production expenses were \$6.1 billion, 57% more than in 2002.

- The largest production expense was feed for animals, at \$2 billion. Costs for purchasing livestock totaled \$828 million. Arkansas farmers also spent \$437 million on fertilizer and chemicals, \$416 million on depreciation, \$395 million on fuels, \$328 million on pesticides, \$325 million on supplies and repairs, \$276 million buying seeds, and \$268 million hiring labor.
- \$2.9 billion of crops were sold (39% of sales).
- \$4.6 billion of livestock and products were sold (61% of sales).
- 29,426 (60%) of the state's farms sold less than \$10,000 of products in 2007. Their aggregate sales of \$74 million amounted to 1% of the state's farm product sales.
- 8,070 farms (16%) sell more than \$100,000 of products, an aggregate total of \$7 billion — 95% of Arkansas' farm product sales.
- 11,461 farms received \$269 million of federal subsidies in 2007, 13% more than in 2002. *[Note that Agriculture Census data differ from Bureau of Economic Analysis data; see below.]*
- 53% (26,095) of Arkansas' farms reported net losses in 2007, after subsidies are taken into account.

Grains, Dry Edible Beans, Oil Crops, and others:

- Arkansas farms sold \$2.2 billion of grains, oil crops and edible beans.
- Rice was the largest single crop, with \$932 million in sales from 2,752 farms.
- 1,395 Arkansas farms raised \$357 million (100 million bushels) of corn on 584,629 acres in 2007.
- This was an average price of \$3.57 per bushel.
- 4,610 Arkansas farms sold \$770 million (99 million bushels) of soybeans, raised on 2.8 million acres, in 2007.
- This was an average sale price of \$7.78 per bushel.
- 2,112 of the state's farmers sold 28 million bushels of winter wheat, on 696,681 acres.
- The state's wheat crop brought a total of \$118 million.
- 57 farms raised 601,737 bushels of oats on 6,431 acres.
- 697 farms produced \$73 million (21 million bushels) of grain sorghum on 216,432 acres.
- 2,752 farms produced 96 million hundredweight of rice worth \$933 million on 1.3 million acres.
- 915 Arkansas farms produced 1.9 million tons of cotton, which sold for \$473 million, on 854,410 acres. This was 25% more sales, from 23% fewer farms, than five years earlier.

Cattle & Dairy:

- 28,292 (57%) farms held an inventory of 1.8 million cattle and calves.
- 992,422 cattle worth \$626 million were sold from 23,731 farms in 2007. This represents a decrease of 2,224 farms (9%) since 2002, but an increase in sales of \$205 million (49%).
- 369 farms were reported as selling milk or dairy products, 27 fewer than in 2002.
- Milk and dairy sales totaled \$44.8 million, down 17% from \$54 million five years earlier.
- 22,939 farms produced 2.97 million dry tons of forage crops (hay, etc.) on 1.3 million acres of cropland.
- Of these, 9,555 farms sold \$75 million of forage, an increase of 115% over 2002 sales of \$35 million.
- 34 Arkansas farms produced 27,488 tons of sorghum for green chop on 2,073 acres.

Other livestock & animal products:

- 5,640 farms sold \$3.7 billion of poultry and eggs in 2007, making Arkansas the third-largest producer in the U.S.
- 2007 sales of poultry and eggs were 42% above 2002 sales totaling \$2.6 billion.
- Arkansas had 2,485 broiler chicken producers, holding an inventory of 1.17 billion birds.
- 3,047 farms raised laying hens, holding an inventory of 14 million.
- Arkansas was the third-ranking state in the U.S. for aquaculture, with \$119 million in sales.
- 954 farms sold 1.9 million hogs and pigs for a total of \$84 million. This is 10% more farms, but a 32% decrease in sales, over the past five years.
- 1,142 farms held an inventory of 289,342 hogs and pigs.
- 2,512 farms sold a total of \$9.9 million of horses.
- 1,584 farms held an inventory of 15,262 sheep, lambs, and goats; selling \$2.5 million worth. This represented a 53% increase in the number of farms, and 60% increase in sales, over 2002 levels.

Nursery, Landscape and Ornamental Crops:

- 357 farms sold \$48 million of ornamental and nursery crops.
- 51 Arkansas farms sold \$1.2 million of Christmas trees.

Vegetables & Melons (some farmers state that Ag Census data does not fully represent vegetable production):

- 804 farms produced \$38 million of vegetables on 14,146 acres of land; this is an increase of 57% in the number of farms, and an increase of 63% in sales, over 2002 levels.
- 168 farms raised 76 acres of potatoes.
- Sweet potatoes were grown on 53 farms.

Specific vegetables listed in the Agriculture Census as produced in Arkansas in 2007:

	Farms	Acres
Vegetables		
Asparagus	18	9
Beans, lima	8	4
Beans, snap	214	2,241
Beets	10	2
Broccoli	12	4
Cabbage, head	26	12
Cantaloupes	150	138
Carrots	13	5
Celery	1	(D)
Collard Greens	17	62
Cucumbers	197	193
Eggplant	27	8
Garlic	14	2
Herbs, fresh cut	9	9
Honeydew melons	2	(D)
Lettuce	21	11
Mustard greens	18	592
Okra	101	46
Onions, dry	21	6
Onions, green	10	2

Parsley	5	1
Peas, green	10	(D)
Peas, southern	264	2,029
Peppers, bell	64	41
Peppers, chili	44	(D)
Potatoes	168	76
Pumpkins	42	285
Radishes	4	(D)
Spinach	11	3
Squash, summer	117	191
Squash, winter	6	3
Sweet corn	242	1,342
Sweet potatoes	53	3,125
Tomatoes	414	1,101
Turnips	18	14
Turnip greens	38	(D)
Watermelon	271	2,059

Note: (D) means data suppressed by USDA to protect confidentiality; (Z) means less than half of an acre.

Fruits (some farmers state that Ag Census data does not fully represent fruit production):

- The state had 666 fruit farms with 13,932 acres of orchard.
- These farms sold \$13 million of fruit and nuts, 2% more than 2002 sales, on 4% more farms.

Specific fruits and nuts listed in the Agriculture Census as produced in Arkansas in 2007:

	Farms	Acres
Fruits		
Apples	153	287
Apricots	12	2
Cherries, sweet	12	2
Cherries, tart	5	1
Figs	1	(D)
Grapes	149	747
Nectarines	17	18
Peaches	235	1,240
Pears	96	67
Persimmons	3	(D)
Plums & Prunes	28	13
Pecans	312	11,396
Walnuts	7	22
Blackberries	118	516
Blueberries	138	443
Raspberries	37	18
Strawberries	67	119

Note: (D) means data suppressed by USDA to protect confidentiality; (Z) means less than half of an acre.

Direct & organic sales:

- 1,657 farms sold \$8.1 million of food directly to consumers. This was a 12% increase in the number of farms selling direct (1,476 in 2002), and a 44% increase in direct sales, over \$5.7 million in 2002. Direct sales account for 0.1% of Arkansas' farm sales, one-fourth the national average.
- If direct sales were a single commodity, they would rank as 17th largest farm product in Arkansas, larger than sales of sweet potatoes, tomatoes, or pecans.
- 69 farms sold \$2.3 million of organic products from 5,865 acres.
- Another 3,186 acres were under transition to organic.
- 187 farms marketed through community supported agriculture (CSA).
- 1,558 farms produced added-value products on the farm.

Conservation practices:

- 6,292 farms used conservation methods such as no-till, limited tilling, filtering field runoff to remove chemicals, fencing animals to prevent them from entering streams, etc.
- 8,543 farms practiced rotational management or intensive grazing.
- 299 farms generated energy or electricity on the farm.

Farm Ownership:

Whites operate the preponderance of farms in Arkansas:

Whites	70,503	96.0%
African-Americans	1,433	2.0%
Asians	546	0.7%
Native Americans	860	1.2%
Pacific Islanders	6	0.0%
Latinos	651	0.9%

This compares with the state population in 2009 of:

Whites	2,328,897	80.6%
African-Americans	456,533	15.8%
Asians	34,673	1.2%
Native Americans	26,005	0.9%
Pacific Islanders	2,889	0.1%
Latinos	173,367	6.0%

Arkansas rankings (Agriculture Census 2007):

- Ranked 1st in the nation in rice acres, with 1.3 million.
- Ranked 2nd in U.S. for inventory of broiler chickens, with 202 million.
- Ranked 2nd in U.S. for inventory of pullets, with 8 million.
- Ranked 3rd in nation for inventory of turkeys, with 9.4 million.
- Ranked 3rd in U.S. for sales of poultry and eggs, with \$3.7 billion.
- Ranked 3rd in nation for sales of cotton, with \$473 million.
- Ranked 3rd in U.S. for aquaculture sales, with \$118 million.
- Ranked 8th in nation for inventory of laying hens (13.9 million).
- Ranked 10th in U.S. for acres of soybeans, with 2.8 million.
- Ranked 13th in nation for sales of farm commodities, with \$7.5 billion.

Arkansas' top 25 farm products in 2009 (Economic Research Service)

See chart on next page

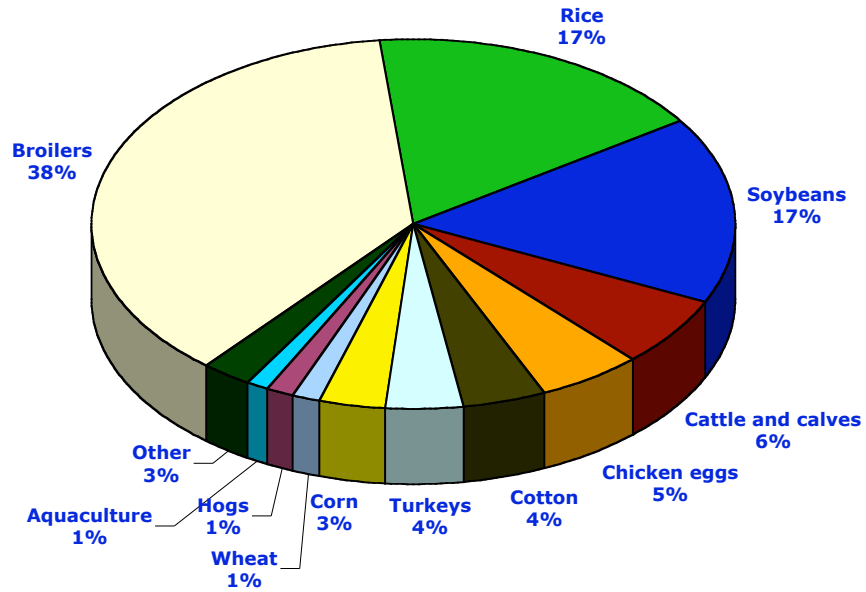
1	Broilers	2,641
2	Rice	1,230
3	Soybeans	1,179
4	Cattle and calves	437
5	Chicken eggs	363
6	Cotton	293
7	Turkeys	284
8	Corn	246
9	Wheat	96
10	Hogs	85
11	Aquaculture	85
12	Hay	65
13	Nursery/Ornamentals	51
14	Dairy products	22
15	Sorghum grain	12
16	Farm chickens	11
17	Sweet potatoes	4
18	Tomatoes	4
19	Pecans	2
20	Watermelons	2
21	Honey	2
22	Peaches	2
23	Beans, snap	2
24	Grapes	1
25	Oats	1

Note: If direct sales were a single commodity, at \$8 million of sales, it would rank as 17th largest farm product in Arkansas, larger than sales of sweet potatoes, tomatoes, or pecans.

Arkansas' top 25 farm products in 2009 (Economic Research Service)

See table on previous page

Top 25 Farm Products in Arkansas, 2009



Source: USDA Economic Research Service

Balance of Cash Receipts and Production Costs (Bureau of Economic Analysis):

Note: Bureau of Economic Analysis farm income data may differ from Agriculture Census data. BEA says the major difference between USDA and BEA data sets is that BEA data offer a more full accounting of depreciation costs, in line with international standards. BEA also says it hopes to update its computer models.

Arkansas farmers sell \$7.3 billion of commodities per year (a twenty-two year average from 1987-2008), spending \$6.4 billion to raise them, for an average gain of \$870 million each year.

Overall, farm producers have experienced gains of \$19 billion since 1987. However, 53% of the state's farms and ranches reported a net loss in 2007 (Agriculture Census), even after subsidies are taken into account.

Arkansas farmers and ranchers earned only \$701 million more by selling commodities in 2008 than they earned in 1969 (in 2008 dollars). Sales of livestock and related products hovered around \$4.5 billion each year from 1987-2008. Income from selling crops hovered at about \$2.7 billion over the same period, but rose to \$4.3 billion in 2008. From 1981 to 2007, Arkansas farmers earned less selling crops than they had earned in 1969.

The most steadily increasing cost of production is feed costs (at \$1.6 billion in 2008), followed by chemical fertilizers (at \$1 billion in 2008).

Farmers and ranchers earn another \$456 million per year of farm-related income — primarily rental income for land and insurance payments (22-year average for 1987-2008). Federal farm support payments average \$713 million per year for the entire state over the same years. Farm families also depend heavily on off-farm income sources.

Arkansas consumers (2008):

State consumers spend \$7 billion buying food each year, including \$4 billion for home use. Most of this food is produced outside the state. \$8 million of food products (0.1% of farm cash receipts, and 0.1% of local consumer needs) are sold by 1,657 farmers directly to consumers, but not always to Arkansas consumers, since any farmers' market sales out of state, or internet sales, are included in this total.

Estimated change in net assets for all Arkansas households was a combined loss of \$1.2 billion in 2008 alone (BLS). This places additional pressure on state residents as they pay for food.

Farm and food economy summary:

Farmers gain \$870 million each year producing food commodities, spending \$3.4 billion buying inputs from external suppliers, for a total outflow of \$2.5 billion from the state economy.

Meanwhile, consumers spend more than \$6.3 billion buying food from outside. Thus, total loss to the state is \$8.8 billion of potential wealth *each year*. This loss amounts to more than the value of all farm commodities raised in the state, and would be more than enough to feed all state residents for a year.

Consumer Markets for Food

Little Rock metro area: markets for food eaten at home (2008):

Source: Bureau of Labor Statistics

Metro Little Rock residents purchase \$1.65 billion of food each year; \$944 million to eat at home. Home purchases break down in the following way:

	<i>millions</i>
Meats, poultry, fish, and eggs	\$ 228
Fruits & vegetables	157
Cereals and bakery products	128
Dairy products	106
“Other,” incl. sweets, fats, & oils	326

Arkansas: markets for food eaten at home (2008):

Source: Bureau of Labor Statistics

Arkansas residents purchase \$7 billion of food each year; \$4 billion to eat at home. Home purchases break down in the following way:

	<i>millions</i>
Meats, poultry, fish, and eggs	\$ 967
Fruits & vegetables	665
Cereals and bakery products	541
Dairy products	450
“Other,” incl. sweets, fats, & oils	1,384

If Arkansas consumers purchased only 15% of the food they need for home use directly from state farmers, this would produce \$1 billion of new farm income in the state.

Key data sources:

Bureau of Economic Analysis data on farm production balance

<http://www.bea.doc.gov/bea/regional/reis/>

Food consumption estimates from Bureau of Labor Statistics Consumer Expenditure Survey

<http://www.bls.gov/cex/home.htm>

U.S. Census of Agriculture

<http://www.nass.usda.gov/census/>

USDA/Economic Research Service food consumption data:

<http://www.ers.usda.gov/data/foodconsumption/>

USDA/ Economic Research Service farm income data:

<http://ers.usda.gov/Data/FarmIncome/finfidmu.htm>

Centers for Disease Control: Behavior Risk Factors Surveillance System

BRFSS <http://apps.nccd.cdc.gov/brfss-smart/>

National Association of County and City Health Officials (NACCHO)

Big Cities Health Inventory <http://www.naccho.org/>

For more information:

To see results from *Finding Food in Farm Country* studies in other counties of the U.S.:

<http://www.crcworks.org/locales.html>

To read the original *Finding Food in Farm Country* study from Southeast Minnesota (written by Ken Meter and Jon Rosales for the Community Design Center and the Southeast Minnesota Experiment in Rural Cooperation): <http://www.crcworks.org/ff.pdf>

To view a PowerPoint presented in March, 2008, by Ken Meter at Rep. Collin Peterson's (D-MN) Minnesota agricultural forum, called the "Home Grown Economy":

<http://www.crcworks.org/crcppts/petersonKM08.pdf>

To get a brief list of essential food facts, many of which are cited in the presentation above,

<http://www.crcworks.org/foodmarkets.pdf>

To link to further analysis of farm and food economies in the U.S.:

<http://www.crcworks.org/econ.html>

Contact Ken Meter at Crossroads Resource Center

<kmeter@crcworks.org>

(612) 869-8664