

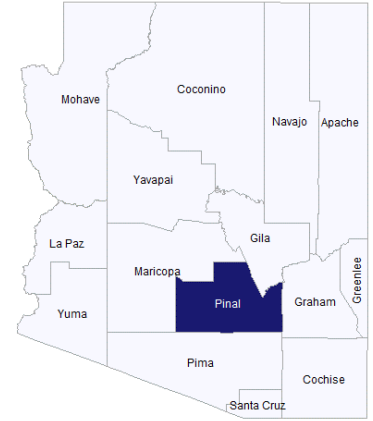
Pinal County, AZ

Arizona County Agricultural Economy Profiles
University of Arizona Cooperative Extension

Overview

Pinal County is located in central Arizona bordered to the north and west by Maricopa County, to the south by Pima County, to the east by Graham County, and to the northeast by Gila County. The third most populous county in the state, major population centers include Casa Grande, Maricopa, and Apache Junction. With metropolitan Phoenix and Tucson on either side of Pinal County, the county has experienced an annual population growth rate of 1.9% from 2010 to 2022. 23% of the county's population lives in rural areas.

Top industries in Pinal County include mining, agriculture, and government. Mining occurs primarily in the eastern part of the county, while agriculture occurs in the valleys along the Gila and Santa Cruz rivers and the Central Arizona Project canal. Agriculture plays an important role in Pinal County's economy and accounts for 2% of Pinal County's GDP. Jobs in agriculture account for approximately 4% of all private employment, higher than the state and national averages. Additionally, more than 40% of county land is in farms. Pinal County accounts for 23% of Arizona's total agricultural cash receipts.



Map of Pinal County, Arizona

Indicator	Pinal County	Arizona
Land Area (square miles)	5,366	113,591
Land in Farms (Crops, Grazing) (square miles) (2022)	2,307	39,883
Population (2022)	464,154	7,359,197
Annual Average Population Growth Rate (2010-22)	1.9%	1.2%
Percent of Population Over 65 (2022)	21.1%	18.8%
Percent Population Rural (2020)	23.0%	10.7%
Total Employment (2022)	68,953	3,075,427
Share Federal, State, & Local Government Employment (2022)	27.86%	13.5%
GDP (2022)	\$11.9 billion	\$475.7 billion
Ag, Forestry, & Hunting GDP (on-farm only) (2022)	\$322.2 million	\$2.6 billion

Industry	Location Quotient
Cotton farming	43.41
Cotton ginning	25.48
Dairy cattle and milk production	18.19
Hay farming	18.00
Lessors of other real estate property	7.13
Ready-mix concrete manufacturing	6.20
Cattle feedlots	5.90
All other miscellaneous crop farming	4.86
Soil preparation, planting, and cultivating	4.48
Other similar organizations (except business, professional, labor, and political organizations)	4.19

Top 10 Private Industries in Pinal County by Employment LQ, 2022

An economy can be characterized by the industries that make up its "base". A common way to measure this is with location quotients (LQs), the ratio of a particular industry's share of employment within a region to the same industry's share of national employment. An industry with a LQ greater than 1.25 is considered part of the economic base, exporting goods and services and bringing money into the region. LQs also help identify a region's areas of specialization. Higher LQs indicate greater specialization. Of the top 10 most concentrated private industries in Pinal County, agriculture accounts for seven, reflecting not only employment on-farm, but also industries that prepare land and are involved in harvest and postharvest activities. Cotton farming ranks first with employment over 43 times more concentrated than the national average, and dairy cattle and milk production ranks third, with an LQ of over 18.

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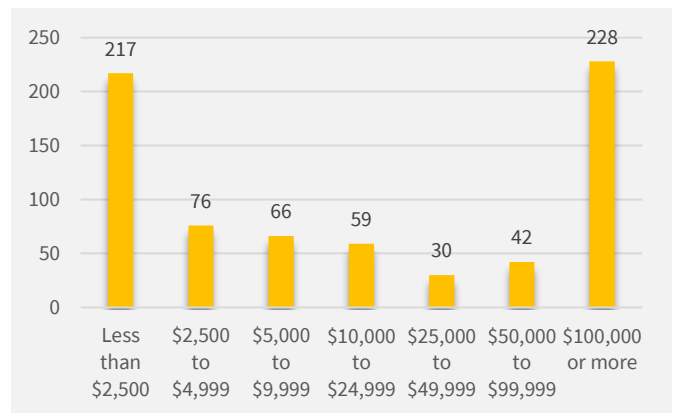
Every 5 years, U.S. Department of Agriculture releases the Census of Agriculture, the most comprehensive source of information on agricultural production by county. The Census provides information on the number of farms, types of crops and livestock produced, and farm characteristics, among other information. A farm is defined as any establishment that produced and sold, or could have sold, \$1,000 or more of agricultural products in the Census year. The following information comes from the most recent 2022 Census of Agriculture.

Farms

There were 718 farms in Pinal County in 2022, covering 295,876 acres of cropland (100% of harvested acreage irrigated) and 1,446,403 acres of pastureland (1% irrigated). The average farm size was 2,056 acres, significantly larger than the national average of 1,528 acres. The top 9% of farms account for 90% of county acreage. Of 718 total farms, 217 had less than \$2,500 in sales and 228 had more than \$100,000 in sales. The majority of county farms (69%) are family- or individually-held farms, 16% are partnerships, and 10% are family-held corporations.

Farms are classified by the type of agricultural products they produce. When a farm or ranch produces more than one agricultural product, they are classified by the product that constitutes more than 50% of their sales. The most common type of operation in Pinal County is aquaculture and other animal production (159 farms), followed by sugarcane farming, hay farming, and all other crop farming (148 farms), and beef cattle ranching and farming (141 farms). While the number of farms is helpful in understanding how many farms “specialize” in different types of agricultural production, it does not reflect the magnitude or scale of production by commodity, which is better captured by sales or cash receipts (next page).

Pinal County Farms by Annual Sales, 2022



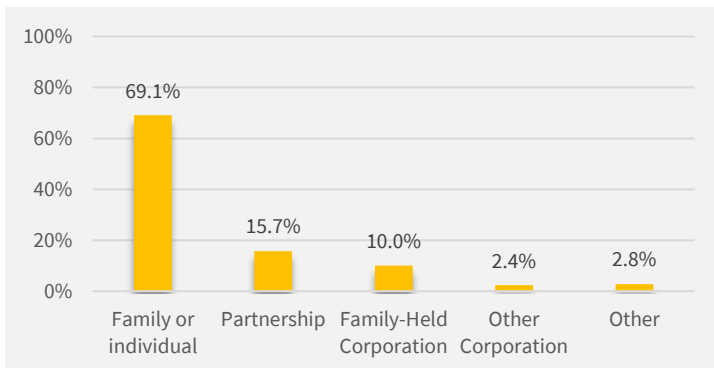
Source: USDA

Pinal County Farms by Industry, 2022

Category	Farms
Total farms	718
Oilseed and grain farming	45
Vegetable and melon farming	12
Fruit and tree nut farming	23
Greenhouse, nursery, and floriculture production	28
Other crop farming	214
Cotton farming	66
Sugarcane farming, hay farming, and all other crop farming	148
Beef cattle ranching and farming	141
Cattle feedlots	3
Dairy cattle and milk production	19
Hog and pig farming	5
Poultry and egg production	39
Sheep and goat farming	30
Aquaculture and other animal production	159

Source: USDA

Pinal County Farms by Legal Organization, 2022



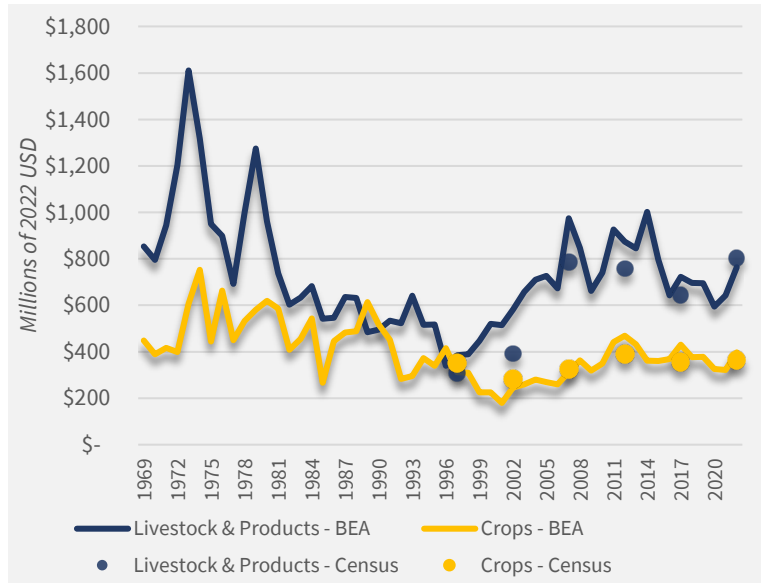
Source: USDA

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Production & Marketing

Pinal County is a livestock-dominant county, with an estimated 69% of county cash receipts originating from sales of livestock and livestock products. Nonetheless, the county is a significant producer of both crops and livestock. Top crops produced in Pinal County in 2022 include cotton and cottonseed (\$86 million in cash receipts) and hay (including alfalfa) (\$136 million in cash receipts). Top livestock commodities include cattle and calves (\$402 million in cash receipts) and milk from cows (\$402 million in cash receipts). The county ranks highly nationally among counties in production of feed crops for livestock, including sorghum silage production (4th) and alfalfa hay production (6th). The county also ranks 2nd nationally in harvested acres of spring durum wheat, 4th nationally in acres of irrigated cotton harvested, and 7th nationally in production of upland cotton. The county ranks 17th nationally in terms of its sales of milk and 28th nationally in its sales of cattle and calves.

Pinal County Agricultural Cash Receipts, Crops & Livestock, 1969-2022



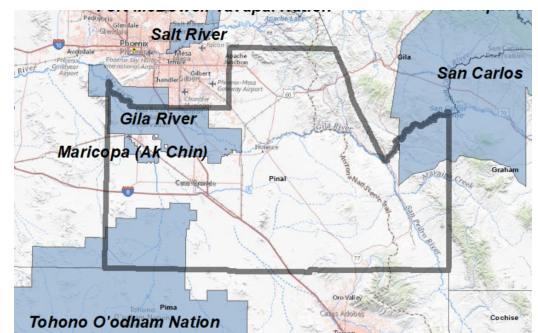
Source: USDA & BEA

Central Arizona Dairy Industry

In 2022, Pinal County had 17 dairies with \$400 million in sales, accounting for 34% of the state's milks sales. Combined, Maricopa and Pinal counties in Central Arizona generated 85% of Arizona's milk sales. As the dairy industry has grown in Pinal County, crop production has largely shifted towards agricultural products that are used as feed crops. There has been a shift in acreage towards forage land, growing hay (including alfalfa hay), grass silage, haylage, and greenchop and corn for silage. This has also been accompanied by a reduction in acreage for both wheat and cotton.

Tribal Agriculture

Pinal County contains portions of the Gila River Indian Community, the Tohono O'odham Nation, the San Carlos Apache Reservation, and the Maricopa Ak-Chin Reservation. Statistics reported below represent production within entire tribal areas, therefore production occurring within Pinal County is only a portion of the totals reported. The Gila River Indian Community had 55 farms operating in 2017, with 40,930 acres of crops, and \$32.8 million in sales, primarily cotton and hay. The Tohono O'odham Nation had 164 operations with 2.6 million acres in farms, 8,603 acres of which were in crops. These farms generated \$8.1 million in total sales in 2017. A total of 198 farms operated on the San Carlos Apache Reservation in 2017, most of which (193) had inventory of cattle and calves. Finally, the Maricopa Ak-Chin Reservation had 3 farms in operation in 2017.



Pinal County Tribal Areas

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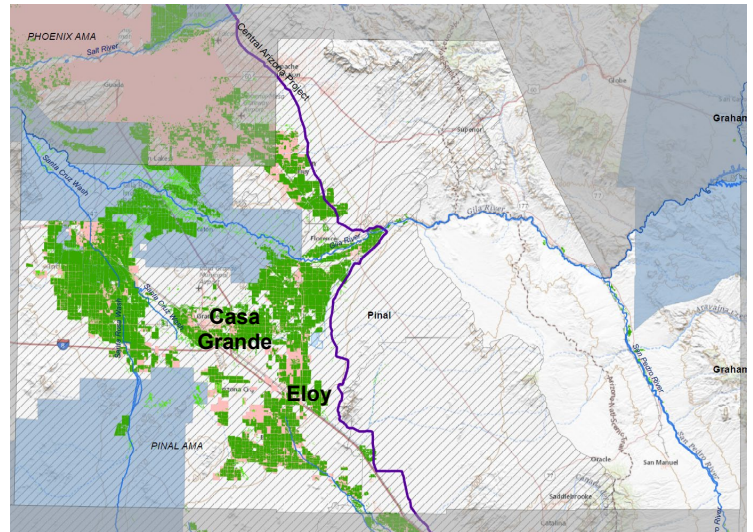
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Irrigation Water Use

In Arizona, agriculture accounts for about 75% of the state’s water use. More than half of withdrawals for agricultural uses in the state are from surface water. In some areas of the state with high demand, groundwater withdrawals for irrigated agriculture are limited by the 1980 Groundwater Management Act. This legislation established five Active Management Areas (AMA) as well as other Irrigation Non-Expansion Areas (INA) where groundwater pumping and expansion of irrigated agriculture are limited. Pinal County has land in three AMAs: 42.1% of county land area is in the Pinal AMA, 15.4% is in the Phoenix AMA, and 13.3% is in the Tucson AMA. Demand for water in the Pinal AMA has increased since 1985, and agricultural demand has increased as well, though the share of agricultural demand as a percent of total demand has fallen from nearly 92% in 1985 to nearly 75% in 2021.

Based on the priority of Colorado River water rights in Arizona, agricultural irrigators in Pinal County are some of the first to lose their water supply in the case of shortages in the Colorado River Basin. Irrigation districts in Central Arizona have already seen cuts to water supplies via the Central Arizona Project due to declared shortages and voluntary agreements such as the Drought Contingency Plan that aim to curtail water use in order to avoid further system cutbacks.

Pinal County Water Map



For more information on water in Pinal County, please visit the University of Arizona Water Resource Research Center county water factsheets by clicking [here](#) or scanning the QR code →



About Us

Extension Regional Economic Analysis Program

The Extension Regional Economic Analysis Program (EREAP) conducts applied research and economic analysis addressing economic development issues around Arizona. We work serving the needs of Cooperative Extension and its stakeholders, such as Arizona agricultural and agribusiness industries, natural resource users and organizations, and regional economic groups, to provide specialized analysis and targeted information. For more information or to contact us, please click [here](#) or scan the QR code to visit our site →

