Arizona County Agricultural Economy Profiles University of Arizona Cooperative Extension

## Overview

Pima County is located in southern Arizona bordered to the north by Pinal and Maricopa counties, to the east by Cochise County, and to the south by Mexico and Santa Cruz County. Pima is an urban county, ranking as the second most populous county in Arizona, with more than 1 million residents and only 9% of its population living in rural areas. A majority of the county's population resides in metro Tucson, Arizona's second largest city.

Top industries in Pima County include higher education, healthcare, and aerospace and defense. On-farm agriculture accounts for approximately 0.2% of private employment in Pima County and directly contributes \$89.4 million to the county's \$55.8 billion economy. While agriculture does not account for a large share of county GDP or county employment, nearly 40% of Pima County's land area is in farms, either for crop production or grazing. Pima County accounts for 2% of Arizona's total agricultural cash receipts.



Map of Pima County, Arizona

Indicator	Pima County	Arizona
Land Area (square miles)	9,187	113,591
Land in Farms (Crops, Grazing) (square miles) (2022)	3,556	39,883
Population (2022)	1,057,597	7,359,197
Annual Average Population Growth Rate (2010-22)	0.6%	1.2%
Percent of Population Over 65 (2022)	21.2%	18.8%
Percent Population Rural (2020)	8.8%	10.7%
Total Employment (2022)	377,863	3,075,427
Share Federal, State, & Local Government Employment (2022)	18.08%	13.5%
GDP (2022)	\$55.8 billion	\$475.7 billion
Ag, Forestry, & Hunting GDP (on-farm only) (2022)	\$89.4 million	\$2.6 billion

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Industry	Location Quotient
Professional employer organizations	6.11
Research and development in nanotechnology	5.58
Other technical and trade schools	5.54
Telemarketing bureaus and other contact centers	5.14
Freestanding ambulatory surgical and emergency centers	4.91
Coal and other mineral and ore merchant wholesalers	4.01
Other support activities for air transportation	3.78
Grantmaking foundations	3.78
Metal window and door manufacturing	3.63
Flight training	3.51

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.

Due to the size of Pima County's economy, which is dominated by economic activity in the metro Tucson area, agricultural industries do not rank within the top 10 industries by employment LQ.

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





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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.

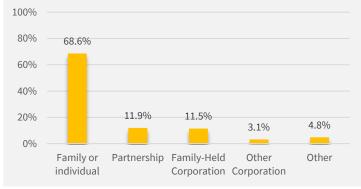
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### Farms

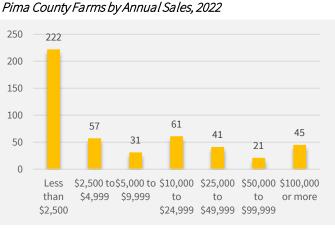
There were 478 farms in Pima County in 2022, covering 39,294 acres of cropland (100% of harvested cropland irrigated) and 2.2 million acres of pastureland (<1% irrigated). The average farm size was 4,761 acres, significantly larger than the state average of 1,528 acres, with the top 6% of farms accounting for 98% of county acreage. Of 478 total farms, 222 had less than \$2,500 in sales and 45 farms had more than \$100,000 in sales. The majority of county farms are individually- or family-held (69%), 12% are family-held corporate farms, and 19% have other forms of legal organization.

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 Pima County is aquaculture and other animal production (177 farms), reflecting domestic animal breeders in the Tucson metropolitan area. 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).

Pima County Farms by Legal Organization, 2022



Source: USDA



Source: USDA

#### Pima County Farms by Industry, 2022

Category	Farms
Total farms	478
Oilseed and grain farming	3
Vegetable and melon farming	31
Fruit and tree nut farming	25
Greenhouse, nursery, and floriculture production	30
Other crop farming	45
Cotton farming	5
Sugarcane farming, hay farming, and all other crop farming	40
Beef cattle ranching and farming	98
Cattle feedlots	0
Dairy cattle and milk production	2
Hog and pig farming	6
Poultry and egg production	34
Sheep and goat farming	27
Aquaculture and other animal production	177

Source: USDA



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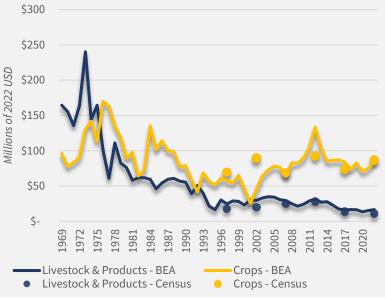


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## **Production & Marketing**

Pima County is a crop-dominant county, with an estimated 89% of county cash receipts originating from sales of crops. An important source of crop sales for the county is tree nuts. Because tree nut production in the county is heavily dominated by one large producer, statistics on acreage and production are not disclosed to protect the confidentiality of individual operators. Another of the county's top sources of agricultural sales is nurseries, with over \$16 million in sales in 2022. Other important commodities for the county include cotton (\$9 million in sales), cattle (\$8 million in sales), and wheat (\$3 million in sales).

#### Pima County Agricultural Cash Receipts, Crops & Livestock, 1969-2022



Source: USDA & BEA

### **Tribal Agriculture**

Pima County contains portions of the Tohono O'odham Nation and the Pascua Yaqui Pueblo. Statistics reported below represent production within entire tribal areas, therefore production occurring within Pima County is only a portion of the totals reported.

164 farms operated on the Tohono O'odham Nation in 2017 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. The most common type of operation was farms producing cattle and calves, followed by those producing horses.

Production by the Pascua Yaqui Pueblo was not reported in the 2017 Census of Agriculture.

#### Tribal Areas in Pima County

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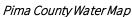
### **Irrigation Water Use**

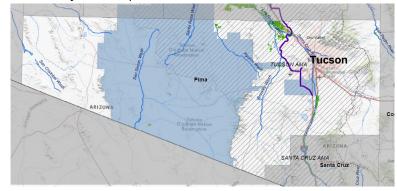
In Arizona, agriculture accounts for about 75% of the state's water use. More than half of withdrawals for agricultural uses in the state are from surface water. In some areas of the state with high demand, groundwater withdrawals for irrigated agriculture are limited by the 1980 Groundwater Management 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. Pima County has land in three AMAs: 33.1% of county land area in the Tucson AMA, 15.9% in the Pinal AMA, and 1.6% in the Santa Cruz AMA. AMA-level water demand data from the Arizona Department of Water Resources shows that water demand in the Tucson AMA has increased slightly between 1985 and 2021, and agriculture's share of total demand has decreased modestly, from just under 42% in 1985 to 22% in 2021, a decline of 33%.

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For more information on water in Pima County, please visit the University of Arizona Water Resource Research Center county water factsheets by clicking *here* or scanning the QR code  $\rightarrow$ 







### 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 <u>here</u> or scan the QR code to visit our site  $\rightarrow$ 







