

## **Contents**

Arizona County Agricultural Economy Profiles University of Arizona Cooperative Extension

## **Arizona County Agricultural Economy Profiles**

This set of county profiles presents a quick reference for important information on agricultural production, agricultural water use, and the role of agriculture in Arizona's county economies. The profiles synthesize data from a variety of sources, first and foremost the recently released 2022 USDA Census of Agriculture, the most comprehensive source of information on county-level agricultural production. County profiles are available in both English and Spanish.

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## **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.





Arizona County Agricultural Economy Profiles
University of Arizona Cooperative Extension

#### **Overview**

Arizona is a largely urban state, with roughly 90% of the state's population in urban areas. It includes the country's 10<sup>th</sup> largest metro area, the Phoenix-Mesa-Chandler metropolitan statistical area (MSA), with 4.9 million residents.

Major industries include mining, high-tech manufacturing, business services, and tourism. Agriculture accounts for less than 1% of private employment in the state and less than 1% of state GDP. Nonetheless, approximately 36% of Arizona's land area is used for agricultural purposes, either crop or livestock production. Agriculture in Arizona is diverse, characterized by highly productive irrigated crop production in the central, western, and southern parts of the state, and by livestock grazing over expansive rangelands in the northern and eastern parts of the state. Arizona is known as a leading state in the production of winter vegetables, particularly in the Yuma area. Much of the state's livestock and animal product production by value occurs in large dairies in central Arizona that serve the state's main population centers.



Map of Arizona Counties

The types of crops and livestock produced, the amount of water used for agricultural purposes, and the role of agriculture in county economies varies significantly across the state. *This collection of county profiles presents* agricultural production, water use, and regional economic data in a standardized, integrated, and easy-to-read format to provide context on the role of agriculture within state and county economies, as well as its role as a manager of land and natural resources.

Industry	Location Quotient
Copper, nickel, lead, and zinc mining	30.22
Other urban transit systems	10.14
Satellite telecommunications	9.24
Nonferrous metal (except aluminum) smelting and refining	6.49
Other activities related to credit intermediation	5.62
Semiconductor and related device manufacturing	5.32
Professional employer organizations	5.21
Bus and other motor vehicle transit systems	4.21
Support activities for nonmetallic minerals (except fuels) mining	3.70
Small arms, ordnance, and ordnance accessories manufacturing	3.61

*Top 20 Private Industries in AZ by Employment LQ,* 2022

Indicator	Arizona
Land Area (square miles)	113,591
Land in Farms (Crops, Grazing) (square miles)	39,883
Population (2022)	7,359,197
Annual Average Population Growth Rate (2010-22)	1.2%
Percent of Population Over 65 (2022)	18.8%
Percent Population Rural (2022)	10.7%
Total Employment (2022)	3,075,427
Share Federal, State, & Local Government Employment (2022)	13.5%
GDP (2022)	\$475.7 billion
Ag, Forestry, & Hunting GDP (2022) (on-farm only)	\$2.6 billion

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. At the state level, agriculture does not rank within the top 10 most concentrated industries, however, at a regional level, Arizona has a high concentration of many agricultural industries, detailed in individual county profiles.





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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 16,710 farms in Arizona as of 2022, covering 1,221,799 acres of cropland (99% of harvested cropland irrigated) and 21,945,765 acres of pastureland (<1% irrigated). The average farm size was 1,528 acres, and the top 5% of farms account for 94% of state acreage. Farms are distributed across the state unevenly with a large number of farms in the northeastern portion of the state. Areas of central and southwestern Arizona have a smaller number of farms, but account for a larger share of agricultural sales. More than half of total farms in Arizona (10,742 farms) had sales of less than \$2,500 and 83% are family- or individually-held farms. 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 Arizona is sheep and goat farming (4,918 farms), followed by beef cattle ranching and farming (4,561 farms) and aquaculture and other animal production (3,080 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.

#### Arizona Farms by Industry

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Category	Farms
Total farms	16,710
Oilseed and grain farming	278
Vegetable and melon farming	886
Fruit and tree nut farming	826
Greenhouse, nursery, and floriculture production	230
Other crop farming	1,455
Cotton farming	106
Hay and all other crop farming	1,349
Beef cattle ranching and farming	4,561
Cattle feedlots	20
Dairy cattle and milk production	68
Hog and pig farming	83
Poultry and egg production	305
Sheep and goat farming	4,918
Aquaculture and other animal production	3,080

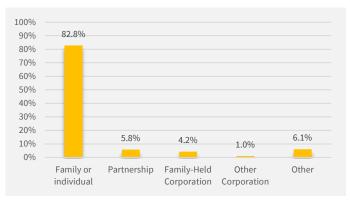
#### Arizona Farms by Annual Sales, 2022



# Farms by County, 2022 Ag Sales by County, 2022

Source: USDA

#### Arizona Farms by Legal Organization, 2022







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## **Production & Marketing**

Arizona's agricultural production is neither crop- or livestock-dominant, but rather value of production of crops and livestock track together, with year-to-year fluctuations in value of sales. Important agricultural products for the state in terms of value of sales include *vegetables, melons, potatoes, and sweet potatoes* (\$1.4 billion), *milk from cows* (\$856 million), *cattle and calves* (\$1.17 billion), cattle and calves (\$727 million) and *other crops and hay* (\$707 million).

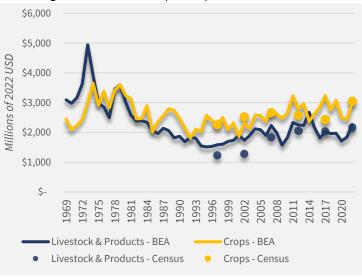
The total market value of agricultural products sold in 2022 accounts for \$5.2 billion, and the total number of farms is 16,710; a 12% reduction in the number of farm operations when compared to 2017.

## **Agriculture in State Economies**

Nationally, on-farm agriculture accounts for less than 1% of Gross Domestic Product (GDP). This is also the case in Arizona (0.4%). In California, the country's largest agricultural producer, agriculture represents 0.8% of state GDP (gross state product or GSP). Meanwhile, in some Midwestern states agriculture accounts for upwards of 7% of state GDP. In terms of water use nationally, irrigation accounts for 37% of total water use, though in western states the share is much higher as most agriculture is irrigated. For example, in Arizona 77% of water use is for irrigation (crops and golf), livestock, and aquaculture. A common trend among states, particularly in the West, is agriculture representing a relatively small share of state GDP while constituting a large share of water use. Food, feed, and fiber production are, by nature, water-intensive.

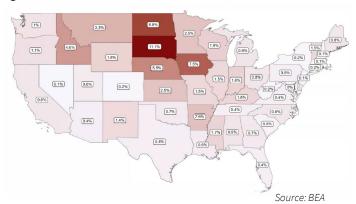
Nationally, Arizona ranks highly in the production of a number of agricultural commodities. For 2022, this includes value of production of broccoli (2<sup>nd</sup>), cabbage (4<sup>th</sup>), cantaloupes (2<sup>nd</sup>), cauliflower (2<sup>nd</sup>), hay (6<sup>th</sup>), long-staple cotton (3<sup>rd</sup>), lemons (2<sup>nd</sup>), lettuce (2<sup>nd</sup>), pecans (3<sup>th</sup>), spinach (2<sup>nd</sup>), and watermelon (7<sup>th</sup>) (USDA ERS). For total value of vegetables and melons sold, Arizona ranked fifth, after California, Florida, Washington, and Idaho. So while agriculture overall may not comprise a large share of the state's economy as measured by state GDP, Arizona plays an important role nationally and internationally in the production of specific commodities.

#### Arizona Agricultural Cash Receipts, Crops & Livestock, 1969 to 2022

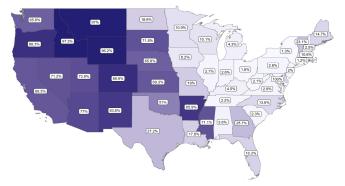


Source: USDA & BEA

#### Agriculture's Share of Gross State Product (GSP), 2022



#### Agriculture's Share of State Water Withdrawals, 2015



Source: USGS





Arizona County Agricultural Economy Profiles
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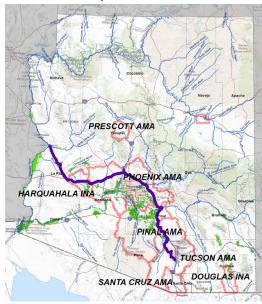
## **Irrigation Water Use**

Major sources of surface water in Arizona include the Colorado River, the Central Arizona Project which delivers Colorado River water to central and southern Arizona, and the Salt and Gila Rivers. In Arizona, irrigated agriculture accounts for about 75% of the state's water use (77% including golf course irrigation). 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. These include the Phoenix AMA, Prescott AMA, Pinal AMA, Santa Cruz AMA, and Tucson AMA. Within AMAs, water use for agriculture has decreased from roughly 65% of total demand in 1985 to 45% of demand in 2021. Overall, AMA water demand for agriculture has fallen from over 2.2 million acre-feet in 1985 to 1.8 million acrefeet in 2021.

For more information on water in Arizona, please visit the University of Arizona Water Resource Research Center county water factsheets by clicking <a href="https://example.com/here">here</a> or scanning the OR code ->



#### Arizona Water Map



The Central Arizona Project (CAP) is depicted in purple on the map to the left. It delivers Colorado River water to the state's largest population centers in central and southern Arizona. Those same population centers account for most of the state's AMAs (outlined in red), and a large share of the state's irrigated agriculture (areas in green). Irrigated agriculture along the Colorado River mainstem represents another large share of the state's agricultural production.

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#### Overview

Apache County, in Arizona's northeast corner, is part of the Four Corners region, where the states of Arizona, New Mexico, Utah, and Colorado meet. As of 2022, the county's population was approximately 11,197, all of which reside in areas considered as rural. Population centers in the county include Chinle, Fort Defiance, and Eagar-Springerville.

Employment in on-farm agriculture represents less than 1% of private industry jobs in Apache County, and accounts for approximately 0.43% of the county's GDP. While agriculture does not constitute a large part of the county's economy, it does play an important role in land management, with more than 77% of Apache County land area in farms. County agricultural production is heavily influenced by tribal agriculture in the Navajo Nation, the Zuni Reservation, and the Fort Apache Reservation, which constitute a majority of the county's land area. Apache County represents less than 1% of Arizona's total agricultural cash receipts but accounts for 22% of the state's total land in farms.



Map of Apache County, Arizona

Indicator	Apache County	Arizona
Land Area (square miles)	11,197	113,591
Land in Farms (Crops, Grazing) (square miles) (2022)	8,648	39,883
Population (2022)	65,432	7,359,197
Annual Average Population Growth Rate (2010-22)	-0.7%	1.2%
Percent of Population Over 65 (2022)	16.7%	18.8%
Percent Population Rural (2020)	100%	10.7%
Total Employment (2022)	16,677	3,075,427
Share Federal, State, & Local Government Employment (2022)	58.7%	13.5%
GDP (2022)	\$2.7 billion	\$475.7 billion
Ag, Forestry, & Hunting GDP (on-farm only) (2022)	\$11.5 million	\$2.6 billion

Industry	Location Quotient
Gift, novelty, and souvenir retailers	8.76
Fuel dealers	4.52
Postal service	3.49
Elementary and secondary schools	2.96
Home health care services	2.57
Beef cattle ranching and farming	1.99
All other general merchandise retailers	1.88
Water supply and irrigation systems	1.30
Lessors of residential buildings and dwellings	0.94
Services for the elderly and persons with disabilities	0.88

Top 10 Private Industries in Apache 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 Apache County, two are agriculture-related: beef cattle ranching and farming and water supply and irrigation systems. While there are many farms in Apache County, many do not employ individuals besides the farm proprietors.





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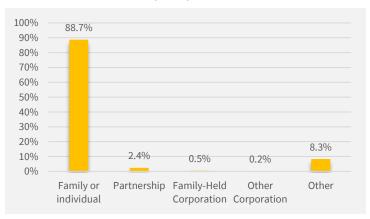
Every 5 years, U.S. Department of Agriculture releases the Census of Agriculture, the most comprehensive source of information on agricultural production by county. The Census provides information on the number of farms, types of crops and livestock produced, and farm characteristics, among other information. 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 5,343 farms in Apache County in 2022, covering 37,526 acres of cropland (99% of harvested cropland irrigated) and 5.5 million acres of pastureland (less than 1% irrigated). The average farm size was 1,036 acres, smaller than the state average of 1,528 acres, and the top 2% of farms account for nearly 96% of county acreage. Of 5,343 farms, 4,340 had less than \$2,500 in sales and 19 farms had more than \$100,000 in sales. The vast majority (89%) of county farms are family- or individually-held, and only 0.2% of farms were non-family-held corporate farms.

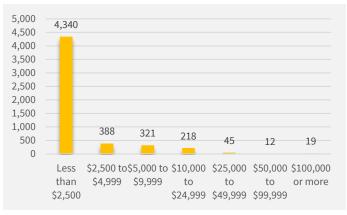
Farms are classified by the type of agricultural products they produce. When a farm or ranch produces more than one agricultural product, they are classified by the product that constitutes more than 50% of their sales. The most common type of operation in Apache County is sheep and goat farming (2,550 farms), followed by beef cattle ranching and farming (1,370 farms), and aquaculture and other animal production (661 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).

#### Apache County Farms by Legal Organization, 2022



Source: USDA

#### Apache County Farms by Annual Sales, 2022



Source: USDA

#### Apache County Farms by Industry, 2022

Category	Farms
Total farms	5,343
Oilseed and grain farming	92
Vegetable and melon farming	330
Fruit and tree nut farming	4
Greenhouse, nursery, and floriculture production	2
Other crop farming	293
Cotton farming	0
Sugarcane farming, hay farming, and all other crop farming	293
Beef cattle ranching and farming	1,370
Cattle feedlots	1
Dairy cattle and milk production	2
Hog and pig farming	12
Poultry and egg production	26
Sheep and goat farming	2,550
Aquaculture and other animal production	661





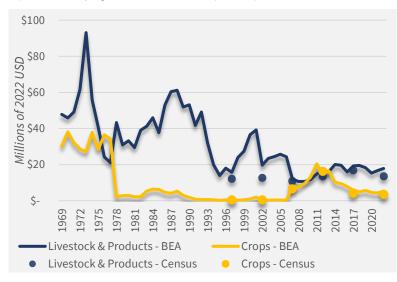


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## **Production & Marketing**

In recent years, agricultural production in Apache County has been livestock-dominant, with an estimated 80% of county cash receipts originating from sales of livestock and livestock products. The county ranked first nationally in terms of its production of traditional or Indian corn with over 570,000 pounds of production in 2022. It also ranked in the top 5 counties nationally in its sales of Angora goats, as measured by heads sold. The county's combined sales of sheep and goats and their products totaled \$1.7 million in 2022. Though not a top-ranked county nationally, Apache County's greatest sales by commodity came from cattle and calves, at \$10.5 million in 2022. Following cattle, total vegetable sales were an estimated \$2.2 million in 2022.

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



Source: USDA & BEA

#### Apache County Tribal Areas



## **Tribal Agriculture**

Apache County contains portions of the Navajo Nation, the Fort Apache Reservation, and non-contiguous portions of the Zuni Reservation. Of these three tribal areas, the 2022 Census of Agriculture reports complete data on the Navajo Nation. The Navajo Nation spans portions of Arizona, New Mexico, and Utah. Therefore, statistics reported below represent production beyond just Apache County.

The Navajo Nation, in its entirety, had 13,558 farms with \$140.3 million in sales of agricultural products in 2022, of which \$121.3 million was crops and \$19 million was livestock and livestock products. There were 5,066 farms with cattle and calf inventories (2,121 of which had sales of cattle and calves) and 8,910 farms with sheep and lamb inventories (2,057 of which had sales of sheep and lambs). 1,793 farms grew traditional corn on 4,381 acres, 1,192 farms grew vegetables and melons on 8,271 acres, and 661 farms grew hay and forage on 25,748 acres.

Agriculture in Apache County is heavily influenced by tribal agriculture, both as a share of total farms, and in terms of top commodities produced. Sheep and goat farms are the most common type of operation in Apache County. Tribal agriculture also influences the profile of Apache County agricultural producers. Within the Navajo Nation, 52% of producers are female, and the three Arizona counties that include Navajo Nation lands (Apache, Coconino, and Navajo counties) are also the three counties with more female than male principal agricultural producers. In fact, driven in part by female producers in these counties, Arizona has the highest share of female agricultural producers (48%) in the nation.





Arizona County Agricultural Economy Profiles University of Arizona Cooperative Extension

## **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. There is no land in Apache County within an AMA or INA.

Based on 2015 USGS estimates of water use, agriculture accounted for 13% of Apache County water withdrawals. Within the county, thermoelectric power generation represents the largest share of water demand, at over 60%. Agricultural irrigation water use in Apache County is dominated by production of crops, with the majority of irrigation water sourced from surface water. Surface water used for agriculture in the county was estimated at 2,050 acre-feet (AF) in 2015 and an estimated 930 AF was sourced from groundwater. An acre-foot is the amount of water required to cover one acre one foot deep in water.

For more information on water in Apache County, please visit the University of Arizona Water Resource Research Center county water factsheets by clicking <a href="https://example.com/here">here</a> or scanning the QR code ->



#### Apache County Water Map



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Arizona County Agricultural Economy Profiles *University of Arizona Cooperative Extension* 

#### **Overview**

Cochise County is located in Arizona's southeast corner bordered to the east by New Mexico and to the south by Mexico. As of 2022 the population was 125,663 with more than one-third of the county's population residing in rural areas. Major population centers include Sierra Vista, Douglas, Bisbee, Benson, and Willcox.

Historically a mining and ranching region, today top industries in Cochise County include agriculture and tourism. The county is home to Fort Huachuca, an Army installation, and a rapidly growing tree nut and winery industry, supporting agritourism in the region.

Although on-farm agriculture accounts for 1% of the county's GDP, it is responsible for approximately 4% of all private industry jobs, higher than the national and state averages. Agriculture also plays an important role in land management, with 1,618 square miles or one-quarter of Cochise County's land area in farms. Cochise County accounts for 6.5% of Arizona's agricultural cash receipts.



Map of Cochise County, Arizona

Indicator	Cochise County	Arizona
Land Area (square miles)	6,165	113,591
Land in Farms (Crops, Grazing) (square miles) (2022)	1,618	39,883
Population (2022)	125,663	7,359,197
Annual Average Population Growth Rate (2010-22)	-0.4%	1.2%
Percent of Population Over 65 (2022)	24.4%	18.8%
Percent Population Rural (2020)	36.8%	10.7%
Total Employment (2022)	33,997	3,075,427
Share Federal, State, & Local Government Employment (2022)	30.0%	13.5%
GDP (2022)	\$5.7 billion	\$475.7 billion
Ag, Forestry, & Hunting GDP (on-farm only) (2022)	\$70.1 million	\$2.6 billion

Industry	Location Quotient
Tree nut farming	40.18
Corn farming	10.34
Water and sewer line and related structures construction	10.19
Water supply and irrigation systems	9.85
Livestock merchant wholesalers	9.37
Facilities support services	6.16
Wineries	4.60
Residential framing contractors	3.58
Motor vehicle towing	3.50
Hardware retailers	3.42

Top 10 Private Industries in Cochise 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 Cochise County, agricultural industries occupy five spots, including tree nut farming, corn farming, water supply and irrigation systems, livestock merchant wholesalers, and wineries. For example, the share of employment in tree nut farming is nearly 40 times the national average. Wineries rank seventh at more than 4 times the national average.





Arizona County Agricultural Economy Profiles *University of Arizona Cooperative Extension* 

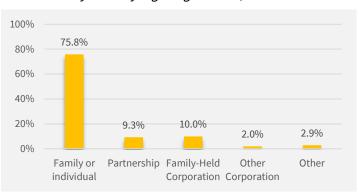
Every 5 years, U.S. Department of Agriculture releases the Census of Agriculture, the most comprehensive source of information on agricultural production by county. The Census provides information on the number of farms, types of crops and livestock produced, and farm characteristics, among other information. 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 1,002 farms in Cochise County in 2022, covering 143,907 acres of cropland (100% of harvested cropland irrigated) and 929,463 acres of pastureland (< 1% irrigated). The average farm size was 1,034 acres, smaller than the state average of 1,528 acres, and the top 13% of farms accounts for 82% of county acreage. Of 1,002 total farms, 378 had less than \$2,500 in sales and 178 farms had more than \$100,000 in sales. The majority of farms in Cochise County were family- or individually-held (76%). Another 9% were partnerships and 10% were family-held corporations.

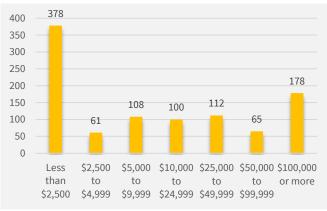
Farms are classified by the type of agricultural products they produce. When a farm or ranch produces more than one agricultural product, they are classified by the product that constitutes more than 50% of their sales. The most common type of operation in Cochise County is beef cattle ranching and farming (306 farms), followed by fruit and tree nut farming (238 farms), and aquaculture and other animal production (209 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).

#### Cochise County Farms by Legal Organization, 2022



Source: USDA

#### Cochise County Farms by Annual Sales, 2022



Source: USDA

#### Cochise County Farms by Industry, 2022

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Category	Farms
Total farms	1,002
Oilseed and grain farming	9
Vegetable and melon farming	41
Fruit and tree nut farming	238
Greenhouse, nursery, and floriculture production	19
Other crop farming	84
Cotton farming	5
Sugarcane farming, hay farming, and all other crop farming	79
Beef cattle ranching and farming	306
Cattle feedlots	3
Dairy cattle and milk production	6
Hog and pig farming	12
Poultry and egg production	41
Sheep and goat farming	34
Aquaculture and other animal production	209





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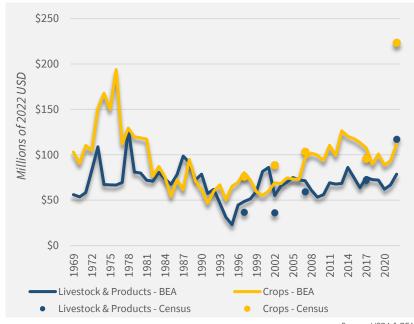
## **Production & Marketing**

Cochise County is a crop-dominant county with an estimated two-thirds of cash receipts originating from the sale of crops. The county is major producer of tree nuts, including pecans and pistachios. The county ranked second among U.S. counties in 2022 in terms of its pecan acreage and seventh nationally in terms of its pistachio acreage. Total fruit and tree nut sales, dominated by tree nut sales, approached \$100 million in 2022, a large jump from the previous census when sales totaled just over \$30 million. Since that time significant amounts of new acreage have been planted, and thennon-bearing acreage has since come into production. Meanwhile, total livestock and animal sales for the county were \$117 million.

## Viticulture & Winemaking

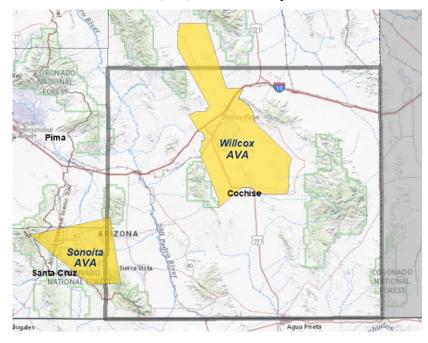
Cochise County is home to two American Viticultural Areas (AVAs), areas designated and recognized as wine grape-growing regions. Both the Willcox and Sonoita AVAs are located partially in Cochise County. As of 2022, Cochise County had 1,076 acres of grape production, accounting for nearly 60% of the state's total acreage, with 64 farms growing grapes. This represents an increase since the 2017 Census. The county produces more wine grapes than it uses and serves as a supplier of Arizona-grown grapes to wineries throughout other parts of the state. Itself a wine tourism destination, Cochise County is home to 28 wineries.

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



Source: USDA & BEA

#### American Viticultural Areas (AVAs) in Cochise County







Arizona County Agricultural Economy Profiles *University of Arizona Cooperative Extension* 

## **Irrigation Water Use**

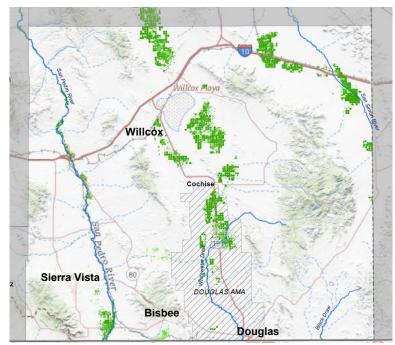
In Arizona, agriculture accounts for about 75% of the state's water use. More than half of withdrawals for agricultural uses in the state are from surface water. In some areas of the state with high demand, groundwater withdrawals for irrigated agriculture are limited by the 1980 Groundwater Management 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. Cochise County contains the Douglas AMA. Previously designated an INA, the area was transitioned to an AMA in 2022. An AMA has been proposed in the Willcox Basin, but has not been approved by voters.

Cochise County voluntarily requires new developments to provide proof of an adequate 100-year water supply. County-wide, roughly 92% of water is used for irrigation and 8% is used for municipal and domestic uses. Dependence on limited groundwater supplies has been and will continue to be a challenge for agriculture in Cochise County.

For more information on water in Cochise County, please visit the University of Arizona Water Resource Research Center county water factsheets by clicking <a href="here">here</a> or scanning the QR code →



#### **Cochise County Water Map**



#### **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.  $\rightarrow$ 





Arizona County Agricultural Economy Profiles
University of Arizona Cooperative Extension

## **Overview**

Coconino County is located in northern Arizona bordered to the north by Utah. With an area of 18,619 square miles, Coconino is the second-largest county in the contiguous U.S. and includes land within tribal areas of the Havasupai, Hopi, Hualapai, Kaibab Paiute, and the Navajo Nation. Flagstaff is the county's largest population center and home of Northern Arizona University.

Home to the Grand Canyon, tourism and related industries are top economic activities in Coconino County. Agriculture accounts for less than 1% of all private employment and less than 0.5% of county GDP. Nonetheless, agriculture plays an important role in land management, with nearly 50% of Coconino County land area in farms. Agricultural production in Coconino County is heavily influenced by tribal agriculture, both as a share of total farms, and in terms of top commodities produced. Coconino County accounts for less than 1% of Arizona's total agricultural cash receipts.



Map of Coconino County, Arizona

Indicator	Coconino County	Arizona
Land Area (square miles)	18,619	113,591
Land in Farms (Crops, Grazing) (square miles) (2022)	8,615	39,883
Population (2022)	144,060	7,359,197
Annual Average Population Growth Rate (2010-22)	0.6%	1.2%
Percent of Population Over 65 (2022)	14.6%	18.8%
Percent Population Rural (2020)	32.4%	10.7%
Total Employment (2022)	61,999	3,075,427
Share Federal, State, &Local Government Employment (2022)	22.3%	13.5%
GDP (2022)	\$9.1 billion	\$475.7 billion
Ag, Forestry, & Hunting GDP (on-farm only) (2022)	\$52.2 million	\$2.6 billion

Industry	Location Quotient
Scenic and sightseeing transportation, land	29.11
Tour operators	27.18
Nature parks and other similar institutions	23.29
RV (recreational vehicle) parks and campgrounds	9.36
Recreational goods rental	9.25
All other traveler accommodation	9.10
Hotels (except casino hotels) and motels	7.43
Bed-and-breakfast inns	7.06
Breweries	5.17
Other personal and household goods repair and maintenance	4.20

Top 10 Private Industries in Coconino 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. Top-ranked industries in terms of employment LQ include many outdoor recreation and tourism-related industries, of which none are directly related to agriculture. While there are many farms in Coconino County, many do not employ individuals besides the farm proprietors.





Arizona County Agricultural Economy Profiles
University of Arizona Cooperative Extension

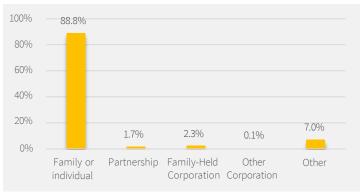
Every 5 years, U.S. Department of Agriculture releases the Census of Agriculture, the most comprehensive source of information on agricultural production by county. The Census provides information on the number of farms, types of crops and livestock produced, and farm characteristics, among other information. 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 2,057 farms in Coconino County in 2022, covering 418 acres of cropland (98% of harvested cropland irrigated) and 5.5 million acres of pastureland (<1% irrigated). The average farm size was 2,680 acres, significantly larger than the state average of 1,528 acres, with the top 6% of farms accounting for 97% of county acreage. Of 2,057 farms, 1,485 had less than \$2,500 in sales and 28 farms had more than \$100,000 in sales. The vast majority (89%) of county farms were family- or individually- held farms, and only 0.1% of farms were non-family-held corporate farms.

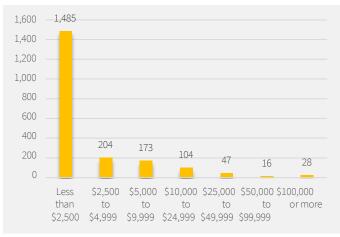
Farms are classified by the type of agricultural products they produce. When a farm or ranch produces more than one agricultural product, they are classified by the product that constitutes more than 50% of their sales. The most common type of operation in Coconino County is beef cattle ranching and farming (809 farms), followed by sheep and goat farming (766 farms), and aquaculture and other animal production (205 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).

#### Coconino County Farms by Legal Organization, 2022



Source: USDA

#### Coconino County Farms by Annual Sales, 2022



Source: USDA

#### Coconino County Farms by Industry, 2022

Category	Farms
Total farms	2,057
Oilseed and grain farming	1
Vegetable and melon farming	90
Fruit and tree nut farming	12
Greenhouse, nursery, and floriculture production	13
Other crop farming	135
Cotton farming	0
Sugarcane farming, hay farming, and all other crop farming	135
Beef cattle ranching and farming	809
Cattle feedlots	0
Dairy cattle and milk production	0
Hog and pig farming	3
Poultry and egg production	23
Sheep and goat farming	766
Aquaculture and other animal production	205



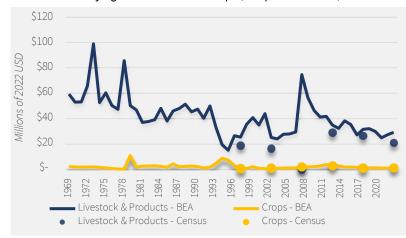


Arizona County Agricultural Economy Profiles
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## **Production & Marketing**

Coconino County is a livestock-dominant county, with an estimated 94% of county cash receipts originating from sales of livestock and animal products. Sales of cattle and calves represented 81% of county agricultural cash receipts in 2022, followed by sales of sheep, goats, wool, mohair, and milk at 7% of the county agricultural cash receipts. Cattle growers in Coconino County held an inventory of 41,999 head of beef and dairy cows.

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



Source: USDA & BEA

## **Tribal Agriculture**

Coconino County contains tribal lands including the Havasupai, Hopi, Hualapai, and Kaibab Paiute reservations, and the Navajo Nation. Data on agricultural production within these tribal areas was reported for 4 of the 5 tribal areas, except the Havasupai. Agricultural production in these areas includes livestock production, in particular cattle and calves, sheep and lambs, horses, goats, as well as crop production, particularly traditional corn, vegetables, and hay. Statistics reported below represent production within entire tribal areas, therefore production occurring within Coconino County is only a portion of the totals reported.

Agriculture in Coconino County is heavily influenced by tribal agriculture. The county ranks 4th among U.S. counties in its production of traditional or Indian corn (2022). Important livestock produced include cattle, sheep, goats, and products thereof. Tribal agriculture also influences the profile of Coconino County agricultural producers. Within the Navajo Nation, 52% of producers are female, resulting in Coconino County being one of three counties in Arizona (with Apache and Navajo counties) with more female than male principal agricultural producers. In fact, because of these counties, Arizona has the highest share of female agricultural producers (48%) in the nation.

#### Summary of Agricultural Production in Coconino County Tribal Areas, 2022

	Норі	Hualapai	Kaibab Paiute	Navajo Nation
Farms	131	51	3	13,558
Cropland (total acres)	553	-	N.D.	249,985
Value of ag. products sold (\$1,000)	2,329	267	327	140,319
Producers	211	57	8	22,442
Top commodities	Cattle & calves; Horses; Traditional corn; Dry beans; Vegetables	Cattle & calves	Cattle & calves	Cattle & calves; Sheep & lambs; Horses; Goats; Traditional corn; Hay; Vegetables

Source: USDA

#### Coconino County Tribal Areas





Arizona County Agricultural Economy Profiles University of Arizona Cooperative Extension

## **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. There is no land in Coconino County within an AMA or INA.

Irrigated agriculture in Coconino County is minimal, with a total of 1,429 irrigated acres county-wide in 2022, roughly one-tenth of one percent of irrigated agricultural land in Arizona.

For more information on water in Coconino County, please visit the University of Arizona Water Resource Research Center county water factsheets by clicking <a href="here">here</a> or scanning the QR code →



#### Coconino County Water Map



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Arizona County Agricultural Economy Profiles
University of Arizona Cooperative Extension

#### Overview

Gila County is located in central Arizona, bordered to the north by Navajo and Coconino counties, to the west by Yavapai, Maricopa, and Pinal counties, and to the east by Graham County. As of 2022, the population was nearly 54,000 with approximately 44% of the county's population residing in rural areas. Major population centers include Payson and Globe. Top industries in Gila County include copper mining, mining-related industries, and government.

Although on-farm agriculture accounts for less than 1% of the county's GDP and less than 1% of all private industry jobs, Gila County is specialized in beef cattle ranching, with employment in ranching over 3 times more concentrated than the national average. Gila County has the highest average farm size of all Arizona counties at 6,953 acres. Land in farms accounts for approximately 44% of total county land area. Gila County represents less than 1% of Arizona's total agricultural cash receipts.



Map of Gila County, Arizona

Indicator	Gila County	Arizona
Land Area (square miles)	4,758	113,591
Land in Farms (Crops, Grazing) (square miles) (2022)	2,075	39,883
Population (2022)	53,922	7,359,197
Annual Average Population Growth Rate (2010-22)	0.1%	1.2%
Percent of Population Over 65 (2022)	30.8%	18.8%
Percent Population Rural (2020)	44.4%	10.7%
Total Employment (2022)	14,640	3,075,427
Share Federal, State, & Local Government Employment (2022)	35.3%	13.5%
GDP (2022)	\$2.2 billion	\$475.7 billion
Ag, Forestry, & Hunting GDP (on-farm only) (2022)	\$12 million	\$2.6 billion

Industry	Location Quotient
Nonresidential site preparation contractors	7.73
RV (recreational vehicle) parks and campgrounds	6.75
Specialized freight (except used goods) trucking, local	4.84
Tire dealers	4.26
Water supply and irrigation systems	4.02
Lessors of other real estate property	3.98
Motor vehicle towing	3.85
Nursery, garden center, and farm supply retailers	3.60
Beef cattle ranching and farming	3.28
Residential flooring contractors	3.23

Top 10 Private Industries in Gila 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 industries in Gila County, agriculture accounts for two industries, including water supply and irrigation systems, and beef cattle ranching and farming, in both cases employment is nearly 4 times more concentrated than the national average.





Arizona County Agricultural Economy Profiles
University of Arizona Cooperative Extension

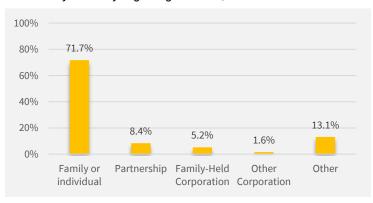
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#### **Farms**

There were 191 farms in Gila County in 2022, covering 2,570 acres of cropland (100% of harvested cropland irrigated) and 1,325,473 acres of pastureland (<1% irrigated). The average farm size was 6,953 acres, significantly larger than the state average of 1,528 acres, with the top 5% of farms accounting for 97% of county acreage. Of 191 farms, 80 had less than \$2,500 in sales and 22 farms had more than \$100,000 in sales. A large majority (72%) of county farms are family- or individually-held farms, 8% are partnerships, 5.2% family-held corporations, and only 1.6% are non-family-held corporate farms.

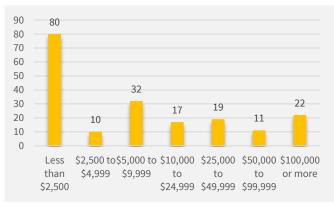
Farms are classified by the type of agricultural products they produce. When a farm or ranch produces more than one agricultural product, they are classified by the product that constitutes more than 50% of their sales. The most common type of operation in Gila County is beef cattle ranching and farming (85 farms), followed by aquaculture and other animal production (66 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).

#### Gila County Farms by Legal Organization, 2022



Source: USDA

#### Gila County Farms by Annual Sales, 2022



Source: USDA

#### Gila County Farms by Industry, 2022

Category	Farms
Total farms	191
Oilseed and grain farming	0
Vegetable and melon farming	3
Fruit and tree nut farming	17
Greenhouse, nursery, and floriculture production	1
Other crop farming	5
Cotton farming	0
Sugarcane farming, hay farming, and all other crop farming	5
Beef cattle ranching and farming	85
Cattle feedlots	2
Dairy cattle and milk production	4
Hog and pig farming	0
Poultry and egg production	7
Sheep and goat farming	1
Aquaculture and other animal production	66





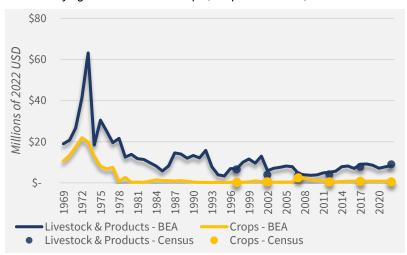


Arizona County Agricultural Economy Profiles
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## **Production & Marketing**

Gila County is a livestock-dominant county, with an estimated 96% of county cash receipts originating from sales of livestock and animal products. Sales of cattle and calves represented 62% of county agricultural cash receipts in 2022, followed by sales of horses, ponies, mules, burros, and donkeys, at 22% of cash receipts. Cattle growers in the county sold 6,784 head of cattle in 2022. Crop sales totaled just over \$400,000 in 2022.

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



Source: USDA & BEA

## **Tribal Agriculture**

Gila County contains portions of the Fort Apache, San Carlos Apache, and Tonto Apache reservations. Of these three tribal areas, the Census of Agriculture only reports on the San Carlos Apache. Statistics reported for San Carlos Apache agricultural production represent production within the entire tribal area, therefore production occurring within Gila County is only a portion of the total reported.

The San Carlos Apache reservation spans portions of Gila, Graham, and Pinal counties. A total of 119 farms operated on the San Carlos Apache reservation in 2022. A large majority of these farms were small, both in terms of size and value of sales. Of 119 farms, 95 farms were between 1 and 9 acres in size and 90 farms sold less than \$1,000 in agricultural products. Almost all farms (109 farms) had inventory of cattle and calves, but only 42 farms sold cattle in 2022.

#### Tribal Land in Gila County



## **Ranching & Public Lands**

Federal lands account for 59% of county land area in Gila County. As a livestock-dominant county, many Gila County livestock producers rely on federal grazing leases for grazing their livestock. The Forest Service (FS) and the Bureau of Land Management (BLM) are the two federal agencies that issue grazing permits. In Gila County, roughly 1.8 million acres are managed by the FS and 57,000 acres are managed by the BLM, accounting for nearly all federal lands in the county.

Ranching on public lands presents a series of unique considerations for producers, including coordinating with one or many land managers, complying with federal or state regulations, obtaining permits, and paying fees. These considerations have implications for operations and the cost of doing business (Arizona Ranching Budgets: 2016, Teegerstrom & Tronstad, 2017).





Arizona County Agricultural Economy Profiles
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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. There is no land in Gila County within an AMA nor within an INA.

The largest water user in Gila County is mining. In fact, the county is a major producer of copper and other minerals. In terms of land management, the county's land base consists of 38% Tribal, 57% federal, 1% state, and 4% private land. Much of the county includes Forest Service lands, important watersheds that supply critical surface water sources including the Salt and Gila Rivers.

For more information on water in Gila County, please visit the University of Arizona Water Resource Research Center county water factsheets by clicking <a href="here">here</a> or scanning the QR code →



#### Gila County Water Map



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Arizona County Agricultural Economy Profiles *University of Arizona Cooperative Extension* 

#### **Overview**

Graham County is located in eastern Arizona bordered to the north by the Black and San Carlos Rivers, to the south by Cochise County, to the east by Greenlee County, and to the west by Gila and Pinal counties. As of 2022 the population was just over 38,000 with more than 52% of the county's population residing in rural areas. The county's population is concentrated in the eastern part of the county in Safford, Pima, and Thatcher.

Top industries in Graham County include government, agriculture, and retail and service-industries. With much of eastern Arizona's population residing in rural areas, the cities and towns of Graham County serve as a primary source for household goods and services. More than 40% of the county's land area is in farms, either crops or grazing. On-farm agriculture directly accounts for less than 1% of county GDP. Graham County accounts for about 1% of Arizona's total agricultural cash receipts.



Map of Graham County, Arizona

Indicator	Graham County	Arizona
Land Area (square miles)	4,623	113,591
Land in Farms (Crops, Grazing) (square miles) (2022)	1,900	39,883
Population (2022)	38,779	7,359,197
Annual Average Population Growth Rate (2010-22)	0.4%	1.2%
Percent of Population Over 65 (2022)	14.5%	18.8%
Percent Population Rural (2020)	52.4%	10.7%
Total Employment (2022)	10,088	3,075,427
Share Federal, State, & Local Government Employment (2022)	29.3%	13.5%
GDP (2022)	\$1.6 billion	\$475.7 billion
Ag, Forestry, & Hunting GDP (on-farm only) (2022)	\$9.7 million	\$2.6 billion

Industry	Location Quotient
Commercial & industrial machinery & equipment (except automotive & electronic) repair & maintenance	8.35
Tire dealers	5.86
Tax preparation services	2.97
Offices of optometrists	2.59
Automotive parts and accessories retailers	2.54
Exterminating and pest control services	2.27
Cut stone and stone product manufacturing	2.06
Residential plumbing and hvac contractors	1.76
Offices of dentists	1.55
Water supply and irrigation systems	1.54

Top 10 Private Industries in Graham 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 industries in Graham County, only water supply and irrigation systems is agriculture-related, with a LQ of 1.54.





Arizona County Agricultural Economy Profiles *University of Arizona Cooperative Extension* 

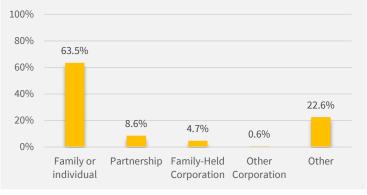
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#### **Farms**

There were 359 farms in Graham County in 2022, covering 39,511 acres of cropland (100% of harvested cropland irrigated) and 1,176,381 acres of pastureland (<1% irrigated). The average farm size was 3,387 acres, significantly larger than the state average of 1,528 acres, with the top 5% of farms accounting for 96% of county acreage. Of 359 total farms, 156 had less than \$2,500 in sales and 54 had more than \$100,000 in sales. More than 63% of county farms are family- or individually-held farms, 9% are partnerships, 5% are family-held corporations, and only 0.6% are non-family held corporations.

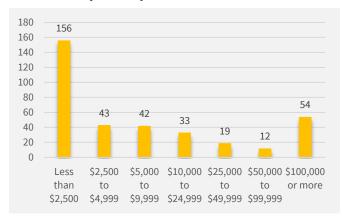
Farms are classified by the type of agricultural products they produce. When a farm or ranch produces more than one agricultural product, they are classified by the product that constitutes more than 50% of their sales. The most common type of operation in Graham County is beef cattle ranching and farming (196 farms), followed by other crop farming (73 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).

#### Graham County Farms by Legal Organization, 2022



Source: USDA

#### Graham County Farms by Annual Sales, 2022



Source: USDA

#### Graham County Farms by Industry, 2022

Category	Farms
Total farms	359
Oilseed and grain farming	3
Vegetable and melon farming	4
Fruit and tree nut farming	35
Greenhouse, nursery, and floriculture production	3
Other crop farming	73
Cotton farming	17
Sugarcane farming, hay farming, and all other crop farming	56
Beef cattle ranching and farming	196
Cattle feedlots	1
Dairy cattle and milk production	0
Hog and pig farming	9
Poultry and egg production	0
Sheep and goat farming	6
Aquaculture and other animal production	29





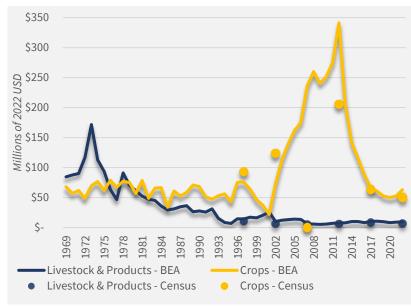


Arizona County Agricultural Economy Profiles University of Arizona Cooperative Extension

## **Production & Marketing**

Graham County is a crop-dominant county, with an estimated 88% of county cash receipts originating from sales of crops. Graham County ranks 4<sup>th</sup> nationally in acres of Pima cotton harvested in 2022, and 5th in terms of bales of Pima cotton produced. Pima cotton is a longstaple variety of cotton valued for its use in textiles. Cotton is the county's top crop in terms of value of production (roughly half of the county's agricultural cash receipts) and the county's relative geographic isolation from other agricultural areas has made it a strategic location for cultivation of Pima cotton which can be more susceptible to pests compared with genetically engineered varieties of Upland cotton. Other top agricultural products in the county include corn, alfalfa hay, and cattle and calves.

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



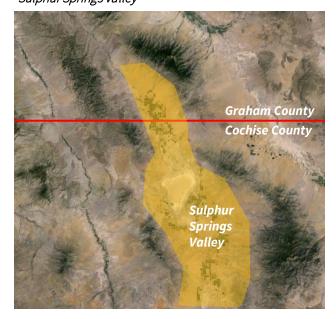
Source: USDA & BEA

## **Greenhouse Production in the Sulphur Springs Valley**

Crop production value in Graham County has seen significant swings over time, most notably between 2002 and 2017. This major spike in the value of crop production in the county was due to construction and operation of a large greenhouse facility in the Sulphur Springs Valley area of Graham County. The Sulfur Springs Valley spans from southwestern Graham County southward into Cochise County and is a major agricultural area of the state. As of 2024, a major producer has announced investment in greenhouse operations in the area, therefore a revival of high value specialty crop production is anticipated within the county in coming years.

The Sulphur Springs Valley is a highly dynamic and productive area of the state, including production of tree nuts, wine grapes, field crops, and greenhouse crops. The area also faces considerable challenges related to its limited groundwater supplies.

Sulphur Springs Valley







Arizona County Agricultural Economy Profiles *University of Arizona Cooperative Extension* 

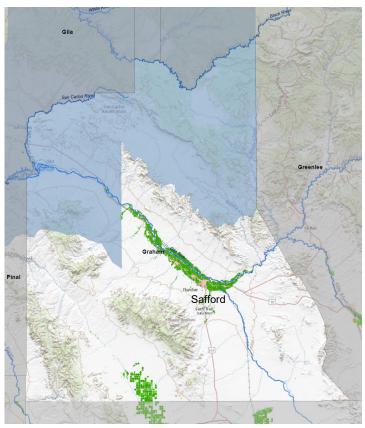
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For more information on water in Graham County, please visit the University of Arizona Water Resource Research Center county water factsheets by clicking <a href="here">here</a> or scanning the QR code →



#### Graham County Water Map



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Arizona County Agricultural Economy Profiles University of Arizona Cooperative Extension

## **Overview**

Greenlee County is located in eastern Arizona along the New Mexico border. It is bordered by Apache County to the north and Graham county to the west. As of 2022 the population was just under 9,302 with the 100% of the county's population residing in rural areas. Major population centers include Clifton and Duncan.

Top industries in Greenlee County include copper mining and mining-related industries. On-farm agriculture has a small footprint, accounting for less than 1% of all private employment and less than 1% of county GDP.

Characterized by its rugged, mountainous terrain, Greenlee County also has a relatively small proportion of land in farms (2%). Much of the land in Greenlee County is public land, or government-owned. Ranchers in Greenlee County lease land from public agencies for grazing. Greenlee County accounts for less than 1% of Arizona's total agricultural cash receipts.



Map of Greenlee County, Arizona

Indicator	Greenlee County	Arizona
Land Area (square miles)	1,842	113,591
Land in Farms (Crops, Grazing) (square miles)	36	39,883
Population (2022)	9,302	7,359,197
Annual Average Population Growth Rate (2010-22)	1.0%	1.2%
Percent of Population Over 65 (2022)	14.5%	18.8%
Percent Population Rural (2020)	100.0%	10.7%
Total Employment (2022)	5,511	3,075,427
Share Federal, State, &Local Government Employment (2022)	10.3%	13.5%
GDP (2022)	\$2.3 billion	\$475.7 billion
Ag, Forestry, & Hunting GDP (on-farm only) (2022)	\$20.5 million	\$2.6 billion

Industry	Location Quotient
Copper, nickel, lead, and zinc mining	1,205.58
Support activities for metal mining	547.17
Other metal ore mining	287.95
Support activities for rail transportation	116.77
Water supply and irrigation systems	39.44
Construction and mining (except oil well) machinery and equipment merchant wholesalers	38.34
Natural gas distribution	34.09
Other nonresidential exterior contractors	33.17
Bowling centers	32.13
Corn farming	28.97

Top 10 Private Industries in Greenlee County by Establishment LQ, 2022

An economy can be characterized by the industries that make up the "base" of the economy. A common way to measure this is with location quotients (LQs). LQs are 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 Greenlee County's economy and concentration of employment in a small number of large firms, non-disclosed data prevents presenting employment location quotients for the county. Therefore LQs are calculated based on the number of businesses. Greenlee County's economy is heavily mining dependent, with copper, nickel, lead, and zinc mining ranking first by establishment LQ. Water supply and irrigation systems, and corn farming, are agriculture or agriculture-related industries that rank in the top 10.





Arizona County Agricultural Economy Profiles University of Arizona Cooperative Extension

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**

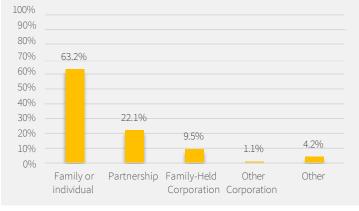
There were 95 farms in Greenlee County in 2022, covering 4,659 acres of cropland (100% of harvested cropland irrigated) and 18,610 acres of pastureland (8% irrigated). The average farm size was 245 acres, significantly smaller than the state average of 1,528 acres.

Of 95 total farms, 41 had less than \$2,500 in sales and 10 had more than \$100,000 in sales. A majority (63%) of county farms are family- or individually-held farms, 22% 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 Greenlee County is beef cattle ranching and farming (43 farms), followed by sugarcane farming, hay farming, and all other crop farming (20 farms).

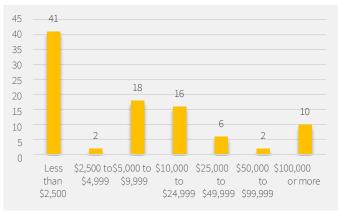
While the number of farms is helpful in understanding how many farms "specialize" in different types of agricultural production, it does not reflect the magnitude or scale of production by commodity, which is better captured by sales or cash receipts (next page).

#### Greenlee County Farms by Legal Organization, 2022



Source: USDA

#### Greenlee County Farms by Annual Sales, 2022



Source: USDA

#### Greenlee County Farms by Industry, 2022

Category	Farms
Total farms	95
Oilseed and grain farming	1
Vegetable and melon farming	3
Fruit and tree nut farming	3
Greenhouse, nursery, and floriculture production	3
Other crop farming	20
Cotton farming	0
Sugarcane farming, hay farming, and all other crop farming	20
Beef cattle ranching and farming	43
Cattle feedlots	0
Dairy cattle and milk production	0
Hog and pig farming	4
Poultry and egg production	0
Sheep and goat farming	4
Aquaculture and other animal production	14



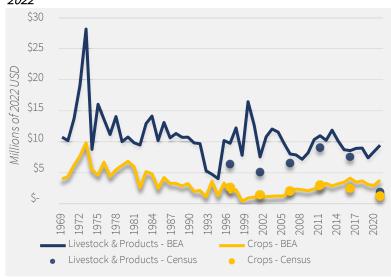


Arizona County Agricultural Economy Profiles University of Arizona Cooperative Extension

## **Production & Marketing**

Greenlee County is a livestock-dominant county, with an estimated 60% of county cash receipts originating from sales of livestock. Its most significant commodity in terms of sales generated is cattle and calves with \$1.7 million sold in 2022. The county had \$1.2 million in sales of field crops in 2022, most of which were feed crops supporting livestock production, such as corn and hay.

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



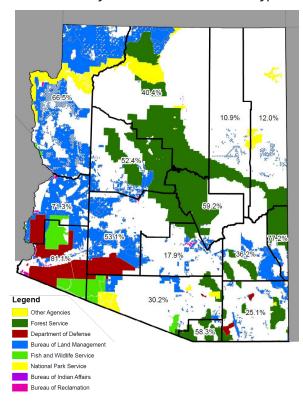
Source: USDA&BEA

## Ranching & Public Lands

Greenlee County has the second highest share of federal lands of all counties in Arizona at 77.2% (Yuma County has 81.1%). As a livestock-dominant county, many Greenlee County livestock producers rely on federal grazing leases for grazing their livestock. The Forest Service (FS) and the Bureau of Land Management (BLM) are the two federal agencies that issue grazing permits. Approximately 64% of Greenlee County's land area is managed by the FS and 13% is managed by the BLM.

Ranching on public lands presents a series of unique considerations for producers. Wildland fire is one issue that affects livestock producers, particularly those operating in forested areas. Greenlee County has been significantly impacted by wildland fire in recent years. In the summer of 2011, the Wallow Fire burned a large portion of the Apache-Sitgreaves National Forest in Greenlee and Apache counties. As one of the largest fires in the state's history, grazing activity was disrupted for livestock producers who were forced to flee and move livestock to safety. Additionally, grazing on public lands requires coordinating with one or many land managers, complying with federal or state regulation, obtaining permits, and paying fees. These considerations have implications for operations and the cost of doing business (Arizona Ranching Budgets: 2016, Teegerstrom & Tronstad, 2017).

#### Share of County Area in Federal Lands and Type







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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. There is no land in Greenlee County within an AMA or INA.

Irrigated crop production in Greenlee County is concentrated in the Gila River Valley near Duncan, Arizona. The Gila River runs through portions of the county and use of Gila River water is governed according to the Globe Equity Decree of 1935, among other water rights settlements, both finalized and ongoing. Aside from agriculture, mining is an important water use in Greenlee County, responsible for roughly one-third of county water use.

For more information on water in Greenlee County, please visit the University of Arizona Water Resource Research Center county water factsheets by clicking <a href="https://example.com/here">here</a> or scanning the QR code <a href="https://example.com/here">→</a>



#### Greenlee County Water Map



#### **About Us**

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Arizona County Agricultural Economy Profiles University of Arizona Cooperative Extension

#### **Overview**

La Paz County, located in western Arizona on the Colorado River, is bordered to the north by Mohave County and to the south by Yuma County. Population centers include Quartzite and Parker. La Paz County was established in 1983 when it separated from Yuma County. As of 2022 the population was just over 16,500, with more than 41% of the county's population residing in rural areas.

Top industries in La Paz County include government, tourism, and agriculture. Agricultural production is concentrated along the Colorado River within the Colorado River Indian Reservation, as well as in the east-central portion of the county near the towns of Vicksburg, Salome, and Wenden. Approximately 8% of county land is in farms. Agriculture plays an important role in La Paz County. On-farm agriculture accounts for roughly 3% of La Paz County's GDP and 11.7% of all private industry jobs, significantly higher than the national and state averages. La Paz County accounts for 5% of Arizona's total agricultural cash receipts.



Map of La Paz County, Arizona

Indicator	La Paz County	Arizona
Land Area (square miles)	4,500	113,591
Land in Farms (Crops, Grazing) (square miles) (2022)	368	39,883
Population (2022)	16,506	7,359,197
Annual Average Population Growth Rate (2010-22)	-1.6%	1.2%
Percent of Population Over 65 (2022)	41.7%	18.8%
Percent Population Rural (2020)	43.4%	10.7%
Total Employment (2022)	5,987	3,075,427
Share Federal, State, & Local Government Employment (2022)	32.6%	13.5%
GDP (2022)	\$824.7 million	\$475.7 billion
Ag, Forestry, & Hunting GDP (on-farm only) (2022)	\$25.2 million	\$2.6 billion

Industry	Location Quotient
RV (recreational vehicle) parks and campgrounds	79.78
Crop harvesting, primarily by machine	43.22
Lessors of other real estate property	20.08
Gasoline stations with convenience stores	6.27
Farm labor contractors and crew leaders	5.42
Water supply and irrigation systems	5.18
Farm supplies merchant wholesalers	3.61
Offices of real estate agents and brokers	2.07
Full-service restaurants	0.86
Office of lawyers	0.12

Top 10 Private Industries in La Paz 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 10 most concentrated industries in La Paz County, agriculture accounts for 4, including crop harvesting (with employment 43.22 times more concentrated than the national average), farm labor contractors and crew leaders (5.42), water supply and irrigation systems (5.18), and farm supplies merchant wholesalers (3.61). Hay farming is highly concentrated, but 2022 data are not disclosed for the county.





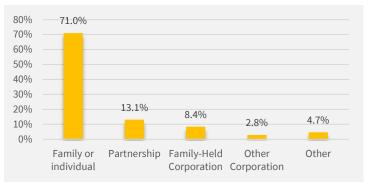
Arizona County Agricultural Economy Profiles *University of Arizona Cooperative Extension* 

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**

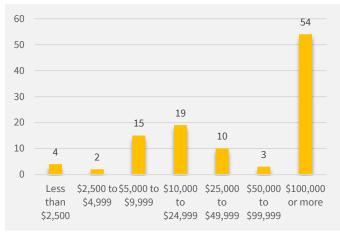
There were 107 farms in La Paz County in 2022, covering 99,798 acres of cropland (100% of harvested acreage irrigated) and 135,868 acres of pastureland (<1% irrigated). The average farm size was 2,202 acres, significantly larger than the state average of 1,528 acres, with the top 16% of farms accounting for 86% of county acreage. Of 107 farms, 54 had more than \$100,000 in sales, and only 4 farms had less than \$2,500 in sales. This distribution is very different from most other Arizona counties, where there are a large number of small farms and a small number of large farms. Most county farms are family- or individually-held farms (71%), 13% are partnerships, 8% are family-held corporations, and 3% are non-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 La Paz County is sugarcane farming, hay farming, and all other crop farming (82 farms). While the number of farms is helpful in understanding how many farms "specialize" in different types of agricultural production, it does not necessarily reflect the magnitude or scale of production by commodity, which is better captured by sales or cash receipts (next page).

#### La Paz County Farms by Legal Organization, 2022



Source: USDA

#### La Paz County Farms by Annual Sales, 2022



Source: USDA

#### La Paz County Farms by Industry, 2022

Category	Farms
Total farms	107
Oilseed and grain farming	0
Vegetable and melon farming	0
Fruit and tree nut farming	0
Greenhouse, nursery, and floriculture production	0
Other crop farming	84
Cotton farming	2
Sugarcane farming, hay farming, and all other crop farming	82
Beef cattle ranching and farming	4
Cattle feedlots	0
Dairy cattle and milk production	1
Hog and pig farming	0
Poultry and egg production	1
Sheep and goat farming	3
Aquaculture and other animal production	14





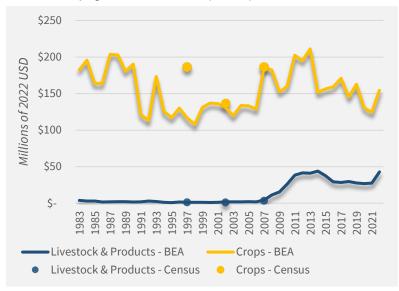


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## **Production & Marketing**

La Paz County is a crop-dominant county, with an estimated 78% of county cash receipts originating from sales of crops. La Paz County is Arizona's youngest county, having separated from Yuma County in 1983. Its agricultural statistics therefore are available back to that year. La Paz County is a significant producer of alfalfa hay. In 2022, it had \$127 million in sales of other crops and hay, including alfalfa, nearly half of the county's agricultural sales, with roughly 68,000 acres of production. Though sales values are not disclosed, the county had over 5,300 acres of cotton in 2022, and nearly 6,000 acres of wheat, most of which was durum wheat.

#### La Paz County Agricultural Cash Receipts, Crops & Livestock, 1983-2022



Source: USDA & BEA

## **Recent Developments in Alfalfa Farming**

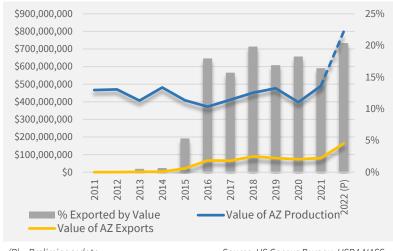
La Paz County ranked 4th nationally among U.S. counties in tons of alfalfa hay produced in 2022 and 6th nationally in terms of total tons of hay produced. Alfalfa production in La Paz County is highly productive, with an average yield of 7.5 tons per acre in 2022. The county has emerged at the center of a debate around the use of groundwater supplies to irrigate water-intensive crops that go on to be exported to foreign markets.

While most agricultural water use in the county is surface water, some areas of the county with agricultural production are groundwater-dependent.

Statewide, the share of hay production that is exported to foreign markets has increased significantly since 2014. As of 2022, roughly 20% of the value of Arizona's alfalfa production was generated through alfalfa exports. Primary destinations include Saudia Arabia, China, and the United Arab Emirates.

Part of the increase in exports has occurred through foreign investment by firms producing alfalfa for export. La Paz County had a notable example of this which was at the center of debates on "virtual water exports" occurring through the export of water intensive crops by foreign firms.

Arizona Alfalfa Production Value, Forage Product Exports (HS Code 1214) & Exports as Share of Alfalfa Production, 2011-22(P)



(P) - Preliminary data

Source: US Census Bureau, USDA NASS







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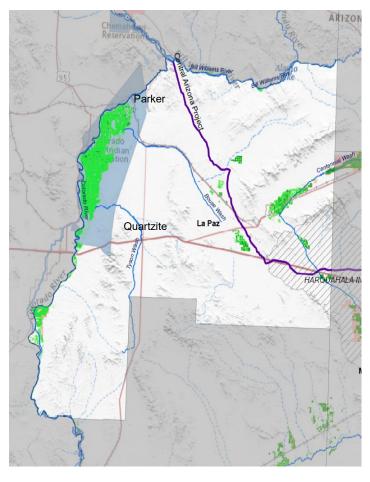
## **Irrigation Water Use**

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. Eastern La Paz County contains a portion of the Harquahala INA. The county is bordered to the west by the Colorado River and water use in the county is heavily dominated by surface water, estimated at roughly 87% of county was use in 2015.

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



#### La Paz County Water Map



#### **About Us**

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# **Maricopa County, AZ**

Arizona County Agricultural Economy Profiles University of Arizona Cooperative Extension

#### **Overview**

Maricopa County is located in central Arizona and is home to the state capital, Phoenix. It is Arizona's most populous county, with more than 4.5 million inhabitants. Only 2.3% of the county's population resides in rural areas. Maricopa County represents the largest county economy in the state. Top industries include a growing high-tech industry, manufacturing, and financial services. The county is also home to several higher education institutions including Arizona State University. On-farm agriculture accounts for approximately 0.3% of all private employment and directly contributes \$459.2 million in GDP to the county's \$350 billion economy.

Though its agricultural production is small relative to the county economy, Maricopa County plays a prominent role in the state's production of agricultural commodities. The county's fertile river valley land has been farmed for centuries by indigenous peoples. Today, a variety of crops are grown, including cotton, vegetables and melons, hay, and grains, however, county production is dominated by livestock, specifically milk production. Maricopa County accounts 30% of Arizona's total agricultural cash receipts.



Map of Maricopa County, Arizona

Indicator	Maricopa County	Arizona
Land Area (square miles)	9,199	113,591
Land in Farms (Crops, Grazing) (square miles) (2022)	784	39,883
Population (2022)	4,551,524	7,359,197
Annual Average Population Growth Rate (2010-22)	1.6%	1.2%
Percent of Population Over 65 (2022)	16.2%	18.8%
Percent Population Rural (2020)	2.3%	10.7%
Total Employment (2022)	2,170,744	3,075,427
Share Federal, State, & Local Government Employment (2022)	9.5%	13.5%
GDP (2022)	\$350.2 billion	\$475.7 billion
Ag, Forestry, & Hunting GDP (on-farm only) (2022)	\$459.2 million	\$2.6 billion

Industry	Location Quotient
Satellite telecommunications	12.76
Other activities related to credit intermediation	7.86
Semiconductor and related device manufacturing	7.28
Professional employer organizations	5.43
Small arms, ordnance, and ordnance accessories manufacturing	5.03
Sales financing	4.23
Health and welfare funds	4.00
Packing and crating	3.96
Financial transactions processing, reserve, and clearinghouse activities	3.80
Aircraft engine and engine parts manufacturing	3.50

Top 10 Private Industries in Maricopa 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 industries in Maricopa County, agriculture does not rank among them. That said, the county is one of the top agricultural counties in the state, though due to the size of the county's economy, agriculture is outweighed by economic activity in the metro Phoenix area.





# **Maricopa County, AZ**

Arizona County Agricultural Economy Profiles
University of Arizona Cooperative Extension

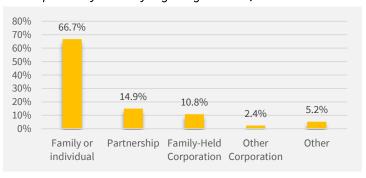
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#### **Farms**

There were 1,527 farms in Maricopa County in 2022, covering 264,018 acres of cropland (100% of harvested acreage irrigated) and 238,011 acres of pastureland (1% irrigated). The average farm size was 329 acres, significantly smaller than the state average of 1,528 acres, with the top 4% of farms accounting for 79% of county acreage. Of 1,527 farms, 656 had less than \$2,500 in sales and 265 had more than \$100,000 in sales. A majority of county farms (67%) are family- or individually-held, 15% are partnerships, 11% are family-held corporations, and 2.4% are non-family-held corporations.

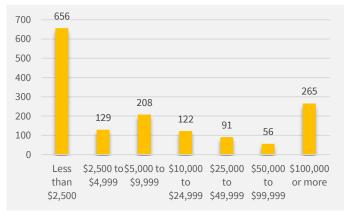
Farms are classified by the type of agricultural products they produce. When a farm or ranch produces more than one agricultural product, they are classified by the product that constitutes more than 50% of their sales. The most common type of operation in Maricopa County is aquaculture and other animal production (633 farms), followed by sugarcane farming, hay farming, and all other crop farming (206 farms), and beef cattle ranching and farming (189 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).

#### Maricopa County Farms by Legal Organization, 2022



Source: USDA

#### Maricopa County Farms by Annual Sales, 2022



Source: USDA

#### Maricopa County Farms by Industry, 2022

Category	Farms
Total farms	1,527
Oilseed and grain farming	32
Vegetable and melon farming	54
Fruit and tree nut farming	173
Greenhouse, nursery, and floriculture production	69
Other crop farming	207
Cotton farming	1
Sugarcane farming, hay farming, and all other crop farming	206
Beef cattle ranching and farming	189
Cattle feedlots	2
Dairy cattle and milk production	29
Hog and pig farming	15
Poultry and egg production	72
Sheep and goat farming	52
Aquaculture and other animal production	633







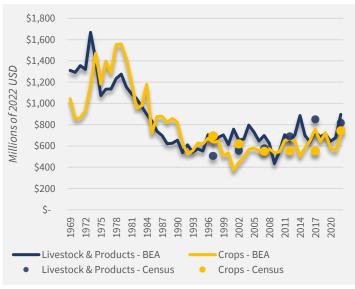
# **Maricopa County, AZ**

Arizona County Agricultural Economy Profiles
University of Arizona Cooperative Extension

## **Production & Marketing**

Maricopa County generates a roughly even mix of agricultural sales through crops versus livestock and livestock products. This pattern has held over time in the county. Total agricultural cash receipts were \$1.6 billion in 2022. Commodities responsible for large shares of these sales were vegetables, melons, potatoes, and sweet potatoes with \$275 million in sales, other crops and hay with \$278 million in sales, nursery, greenhouse, floriculture, and sod with \$117 million in sales, and milk from cows with \$599 million in sales. Most of these products directly or indirectly serve the large metropolitan Phoenix area. An estimated \$136 million of the county's agricultural cash receipts are from products sold directly to retail markets, institutions, and food hubs for local or regionally branded products, evidence of a growing local foods movement in the region.

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



Source: USDA & BEA

## **Tribal Agriculture**

Maricopa County contains the Fort McDowell Yavapai Nation and the Salt River Pima-Maricopa Reservation, as well as portions of the Gila River Indian Community and the Tohono O'odham Nation. Statistics reported below represent production within entire tribal areas, therefore production occurring within the county is only a portion of the totals for tribal areas not fully within the county. In 2022, the Fort McDowell Yavapai Nation had 10 farms; the Salt River Pima-Maricopa reservation had 4 farms; the Gila River Indian Community, partially in Maricopa County, had 58 farms, 29,102 acres of crops, and \$35 million in sales, primarily cotton and hay. The 2022 Census of Agriculture did not report data on the Tohono O'odham Nation.

## **Central Arizona Ag History**

Maricopa County and Central Arizona have long been a center of agricultural production. Agriculture in the area is estimated to date back to the fifth century A.D. when the Hohokam civilization farmed the area surrounding the confluence of the Salt and Gila Rivers. They developed a sophisticated system of hand-dug irrigation canals, measuring hundreds of miles in length. In fact, current day water conveyance systems in the region retrace portions of the original system.

In the late 1800s, non-native settlers arrived in the region. Flood control became problematic as agriculture expanded in major river valleys, and by the early 1900s major water infrastructure projects were underway, investing in large dams and reservoirs. The First World War marked a transition for agriculture in the region as long-staple cotton production expanded rapidly in the area to support the manufacture of tires for the war effort. By mid-century, Maricopa County had become one of the largest agricultural producing counties in the country. Since that time, production has shifted to support dairy production, supplying the state's major population centers, and milk from cows is now the county's most valuable commodity in terms of sales. Nonetheless, the county continues to be an important producer of winter vegetables, fruit, and cotton. Source: Contribution of Agriculture to the Maricopa County and Gila River Indian Community Economies (2018) by Duval, D., Bickel, A.K., and Frisvold, G.





## **Maricopa County, AZ**

Arizona County Agricultural Economy Profiles University of Arizona Cooperative Extension

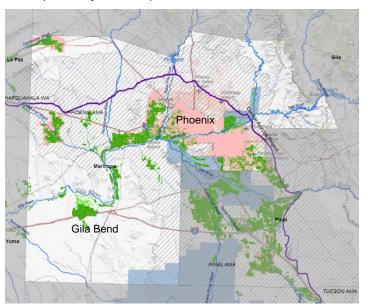
## **Irrigation Water Use**

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. Maricopa County has 48.8% of its land area in the Phoenix AMA, 4.1% in the Pinal AMA, 5.3% in the Harquahala INA, and 41.9% outside of an AMA or INA.

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#### Maricopa County Water Map



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Arizona County Agricultural Economy Profiles *University of Arizona Cooperative Extension* 

#### **Overview**

Mohave County is located at Arizona's northwest corner bordered to the west by the Colorado River, to the east by Coconino and Yavapai counties, and to the south by La Paz County. As of 2022, the population in Mohave County was more than 220,000, with 24% of the county's population residing in rural areas. Major population centers include Lake Havasu City, Kingman, and Bullhead City.

Top industries in Mohave County are linked with outdoor recreation and water sports as the county is an access point to a number of large reservoirs along the Colorado River, including Lake Mead, Lake Mohave, and Lake Havasu.

On-farm agriculture in Mohave County accounts for less than 1% of all private industry jobs and less than 1% of county GDP. Approximately 9% of county land is in farms. That said, Mohave County is a significant producer of alfalfa hay, ranking in the top 2% of counties nationally in terms of its production. Mohave County accounts for 1% of Arizona's total agricultural cash receipts.



Map of Mohave County, Arizona

Indicator	Mohave County	Arizona
Land Area (square miles)	13,311	113,591
Land in Farms (Crops, Grazing) (square miles) (2022)	1,178	39,883
Population (2022)	220,816	7,359,197
Annual Average Population Growth Rate (2010-22)	0.9%	1.2%
Percent of Population Over 65 (2022)	32.4%	18.8%
Percent Population Rural (2020)	23.9%	10.7%
Total Employment (2022)	54,756	3,075,427
Share Federal, State, & Local Government Employment (2022)	14.44%	13.5%
GDP (2022)	\$7.7 billion	\$475.7 billion
Ag, Forestry, & Hunting GDP (on-farm only) (2022)	\$49.6 million	\$2.6 billion

Industry	Location Quotient
Telecommunications resellers	10.59
Recreational goods rental	10.05
Motorcycle, bicycle, and parts manufacturing	7.91
Residential framing contractors	7.38
Motorcycle, atv, and all other motor vehicle dealers	5.54
Recreational vehicle dealers	5.13
Boat dealers	5.13
Dental laboratories	4.90
Convention and trade show organizers	4.84
Other personal and household goods repair and maintenance	4.19

Top 10 Private Industries in Mohave 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 industries in Mohave County, agriculture does not rank among them. Mohave County has a very high concentration of alfalfa production, however 2022 employment data are not disclosed.





Arizona County Agricultural Economy Profiles *University of Arizona Cooperative Extension* 

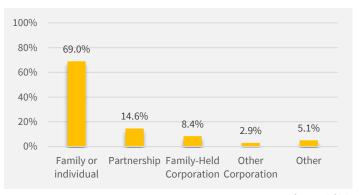
Every 5 years, U.S. Department of Agriculture releases the Census of Agriculture, the most comprehensive source of information on agricultural production by county. The Census provides information on the number of farms, types of crops and livestock produced, and farm characteristics, among other information. 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 274 farms in Mohave County in 2022, covering 33,338 acres of cropland and 720,461 acres of pastureland (data on irrigated acreage not disclosed). The average farm size was 2,751 acres, significantly larger than the state average of 1,528 acres, with the top 15% of farms accounting for 94% of county acreage. Of 274 farms, 131 had less than \$2,500 in sales and 35 farms had more than \$100,000 in sales. A majority of county farms (69%) are family- or individuallyheld, 15% are partnerships, and 8% 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 Mohave County is beef cattle ranching and farming (129 farms), followed by aquaculture and other animal production (40 farms), and fruit and tree nut farming (30 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).

#### Mohave County Farms by Legal Organization, 2022



Source: USDA

#### Mohave County Farms by Annual Sales, 2022



Source: USDA

#### Mohave County Farms by Industry, 2022

Category	Farms
Total farms	274
Oilseed and grain farming	0
Vegetable and melon farming	2
Fruit and tree nut farming	30
Greenhouse, nursery, and floriculture production	11
Other crop farming	28
Cotton farming	0
Sugarcane farming, hay farming, and all other crop farming	28
Beef cattle ranching and farming	129
Cattle feedlots	1
Dairy cattle and milk production	2
Hog and pig farming	2
Poultry and egg production	12
Sheep and goat farming	17
Aquaculture and other animal production	40





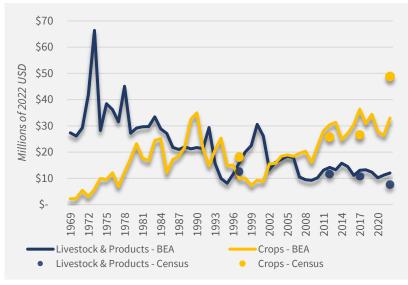
Arizona County Agricultural Economy Profiles

University of Arizona Cooperative Extension

### **Production & Marketing**

Mohave County is a crop-dominant county, with an estimated 86% of county cash receipts originating from sales of crops. This hasn't always been the case, however. In the 1970s and earlier, county agriculture cash receipts were primarily from sales of livestock and livestock products, but the inflation-adjusted value of livestock sales has gradually declined over time while the value of crop sales has increased, crossing in the mid-2000s. From the 2017 Census to the 2022 Census, cash receipts from crops more than doubled, most of which is due to a sharp increase in sales of alfalfa hay. Additionally, the county has seen an influx of new orchard plantings, principally pistachios and other tree nuts. As of 2022, the county ranks 15th nationally in combined bearing and non-bearing acreage of pistachios.

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



Source: USDA & BEA

## **Hay Production in Mohave County**

Hay is, by far, the top agricultural commodity produced in Mohave County. It accounts for approximately 75% of county crop sales, and 65% of total agricultural sales. In 2022, there were 28 farms in the county that produced other crops and hay. 19,574 acres county-wide were dedicated to production of forage and hay, of which 15,810 were used for production of alfalfa.

## **Ranching & Public Lands**

Sales of cattle and calves account for 91% of livestock and livestock product sales in Mohave County. Cattle ranching in the county relies in-part on leasing of grazing rights on public lands.

The county contains 5.7 million acres of federal land (66.5% of the county's area), of which 4.5 million acres are managed by the Bureau of Land Management.

Ranching on public lands presents a series of unique considerations for producers, including coordinating with one or many land managers, complying with federal or state regulation, obtaining permits, and paying fees. These considerations have implications for operations and the cost of doing business (Arizona Ranching Budgets: 2016, Teegerstrom & Tronstad, 2017).





Arizona County Agricultural Economy Profiles University of Arizona Cooperative Extension

## **Irrigation Water Use**

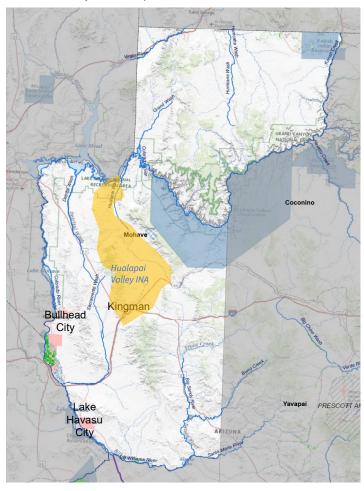
In Arizona, agriculture accounts for about 75% of the state's water use. More than half of withdrawals for agricultural uses in the state are from surface water. In some areas of the state with high demand, groundwater withdrawals for irrigated agriculture are limited by the 1980 Groundwater Management 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.

Mohave County is home to the state's newest INA, the Hualapai Valley INA. This INA is aimed at maintaining groundwater withdrawals at a level that protects existing irrigators, domestic wells, and municipal water supplies. This area of the county has seen rapid expansion of irrigated agriculture, including new tree nut orchard plantings. This prompted calls to put limits on further expansion of irrigated agriculture in this basin utilizing mechanisms under the state's Groundwater Management Act.

For more information on water in Mohave County, please visit the University of Arizona Water Resource Research Center county water factsheets by clicking <a href="here">here</a> or scanning the QR code <a href="here">> \text{}



#### Mohave County Water Map



#### **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.  $\rightarrow$ 





Arizona County Agricultural Economy Profiles University of Arizona Cooperative Extension

#### Overview

Navajo County is located in northeastern Arizona between Coconino and Apache counties. As of 2022, the population of Navajo County was 108,650. More than half of the county's population (64.3%) resides in rural areas, and a large share of the county consists of tribal areas, including lands of the Navajo Nation, the Hopi, and the White Mountain Apache tribes. Major population centers include Winslow, Holbrook, and Show Low. Top industries in Navajo County include government, tourism, forestry, and agriculture, specifically livestock production. Prior to the closing of the Kayenta Mine in 2019, coal mining was a major industry in the county.

More than 70% of Navajo County's land is in farms and on-farm agriculture directly accounts for approximately 1% of all private industry jobs and 1.33% of county GDP, higher than the state and national averages. The county's agricultural production is heavily influenced by tribal agricultural producers, ranking nationally as a top producer of horses, goats, and traditional corn. Navajo County accounts for about 1% of Arizona's total agricultural cash receipts.



Map of Navajo County, Arizona

Indicator	Navajo County	Arizona
Land Area (square miles)	9,950	113,591
Land in Farms (Crops, Grazing) (square miles) (2022)	7,246	39,883
Population (2022)	108,650	7,359,197
Annual Average Population Growth Rate (2010-22)	0.1%	1.2%
Percent of Population Over 65 (2022)	20.0%	18.8%
Percent Population Rural (2020)	64.3%	10.7%
Total Employment (2022)	27,528	3,075,427
Share Federal, State, & Local Government Employment (2022)	34.7%	13.5%
GDP (2022)	\$3.4 billion	\$475.7 billion
Ag, Forestry, & Hunting GDP (on-farm only) (2022)	\$45.3 million	\$2.6 billion

Industry	Location Quotient
Outpatient mental health and substance abuse centers	7.53
RV (recreational vehicle) parks and campgrounds	7.03
Automotive glass replacement shops	4.19
All other consumer goods rental	3.91
Nursery, garden center, and farm supply retailers	3.44
Ready-mix concrete manufacturing	3.4
Fuel dealers	3.12
Elementary and secondary schools	2.97
Tire dealers	2.44
Beef cattle ranching and farming	2.42

Top 10 Private Industries in Navajo 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 industries in Navajo County, beef cattle ranching and farming ranks 10th, with employment nearly 3 times more concentrated than the national average.





Arizona County Agricultural Economy Profiles
University of Arizona Cooperative Extension

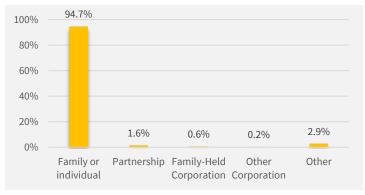
Every 5 years, U.S. Department of Agriculture releases the Census of Agriculture, the most comprehensive source of information on agricultural production by county. The Census provides information on the number of farms, types of crops and livestock produced, and farm characteristics, among other information. 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 3,269 farms in Navajo County in 2022, covering 35,267 acres of cropland (99% of harvested cropland irrigated) and 4.6 million acres of pastureland (<1% irrigated). The average farm size was 1,419 acres, close to the state average of 1,528 acres, with the top 2% of farms accounting for 95% of county acreage. Of 3,269 farms, 2,573 had less than \$2,500 in sales and 19 farms had more than \$100,000 in sales. A large majority of county farms (95%) are family- or individually-held, 2% are partnerships, and only 0.2% are non-family-held corporate farms.

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 Navajo County is sheep and goat farming (1,370 farms), followed by beef cattle ranching and farming (896 farms), and aquaculture and other animal production (511 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).

#### Navajo County Farms by Legal Organization, 2022



Source: USDA

#### Navajo County Farms by Annual Sales, 2022



Source: USDA

#### Navajo County Farms by Industry, 2022

Category	Farms
Total farms	3,269
Oilseed and grain farming	70
Vegetable and melon farming	229
Fruit and tree nut farming	17
Greenhouse, nursery, and floriculture production	16
Other crop farming	131
Cotton farming	0
Sugarcane farming, hay farming, and all other crop farming	131
Beef cattle ranching and farming	896
Cattle feedlots	2
Dairy cattle and milk production	0
Hog and pig farming	7
Poultry and egg production	20
Sheep and goat farming	1,370
Aquaculture and other animal production	511







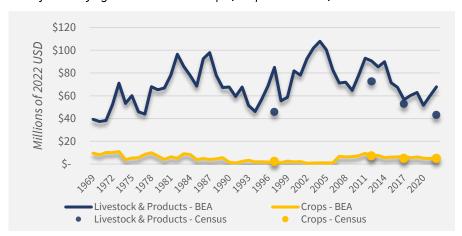
Arizona County Agricultural Economy Profiles University of Arizona Cooperative Extension

## **Production & Marketing**

Navajo County is a livestock-dominant county, with an estimated 90% of county cash receipts originating from sales of livestock. Livestock sales totaled \$43 million in 2022. Important livestock commodities for the county include cattle, sheep, wool, goats, and products thereof.

The county ranked third nationally in production of traditional or Indian corn. Other crops produced include vegetables and melons, with \$2.2 million in sales in 2022.

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



Source: USDA & BEA

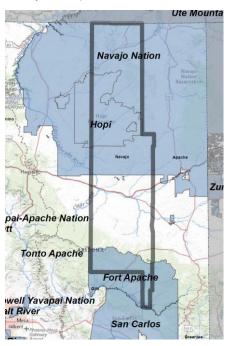
## **Tribal Agriculture**

Navajo County includes portions of the Navajo Nation, the Hopi Reservation, and the Fort Apache Reservation. Statistics reported below represent production within entire tribal areas, therefore production occurring within Navajo County is only a portion of the totals reported. In 2022, there were 13,558 farms operating on the Navajo Nation with 16.3 million acres in farms and 249,985 acres in crops, generating \$138.14 million in sales. The most common type of farms on the Navajo Nation are those producing sheep and lambs, followed by horses, cattle and calves, and goats. There were 131 farms operating on the Hopi reservation with 1.7 million acres in farms, of which 553 acres were crops, generating total sales of \$2.3 million. Cattle and calf producers and farms growing traditional corn are the most common types of farms on the Hopi reservation. Traditional corn and vegetables are the most commonly produced crops. The Census of Agriculture does not report agricultural statistics for the Fort Apache Reservation.

### **Women in Agriculture**

Navajo County is one of three counties in Arizona with more female than male principal agricultural producers (Apache, Coconino, and Navajo counties). These three counties also have more female producers than male producers overall, including non-principal producers. This is evidence of the influence of tribal agriculture on the county agricultural economy. Within the Navajo Nation, 52% of producers are female, and the three Arizona counties that include Navajo Nation lands (Apache, Coconino, and Navajo counties) are also the three counties with more female than male principal agricultural producers. In fact, driven in part by female producers in these counties, Arizona has the highest share of female agricultural producers (48%) in the nation.

#### Navajo County Tribal Areas







Arizona County Agricultural Economy Profiles University of Arizona Cooperative Extension

### **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. There is no land in Navajo County within an AMA, but approximately 1.8% of the county is located in the Joseph City INA established under the Groundwater Management Act.

For more information on water in Navajo County, please visit the University of Arizona Water Resource Research Center county water factsheets by clicking <a href="here">here</a> or scanning the QR code →



#### Navajo County Water Map



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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

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

Top 10 Private Industries in Pima 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.

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.





Arizona County Agricultural Economy Profiles
University of Arizona Cooperative Extension

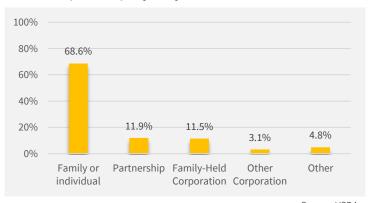
Every 5 years, U.S. Department of Agriculture releases the Census of Agriculture, the most comprehensive source of information on agricultural production by county. The Census provides information on the number of farms, types of crops and livestock produced, and farm characteristics, among other information. 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 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

#### Pima County Farms by Annual Sales, 2022



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



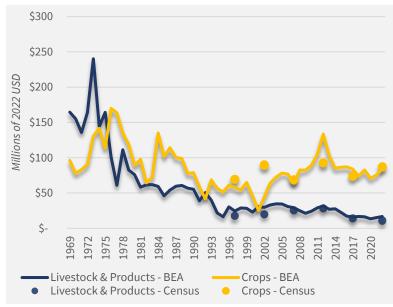


Arizona County Agricultural Economy Profiles
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## **Production & Marketing**

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

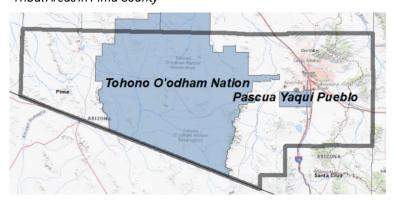
## **Tribal Agriculture**

Pima County contains portions of the Tohono O'odham Nation and the Pascua Yaqui Pueblo. The 2022 Census of Agriculture did not report data on these tribal areas, therefore the data correspond to the year 2017. Note that 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







Arizona County Agricultural Economy Profiles
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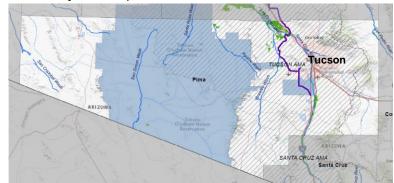
### **Irrigation Water Use**

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%.

For more information on water in Pima County, please visit the University of Arizona Water Resource Research Center county water factsheets by clicking <a href="https://example.com/here">here</a> or scanning the QR code ->



Pima County Water Map



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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
Hayfarming	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.





Arizona County Agricultural Economy Profiles University of Arizona Cooperative Extension

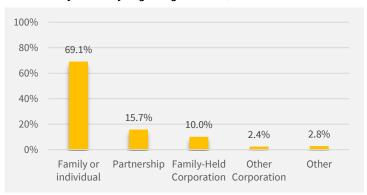
Every 5 years, U.S. Department of Agriculture releases the Census of Agriculture, the most comprehensive source of information on agricultural production by county. The Census provides information on the number of farms, types of crops and livestock produced, and farm characteristics, among other information. 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 Legal Organization, 2022



Source: USDA

#### 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





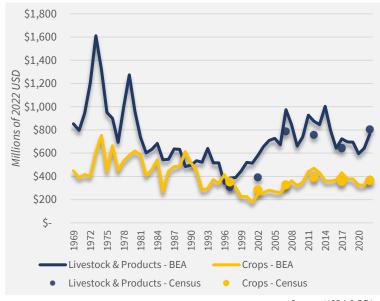


Arizona County Agricultural Economy Profiles
University of Arizona Cooperative Extension

## **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 (6<sup>th</sup>). The county also ranks 2<sup>nd</sup> nationally in harvested acres of spring durum wheat, 4th nationally in acres of irrigated cotton harvested, and 7<sup>th</sup> nationally in production of upland cotton. The county ranks 17<sup>th</sup> 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 58 farms operating in 2022, with 29,102 acres of crops, and \$35 million in sales, primarily cotton and hay. A total of 119 farms operated on the San Carlos Apache Reservation in 2022, most of which (109) had inventory of cattle and calves. Finally, the Maricopa Ak-Chin Reservation had 3 farms in operation in 2022. The 2022 Census of Agriculture did not report numbers on Tohono O'odham Nation.



Pinal County Tribal Areas





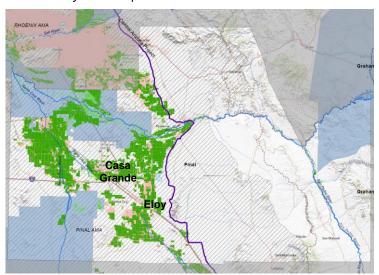
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### **Irrigation Water Use**

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 <u>here</u> or scanning the QR code →



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Arizona County Agricultural Economy Profiles *University of Arizona Cooperative Extension* 

#### **Overview**

Santa Cruz County is located in southern Arizona bordered to the north by Pima County, to the east by Cochise County, and to the south by Mexico. It is the smallest county in Arizona by land area at 1,237 square miles. Major population centers include Nogales and Rio Rico. Top industries in Santa Cruz County include transportation, wholesale, government, and agriculture. The county is home to a cluster of industries involved in importing, storing, and transporting fresh produce from Mexico. Ranching is prominent within the county, but greenhouse production and viticulture and wine-making are of increasing importance for county agriculture.

On-farm agriculture accounts for a relatively small share (less than 1%) of Santa Cruz County's GDP, but accounts for nearly 4% of private employment, higher than the national and state averages. It also occupies approximately 15% of county land area. Santa Cruz County accounts for less than 1% of Arizona's total agricultural cash receipts.



Map of Santa Cruz County, Arizona

Indicator	Santa Cruz County	Arizona
Land Area (square miles)	1,237	113,591
Land in Farms (Crops, Grazing) (square miles) (2022)	186	39,883
Population (2022)	48,759	7,359,197
Annual Average Population Growth Rate (2010-22)	0.2%	1.2%
Percent of Population Over 65 (2022)	19.5%	18.8%
Percent Population Rural (2020)	59.8%	10.7%
Total Employment (2022)	13,336	3,075,427
Share Federal, State, & Local Government Employment (2022)	27.9%	13.5%
GDP (2022)	\$2.5 billion	\$475.7 billion
Ag, Forestry, & Hunting GDP (on-farm only) (2022)	\$16.3 million	\$2.6 billion

Industry	Location Quotient
Fresh fruit and vegetable merchant wholesalers	162.76
Refrigerated warehousing and storage	32.21
Freight transportation arrangement	18.17
Art dealers	17.68
Postharvest crop activities (except cotton ginning)	15.58
Wineries	9.79
Hardware retailers	4.92
General warehousing and storage	3.17
Department stores	2.81
General freight trucking, local	2.66

Top 10 Private Industries in Santa Cruz 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. Agricultural industries ranking in the top 10 by LQ include postharvest crop activities (15.58 times more concentrated than the national average) and wineries (9.79). Industries linked with the fresh produce trade also rank highly in the county, for example, fruit and vegetable merchant wholesalers (162.76), refrigerated warehousing and storage (32.21), and freight transportation arrangement (18.17).





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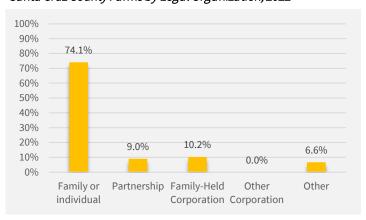
Every 5 years, U.S. Department of Agriculture releases the Census of Agriculture, the most comprehensive source of information on agricultural production by county. The Census provides information on the number of farms, types of crops and livestock produced, and farm characteristics, among other information. 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 166 farms in Santa Cruz County in 2022, covering 3,974 acres of cropland and 115,214 acres of pastureland. The average farm size was 718 acres, significantly smaller than the state average of 1,528 acres. Of 166 total farms, 57 had less than \$2,500 in sales and 18 farms had more than \$100,000 in sales. A large majority of county farms (74%) are family- or individually-held, while 9% are partnerships, 10% are family-held corporations, and 7% 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 Santa Cruz County is beef cattle ranching and farming (87 farms), followed by aquaculture and other animal production (37 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).

#### Santa Cruz County Farms by Legal Organization, 2022



Source: USDA

#### Santa Cruz County Farms by Annual Sales, 2022



Source: USDA

#### Santa Cruz County Farms by Industry, 2022

Category	Farms
Total farms	166
Oilseed and grain farming	0
Vegetable and melon farming	1
Fruit and tree nut farming	25
Greenhouse, nursery, and floriculture production	7
Other crop farming	5
Cotton farming	0
Sugarcane farming, hay farming, and all other crop farming	5
Beef cattle ranching and farming	87
Cattle feedlots	0
Dairy cattle and milk production	2
Hog and pig farming	0
Poultry and egg production	0
Sheep and goat farming	2
Aquaculture and other animal production	37





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### **Production & Marketing**

Santa Cruz County produces roughly equal proportions of agricultural cash receipts through livestock and crops, though historically the county has been livestock-dominant. The county's main livestock commodity is cattle and calves. Though data for 2022 are not disclosed, top crops produced in Santa Cruz County include wine grapes and greenhouse vegetables.

### **Fresh Produce Wholesale Industry**

The Nogales port of entry, located in Santa Cruz County, is a top port nationally for shipments of fresh fruits and vegetables from Mexico, the U.S.'s largest source of imported fresh produce. Direct employment in fruit and vegetable wholesaling in Santa Cruz County accounts for nearly 1 in 9 private sector jobs in the county. Though employment in the industry has seasonal swings, average annual salaries are over 50% higher than the county average for all private sector jobs. Fresh fruit and vegetable commodities, combined, became the highest-value category of imports through the Nogales port of entry as of 2020 with more than \$3.4 billion in imports, surpassing motor vehicles and vehicle parts as the top category.

For more information on the fresh produce industry in Santa Cruz County, please click <u>here</u>or scan the OR code



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



Source: USDA & BEA

### **Wineries in Santa Cruz County**

Like its neighbor Cochise County, Santa Cruz County has a growing wine industry. The northeastern part of the county is home to the Sonoita American Viticultural Area (AVA). An AVA is an area that has been designated and recognized as a wine grape-growing region. In 2022, the county had 200 acres of grape production by 23 growers. In the same year, there were 21 wineries operating in the county.

#### Map of Sonoita AVA







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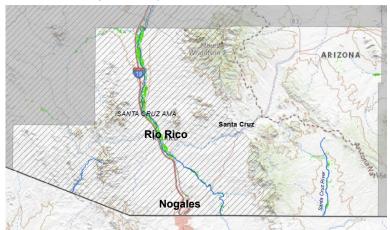
### **Irrigation Water Use**

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. Santa Cruz County contains portions of the Santa Cruz AMA. Agriculture accounts for roughly 58% of water use within the Santa Cruz AMA. This represents little change since 1985.

For more information on water in Santa Cruz County, please visit the University of Arizona Water Resource Research Center county water factsheets by clicking <u>here</u> or scanning the QR code →



#### Santa Cruz County Water Map



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Arizona County Agricultural Economy Profiles

University of Arizona Cooperative Extension

#### **Overview**

Yavapai County is located in north-central Arizona, bordered to the north by Coconino County, to the west by Mohave and La Paz counties, to the south by Maricopa County, and to the east by Gila County. As of 2022, the population of Yavapai County was over 246,000, with approximately one-third of the county's population residing in rural areas. Major population centers include Prescott, Sedona, and Cottonwood.

Top industries in Yavapai County include mining, manufacturing, and tourism. The county is also home to several institutions of higher education including Yavapai College, Prescott College, and Embry-Riddle Aeronautical University.

On-farm agriculture accounts for approximately one-tenth of 1% of the county's GDP and less than 1% of all private industry jobs. Only approximately 13% of county land is in farms. Yavapai County accounts for about 1% of Arizona's total agricultural cash receipts.



Map of Yavapai County, Arizona

Indicator	Yavapai County	Arizona
Land Area (square miles)	8,124	113,591
Land in Farms (Crops, Grazing) (square miles) (2022)	1,034	39,883
Population (2022)	246,191	7,359,197
Annual Average Population Growth Rate (2010-22)	1.4%	1.2%
Percent of Population Over 65 (2022)	34.2%	18.8%
Percent Population Rural (2020)	32.0%	10.7%
Total Employment (2022)	67,528	3,075,427
Share Federal, State, & Local Government Employment (2022)	15.73%	13.5%
GDP (2022)	\$9.8 billion	\$475.7 billion
Ag, Forestry, & Hunting GDP (on-farm only) (2022)	\$4.1 million	\$2.6 billion

Industry	Location Quotient
Dimension stone mining and quarrying	23.26
RV (recreational vehicle) parks and campgrounds	11.95
Sewage treatment facilities	9.59
Wineries	8.96
Trust, fiduciary, and custody activities	8.16
Art dealers	8.07
Other food crops grown under cover	7.49
Recreational goods rental	7.11
Flight training	7.04
Residential site preparation contractors	7.02

Top 10 Private Industries in Yavapai 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 Yavapai County, 2 are agricultural or agriculture-related industries: wineries (8.96 times more concentrated employment than the national average), and other food crops grown under cover (7.49).





Arizona County Agricultural Economy Profiles *University of Arizona Cooperative Extension* 

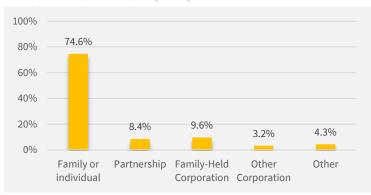
Every 5 years, U.S. Department of Agriculture releases the Census of Agriculture, the most comprehensive source of information on agricultural production by county. The Census provides information on the number of farms, types of crops and livestock produced, and farm characteristics, among other information. 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 727 farms in Yavapai County in 2022, covering 7,714 acres of cropland (100% of harvested acreage irrigated) and 653,929 acres of pastureland (<1% irrigated). The average farm size was 910 acres, smaller than the state average of 1,528 acres, with the top 6% of farms accounting for 83% of county acreage. Of 727 farms, 334 had less than \$2,500 in sales and 74 farms had more than \$100,000 in sales. A large majority of county farms (75%) are family-or individually-held farms, 8% are partnerships, 10% are family-held corporations, and 7% of farms have other forms of legal organizations.

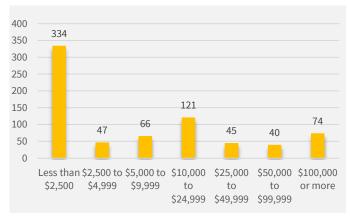
Farms are classified by the type of agricultural products they produce. When a farm or ranch produces more than one agricultural product, they are classified by the product that constitutes more than 50% of their sales. The most common type of operation in Yavapai County is aquaculture and other animal production (282 farms), followed by beef cattle ranching and farming (199 farms), and fruit and tree nut farming (112 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).

#### Yavapai County Farms by Legal Organization, 2022



Source: USDA

#### Yavapai County Farms by Annual Sales, 2022



Source: USDA

#### Yavapai County Farms by Industry, 2022

Category	Farms
Total farms	727
Oilseed and grain farming	7
Vegetable and melon farming	25
Fruit and tree nut farming	112
Greenhouse, nursery, and floriculture production	21
Other crop farming	21
Cotton farming	0
Sugarcane farming, hay farming, and all other crop farming	21
Beef cattle ranching and farming	199
Cattle feedlots	4
Dairy cattle and milk production	0
Hog and pig farming	6
Poultry and egg production	20
Sheep and goat farming	30
Aquaculture and other animal production	282





Arizona County Agricultural Economy Profiles *University of Arizona Cooperative Extension* 

## **Production & Marketing**

Yavapai County is a livestock-dominant county, with an estimated 65% of county cash receipts originating from sales of livestock. Agricultural cash receipts for the county have declined over time, however, due to significant declines in livestock sales.

Major agricultural commodities sold by Yavapai County producers include cattle and calves (\$18 million) and horses and ponies (\$3.4 million). While few data on crop production are disclosed, nursery production has been an important source of crop revenues in past census years, as well as wine grape production, discussed below.

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



Source: USDA & BEA

## **Enology & Viticulture in Yavapai County**

Yavapai County has a growing specialization in viticulture (grape cultivation) and enology (wine making). As of 2022, the county had 239 acres of grape production, accounting for roughly 13% of the state's total acreage, on 61 grape-growing farms.

Yavapai County plays a large role in Arizona's wine industry. In 2022, the county had the most winery permitees in the state, accounting for 35 of 115 permitees, and as of 2022, 58% of the state's employment in wineries was in Yavapai County, followed by Cochise County (15%) and Santa Cruz County (13%).

The Verde Valley American Viticultural Area (AVA) was formally established in 2021, the third AVA in Arizona. AVAs are federally recognized wine growing regions in the United States. The county is home to Yavapai College and the Southwest Wine Center which serves as a resource to Arizona's wine industry, offering certificates in viticulture and enology.

#### Verde Valley AVA Map



Source: Jeremy Weiss







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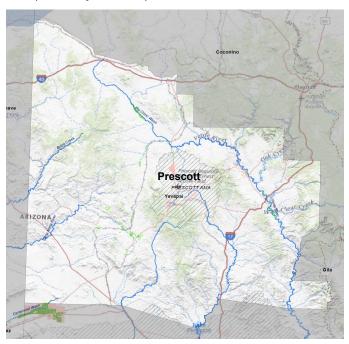
### **Irrigation Water Use**

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For more information on water in Yavapai County, please visit the University of Arizona Water Resource Research Center county water factsheets by clicking <a href="here">here</a> or scanning the QR code ->



#### Yavapai County Water Map



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Arizona County Agricultural Economy Profiles University of Arizona Cooperative Extension

#### Overview

Yuma County is located at the southwest corner of Arizona and is bordered to the west by California and the Colorado River, to the north by La Paz County, and to the east by Maricopa and Pima counties. The county is the sixth most populous county in the state, with nearly 85% of the population living in urban areas, such as the city of Yuma. Top industries in Yuma County include agriculture and tourism. Yuma is a popular destination for seasonal visitors because of its mild winter temperatures. The county is home to two military bases, another important source of employment. In fact, federal, state, and local government employment accounts for over 20% of county employment, significantly higher than the state average.

Despite having a small share (6%) of county land in farms, agriculture plays a critical role in the Yuma County economy. In fact, on-farm agriculture accounts for more than 14% of the county's GDP and directly generates at least one-fifth of all private industry jobs. Yuma County accounts for about one-third of Arizona's total agricultural cash receipts, and over 50% of Arizona's agricultural GDP (on-farm agriculture).



Map of Yuma County, Arizona

Indicator	Yuma County	Arizona
Land Area (square miles)	5,514	113,591
Land in Farms (Crops, Grazing) (square miles) (2022)	331	39,883
Population (2022)	207,842	7,359,197
Annual Average Population Growth Rate (2010-22)	0.5%	1.2%
Percent of Population Over 65 (2022)	20.5%	18.8%
Percent Population Rural (2020)	15.1%	10.7%
Total Employment (2022)	70,648	3,075,427
Share Federal, State, & Local Government Employment (2022)	20.3%	13.5%
GDP (2022)	\$9.9 billion	\$475.7 billion
Ag, Forestry, & Hunting GDP (on-farm only) (2022)	\$1.4 billion	\$2.6 billion

Industry	Location Quotient
Crop harvesting, primarily by machine	93.77
Othervegetable (except potato) and melon farming	71.86
Postharvest crop activities (except cotton ginning)	51.37
Farm labor contractors and crew leaders	49.71
Recreational vehicle dealers	25.47
Soil preparation, planting, and cultivating	23.26
RV (recreational vehicle) parks and campgrounds	14.75
Perishable prepared food manufacturing	13.46
Facilities support services	9.14
Lessors of other real estate property	8.41

Top 10 Private Industries in Yuma 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 Yuma County, six are agricultural industries, reflecting not only employment on-farm, but also industries that prepare the land and are involved in harvest and postharvest activities. For example, the share of employment in crop harvesting in Yuma County is 93.77 times the national average.





Arizona County Agricultural Economy Profiles *University of Arizona Cooperative Extension* 

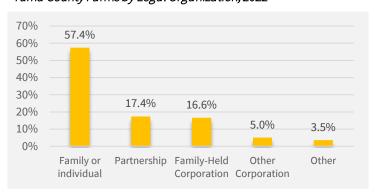
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#### **Farms**

There were 397 farms in Yuma County in 2022, covering 201,881 acres of cropland (100% of harvested acreage irrigated) and 2,842 acres of pastureland (2% irrigated). The average farm size was 534 acres, smaller than the state average of 1,528 acres, with the top 9% of farms accounting for 68% of county acreage. Of total farms, 68 had less than \$2,500 in sales and 163 farms had more than \$100,000 in sales. The majority of county farms in Yuma County were family- or individually-held (57%). Another 17% were partnerships and 17% were family-held corporations.

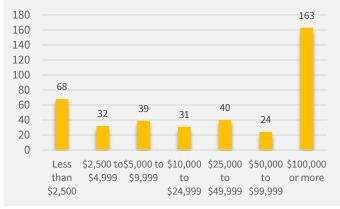
Farms are classified by the type of agricultural products they produce. When a farm or ranch produces more than one agricultural product, they are classified by the product that constitutes more than 50% of their sales. The most common type of operation in Yuma County are farms producing fruit and tree nuts (112 farms), followed by sugarcane farming, hay farming, and all other crop farming (100 farms), and vegetable and melon farming (61 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).

#### Yuma County Farms by Legal Organization, 2022



Source: USDA

#### Yuma County Farms by Annual Sales, 2022



Source: USDA

#### Yuma County Farms by Industry, 2022

,,,	
Category	Farms
Total farms	397
Oilseed and grain farming	15
Vegetable and melon farming	61
Fruit and tree nut farming	112
Greenhouse, nursery, and floriculture production	7
Other crop farming	110
Cotton farming	10
Sugarcane farming, hay farming, and all other crop farming	100
Beef cattle ranching and farming	9
Cattle feedlots	1
Dairy cattle and milk production	1
Hog and pig farming	2
Poultry and egg production	10
Sheep and goat farming	26
Aquaculture and other animal production	43





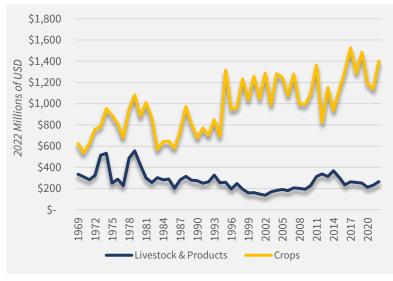


Arizona County Agricultural Economy Profiles *University of Arizona Cooperative Extension* 

### **Production & Marketing**

Yuma County is a crop-dominant county, with an estimated 84% of county cash receipts originating from sales of crops. Sales of vegetables, melons, potatoes, and sweet potatoes (\$1.13 billion) dominate, ranking Yuma County as the third-largest vegetable and melon producing county in the U.S., and 13th largest crop-producing county in the country. Grains, oilseeds, dry beans, and dry peas, particularly wheat, are commonly grown as rotational crops, generating \$55 million in sales. Other major agricultural products include fruit, tree nuts, and berries (\$56.6 million) and other crops and hay (\$84.4 million). Sales for cattle and calves are not disclosed for Yuma County, but the county is the second largest producer in the state by sales. For individual commodities, Yuma County ranks among the top counties for measures of production and sales, including sales of vegetable seeds (1st), acres of fresh market cauliflower harvested (1st), acres of fresh market spinach harvested (2<sup>nd</sup>), acres of irrigated wheat harvested (3<sup>rd</sup>), and acres of fresh market cabbage and celery harvested (4th for both).

#### Yuma County Agricultural Cash Receipts, Crops & Livestock, 1969-2022\*

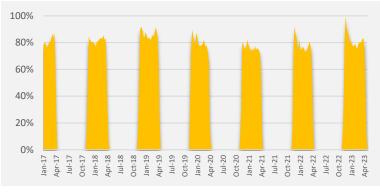


Source: BEA

## **Leafy Greens**

With its arable land, warm winter temperatures, and access to Colorado River water for irrigation, Yuma County is one of the nation's largest producers of winter vegetables, particularly leafy greens such as Romaine, iceberg, and red leaf and green leaf lettuce. Production of leafy greens rotates seasonally between the Yuma area in the winter and central California in the summer, jointly fulfilling a large majority of national supply. During peak weeks in December, leafy greens from Yuma can represent between 80% to 95% of U.S. weekly shipments.

# Western Arizona Percent of Weekly U.S. Lettuce Movements (All Types) 2017-2023



Source: USDA AMS



<sup>\*</sup>La Paz County separated from Yuma County in 1983, at which time it was generating roughly \$150 million (\$2022) in agricultural cash receipts, principally from crops. A corresponding drop in crop cash receipts can be noticed in Yuma County's data. Prior to 1983, agricultural data for Yuma County reflect production occurring in both Yuma and La Paz Counties.



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### **Irrigation Water Use**

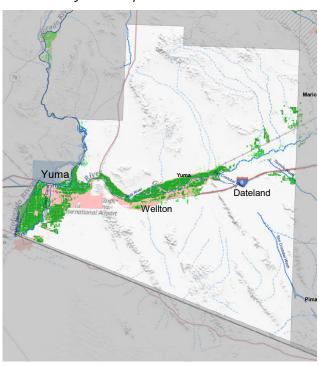
In Arizona, agriculture accounts for about 75% of the state's water use. More than half of withdrawals for agricultural uses in the state are from surface water. In some areas of the state with high demand, groundwater withdrawals for irrigated agriculture are limited by the 1980 Groundwater Management 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.

There is no land in Yuma County within an AMA or INA. Yuma County is situated along the mainstem of the Colorado River and many Yuma County irrigators have high seniority rights to Colorado River water.

For more information on water in Yuma County, please visit the University of Arizona Water Resource Research Center county water factsheets by clicking <a href="here">here</a> or scanning the QR code →



#### Yuma County Water Map



### **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.  $\rightarrow$ 





## **Data Sources**

Arizona County Agricultural Economy Profiles
University of Arizona Cooperative Extension

Indicator	Source
Land Area (square miles) (2022)	Census of Agriculture 2022
Land in Farms (Crops, Grazing) (square miles) (2022)	Census of Agriculture 2022
Population (2022)	U.S. Census Bureau, Population Division
Annual Average Population Growth Rate (2010-22)	U.S. Census Bureau, Population Division
Percent of Population Over 65 (2022)	U.S. Census Bureau, Population Division
Percent Population Rural (2020)	2020 Census Urban Areas
Total Employment (2022)	Quarterly Census of Employment and Wages, U.S. Bureau of Labor
	<u>Statistics</u>
Share Federal, State, & Local Government Employment	Quarterly Census of Employment and Wages, U.S. Bureau of Labor
(2022)	<u>Statistics</u>
GDP (2022)	Bureau of Economic Analysis
Ag, Forestry, & Hunting GDP (on-farm only) (2022)	Bureau of Economic Analysis
Location Quotient	Quarterly Census of Employment and Wages, U.S. Bureau of Labor
	<u>Statistics</u>
County Farms by Annual Sales (2022)	Census of Agriculture 2022
County Farms by Legal Organization (2022)	Census of Agriculture 2022
County Farms by Industry (2022)	Census of Agriculture 2022
Crops Cash Receipts (1969-2022)	Bureau of Economic Analysis and Census of Agriculture and Census
	of Agriculture 2022
Livestock Cash Receipts (1969-2022)	Bureau of Economic Analysis and Census of Agriculture and Census
	of Agriculture 2022
Tribal Agriculture Data (2022)	Census of Agriculture 2022
Irrigation Water Use (2015)	<u>USGS</u>

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