

Economic Report on Arizona Agriculture

*Study examines impact
of state's entire
agribusiness system*

Housing tracts may be sprouting across Arizona, but so are cotton, lettuce and other crops, and cattle. In 2000, agricultural production contributed \$3 billion value added to the Arizona economy. Under 55 percent of this amount was remuneration of persons and capital assets directly employed in agribusiness activity, while the rest—almost \$1.4 billion—benefited other economic sectors linked with and impacted by agribusiness activity.

This finding was reported in “Economic Impact from Agricultural Production in Arizona,” a study recently published by the University of Arizona Department of Agricultural and Resource Economics (AREC). Research specialist Jorgen Mortensen conducted the study using figures from the year 2000 for the impact calculations and from the past two decades for the historical context of Arizona agriculture.

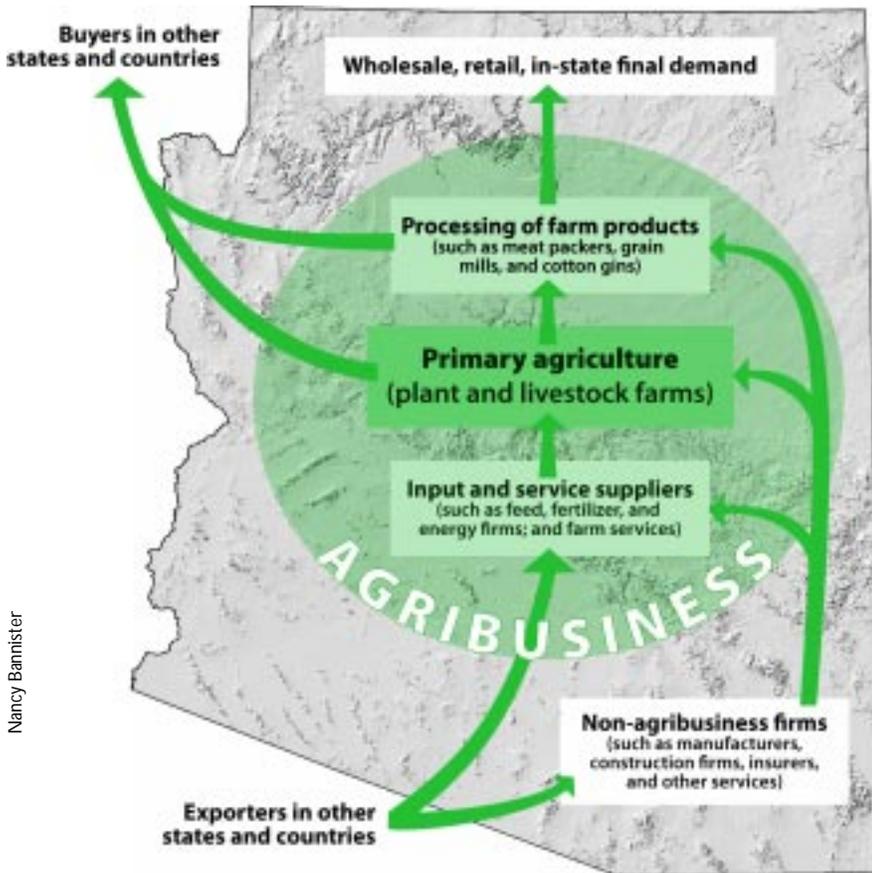
“This study examines the economic impact of the entire agribusiness system,” Mortensen states in the report. “This is defined as the primary agricultural sector plus the closely related supply and processing industries that depend on agricultural activity in Arizona.”

The primary agricultural sector includes ranches, feedlots, dairies and other cattle farms; pig, poultry, equine, apiculture (bees) and other livestock farms; farms with food, fiber, seed and feed crops; farms with tree nuts, fruit and berries; greenhouse and nursery operations.



Joanne Littlefield

Cotton field in Graham County, Arizona



Linkages among agribusiness firms and other Arizona industries.

“Land in farms and ranches occupies 27 million acres or 37 percent of Arizona’s total area,” Mortensen says. With 7,300 farms and ranches, the average area per farm is 3,630 acres, which is 8 times the U.S. average. The main reason for the difference is the predominance of large cattle ranches in Arizona.

Mortensen did not include groceries and restaurants as part of agribusiness in the study because “their activity tends to be independent of the geographical origin of the farm and ranch products,” but he did consider industries that pack and process agricultural products and firms that directly supply farms with production inputs and services. In addition to direct activity in agribusiness, he focused on indirect impacts related to utilities, transportation, warehousing and other goods and services that agribusinesses acquire from other sectors of the Arizona economy.

“Beyond those economic ripple effects, additional induced impacts occur due to spending of incomes earned by people employed in agribusiness activities,” Mortensen notes. His economic analysis

revealed the following major conclusions:

- The value-added or economic impact from production agriculture in Arizona is \$3 billion, which compares with a 2000 Arizona Gross State Product of about \$155 billion.
- More than 72,000 jobs are created by Arizona’s agricultural industry. For every job at farms and ranches, 2 ½ jobs are created in the rest of the state.
- Economic benefits from agribusiness activity are crucial for local schools, public services, and the tax basis in rural districts and small towns.
- Agriculture plays a major role in the use and management of land and other natural resources.
- The direct, induced and ripple effects from Arizona’s agribusiness amount to \$6.6 billion measured on a total output basis.

Mortensen explains that output, or total sales, is the only feasible measurement of economic transactions among

sectors, and output is therefore the main statistical basis for impact models. Yet output leads to double counting because part of total sales from one sector represents production input in other sectors.

“Value-added, (as used in the first bullet above), avoids such double counting,” Mortensen says. “It reflects better than output the direct economic activity in a sector, as created by employed persons and capital assets, and the impact exerted on other parts of the state economy.”

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“The study shows that the economic activity associated with agriculture remains important to Arizona’s economy,” says Alan Ker, AREC department head. It goes beyond crops and livestock.

“Agriculture is much more than bread and butter,” says Eugene Sander, vice provost and dean of the University of Arizona College of Agriculture and Life Sciences. “It comprises farm and ranch business families across the state. Agriculture is embracing technology and research to produce high quality and competitively priced food and fiber, while adding significantly to Arizona’s economy.”

“This study is important because it reminds people living in the metropolitan areas of the farmers and ranchers across the state and the major contribution they make to the economy of Arizona.”

—Don Butler, Director, Arizona Department of Agriculture

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Copies of the report are available at
cals.arizona.edu/arec/pubs/econimpacts.html