#### College of Agricultural, Consumer and Environmental Sciences

The Center of Excellence for Sustainable Food and Agricultural Systems

New Mexico State University

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# Research to Practice in Rural New Mexico Modern Role for Agricultural Research

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Legislative Finance Committee Tucumcari, NM May 15, 2025

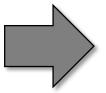
#### The Economic Importance of Agriculture in New Mexico

#### Output

- Direct contribution \$20.9 billion
- Total contribution (including induced and indirect) \$45.0 billion<sup>1</sup>

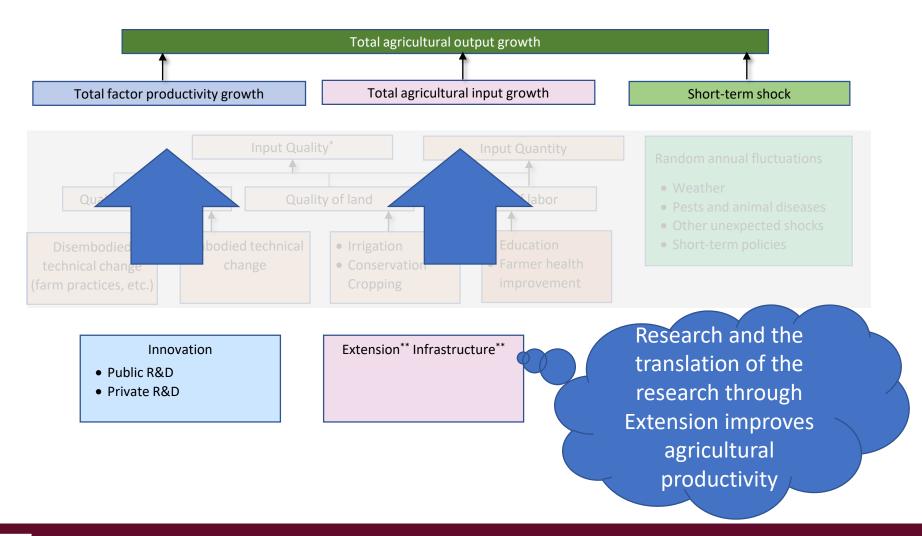
#### Labor

- Direct contribution 144,424
- Total contribution 253,529

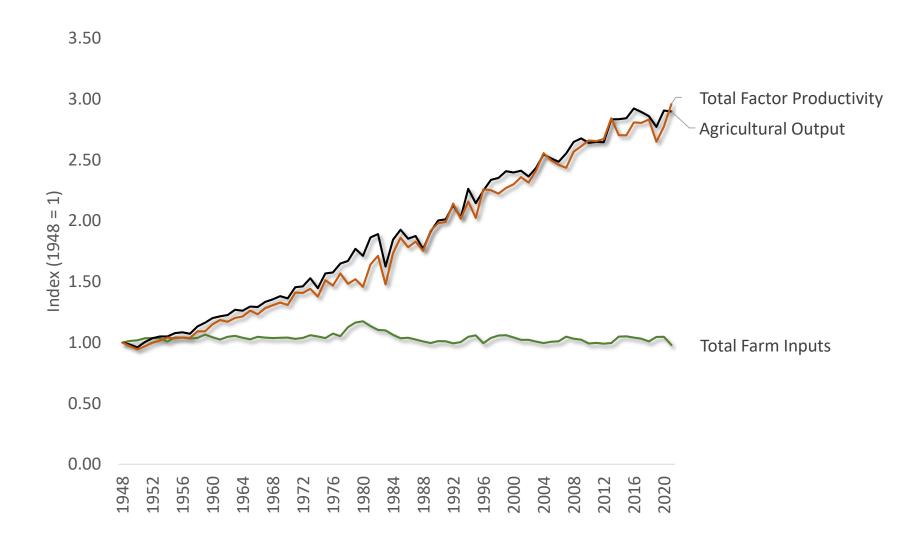


Approximately one-quarter of New Mexico's 1.2 million jobs are supported by the food and fiber supply chain!

### Sources of agricultural growth

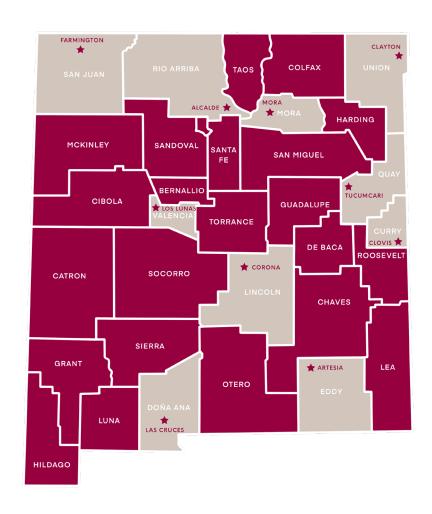


## Contribution of Agricultural Research

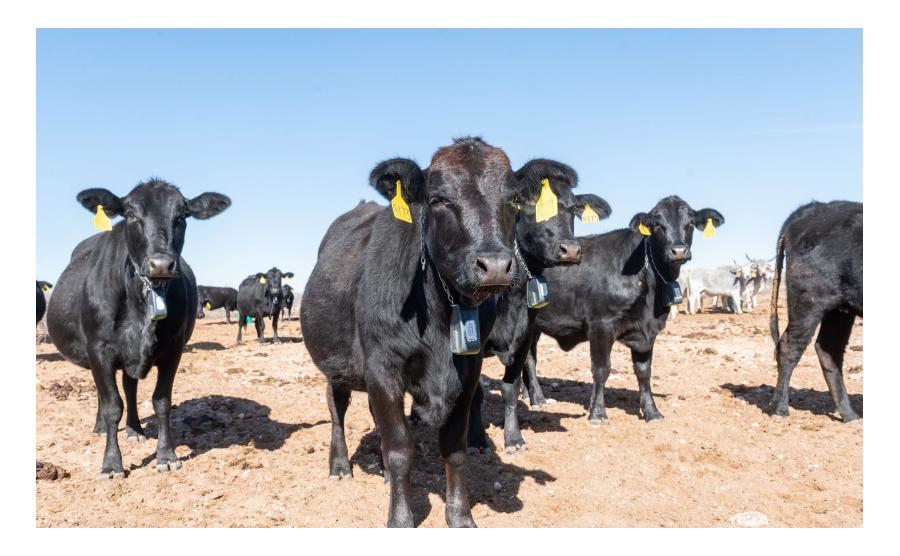


### New Mexico's Agricultural Experiment Station

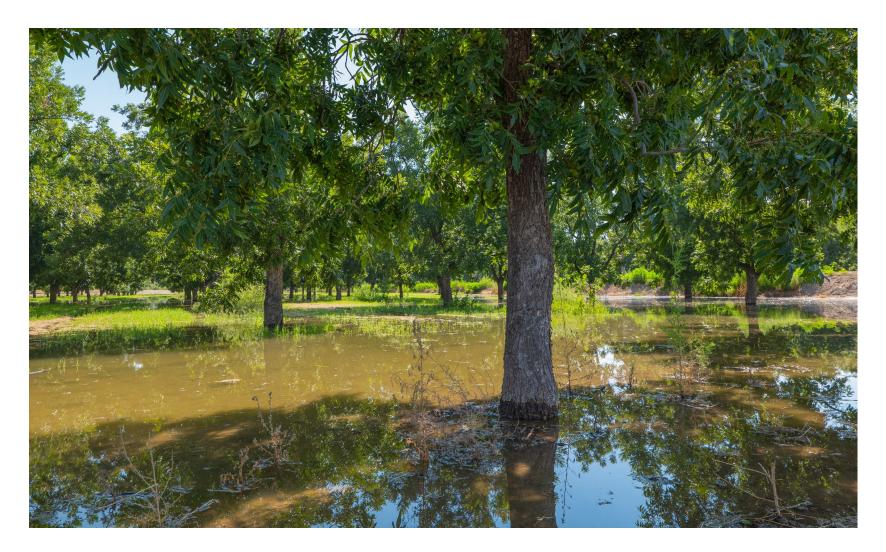
- A component of the Land Grant University system as articulated in the Hatch Act of 1887
- Constitutionally mandated in New Mexico in 1915
- Research arm for the College of Agricultural, Consumer, and Environmental Sciences
- Researchers on the main campus and remote science centers



## Agricultural Experiment Station Research



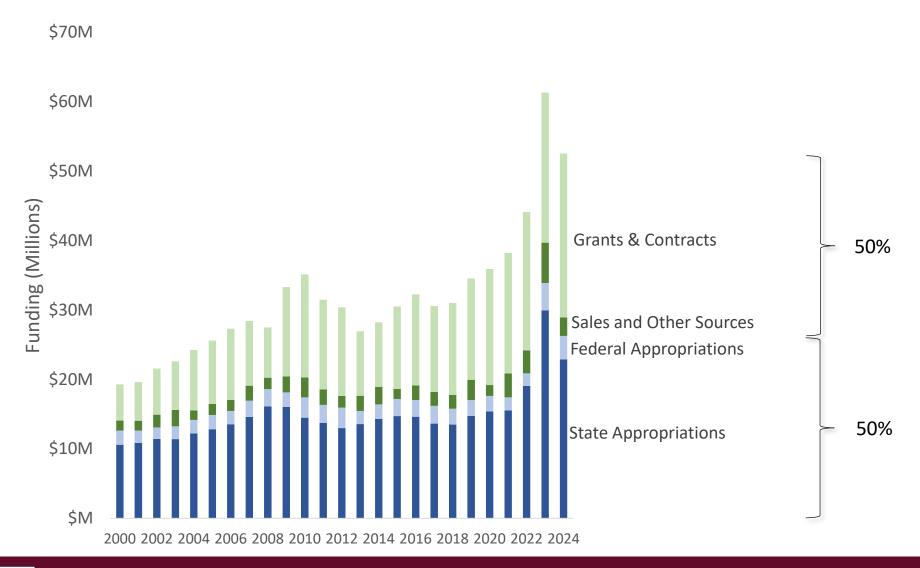
## Agricultural Experiment Station Research



## Agricultural Experiment Station Research



### Agricultural Experiment Station Funding, FY2000 – FY2024





#### Economic impacts of AES research



Economics of Raramuri Criollo and British crossbred cattle production in the Chihuahuan desert: Effects of foraging distribution and finishing strategy

An NMSU researcher led an effort to understand how beef genetics impact the profitability of beef production in arid environments. Significant challenges for raising beef cattle exist in the arid and semi-arid regions of the United States. Limited forage availability and small profit margins are among the greatest concerns in Western U.S. ranching operations. One potential option for ranchers in these regions is using alternative cattle genetics, such as Raramuri Criollo (RC), a Mexican heritage biotype of cattle brought to the Americas by Spanish Conquistadors.

**Environmental Stewardship** 

Food & Fiber Production and Marketing

Department of Animal and Range Sciences



#### Biological Control of Insect Pests in New Mexico

Biological Control has the potential to control many insect pests but is frequently undervalued. Control of insect eggs alone is often over 80% when populations of predators are not disrupted by frequent insecticide applications. The ASC farm has maintained good control of alfalfa weevil with biological control for 20 years. Replicating this type of control in just alfalfa and pecan will save growers over \$6.5 million per year in reduced losses and control costs.

Artesia Agricultural Science Center

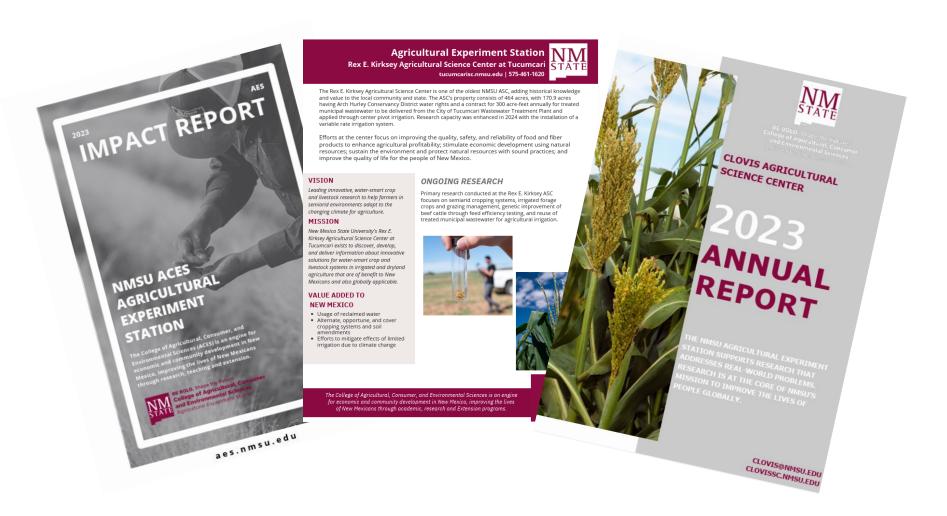
**Environmental Stewardship** 

Department of Entomology, Plant Pathology and Weed Science

## Alternative value-added agricultural production



### Making research available to stakeholders



## Challenges



## Agricultural Science Centers are Living Laboratories



## **Capital Improvements**



## Thank you!



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