

# **University of Arkansas Division of Agriculture Update**

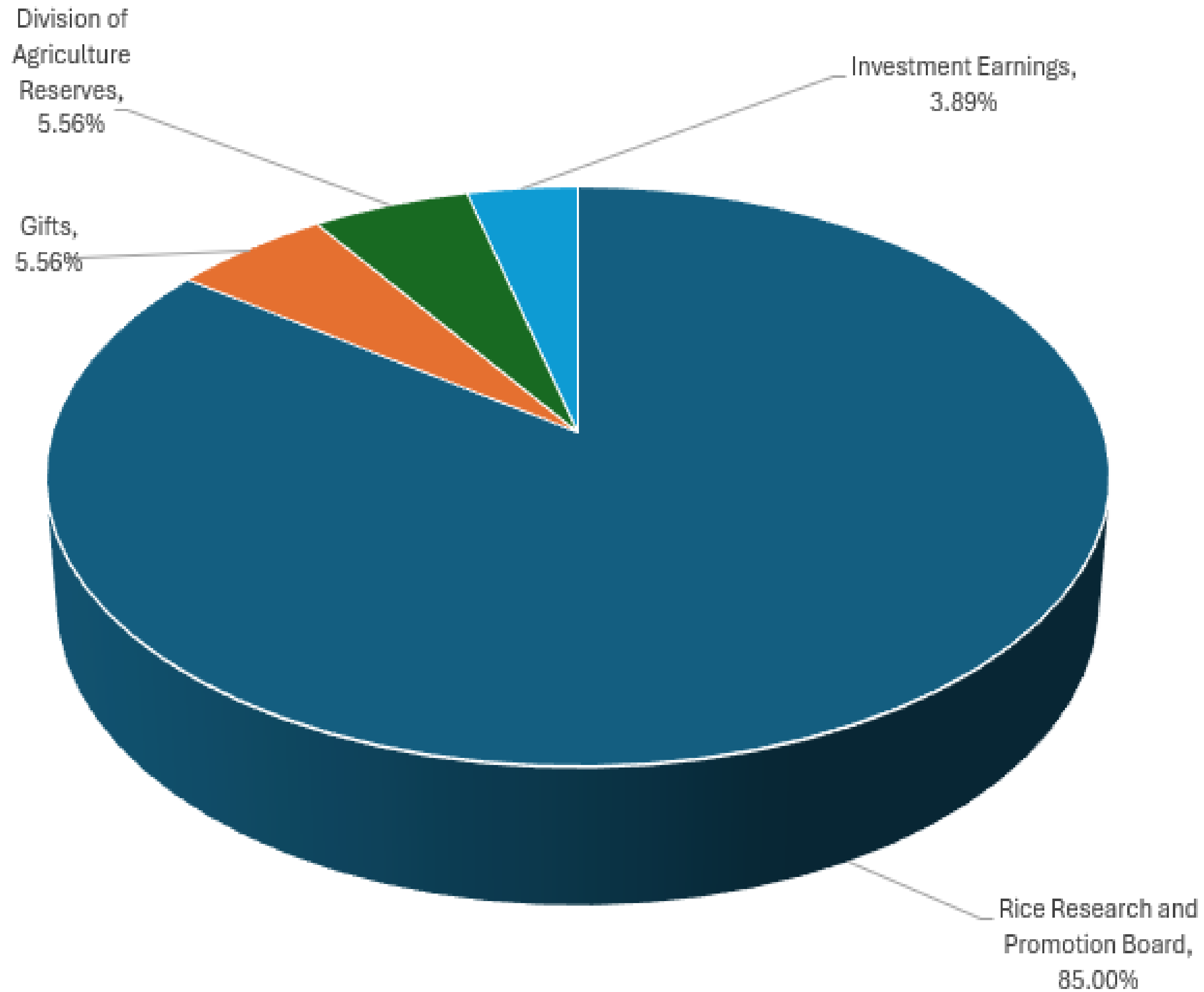
**Arkansas Joint Agriculture Committee**

**August 30, 2024**

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**Deacue Fields,  
Vice President UADA**

## NERREC Construction by Funding Source

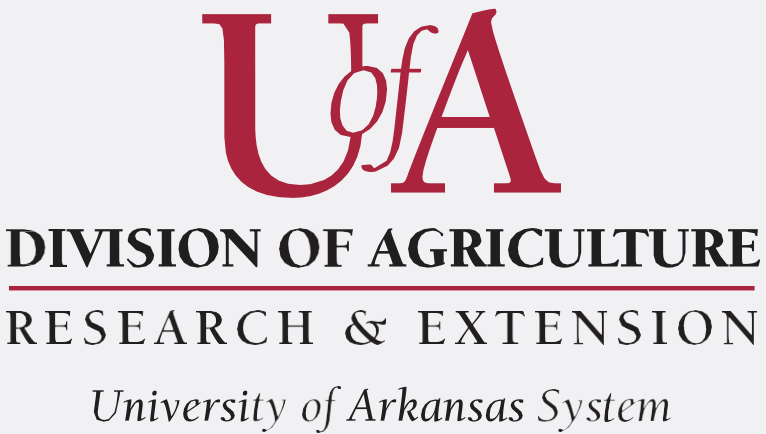


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**NERREC**  
**Facts**

	Mkt Value of Ag Sold, 2017	Mkt Value of Ag Sold, 2022
Texas	\$24,924,041,000	\$32,166,561,000
North Carolina	\$12,900,674,000	\$18,692,574,000
Missouri	\$10,525,938,000	\$14,697,022,000
<b>Arkansas</b>	<b>\$9,651,160,000</b>	<b>\$13,899,149,000</b>
Georgia	\$9,573,252,000	\$13,239,372,000
Oklahoma	\$7,465,512,000	\$8,540,529,000
Florida	\$7,357,343,000	\$10,224,600,000
Mississippi	\$6,195,968,000	\$8,247,775,000
Alabama	\$5,980,595,000	\$9,035,897,000
Kentucky	\$5,737,920,000	\$8,005,745,000
Tennessee	\$3,798,934,000	\$5,161,034,000
Louisiana	\$3,172,978,000	\$4,807,123,000
South Carolina	\$3,008,739,000	\$4,427,204,000



# Importance of Arkansas Agriculture

- **19 Million Acres of Forestland covering 56.6% of the state**
- **\$455 million cash receipts in 2023 making Arkansas the 2<sup>nd</sup> most timber-dependent economy in the nation**
- **24,532 skilled workers employed in timber and related industries.**
- **#1 in the south for hardwood seedlings grown.**
- **Forestry contributes over 4% of the state's economy**



## **Arkansas Forestry Facts**

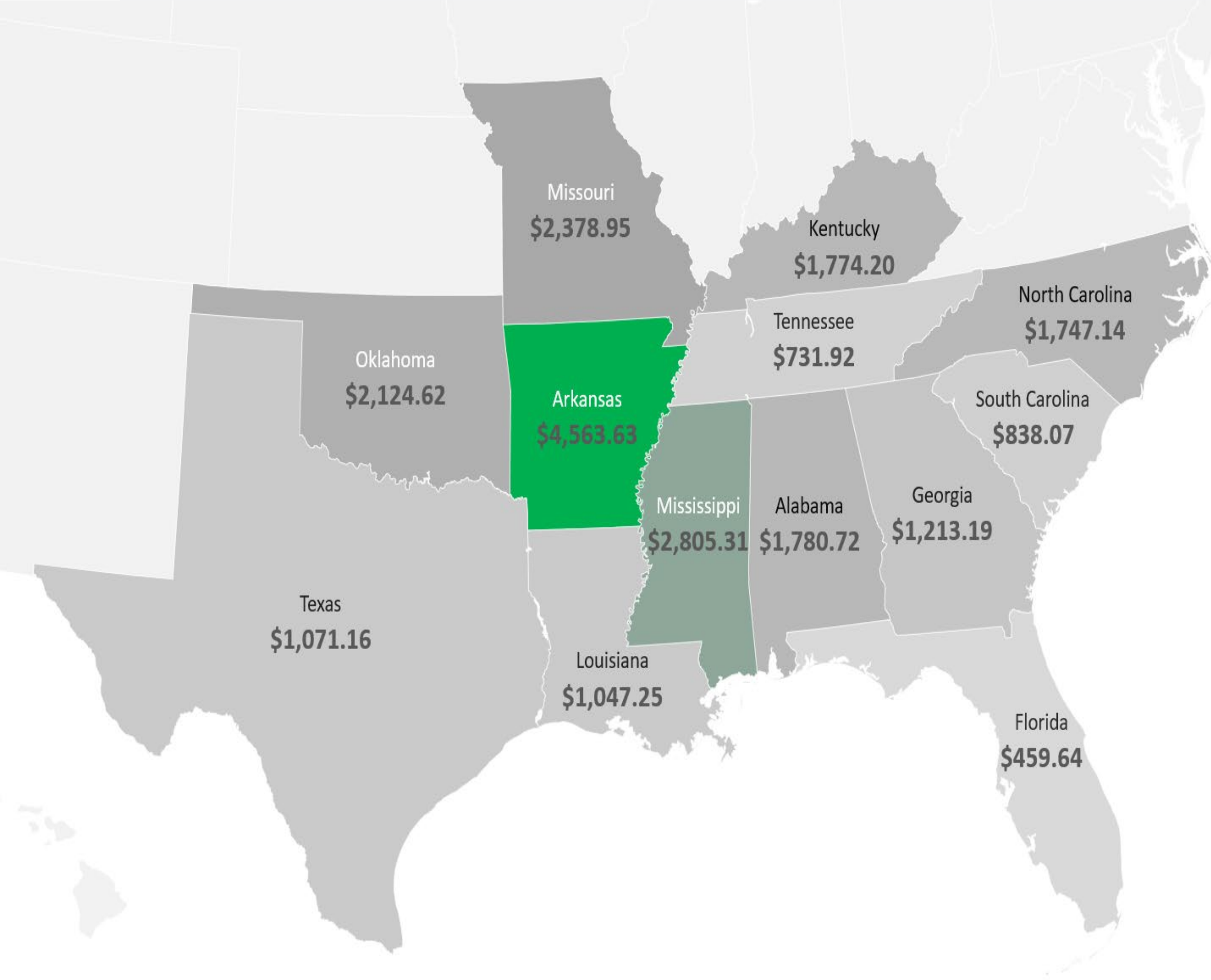




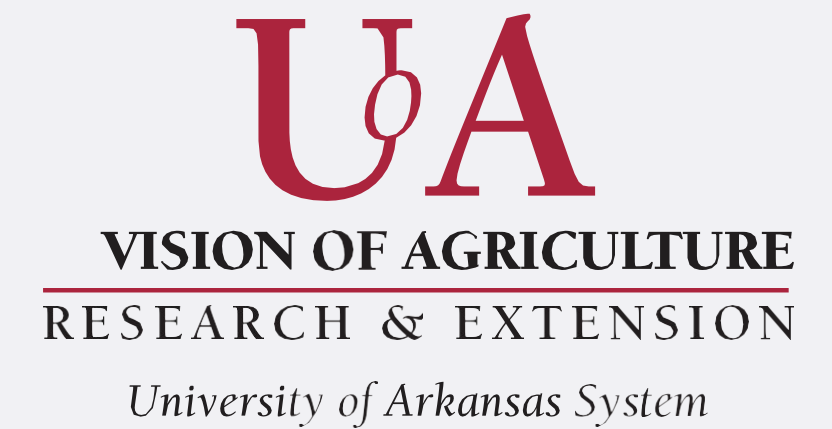
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# **Market Value of Ag Products Sold per Capita**



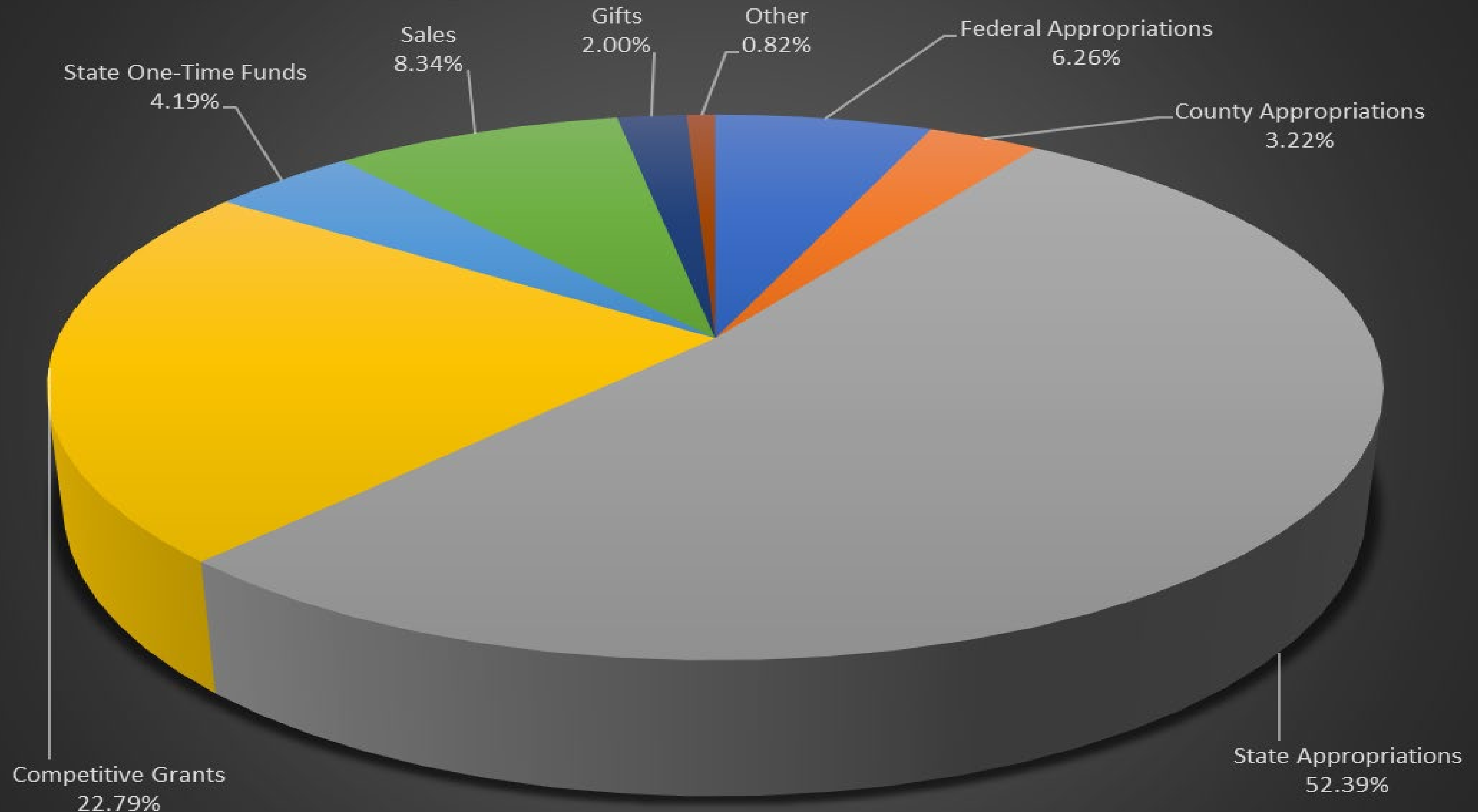
- UADA Rice Breeding program annual increased yields from research represent \$41M increased farm income annually.
- Sheath Blight: Breeding rice with increased resistance increased rice yields by 8.21 bu/ac or \$23.7M per year.
- Insecticide seed treatment research funded by the rice board increases yields by 8.33 bu/ac. Benefits of the increase in yield is estimated at \$24M per year.
- Multiple Inlet Rice Irrigation results in 24% savings water use. An acre-inch of water conserved is worth \$2.
- N-ST\*R has reduced nitrogen application by an average of 42 lbs/ac for those farmers enrolled in the program. The annual benefit of this reduction in nitrogen use is \$9.0M.
- **Benefits associated with UADA rice research are estimated at \$91M annually or a Benefit Cost Ratio of 28.5 to 1.**
- **Investments in UADA rice research are contributing to global food security, feeding an additional 4.1 million people annually.**



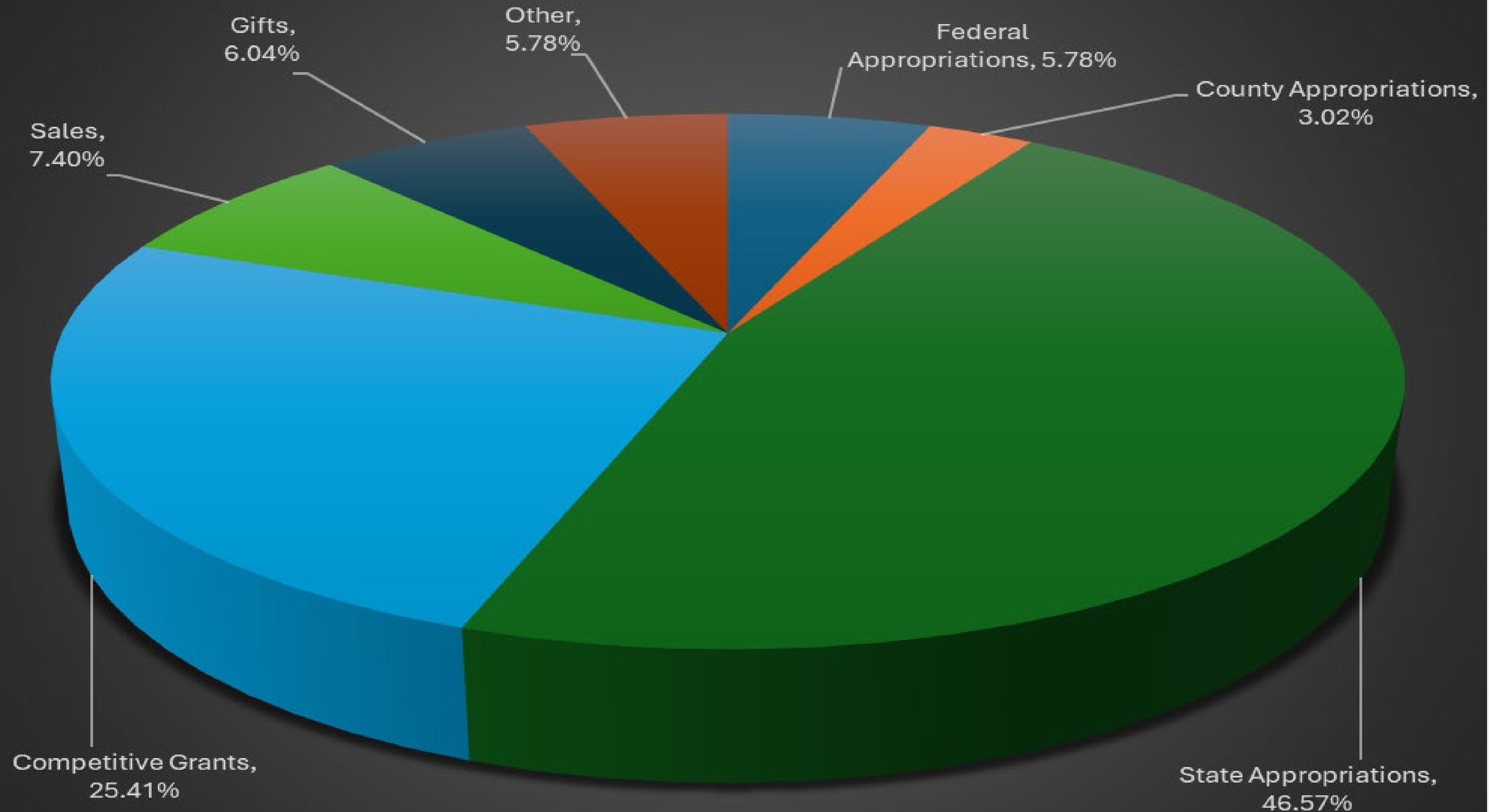
## **Return on Investment for UA Division of Agriculture Research**



# Division of Agriculture - 2022 Sources of Revenue



# Division of Agriculture - 2024 Sources of Revenue

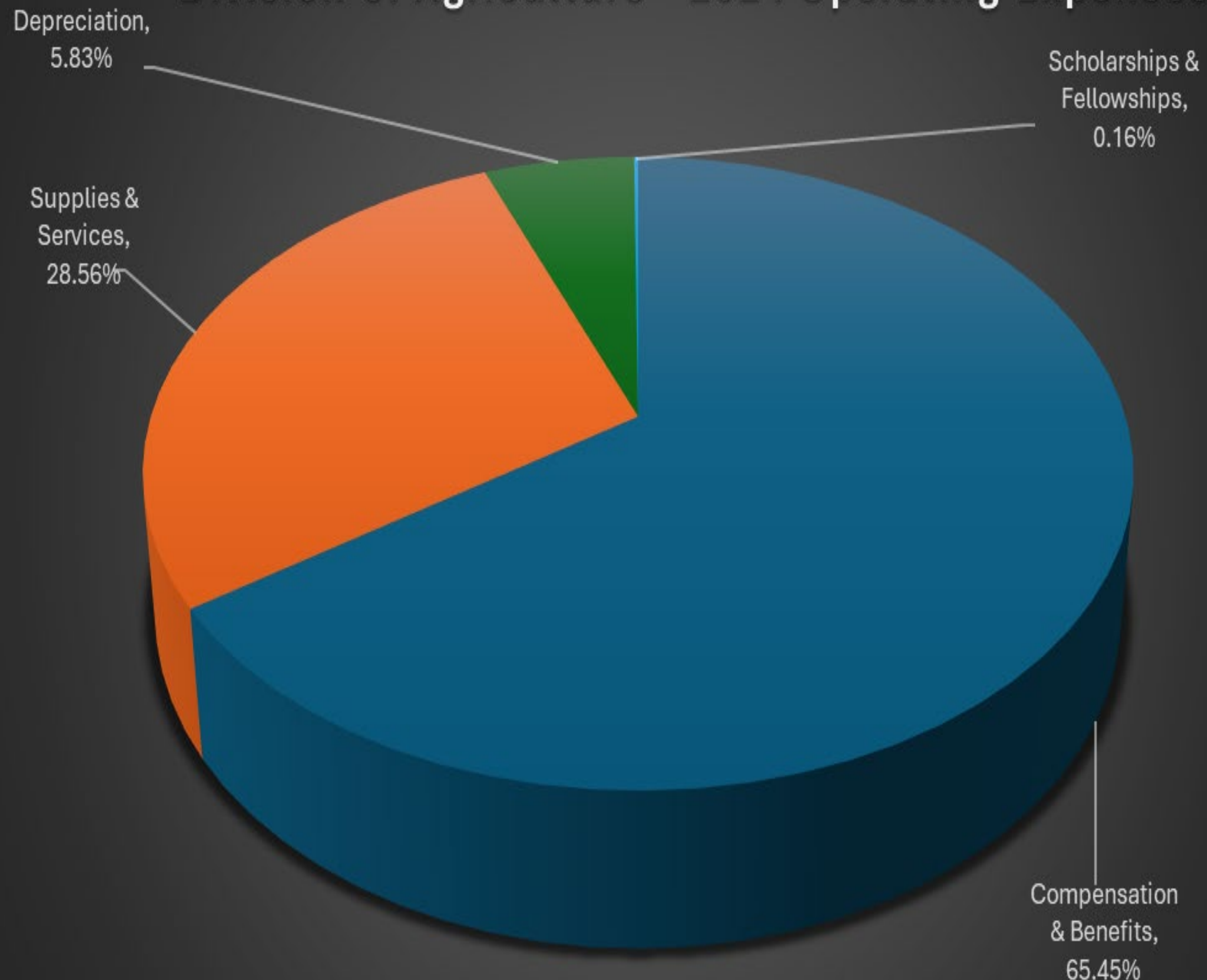






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## Division of Agriculture - 2024 Operating Expenses



### Increase in Operating Expenses - FY24 vs FY17

Category	2024	2017	\$ Inc
Compensation & Benefits	98,735,783	90,809,014	7,926,769
Supplies & Services	43,082,243	31,704,960	11,377,283
Depreciation	8,793,182	5,863,482	2,929,700
Scholarships & Fellowships	234,436	177,446	56,990
Total	150,845,644	128,554,902	22,290,742

- **Federal grant funding has increased 100% from \$38.5M in FY22 to \$76.5M in FY24.**
- **USDA funding total improved from 11<sup>th</sup> to 6<sup>th</sup> in the southern region in 2 years.**
- **Providing a faculty salary incentive program that allows faculty to supplement their salary from grant success.**
- **Aggressively pursuing industry partnerships**
- **Incentivizing technology commercialization, which generates about \$4.0M annually.**



**UA Division of  
Agriculture  
Leveraging  
Resources**

- The State of Arkansas is the majority shareholder for UADA
- UADA has no income stream other than crop sales which account for about 7.4% of the total budget.
- At UA – Fayetteville, UADA contributes 78% and 70% of the budget for Bumpers College and the department of Bio and Ag Engineering, respectively.
  - UADA attempts to keep pace with UAF salary increases with no access to tuition revenue or other income stream.
  - UADA accounts for 45% of total research expenditures/output for UAF, which allows the campus to maintain Research 1 status.
- UADA has continued to leverage the state of Arkansas investment by increasing extramural grant procurement



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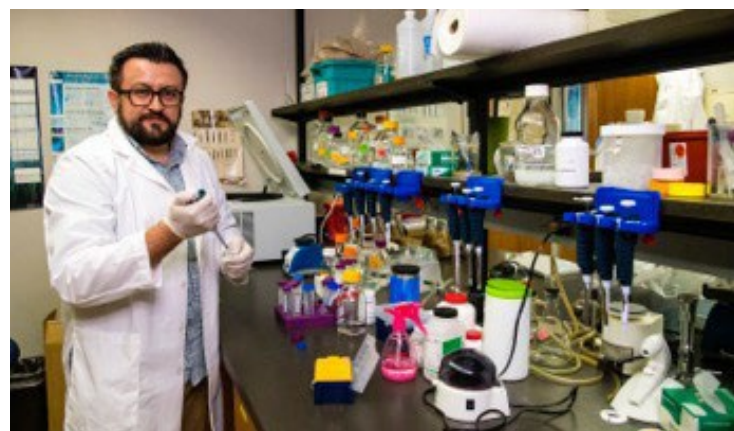
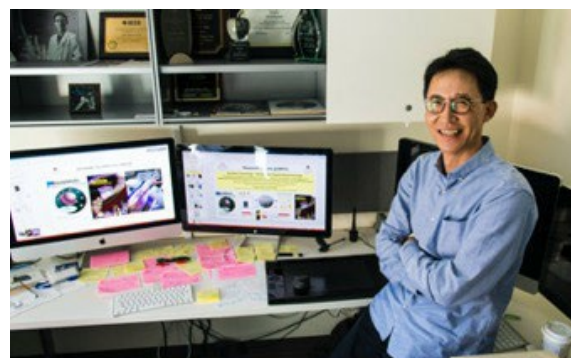
# Investing in Our People

- UADA has about 1,200 employees throughout the state.
- UADA streamlined functions and returned 422 positions to the state in FY22.
- To reduce unsustainable turnover, County Agent and Technician starting salaries were increased from \$36,000 to \$41,000, which is still \$2,800 below the regional average.

**We have offered a salary plan similar to campus to manage morale and productivity.**

**UADA has attracted top scholars due to the quality of programs and the reputation of agriculture in Arkansas**

- UADA provides the R&D, information delivery, health education, human resource and workforce development functions for Arkansas' largest industry.





# Investing in Our Facilities



- UADA over 165 buildings statewide.
- There has been no state or federal investment in UADA facilities since 1995, and total deferred maintenance is estimated at \$99 million.
- It usually takes UADA more than a decade of saving and fundraising to replace a substandard facility.
- Despite lower salaries UADA has attracted top scholars due to the quality of programs as well as the size and reputation of agriculture in Arkansas
- It is difficult to attract and retain top talent and conduct cutting-edge research in outdated facilities.



# New Feed Mill





## **Poultry Demand for Arkansas Grain**

- **Arkansas farmers harvested 690,000 acres of corn and 3.15 million acres of soybeans in 2022.**
- **Arkansas harvested 120,235,000 bushels of corn**
  - **Arkansas poultry consumed 174,068,036 bushels corn. 53,833,036 bushels more than produced in Arkansas.**
- **Arkansas harvested 163,800,000 bushels of soybeans**
  - **Arkansas poultry consumed 63,644,106 bushels or 39% of soybeans grown in Arkansas.**



## Technological Improvements

### **Enhanced Accuracy and Precision**

- Diets can be manufactured on a 0.1% repeatable accuracy scale
- Coefficient of Variation (CV) in the 5% or better range, which is the best CV available in the industry currently

### **Capacity and Output**

- Diets can be manufactured at rates between 5 and 10 tons per hour, if needed
- Current capacity of existing mill does not exceed 1 ton per hour

### **State of the Art Equipment**

- Modern, industry-relevant, technologically advanced equipment throughout
- Students and industry stakeholders will receive training on equipment being installed currently in new industry mills

### **Safe and Spacious Working Areas**

- Layout and design with focus upon safety and enough space for teaching and training applications, as well as routine maintenance

# Impact & Transformational Change

## **Research**

- Feed manufacturing with enhanced throughput time, accuracy, and precision in a technologically advanced, industry-relevant feed mill
- Expand current programs to include elements of feed milling and manufacturing research on relevant commodities produced in AR

## **Teaching**

- Enhance current curriculum with hands-on feed manufacturing coursework and laboratories to enhance preparedness for the workforce

## **Stakeholder Support**

- Support stakeholders with small-batch diets for internal research objectives (Tyson, Cargill, Cobb-Vantress)
- Provide industry personnel local training opportunities and short courses in feed milling and manufacturing

## **Centralization of Feed Manufacturing**

- One feed mill for the University of Arkansas System Division of Agriculture



# Thank You!

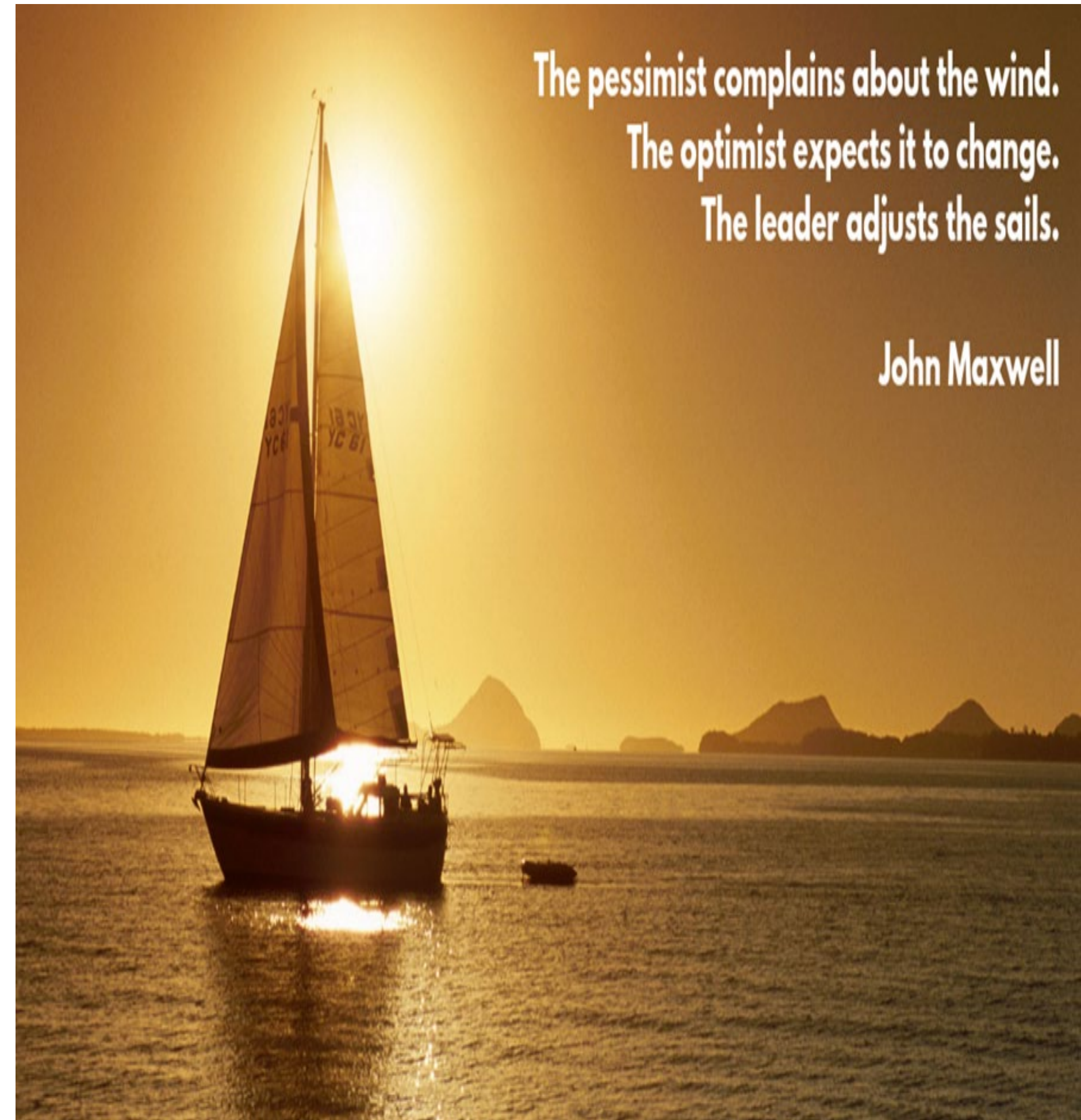
## Questions?

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The pessimist complains about the wind.  
The optimist expects it to change.  
The leader adjusts the sails.

John Maxwell