

Arkansas Producer Decision Support Tool

A Practical Guide for Crop Insurance, Farm Program, and Grain Marketing Decisions

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Key Takeaways

- The Arkansas Producer Decision Support Tool helps producers and county Extension agents compare crop insurance, Title I farm program, production cost, and grain marketing decisions in one place.
- Stage 1 compares producer-selected strategies with model-recommended alternatives using simulated price and yield outcomes.
- Stage 2 helps users think through elevator choice, transportation cost, storage cost, and marketing timing after harvest.
- The tool is designed for educational scenario analysis and planning discussions.

Why This Tool Matters

Arkansas producers make several major risk-management decisions each year. They choose crop insurance coverage, compare ARC-CO and PLC, estimate

production costs and cash rent, and decide whether to sell grain at harvest or store it for later sale. These decisions are often discussed separately, but they are connected on the farm. A change in yield history, cost pressures, program choices or storage costs can alter the way a producer views risk and expected return.

The Arkansas Producer Decision Support Tool was developed to bring these decisions into a single, easy-to-use framework. It is intended to help Extension agents and producers organize the conversation, compare trade-offs and discuss risk in plain language.

Who Should Use the Tool?

The tool is designed for county extension agents, agricultural advisers and producers. It can be used live during producer consultations, at workshops or as a planning tool before a farm meeting. Users do not need to understand the underlying model to use the tool. The most important step is to enter realistic farm information whenever it is available.

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What Information Do Users Enter?

Users begin by entering basic information about the farm and the risk-management choices being considered.

- Arkansas county, crop and irrigation practice
- Production cost and cash rent assumptions
- Five-year producer yield history
- Insurance product, coverage level and unit structure
- ARC-CO or PLC program choice
- Storage option, storage cost, elevator choice and transportation cost

The tool provides starting values where possible, but producer-entered records should be used whenever available, especially for yield history, production costs, rent and storage assumptions.

What Does the Tool Compare?

Stage 1: Crop Insurance and Farm Program Comparison

- Insurance products include Revenue Protection and Yield Protection.
- Coverage levels include 70%, 75%, 80% and 85%. [RM1]
- Unit structures include enterprise, basic and optional units
- Title I program choices include ARC-CO and PLC.
- Outputs include expected net return, estimated premium and downside risk measures.

The model-recommended strategy should be viewed as a benchmark under the assumptions entered into the tool. It is not a requirement and does not replace professional judgment.

Tool Component	Purpose
Stage 1: Pre-Planting Strategy Evaluation	Compares crop insurance and Title I choices before planting.
Stage 2: Post-Harvest Marketing Guidance	Compares selling now with storing and selling later after accounting for local basis, transportation, and storage costs.

Stage 2: Elevator Choice, Transportation, and Storage Timing

Stage 2 focuses on post-harvest marketing. The tool identifies nearby elevator options based on the selected county and crop. Users may choose an elevator from nearby options. The tool accounts for distance-based transportation cost.

The marketing module combines a recent futures price anchor, historical monthly basis patterns for the selected elevator, transportation cost, storage cost and discounting over the storage period. The chart separates gross expected cash price from net value after transportation, storage and time costs.

How to Read the Results

- Expected return shows average performance across simulated outcomes.
- Estimated premium shows the approximate cost of the selected insurance coverage.
- Downside risk is shown as 1-in-5, 1-in-10, and 1-in-20-year outcomes to make risk easier to discuss.
- The Stage 2 chart helps compare gross cash price with net value after transportation and storage costs.
- Results should be used to compare trade-offs across scenarios rather than to predict one exact outcome.

Data and Approach

The tool combines user-entered information with Arkansas-specific data and application-maintained files. Data inputs include producer-entered yield history, Arkansas county yield files, local corn and soybean futures files, county and crop-specific insurance rating inputs, 2026 University of Arkansas Division of Agriculture enterprise budgets, input-cost series used for macro cost stress testing, Arkansas county map data and pre-aggregated monthly elevator basis files.

Some values, such as transportation cost and storage cost, are user-controlled scenario assumptions. This allows producers and agents to adjust the analysis to better reflect local conditions.

Important Cautions

- The tool is for educational scenario analysis and planning discussions.
- It is not an official crop insurance quote or enrollment recommendation.
- Results depend on the quality of the information entered by the user.
- Final crop insurance, farm program and marketing decisions should be verified through official channels and local professional guidance.

Accessing the Tool

The tool is available online and has been updated to be more mobile-friendly for use during consultations, meetings and workshops.



- Tool Link: https://eunchun.shinyapps.io/UADA_App_liteversion/
- Mobile-friendly for use during producer consultations.

*Note: This fact sheet is intended to support Extension education and planning discussions.
Users should verify final insurance and program decisions through official sources.*

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