The Missouri Representative Farms Project
Frequently Asked Questions

Who is FAPRI?
The Food and Agricultural Policy Research Institute (FAPRI) at the University of Missouri is a unique organization of professional economic analysts and support staff that provides objective analysis of issues related to the food, agriculture, and natural resources complex. FAPRI is a part of the MU College of Agriculture, Food and Natural Resources.

These results are sought after to help inform public dialogue and decision-making. Many studies are initiated at the request of Congressional committee staffs, industry groups and public agencies seeking independent analysis of specific proposals.

For example, FAPRI analysis has been used recently by congressional members writing the 2002 farm bill, negotiators working on trade agreements, agri-industry representatives and farmers planning business strategies. Again, FAPRI does not propose or advocate implementation of any particular policy.

What is the Missouri Representative Farms Project?
This project focuses on economic issues that apply specifically to Missouri farms, rather than the global or national agricultural sector. Recognizing the diversity of farms in Missouri, it discovers and clarifies how changes will affect particular kinds of farming operations.

At the heart of this project are the 200 plus farmers from across the state who provide a detailed picture of real-world conditions in their area.

The Missouri project is conducted in partnership with researchers at Texas A&M University.

What is a Representative Farm?
A representative farm is a creation of four to six farmers serving on a panel. By consensus, the panel develops detailed production and financial data that depict a specific type of farm business. The result is a farm that represents the panelists’ operations as a group—hence the term ‘representative farm.’ The approach treats a farm business as a unique system, with specific production and economic features that must be adapted to by management.

Through statistical procedures, FAPRI analysts project the farm financial performance forward through time. The panel verifies that the computer simulation is an appropriate reflection of a farm business with localized characteristics.

FAPRI Roots
FAPRI was instituted at the University of Missouri in 1984. The institute receives a major portion of its funding directly from the U.S. Congress.

What Does FAPRI Do?
FAPRI analysts use sophisticated computer models to simulate the intricacies of the agricultural sector from the farm-level to the international marketplace. The models are used for a variety of research projects. One of the primary research efforts is a ten-year baseline projection of national farm prices for agricultural commodities. The baseline undergoes extensive review by outside experts prior to release each year.

Who Uses FAPRI Research Results?
FAPRI analysts work closely with decision makers in Washington D.C. and elsewhere to measure the impact of policy proposals against the baseline.
What About Confidentiality?
Farmers serving on a panel need not worry about personal information being misuse. FAPRI does not collect data for individual farm operations. Only the composite numbers agreed to by the whole panel are entered into the model for simulation. Farmers are credited by name as panel members, but the representative farm data reflects a group of operations not a particular individual’s farm. FAPRI does not ask for information regarding personal debt, off-farm income, or family living expenses.

What Types of Farms are Represented?
The representative farms database is 45 farms and growing. One quarter of these fit the definition of a small farm with less than $250,000 in annual receipts. Geographically, most farming regions of the state now have active panels. Shaded areas on the map show home counties of producers serving on a panel.

Representative crop farms include cash feedgrains, oilseeds, cotton and rice enterprises. Planted acres range from 400 to 5360.

Farms producing animal products are also represented, including dairy farms, broiler units, farrow-to-finish and cow-calf operations.

A third of the farms produce both crops and livestock. Two farms are diversified into crops, cattle, and hogs, one with contract nursery units.

Collectively, the representative farms substantially mirror the state’s production agriculture, providing a window into the financial condition of Missouri’s leading industry.

What Questions Can the Analysis Answer?
A multitude of scenarios can be tested against the baseline to see how changes impact financial performance of the farm over a period of time. The simulation takes all of the relevant estimates for production, prices and costs and generates financial summaries for the whole farm. Summaries include statements of profit and loss, cash flow, net worth and income tax reports for multiple years.

An example of simulation output is shown in the charts below representing a central Missouri family farm with 250 acres of feedgrain crops, 125 beef cows and 200 sows. The first chart indicates the volatility in future receipts, primarily as a result of hog prices.

Simulation procedures also assess price and production risks for the farm. Risk analysis answers questions such as: what is the probability that the farm will not cash flow next year? In this example, the probability is very high that cash demands in 2002 and 2003 will exceed income in those years.

What Do Farmers Gain From Serving on a Panel?
Serving on a panel is a unique opportunity to insert a grassroots perspective into the policy-making process.

Panelists learn from other farmers and discover new information about their own operations.

Panel members are able to use the financial forecast and risk assessment for the representative farm to assist with decisions for their own operation.

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