## Comprehensive Financial Analysis of Value Added or Farm Expansion Investment Impacts on Farm Resources

## Brees, \* Melvin

MO Value Added Development Center, University of Missouri, 143 Mumford Hall, Columbia, MO 65211

When faced with making decisions to invest in value added enterprises or farm expansion, producers typically narrow their focus to expected returns and feasibility of the investment itself. However, these investments often have significant impact on family cash flow and farm business resources. The purpose of this analysis is to demonstrate these impacts on the financial resources of the farm business and train University Outreach and Extension regional specialists to guide and educate producers in making value added or business investment decisions.

For demonstration purposes, a University of Missouri Food and Agriculture Policy Research Institute (FAPRI) Representative Crop Farm was selected for a comprehensive FINPACK® analysis. The FAPRI Representative Farm, a simulated operation representing a typical crop operation, is a profitable 1850-acre corn, soybean and wheat operation. The farm has a manageable 20% debt level. However, family needs, machinery replacement and debt repayment result in a relatively tight cash flow position.

Alternatives for value added or farm expansion, requiring \$25,000 investment, are used for the analysis. The value added alternative assumes 15% return and an 18-month start up period. The farm expansion alternative is cash renting an additional 120 acres of cropland. While the base plan, value added enterprise and farm expansion all represent profitable alternatives; the impacts on cash surplus or deficit, operating loan repayment and planned asset replacement are dramatically different. The analysis also demonstrates financial risk associated with the alternatives, price/yield sensitivity of the plans and the importance of efficient farm resource use for investment decision-making.