Farm income projections

Low commodity prices have put financial stress on growers, but the farm bankruptcy and loan delinquency rates, indicators of the financial health of farms, have not fluctuated much in recent years.

“These are not the best of times, but it’s stable,” said Ani Katchova, associate professor and chair of the Farm Income Enhancement Program at CFAES. This year, national net farm income, which takes into account many commodities not grown in Ohio, is projected to increase 10% over last year’s total, according to forecasts from the U.S. Department of Agriculture (USDA).

In years with low profit levels, some farmers are increasingly leaning on crop revenue insurance, buying higher coverage levels to help them compensate, Katchova said.

“Due to crop insurance, we see better farm incomes,” said Katchova, one of the authors of a new CFAES report that analyzes USDA farm income forecasts.

The report helps farmers know income trends and assists them with making future planting decisions.

Commodity prices remain low, with modest projected increases. The average per-bushel price for corn, $3.36 last year, is projected to increase to $3.50 this year. By 2020, the price will rise to $3.90, according to USDA estimates released in March.

For soybeans, the average per-bushel price, which was $9.33 last year, is projected to drop to $8.60 this year before rising slightly to $8.75 by 2020.
These are not the best of times, but it’s stable.

ANI KATCHOVA
Associate professor and chair of CFAES’ Farm Income Enhancement Program

A positive for farmers in many states, including those in Ohio, is that agricultural land has maintained its value.

“If there’s a bright spot in farm balance sheets, it’s the land values,” said Ben Brown, manager of CFAES’ Farm Management Program.

Overall, the value of cropland in Ohio has changed very little, said Brown, who co-authored the report with Katchova and Ana Claudia Sant’Anna, a CFAES postdoctoral researcher.

According to Katchova, if land prices were dropping, that might be cause for concern. “But farmers are not massively selling land,” she said.

Helping farmers’ profits grow

For years, Mark Thomas and his wife had been running a 400-cow dairy farm near Canton, Ohio.

Last year, they stopped. Selling off their herd of Holsteins, they switched to raising heifers while continuing with cultivating corn, soybeans, and wheat. While it was tough to watch the milking cows leave their barn for good, the Thomases had the financial projections and analysis to show that it was likely the right move.

They used information from several years of analysis done through CFAES’ Ohio Farm Business Analysis and Benchmarking Program. Partly funded by a grant from the USDA, the program assesses the financial health of a farm operation and generates reports that compare the operation to other comparable Ohio farms.

Since he first participated in the program in 2009, Thomas has been able to make informed decisions that put his business on a better track, with the shift to raising heifers being the most recent decision.

At a time when national farm income is down, on average, and uncertainty abounds about how tariffs might affect foreign demand for corn and especially soybeans, it is invaluable for Ohio farmers to know their production costs in every part of their business. The business analysis program is designed to help Ohio farmers achieve financial success.

Participating businesses work directly with technicians who help the businesses collect the necessary information to generate farm analyses. In addition to providing the relevant reports, the technicians work with the farms’ business owners to interpret and apply the suggested results.

“We don’t always have good news for the farmer,” said Dianne Shoemaker, a dairy specialist with OSU Extension and the manager of the business analysis program. “But the benefits a farm receives from doing an analysis each year include seeing what is going well and identifying issues that need to be addressed in a timely manner.”

It costs $100 to complete the business analysis, and the program is open to any crop, livestock, or dairy farm operation in Ohio.

To view the CFAES report on farm income projections, visit go.osu.edu/farmforecast.
Reducing phosphorus

In a pit about 3 feet under the ground lies one possible solution to reducing a large amount of the phosphorus draining from some of Ohio’s agricultural fields.

At two locations in the state, CFAES researchers are testing phosphorus filters that have the potential to remove up to 75% of the phosphorus running through them. Phosphorus is found in commercial fertilizers and animal manure.

On a typical agricultural field, rainfall percolates through layers of soil and eventually into an underground plastic pipe drainage system that carries the water to a ditch or nearby waterway. With a phosphorus filter, the water flows through an underground tank before it reaches the ditch or nearby waterway. The tank contains a chemical composite, which the phosphorus sticks to, as the water then flows out to the ditch or nearby creek, stream, or lake.

“This filter has great potential,” said Larry Brown, an agricultural engineer and faculty member at CFAES who is studying phosphorus filters in Ohio. “The chemical used is very efficient at absorbing phosphorus.”

During a five-year span, a phosphorus filter can remove up to 75% of the phosphorus flowing through it, depending on how the filter is designed, he said.

The phosphorus filters that the researchers installed are on a privately owned farm in Putnam County and in CFAES’ Waterman Agricultural and Natural Resources Laboratory in Columbus. A third is slated to be installed in Defiance County later this year.

A phosphorus filter can be costly, up to $20,000 or more, depending on the field size and the phosphorus concentrations in the soil and drainage waters, Brown said. But Brown, who is researching the effectiveness of phosphorus filters with other CFAES faculty and the USDA, is looking into grants that would help bring down the cost of the filter and other systems for reducing the amount of nutrients coming from agricultural fields.

“There’s been a lot of discussion about who causes the algal bloom problem in Western Lake Erie or what causes the problem,” Brown said. “We’re trying to figure out what can take care of the problem.”
Dandelion research

CFAES’ ongoing work to turn a species of dandelion into a domestic rubber source got a boost recently with a three-year, $2 million grant from the USDA’s Biomass Research and Development Initiative. The funding will support continued research on TK dandelion, including improving seeding, weed control, harvesting, processing, and genetics.

FABE top 10 ranking

CFAES’ Department of Food, Agricultural and Biological Engineering (FABE) was ranked ninth nationally in the latest U.S. News & World Report rankings of graduate programs in agricultural and biological engineering. The program is in a tie with the University of Nebraska-Lincoln. “The credit goes to the FABE faculty and staff,” said Department Chair Scott Shearer. Fifteen Ohio State graduate programs ranked in the top 10 nationally in their fields, according to U.S. News’ 2020 ranking of America’s best graduate schools, with three ranked No. 1.

‘Smart’ livestock fencing

CFAES animal sciences faculty soon will be working with an Australian company to test the effectiveness of a new virtual fence for livestock that’s akin to an electric fence for a dog. Testing of the fence, created by the Australian agriculture department, will be done after investigators get the approval of the Institutional Animal Care and Use Committee of Ohio State’s Office of Responsible Research Practices. Using eShepherd, the animals will wear smart collars guided by GPS, which will allow producers to monitor each animal’s location. If the livestock crosses the boundary set by the producer, it will hear a warning sound first. If the animal continues, it will feel a shock. Even far away from the herd, the producer can move the fence, retracing its boundary line on a laptop.

New publications

Extension has three new publications of interest to farmers, available for order at extensionpubs.osu.edu. The newly revised Corn, Soybean, Wheat, and Forages Field Guide is available in booklet format for $14.95 or PDF for $8. The 2019 Weed Control Guide for Ohio, Indiana, and Illinois PDF is available for $8. And the 2019 Midwest Vegetable Production Guide for Commercial Growers is available for $15.

Helping hands

This spring, many CFAES alumni were involved in the “Nebraska Strong” efforts to aid farmers in flood-stricken Nebraska. Some offered their farms as donation drop-off locations; some gathered cash, tools, and other items; and some helped deliver the supplies in a caravan organized by Crawford County dairy farmers and CFAES alumni Greg and Rose Hartschuh and their Ohio’s Rural America Relief organization.