

Running on Empty

■ Gauging the Lingering Effects of Hurricane Katrina on Tenth District Farmers

BY TONI LAPP, SENIOR WRITER

It's harvest time in rural Kansas, and Tom Boehm has decided to take a gamble on his 3,000-acre farm near Olathe. He normally would have fertilized his freshly harvested fields in November, but fertilizer—at \$500 a barrel for anhydrous ammonia—was through the roof, so he decided to bide his time, hoping the price of fertilizer would fall before spring. After all, just two years ago, the same barrel of petroleum-based fertilizer cost \$182.

Boehm was a bit uneasy with his gamble, yet he took another one. Rather than immediately selling his soybeans at the currently low price, he rented space

in a grain elevator in the hopes that prices would rise.

Just getting the soybeans to the elevator was a challenge, however. Because of difficulties in shipping crops in the aftermath of Hurricane Katrina, storage elevators were at capacity.

This past hurricane season was one of the worst on record in the United States. Agriculture was impacted by three major hurricanes, but effects wrought by Katrina on transportation and fertilizer costs will linger for some time to come, say experts.

Boehm had to wait by the phone for days before he got word that there would be room for his crop. When he finally was told to come, he arose at 3 a.m. to

get in line, sleeping in his truck until it was his turn to deposit his crop. Some farmers who didn't arrive as early were turned away after waiting in line, he said.

While the most immediate impact from the hurricane occurred in the Gulf of Mexico states, lingering effects of Hurricane Katrina can be felt many miles from the Gulf, months after the August storm that came ashore as one of the costliest and deadliest hurricanes in U.S. history.

What was Katrina's impact on agriculture, and how long might it last? Assessments of near-term impacts are beginning to emerge. Mark Drabenstott, vice president and director of the Center for Rural Study of Rural America, and Jason Henderson, senior economist at the Center explored how higher energy prices and new concerns about export infrastructure could affect agriculture in the future. Their research, "Katrina and Rita: Lingering Effects on Agriculture," can be found in the October issue of *Main Street Economist*, a publication of the Federal Reserve Bank of Kansas City.

Fueling up

Byron Finley knew the price of fuel was on the increase the day before it was time for him to take delivery of the diesel, which he buys 1,000 gallons at a time and stores on a tank at his farm in Edgerton, Kan. He tried, unsuccessfully, to negotiate a prepayment of the fuel, which was then selling for \$2.22. (Fuel purchased to be used on a farm is exempt from federal taxes, because it is not used on public roads.) The next day, the price was 21 cents higher, and he had no choice but to pay the price—it was harvest time.

For farmers like Finley, Hurricane Katrina came at the worst possible time, spiking diesel prices when they most heavily use fuel. Compounding Finley's frustration was the fact that prices later began to drop well below the price he had paid for the fuel stored in his 1,000-gallon tank.

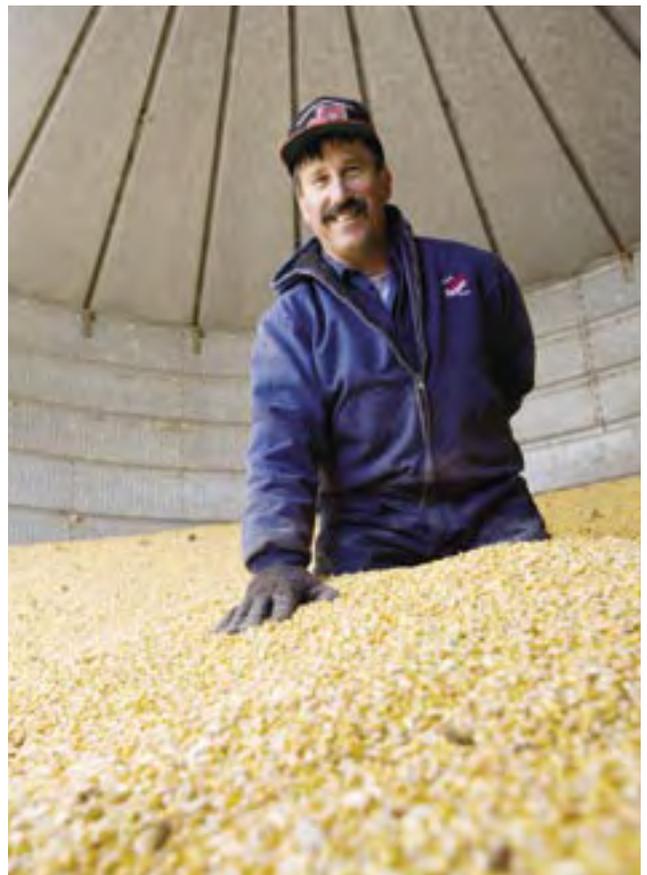
Even before hurricane season, a steady increase in petroleum prices had led the U.S. Department of Agriculture (USDA) to forecast increased energy costs in agriculture. Then Hurricane Katrina shut down nearly all of the

Gulf's oil and natural gas production facilities, halted oil imports and closed refineries. USDA estimates that every 10 percent increase in fuel and energy costs leads to an \$85 million spike in agricultural production costs.

By fall, many farm lenders were reporting additional operating loan requests for the fall harvest, said Henderson.

Anecdotal evidence from farmers like Boehm suggests that the effects of Katrina will last beyond harvest. In November, Boehm was pondering money-saving tactics—one being to "chisel plow" his field, rather than turn over the soil completely, which uses more fuel. Finley said he resorted to a "no-till" method long ago, so is already saving as much fuel as he can. While this might sound like an easy

TOM BOEHM, A FARMER NEAR OLATHE, KAN., says he is considering planting soybeans rather than corn this spring. Soybeans don't require as much fertilizer, which could cost 50 percent more this year than last year.



THE EBBS AND FLOWS

OF SHIPPING ON THE MISSISSIPPI

Much grain that is harvested in the Tenth District finds its way down the Mississippi River, where it is exported from the ports of south Louisiana and New Orleans.

Corn, soybeans and wheat all move down the river, literally the main artery in the U.S. shipping infrastructure. Top destinations once grains reach the Gulf include Japan, Egypt, Mexico, China and Taiwan, South Korea and the Netherlands.

Hurricanes are not the only weather condition that affects shipping by barge; low water or ice on the river can prevent barges from moving.

Financial wires cover river conditions with intensity, filing reports that follow daily barge traffic statistics. Grain terminals and elevators on the river follow the reports to determine how full barges can be loaded. Market analysts follow the reports to gauge export activity and to see if water levels drop. The latter forces a domino effect: when the movement of grain is impeded, backlogs of grain form and prices move.

Lower water levels reduce barge efficiencies. Losing an inch of depth typically means offloading 17 tons of cargo per barge.

Even though farmers do not pay for shipping, they indirectly pay for shipping increases. Grain usually passes through several changes in ownership from producers to final consumers. When a farmer sells grain, the transportation, storage and conversion costs are generally the responsibility of the new owner. When the new owner incurs increased shipping costs, the owner might absorb the increases and narrow the profit margin. But when this is not possible,

the buyer will either purchase grain at a lower price or sell grain at a higher price.

After Katrina, traffic on the river was completely shut down for days, and remained interrupted for weeks. "It was like an accident that happens on the interstate," said Jason Henderson, senior economist at the Federal Reserve Bank of Kansas City's Center for the Study of Rural America. "It takes awhile for everyone to get back up to speed."

If anything, Hurricane Katrina exposed the vulnerability of transporting so much of the nation's grain by barge down the Mississippi. Mark Drabenstott, vice president and director of the Center for the Study of Rural America, cautioned about relying too much on that as a sole mode of transport.

"Katrina demonstrated a risk to agriculture from being so heavily dependent on Mississippi shipping," he said.

Immediately after the hurricane, corn and soybean prices plummeted in places that ship virtually all

of their harvest down the river because there was a backlog of grain at river elevators. By contrast, prices rose in western Iowa and eastern Nebraska, as these areas typically ship their harvest by rail to the Northwest.

"This sharp divergence in crop prices may spark a fresh dialogue on diversifying the nation's grain transportation system," said Drabenstott.

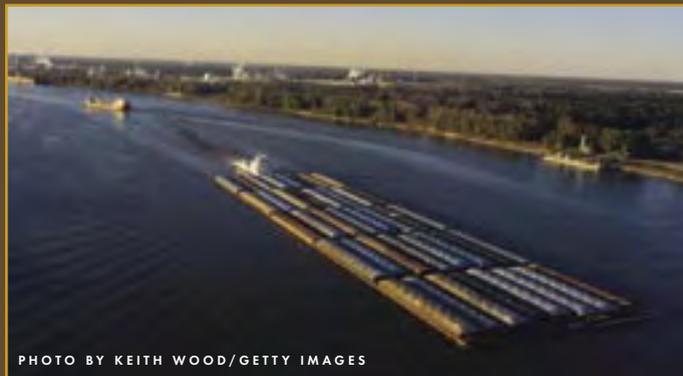


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solution, farmers say that eventually the soil has to be turned over, or else yields begin to fall off.

Shipping

Concerns remain over what effects the next big storm may have on transportation. About half of all U.S. grain exports travel down the Mississippi River to the Gulf of Mexico. The hurricane halted grain exports out of the Mississippi River for nearly two weeks. When

river elevators or terminals were unable to ship grain down the river, any grain they accepted had to be held in storage. This led to situations such as what Boehm endured, waiting for days to get the call to bring his soybeans in.

Some experts have talked about more long-term threats, possibly losing business to grain-producing countries that don't have difficulties with exportation paths.

"If anything, Hurricane Katrina highlighted

how tight the transportation capacity for U.S. food exports is,” said Henderson. “If global demand grows, we have to find capabilities to move grain out of the Midwest, be it rail or the Mississippi River.”

In fact, railways saw an increased demand in the aftermath of Katrina. According to the USDA, rail shipments were up 15 percent year to date in December and continue to run higher than year-ago levels. Yet, barge shipping remains the most economical method of transportation. In 2004, the cost of shipping corn by barge from Minnesota to the Gulf of Mexico was half the cost of rail, said Henderson.

“One quickly senses why those of us in agriculture value what we know to be our best natural comparative advantage in trade—the Mississippi River and its tributaries,” said Timothy Gallagher, a member of the North American Export Grain Association.

Gallagher’s organization is concerned with maintaining the nation’s waterways. He testified about the issue before the House Committee on Agriculture in October.

“As Katrina forced an extended closure of the ports of New Orleans and south Louisiana—including all 10 grain export facilities—an already tight river transportation situation became desperate,” he said in his testimony.

Just as the rest of the country saw a leap in prices at the pump after Katrina, exporters saw a leap in shipping rates on the Mississippi—from 51 cents a bushel the day before Katrina hit to 97 cents a bushel on Sept. 8.

River transportation remains the prime means of moving crops, said Gallagher.

“Rail and truck alternatives to replace the capacity and cost effectiveness of the river system are simply nonexistent,” he said. “Rail shipping is already at full capacity and there is a labor shortage of certified truck drivers. Moreover, shipping by barge remains the most fuel efficient, lowest cost and overall efficient method of transporting the necessary volume of agricultural commodities to export.”

A new business plan

Mike Matson of the Kansas Farm Bureau said farmers have had to make adjustments in

the wake of Katrina.

“The business plan that most producers had in place (before Katrina) was already in place,” he said. “It was difficult to make adjustments—they had to eat the price hikes in the fall. The pencils are getting sharpened and farmers and ranchers are looking at next year’s business plan.”

Input costs such as that for fertilizer are a significant part of a farmer’s business plan, said Matson.

“If fertilizer costs 50 percent more this year than last year, there are going to be hard decisions to make,” he said. “They might choose to plant something else.”

Boehm said he is considering planting soybeans rather than corn this spring. Soybeans don’t require as much fertilization.

Boehm laments the fact that in the global economy, his crops are selling at the same price that they sold for 20 years ago, yet many of his inputs have gone up. Furthermore, farmers overseas aren’t facing the challenges wrought by Katrina.

Farmers such as Boehm are doing the math and coming up with solutions for the problems of higher input costs, said Matson.

“Chances are many of them will find a way to pay for it,” he said. “They will make cuts somewhere else.”

He is making a dire prediction: “They will spend less on Main Street. This will affect rural economies. If agriculture production is suffering, it won’t be long before small town Main Streets will be suffering.”

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FURTHER RESOURCES

KATRINA AND RITA: LINGERING EFFECTS ON AGRICULTURE

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