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, unsuc-
sessfully, to negotiate a prepayment of the fuel,
which was then selling for $2.22. (Fuel pur-
chased 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 in-
crease 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.
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.”

FURTHER RESOURCES

KATRINA AND RITA: LINGERING EFFECTS ON AGRICULTURE
www.KansasCityFed.org/TEN

COMMENTS/QUESTIONS are welcome and should be sent to tene@kc.frb.org.