Higher energy and food costs during 2008 brought study from the government, the agricultural industry, food manufacturers, and consumers. While the controversy played out in the media and became dubbed, “food versus fuel,” consumers got mixed messages about the complex economic and political issues.

At the root of the issue was the perception that there was not enough corn for both food uses and ethanol production. Corn is used in many forms in food products, including being processed into High Fructose Corn Syrup to sweeten foods. Only about 10 percent of corn is used for human consumption. The majority is used for animal food, ethanol and export markets. Sweet corn, which is produced specifically for human food, is not included in commercial corn marketing information.

Scientists, seed corn companies, and farmers are working together to increase corn yields and minimize crop damage from pests, plant diseases, and extreme water changes (too much or drought). The graph above shows that yields are increasing quickly within a short time frame. Additional corn yield is expected.

2015 Corn Yield Projections: bushels/Acre
ProExporter: 185
National Corn Growers Association: 187
Extrapolated: 193
2008 actual: 154

When ethanol is produced from corn, a valuable co-product called distillers grains is also produced. These distillers grains are part of a good feed ration for beef and dairy cattle.

Other Factors
Given the complexities of the situation, it is sometimes difficult to determine the exact cause for market volatility. And, in the midst of the crisis, speculation can create fear and inaccurate assumptions. Only looking back on the situation after some time has passed, allows one to gain perspective. Let’s take a look at happenings during the late spring/early summer of 2008 and other factors may become apparent after more time has passed:

Retail gas price: $4.11 on July 14 (record high)
Weather: Hurricane Ike hits Houston, Texas; oil refineries shut down for about a week
OPEC: Promises to keep oil production steady, allowing prices to rise

Transportation costs: rise among all sectors

Consumer goods and food: prices rise among all sectors; food manufacturers raise prices and in some instance decrease quantity of food in some packaging

Service sectors: Some industries begin including a fuel surcharge on invoices

Consumers: seek relief for high gasoline, retails goods and food prices; consumer interest in high mileage motor vehicles lessen, while demand for hybrid and fuel efficient vehicles increases

Economy: general slow down in all sectors; however bank and investment firm failures and significant employment cuts were yet to come

Airlines: begin charging a fuel surcharge, and tighten weight restrictions on baggage, including charging for checked bags

Sometimes even the “experts” get it wrong. In a July 2008 report, the federal government predicted that retail gasoline prices would remain above $4.00 per gallon after hitting a record $4.10 per gallon on June 30, 2008. An updated report released in January 2009 revised the projection prices for 2009 to an average $1.87 per gallon and $2.18 per gallon in 2010.

And, what does the future hold? The DOE released preliminary projections in the 2009 Annual Energy Outlook.

Why do high corn prices and high fuel prices translate into high food prices?

While higher corn prices slightly increase the input cost for food products, higher fuel prices are multiplied by the time products reach the consumer. The higher fuel charges are added in each step of the process:

+$ Inputs for growing food and livestock
+$ Farmers/processors absorb costs to transport food and livestock to buyers.
+$ Buyers then transport food and livestock to food manufacturer (who also have other input costs, including ingredients and packaging).
+$ The food manufacturer transports to food distributor.
+$ Food distributor transports to grocery store.

Each time the food product is shipped, it, along with other inputs and subsequent by-products or waste, have additional transportation costs.

Food manufacturers raised prices when corn and fuel prices were high, however many food prices have remained the same or continued to increase when corn and fuel prices lowered.

What does the future hold?

Economists and analysts have opinions about the future. But, the United States has many variables making predictions less reliable. In early 2009, political and economic factors are uncertain at the federal and state levels.

One way to decrease the volatility in both supply and price in the transportation fuel market is to have more choices. Biofuels, such as ethanol, can be substituted for gasoline. With the current federal policies, experts predict that ethanol production will increase in the future.

Another way to diversify the biofuels market, is to advocate for diverse feedstocks for energy use. While scientists continue to research ways to make cellulosic ethanol from various biomass feedstocks cost effective, land owners and farmers will be making choices about their ability to diversify crop production cost effectively. Those decisions will include market readiness and availability, land productivity, capital investment needed for new crops (such as machinery to plant, harvest, and transport biomass), and economic conditions.

Resources:


Illinois Corn Growers Association: http://www.ilcorn.org/

National Corn Growers Association: http://www.ncga.com/

Renewable Fuels Association: http://www.ethanolrfa.org/


References:

