Who Will Feed the World?

Asian countries are making new food demands on world markets—and on Illinois agriculture.

Changes underway in Asia have important implications for Illinois agriculture. Increasing population, urbanization, migration toward the coasts, and affluence in that part of the world signal increases in demand for meat and processed food products.

Asia cannot produce enough feed grains to meet its growing animal needs. This scenario means that the future of food and agriculture in Illinois, a major feed-grain producer, is closely linked to economic and demographic changes in Asia.

Illinois will probably continue to provide feed grains for domestic and global markets. Less certain is whether increased numbers of livestock will be fed in Asia or whether Illinois producers will feed animals here for export. The more livestock are fed Illinois corn and soybeans and processed into food products here, the more the state’s economy should benefit. And, the more recycling of nutrients will occur here by returning manure to cropland.

By confining grain production to relatively flat areas of deep, productive, rainfed soils such in Illinois, more fragile ecosystems are spared harmful effects. The greater productivity of Illinois cropland, the less need to farm steep hillside and clear forests in other nations.

A Lesson from the Past

While in grade school in the early 1940s, my classmates and I visited the Union Stockyards and nearby packing plants to see the slaughter of livestock and processing of meat. Meat packing was Chicago’s principal industry and largest employer. Poet Carl Sandburg called Chicago “hog butcher for the world.” Chicago was cattle butcher for the world as well.

In the heyday of the stockyards, a daily run of 100,000 head of fattened cattle was not unusual, especially in the fall. Cattle were slaughtered and processed, the best cuts going on to eastern restaurants. As a typical Illinois farmer in the late 1950s and 1960s, I fed 100 to 200 head of cattle annually and shipped them to the “yards” for sale and slaughter. Illinois farmers then fed more cattle than any other state except Iowa.

At that time, some entrepreneurs built big feedlots in the west and fed cattle year round. Some had packing plants close to their feedlots. Some of those western feedlots fed thousands of cattle annually, purchasing all the feed and labor. Illinois cattle feeders, including me, thought those big feedlots would not survive long down cycles in the cattle market.

We were wrong. The big western feedlots enjoyed economies of scale. They hired migrant labor and professional managers. Their scale and vertical integration gave them better control over costs and quality and provided better access to big urban wholesalers and retailers. Within a few years, most Illinois farmers were no longer feeding cattle. The stockyards, packers, and Chicago’s meat industry vanished.

A New and Different Agriculture

Now more than half (more than 80 percent if you exclude hamburger) of the beef consumed in the United States is fed in the large western feedlots, some feeding over 100,000 head annually. They are successful in part because they can handle the logistics of feeding large, relatively affluent, urban populations.

We all enter grocery stores, make choices from among a bewildering array of products, and check out. The automatic inventory systems record exactly what and how much we select.

A powerful message from each consumer is sent back down each value chain to distributors, processors, and producers: “We want a very wide selection of high-quality, uniform, safe, clearly labeled, convenient, and affordable food and other agricultural products. We want it close to our homes in convenient stores with excellent service. If you can’t provide this, we will find someone who can.”

Apparently, firms such as ConAgra, Cargill, IBP, Tyson, and Perdue win the competition for large urban food markets. Through contract production, vertical integration, vertical cooperation, market coordination, and effective use of technology, they are revolutionizing agriculture.

Some people see this as industrialization, expressing great fears. Others see it as a better and more efficient way to organize the increasingly complex process of producing and marketing food.
What Is the Future of Illinois Agriculture?

Two years ago, North Carolina moved to second, behind Iowa, in swine production, pushing Illinois to third. Last year, Minnesota overtook Illinois, now in fourth place. On average, North Carolina’s hog operations are larger, more vertically integrated, and more closely attuned to customers than ours. Does this sound familiar, given the “yards” experience discussed earlier?

Can Illinois compete effectively for expanding markets for feed grains and animal products? Can we achieve and sustain a great increase in productivity so as to spare the fragile agricultural and natural environments of the world? Can we help supply Asia’s demand for animal products without spoiling our own living environment?

The combined forces of population growth, urbanization, growing affluence, and technological change are like a juggernaut bearing down on Illinois agriculture. We can neither resist nor get out of the way. We can get run over. Or we can hop on and ride. Better yet, with the right strategy, we can steer.

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