Agriculture is changing in response to many influences. Biotechnology is one of the most talked about and least understood of the changing forces. As a farmer, I read and hear about some of the newest innovations, most of which are as startling to me as reports of mechanical advances were to my grandfather or chemical advances were to my father.

Biotechnology by another name is agricultural research. And agricultural research is one major influence that forged U.S. farming and made the U.S. farmers, as producers, the envy of the world. There is always a need for more research. Still, the farmer’s basic role will not change. We have to provide food and fiber so society can function. It is predicted that the world population will double in the next 50 to 60 years, but the acreage of productive farmland will not keep pace. I suggest that this is a challenge and an opportunity, not a threat.

The world’s farmers are feeding twice as many people on the same total farmland acreage used in 1960. This has been accomplished with improved seeds, irrigation, fertilizer and pest control. Just as in 1960, farmers in the 1990s and beyond must produce more and better food if the expected demand is to be met. Jim Moseley, formerly of the U.S. Department of Agriculture (USDA), said that to do this, the world’s farmers will have to produce as much food in the next 40 years as we have grown in the entire 14,000-year history of agricultural production. U.S. farmers are up to the challenge. The U.S. will continue to export ever-increasing tonnage and dollar amounts of higher value products.

This movement toward increased agricultural exports is pushed by increasing demand from higher standards of living around the world, based on the recognition of the quality and value of U.S. farm products and the product enhancement done by agribusinesses. It is a change symptomatic of the term “industrialization.”

There are other movements—such as the decline in the number of farms—from 6.7 million in the 1930s to 2.1 million today. Included in these numbers is any place that sells $1000 dollars worth of agricultural products a year. To me, that is like calling a person a professor if he tutors one child, or calling a person a journalist if she sells one story a year. You could sell two steers or a dozen hogs or backyard garden produce and qualify as an official USDA-declared farmer.
Less than 400,000 of the 2.1 million USDA-recognized farms produce most of the food and feed grains, oilseed, livestock, dairy and poultry raised in the U.S. Long term, the number of farms continues to decrease, and per-farm acreage continues to increase.

Another, but not so well-known trend in agriculture is the increasing number of small, part-time farms. There are several reasons for this. Starting small is about the only way a person can enter farming without marrying or being born into the operation. Also, some people prefer a smaller operation—one with less financial pressure and worries. Others like the aesthetics of living in the country, farming a little but depending on outside sources for income. Urban investors are attracted by income tax advantages for real estate ownership, especially with the current fear of rising personal income and business taxes. Finally, small part-time farm numbers are increasing because some middle-sized farms are now being forced to down-size their operations to just hold onto the farm.

AMERICAN FARM BUREAU GOALS
The American Farm Bureau Federation has two goals to pursue as these changes continue. We constantly strive to increase net farm income and work to improve the quality of rural life. That way, we respond to the needs and desires of all of our farm and rural residents. Some in agriculture are more aware and more affected by industrialization than others. That is because certain sectors are more concentrated than others. Look, for example, at livestock. There are about 45,000 cattle feedlots in America today. About 75 percent of the fed cattle move through just 600 lots.

As a hog farmer, I hear coffee shop concerns about consolidation of our industry. About one million less farms raise hogs now than were in the business just 20 years ago. Some hog producers say we are going the way of the broiler industry—offering our buildings and sweat to the highest contract bidder.

Some states have enacted anticorporate farming laws to thwart the trend of piglet-to-pork chop integration, but the laws do not thwart the trend. Corporations planning to go into a large-scale hog business simply begin operating in states where they are welcomed as a job creator and a tax revenue source. The hog industry is paralleling the industrial path of poultry concentration. The 30 largest integrated broiler operations represent 80 percent of the chicken now sold in the U.S. The 30 largest integrated turkey operations produce 70 percent of the turkeys sold in the U.S.

NEW PROFIT PATHS
Despite this evidence of concentration, I believe individual farmers have a future in U.S. agriculture—if the proper policies are implemented and if we remain alert to market opportunities and consumer demands. The key is profitability. U.S. farmers will be more innovative and productive than can be imagined if the opportunity to make a profit is present. First of all, profit must be
available to those who remain engaged in what I view as traditional agriculture. Thus, the American Farm Bureau will work to ensure the future profitability of agriculture. Several avenues are now hailed as new profit paths for farmers as alternative uses of major farm commodities attract attention (e.g., ink from soybeans). In time, improvements will lead to greater use, requiring 100 million bushels of soybeans to meet annual demand. Likewise, ethanol from corn is becoming a profitable alternative use. Corn growers eagerly promote ethanol use since it provides an additional 20 cents to the farmer for every bushel of corn sold. Ethanol, produced from a renewable crop like corn, substitutes for nonrenewable oil. Crop-based, disposable products will not end up in a dump, but instead will be fed to animals or composted. Maybe something like a disposable plate would end up as the dessert. It is a matter of research and development. It is a matter of economics.

Ethanol, packing material and other industrial uses of corn could require 850 million bushels a year. Paints and fiberboard and medicines—you name it—could also contain farm products. Greater alternative uses will occur, will contribute to a farmer’s income and will offer other benefits.

Biotechnology is also hailed as a profit factor. Farmers will raise pharmaceuticals in specially bred cattle, human blood substitutes in hogs, or antibiotics in tobacco or lettuce or cherry tomatoes. Already we have transgenic plants that protect themselves from disease and insects and the use of recombinant growth hormones enhance milk and lean meat productivity. Many companies are hard at work developing slower ripening tomatoes, insect-resistant tobacco and herbicide-tolerant crops. Farmers will adapt and adopt—looking to the marketplace for production signs. Our goal as farmers is no longer to sell what we produce, but to produce what we can sell. We will be responsive to consumer demand whether it involves producing leaner meat or color-coordinated cabbage. We will deliver products aimed to please the consumer’s specific demands which could rapidly make obsolete traditional food grades and standards. America’s agribusiness powerhouse, including production agriculture, will be price and quality competitive with anyone, anytime, anywhere.

WORLD MARKETS
My remarks presuppose a worldwide arena that encourages and rewards growth, an arena that offers profits to those who best their competition. Markets must be open. Products must not be subsidized in a way that distorts trade. Let products, not national treasuries, compete. Consumers can and will decide a product’s merits with price and quality more important than a product’s national pedigree.

The American Farm Bureau was closely involved with recent world trade negotiations. U.S. farmers must be involved because exports are now vital to our bottom line. Foreign sales account for about one of every four dollars U.S. farmers earn. The elimination of unfair trade barriers would increase U.S. farm exports by as much as $8 billion a year.
More equitable trade with Mexico alone is expected to add $2 billion a year to our export sales. Trade with Canada improved after the U.S. and Canada signed a trade agreement in 1988. Since then, our agricultural exports north of the border have increased 125 percent. And Canada’s farm exports to the U.S. increased 25 percent. Farmers in both countries are better off, and so are consumers.

Similar gains could result from the successful implementation of the Uruguay Round of the General Agreement on Tariffs and Trade (GATT). The American Farm Bureau will work with the administration and U.S. Congress to get equitable international trading rules. We supported the North American Free Trade Agreement (NAFTA), even though some of our members believe they will be adversely affected. We are asking the U.S. Congress for safeguards to enable U.S. producers to adjust to new competition.

The American Farm Bureau’s role in all trade negotiations is to look out for the interests of U.S. farmers—all U.S. farmers. We know that limiting production just does not work. Other nations will happily grow what we will not. We are better off growing at full capacity and selling “the whole load” at a profit. With reduced barriers on our bulk products and increasing demand for our higher-valued farm goods, our export future is bright.

IN CONCLUSION
Industrialization presents many opportunities and challenges to America’s farmers. We will be alert to capitalize on those that offer the most promise. We are also alert to changes that are coming due to the “institutionalization” of agriculture, a topic for another presentation.

As farmers, we are seeing a steady erosion of personal freedoms, a growth of penalties in place of incentives, increased government spending and higher taxes, more costly environmental restrictions and more blundering bureaucrats. Farmers and other entrepreneurs, society’s creators and doers, are under ever-greater pressures. Only after we successfully address and remove these domestically imposed restraints, can we truly take advantage of the benefits offered by industrialization.