



8 Megatrends in Agriculture

USDA economist outlines a bright future for U.S. agriculture.

■ By Richard Keller, editor

Supply, demand and policy factors are all in place for more profitability in agriculture during the next 10 years, and more than we have seen in the past 30 years, said Mike Dwyer, chief economist and director of global trade, biofuels and food security analysis, U.S. Department of Agriculture, Foreign Agricultural Service.

Dwyer's outlook for the future was made at the Agriculture 2.0 Global Investments Conference held in New York City last fall. Dwyer provided a backdrop of facts, figures and opinions—along with more than a dozen presenters talking about sustainable and environmental agricultural investments.

He talked in terms of eight factors that are the megatrends going forward: “local economic growth, value of the dollar, worldwide biofuels production, role of trade and trade liberalization, policy errors by governments, energy prices, biotech developments and additional cropland. Some of these things are positive; some of these are negative, but the net takeaway is that the first four are the ones that are going to swamp the last four.”

He noted that agriculture did not fall into the economic downturn that the rest of the U.S. economy has been going through. “This says it all. The global economy will return to growth. The beauty of a recession is that they always end. You can't tell when and you don't know how bumpy the ride is going to be, but they do come to an end.”

WORLDWIDE ECONOMIC GROWTH

What is unusual about the current recession is that it is centered in the developed world. He said the developing world has actually been doing much better than the developed economies. He suggested countries like Indonesia and Vietnam have simply slowed their growth. “China basically just hit a speed bump, and India is doing very well,” he said.

Consumer incomes are rising and middle class households are expanding, especially in the large emerging markets like China, India and the rest of Southeast Asia, like we've never seen before.

Current middle class people don't buy much more

food with additional income, just more convenience and restaurant food, but with new middle class households in developing nations, “a large percent of that income gain is translated into more food, more protein, fruits and vegetables and processed foods—major impact on food demand on the up side,” Dwyer noted.

“We're looking at 234 million new middle class households between now and 2020 in China. That is bigger than the United States. We have only 330 million people, and how many people live in most households here—two or three? We are talking about a growth in their middle class that is already larger than our current middle class. India, number two, will be more than doubling, almost tripling, their middle class between now and 2020,” he said. “These are the countries that are going to be leading the import demand going forward or the food demand going forward.”

VALUE OF THE DOLLAR

The value of the dollar affects agriculture prices greatly, he said. “Anybody that follows agriculture knows that the value of a commodity is inversely related to the value of the U.S. dollar” because worldwide agricultural trade is “denominated” in terms of dollars.

“Global Insight, which is the outside economic council that we use, and many other private economists expect the U.S. dollar to decline over the long term. You are going to have fits and starts; you are going to get occasional periods of strength that are going to look like a head fake, but the basic fundamentals are in place for a dollar decline going forward over the next 10 years, which puts pressure on prices,” he said.

RESHAPING BIOFUEL PRODUCTION

Dwyer reminded the group about biofuels production and the world blaming “U.S. biofuels policy for causing the massive spike in food prices” during 2008. He pointed to the World Bank and the Food and Agricultural Organization of the United Nations' reports that discounted this theory about food pricing in 2008.



Biofuel in the U.S. is mainly ethanol from corn, and in the European Union, it is biodiesel from oilseeds. “Throughout the Western Hemisphere, the overwhelming majority of countries (developing and developed) have mandates in place that will increase demand for energy feedstocks, which is grain, sugar and oilseeds,” he noted.

Dwyer said the fastest growing agricultural export from the U.S. is distillers dried grains, a byproduct of ethanol production, which is displacing quite a bit of whole corn exports, and will continue to do so.

As Dwyer put it, “the fly in the ointment” could be new biofuels technology that quickly replaces corn ethanol. “You’ve got a third of the corn crop going into ethanol. If something happens—a disruptive technological breakthrough—it will be bad news for corn producers. We just don’t know.”

TRADE POLICIES

Dwyer was emphatic that “trade liberalization will increase as will trade.” He said, “Most people think when I’m talking about agriculture, I’m talking about wheat, corn and soybeans. The reality is global trade is only half in commodities. The other half is in what we call high-value products, which would be like fruits, vegetables, dairy,

meat and processed foods.”

World Trade Organization agreement is not likely to be a driver of trade liberalization, and negotiations appear headed nowhere. “We don’t meet with a lot of success because it operates under the rules of consensus,” explained Dwyer.

It will be Free Trade Agreements (FTAs) that will liberalize trade, it appears. He mentioned the U.S. has had slow congressional response to FTAs with Columbia, Korea and Panama while FTAs “are proliferating all over the world” between other countries.

Brazilian ag exports are increasing and will continue to be a big competitor to the U.S. Brazil has increased from about 5.5 percent of the global export market share in 2000 to 8.5 percent in 2010 from a handful of different commodities. “They are a developing country, but they are an agricultural super power. It is not just in soybeans; that is what everyone thinks about,” Dwyer noted.

CHALLENGING POLICY ERRORS

Policy errors are big problems for agriculture and feeding the world. Governments want to insure their people don’t go through food shortages and, therefore, place bans on exports. “It is understandable, but it is not defensible,” Dwyer claimed. “All it does is push those



Mike Dwyer

price pressures from the domestic market into the foreign market so that anyone relying on imports pays the price.”

It is also an indefensible position to tell a country “you don’t need to pursue self sufficiency; we will feed you” and have import and export bans disrupt supply.

Dwyer suggested that export taxes are a huge government mistake using Argentina as the example. With export taxes of 25 percent to 35 percent on agricultural products, the government is driving out investment in agriculture. The export tax is the same as a farmer being paid a quarter less than farmers in the rest of the world.

“My advice to you is for any country with a track record of making policy errors on a regular basis, you better be really, really careful in investing your money there,” Dwyer said. “Once you buy that land and a means of production, you are going to be there for the long term whether it is a good investment or a bad one.”

Dwyer also said, “One of the problems in the developing world is that it is almost a bad thing to be seen as making a profit from a basic human need—food. And if that is translated into policy, go elsewhere.”

He added, “And God help you if you have a dispute in a foreign court of law because typically they side with the domestic party.”

ENERGY COSTS

In developed countries, agriculture is an energy intensive business sector. When a farmer’s prices for products go up so do input costs almost invariably, and energy costs are one of those big input costs affecting other input costs such as fertilizer, chemical manufacturing and transportation.

He contends that the old saying “the solution for high prices is high prices’ is not really true. The solution to high prices is high profits.”

BIOTECH ACCEPTANCE

“Biotechnology is not the problem, it is the solution. The yield growth that you get with biotechnology is superior to non-biotech,” Dwyer contended.

Even with all the talk about imports by China, in actuality the European Union is the world’s largest ag importer, Dwyer said. “If you want to sell to the EU, you have to follow their rules, and they have operated under something called the precautionary principle, which in essence is when in doubt keep it out,” he explained.

Because Africa relies enormously on the European Union to take its agricultural exports, they have not adopted biotechnology in Africa largely because of what it would do to their export markets. “It is kind of a shame. They missed the Green Revolution, and they are going to miss the Gene Revolution,” he said about African agriculture.

“Our position is that sound science should be the only criteria. If you’ve got science to back up why a variety is not

safe you have the obligation to protect your population but not to just act on fear,” Dwyer said in September, somewhat of a stronger statement in support of biotech than the USDA seems to be advancing since December.

MORE LAND IN PRODUCTION?

Dwyer is confident that new land will come into production as agricultural prices stay high for the next 10 years, but where will this land come from is the question. He noted the obstacles to overcome for profitable production have to do with costs of transportation, storage, infrastructure and marketing to the world.

“Today, we talk about Brazil with issues of getting production out of the center west area of the country. If you think those costs are bad, look at Africa; it is almost debilitatingly difficult to get stuff into global markets out of Africa.”

A World Bank study released in the summer of 2010 shows the potential availability of uncultivated land globally that could be cultivated in the future. In the case of Latin America and the Caribbean, it is 123 million hectares.

“To give you a feel for that number, we only produce 250 million acres or 100 million hectares in this country for all of our program crops—wheat, corn, cotton, soybeans, rice, everything combined. There is another 123 million hectares that could be cultivated in the Western Hemisphere in South and Central America, of which 76 percent of that land is within six hours or less of market.

“More land is available in Africa than the Western Hemisphere. The problem there is that only 47 percent of that land is within six hours or less of market. How about Asia? This is where the most demand in growth is being generated, including China and India, but only 15 million hectares are available. In fact, if you are familiar with the China story, they are losing land to desertification. The desert is literally encroaching on farm land. They have issues with water in China, and they have a rising population that wants to flush toilets and take showers; in other words, they are competing for the water supply. They have only 15 million hectares that they could bring on line anyway. I think what is going to happen is that this is going to be ground zero for demand and ground zero for supplies coming from Central and South America.”

Dwyer concluded with a comment that investors should consider all eight of his megatrends, which will show the U.S. is the best place to be an agricultural producer. “This has to be the most receptive country in the world for agricultural investment.” **AG**

