PolicyPennings by Dr. Daryll E. Ray

Will meeting food needs in 2050 be effectively addressed or be more of the same?

The current situation in production agriculture reminds one of the writers of this column, Harwood, of a question he often heard in his former profession as a country parish pastor. The question: "Is there a shortage of clergy to serve the churches?"

His answer updated for today goes like this. There is a surplus of clergy who want to serve suburban churches that pay $55,000 per year plus a generous housing allowance and that have a staff to carry out youth work and visitation of the elderly.

At the same time there is a shortage of clergy who are willing to serve rural churches in which they are the only staff person-they have to type their own bulletin-and they earn $25,000 per year and, perhaps, have a parsonage to live in.

Let's now take those ideas to the topic of agricultural production. Is there a shortage of agricultural production in the world today, and, come 2050, when the world adds 3 billion people to the current population, will we be able to feed everyone?

Among the developed countries, including the major crop exporting countries of Brazil and Argentina, there is the capacity to significantly increase production to the point that crop and livestock prices will sit in the basement.

At the same time, unless there is significant farmer and government investment in agriculture and the development of agricultural policies that pay attention to the needs of small-holder producers in the developing countries of the world-especially in Africa-, the population in those countries will continue to suffer from high levels of chronic hunger and an increased number of deaths of children under five. The poor in developing countries simply cannot afford to buy the excess production of developing countries.

What we have are two distinct problems that require different solutions, and yet at the same time are linked together.

In recent columns, we have discussed policies that we believe will lead to increased food production and food security in the least developed and most food-insecure countries of the world.

In this column we want to talk about the other side of the problem-the ability of farmers in the developed countries to increase production at a rate faster than the increase in demand, leading to prices that fall to levels well below the cost of production.

One of the current examples of this is the dairy industry. With weather problems that led to reduced milk production in New Zealand and Australia, prices began to rise as importers began to look for alternate sources of cheese, butter, and dry milk powder. US producers responded to the increase in demand by ramping up production to meet what they saw as a growing export market. Meanwhile, a booming US economy sustained a steady increase in demand for milk and cheese.

With high milk prices, dairy farmers were able to cover the increased cost of feed grains, and diary farms showed a handsome profit.

Then more favorable weather returned to New Zealand and Australia, and their milk production recovered. At the same time, the US economy took a nose dive, triggered by the mortgage crisis, among other factors, and domestic demand tightened up. Suddenly there was more milk, cheese, and dry milk powder than the market could handle, so prices took a major tumble.

Because of a wet year with late planting and a killing frost arriving before the corn crop was at physiological maturity, grain and oilseed prices remained high. These events combined to put dairy farmers in a serious bind as the price dairy farmers were being paid for their production fell well below the cost of production. As a result, they were losing a bundle on each hundredweight of milk they sold.

Presently, dairy farmers have funded a diary herd buyout in an attempt to adjust production capacity to demand at a price that allows them to regain profitability. It may take an additional herd reduction to achieve that goal.

While developing countries have the challenge of increasing agricultural production, and thus the livelihood of a mostly rural population where farming is the only available occupation, developed countries face the problem of managing productive capacity.

It turns out that in developed countries it is relatively easy to increase production. Dairy farmers can take advantage of a technology that sorts semen so that cows give birth to 90 percent heifers and 10 percent bull calves instead of the usual 50-50. Using that technology, the size of the dairy herd can be increased quickly.

Likewise, the technology that is being bred into seeds today allows farmers to grow a near record yield corn crop under the terrible growing conditions we have seen this year.

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Given a positive price signal from either exports or domestic demand, agricultural producers in developed countries can ramp up production quickly to meet the new demand. As we see from the low prices in the dairy industry, easing off production to a profitable level is much more difficult.

While each farmer has an incentive to increase production when prices are high, an individual farmer has little reason to be the one to reduce production when prices are low. Instead, the farmer hopes either for a return in demand or a decrease in production by farmers somewhere else.

Given this situation, we read some sage advice from Ohio State University Extension dairy economist Cameron Thraen. He said, "When you see milk prices move up quickly, you need to be prudent with what you do with that extra income. First thing you do is get your financial house in order, You don't look at it as if it's going to last because it doesn't. You are going to have these boom and bust periods and during the boom periods you should follow sound financial advice, pay down debt, and build a cash-flow cushion."

He went on to say, "If the industry wants to be a part of both domestic and international markets you need to be ready to accept more price variability. International markets are more volatile than domestic markets. You have to be thinking of management strategies to implement when that international partner walks away and you are stuck with a supply with not enough demand to support it."

We couldn't have said it better ourselves.

Another point to ponder: much of the unbridled-increase-production emphasis being promoted to solve the food security concerns of today-but especially the concerns for tomorrow-may end up throwing a blanket of chronically low prices on commodities produced primarily in the developed world while continuing to aggravate the productivity problems of small-holder producers in the developing world.

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