Growing world markets absorb U.S. farm output

WASHINGTON, D.C. — The world's growing appetite and its increasing dependence on American farmers will probably match any expansion in U.S. agricultural output during the next two decades, says USDA trade analyst Patrick O'Brien.

Foreign dependence on the U.S. has been rising since the end of World War II, but dramatic yield gains and increased acreage allowed U.S. crop production to more than keep pace. In fact, U.S. agricultural capacity for exceeded food demand for most of that period.

However, in the early 1970's, this trend began to reverse itself. Rising world demand for grain forced the U.S. to commit most of its once-excess resources to meet world needs. Foreign demand for U.S. agricultural products grew almost 9 percent per year, while U.S. agricultural output increased 2.8 percent per year.

From 1970 to 1980, U.S. agricultural exports rose from 62 million metric tons to 164 million tons. At the same time, the demands on U.S. cropland increased dramatically.

According to O'Brien, by the end of the 1960's foreign demand required the production of about 1 U.S. acre out of every 5 planted, or 14 percent of total marketings. By the end of the 1970's, exports accounted for 1 out of every 3.5 acres planted, or 30 percent of total marketings.

As a result, between the markets at home and abroad, there was a buyer for nearly every kernel of grain produced.

O'Brien concludes that world demand for U.S. farm products and its impact on U.S. agriculture over the next few decades "will be far more similar to the turbulent middle and late 1970's than to the previous 25 years."

More People to Feed

The ability of the U.S. to keep up with the world's growing appetite is being challenged by the rapid increase in population.

"Foreign population has increased 75 percent in the last three decades. This unprecedented growth in the sheer number of people to be fed has generated two-thirds of the increase in world demand over the same period," O'Brien says.

Although the rate of growth is expected to slow during the 1980's, world population is still expected to increase more than 50 percent in the next 20 years — from 4.2 billion in 1980 to nearly 6.5 billion by the year 2000.

Additionally, there is the rising demand in both developed and developing counties for improved diets, with more meat, eggs, and milk.

"If U.S. agricultural production expands fast enough to meet the anticipated growth in export demand, our agricultural sector will have to run closer to capacity than at any other time," O'Brien says. "Significantly more of our agricultural and nonagricultural resources will have to be used — and used more intensively — to produce food."

Within Our Capacity

O'Brien estimates that the demand for U.S. grains and oilseeds could increase from the 370 million tons per year at the end of the 1970's to nearly 440 million tons by 1985.

This projection takes into account the known potential for increasing production abroad. In short, most other countries of the world face problems in expanding production similar to those in the U.S. These problems include rising energy and input prices, limited availability and additional prime land, constraints on further expansion of irrigation, and limited funds to meet rising capital investment costs.

For these and other reasons, current indications suggest that consumption needs in the rest of the world will grow faster than foreign production. The resulting gap will have to be filled by imports from the U.S. and a handful of other exporting nations.

Meeting this growth in demand may call for an annual rate of increase in U.S. grain and oilseed production of roughly 3 percent, O'Brien says. This would be equal to the annual rate of increase achieved in the late 1970's.

But, have we exhausted our capacity to increase agricultural production at this rate?

Unlike many observers who conclude that we have, O'Brien says, "The combined acreage and productivity gains needed to expand output 3 percent per year by the late 1980's are certainly within our physical capacity."

He cites a Soil Conservation service study which found 413 million acres of U.S. cropland, of which only 360 million acres are currently being used to grow crops. In addition, another 127 million acres of U.S. soil are classified as potential cropland.

In light of the figures, O'Brien says that if all goes well, "We may have physical capacity well in excess of anticipated demand through the end of the century."

Higher Farm Prices

In order for farm production to keep up with demand, monetary incentives for growers must keep pace with the increasing costs of production — energy, fertilizer, and labor.

After adjusting for inflation, "real prices" received by U.S. growers would have to increase nearly 1 to 3 percent per year, compared with "real price" declines averaging 1 to 2 percent a year over the last 30 years. This will be imperative if farmers are expected to increase production, O'Brien says.

Also, our marketing and transportation facilities will need extensive improvements to handle large volumes of crops. "By the mid-1980's, the volume of products moving through the marketing system could reach as high as 755 million tons, compared with an average of 560 million tons in the 1970's, and 450 million tons in the 1960's," O'Brien explains.

While growing export demand will bolster U.S. farm inceomes, consumers could face increases in food prices unless higher farm commodity prices can be offset by increased productivity in food processing and marketing.