PolicyPennings by Dr. Daryll E. Ray

## China's meat consumption and production trends

For more than a decade, increasing meat consumption by the Chinese middle class has been the great hope of feed grain farmers around the world as they struggled with prices that were below the cost of production.

Today the increasing taste for meat by the middle class in China has been used as a partial justification for the surge in crop prices over the last 19 months.

With all of the attention this issue has been receiving in the general press, we decided to take a look at the numbers and see what they tell us. While the Chinese eat a wide variety of meat animals, we are confining our analysis to pork, broilers, and beef.

Of these three, the most widely consumed meat is pork. In 1990, pork accounted for 87 percent of the major meat consumption at 23 million tonnes. By 2007, the consumption of pork had increased to 45 million tonnes while pork's share of major meat consumption had declined to 69 percent.

All of this increase in consumption has been met by domestic production. In 1990 China exported 235 thousand tonnes-1 percent of production. In 2007, Chinese pork exports had declined to 152 thousand tonnes-three tenths of 1 percent of production.

Broiler consumption increased by nearly fivefold between 1990 and 2007. In 1990, broiler consumption was 2.4 million tonnes and China exported 21 thousand tonnes. China was a net importer of broiler meat-124 thousand tonnes-in 2007 with consumption at 11.5 million tonnes. China was a net importer of broiler meat for 13 of the last 18 years.

Broiler consumption stood at 9 percent of major meat consumption in 1990 and had increased to 20 percent in 2007.

Beef also increased its share of major meat consumption growing from 4 percent in 1990 and reaching nearly 12 percent in 2007. The total consumption of beef increased from 1.1 million tonnes in 1990 to 7.4 million tonnes in 2007. While

consumption rose over this period, exports fell from 155 thousand tonnes to 76 thousand tonnes.

Okay, that's a lot of numbers. Boiled down, what does it all mean?

As far as meat consumption goes, the conventional wisdom is correct. China has increased its consumption of meats at a rate well above the rate of population increase.

Total consumption of pork, broilers, and beef increased by 142 percent over the last 18 years, well ahead of the 16 percent increase in population over that same time period.

Pork continues to be the most consumed meat but the consumption shares for broilers and beef have increased considerably between 1990 and 2007 (from 9 to 20 percent for broilers and from 4 to 12 percent for beef).

That's consumption, what about production? China produces virtually all the meat that is domestically consumed, and then some. In fact, China was a net meat exporter for the last 7 years and 14 of the past 18 years.

For farmers in the US and world-wide, the crucial question is what impact these Chinese meat trends has had, and will have, on the markets for grains and oilseeds.

In the coming weeks we will look at that question in light of the expectation that increasing Chinese meat consumption will have a major positive impact on world grain prices in the coming decade.

We will also look at whether or not the current spike in crop prices can, in part, be laid at the door of the Chinese middle class.

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