

PolicyPennings by Daryll E. Ray & Harwood D. Schaffer

China's agricultural future: Adopt US developed technologies

As the most populous nation on Earth, China has intermittently been seen as the solution to the problem created by the ability of US farmers to produce more than they can sell at a profitable price. Sometimes the discussion is focused on cotton; at other times it is corn or soybeans. Today, it is pork—on the hoof that is.

A recent Reuters article, <http://www.reuters.com/article/2012/04/20/us-usa-china-food-idUSBRE83J05R20120420>, provides an explanation for the surge in the import of live pigs into China. From 2002 to 2007, China imported a total of 13,000 head of swine, while from 2008-2011, live swine imports totaled 39,000 head—15,000 in 2011 alone.

According to Reuters, China is importing breeding swine, “capitalizing on decades of cutting-edge US agricultural research.” Presently, “the focus on livestock genetics also represents an emerging economic bonanza for two of the most powerful American industries: technology and agriculture. Worldwide, the United States exported a record \$664 million worth of breeding stock and genetic material like semen.” Depending on the species, the advanced genetics provides farmers worldwide with better daily rates of gain, better feed conversion rates, and larger litters.

While this market is lucrative for farmers who specialize in producing breeding sows and supplying semen from productive animals, it has long-term implications for US meat and grain producers.

As US per capita consumption of red meat has declined over the last decade, exports of pork have nearly quadrupled, and beef exports have recovered from the BSE event. This increase in exports has provided a bright spot in an otherwise stagnating market.

With potential major markets like China purchasing, not animals for slaughter, but animals with all of the best genetics the US has developed, the future potential of that market begins to look somewhat limited as the Chinese begin to gear up to move hog production out of the backyards of millions of farmers and into modern high-production facilities like those used across much of the US.

A separate Reuters article “China's voracious appetite spurs farm expansion,” <http://www.reuters.com/article/2012/04/20/us-usa-china-food-factbox-idUSBRE83J05V20120420>, lists 10 firm in China, some with links to the US meat industry, that are gearing up to use the imported genetics to increase their production and slaughter capacity to meet the growing Chinese demand for meat which has increased

by 10 percent over the last five years. These 10 firms represent both producers of hogs and large-scale meat processors.

Even if the US can continue to increase its meat exports to China in the near future, this all-out emphasis on domestic production by the Chinese has to put a damper on the potential for US meat exports. And there is no guarantee that with this genetic jump-start from the US, the Chinese will not develop their own genetic research teams, reducing the need for imports of this valuable material.

The Reuters article points out that all of the chickens and hogs in China will need corn, providing a potential boon for corn and soybean farmers. As Mike Phillips, president of US Livestock Genetics Export in Salem, IL is quoted in the first Reuters article, “Genetics and nutrition go hand-in-hand.... The more they use our genetics, the more they're going to need to import corn from the US and elsewhere.”

The usual assumption on the part of US grain producers is that they will be the major beneficiary of such developments. While there may be some benefit to US grain farmers in the increase in Chinese demand and production of meat there is more to the story.

Between 2001 and 2011, the increase in the US corn yield was a paltry 6.6 percent due to weather-related yield loss over the last 2 years. China on the other hand has seen yields increase by 22 percent over the same period. In addition while total US corn production has increased by 30 percent over that same period, Chinese production has increased by 68 percent. Clearly the Chinese are going to be grudging importers of corn but, as applicable, eager importers of US corn genetics.

But competition for supplying Chinese corn demands is not limited to just Chinese farmers. Farmers outside the US and China have increased their production of corn by 46 percent over the 2001-2011 period. At the same time the farmers outside the US and China have seen their corn exports triple. Where their corn exports were once (in 2001) just a third the size of US exports, in 2011 they were 23 percent higher than US corn exports.

As US corn farmers have hustled to meet the demands of a growing domestic corn ethanol market, farmers outside the US and China have gained a dominant position in the export marketplace.

The agricultural technology that gave US farmers a competitive advantage for many years is now spread-

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ing worldwide. And while the sale of that technology may continue to benefit a small numbers of farmers and agribusinesses, it also means that most US producers of meat and grain face an increasingly competitive worldwide agricultural marketplace.

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