

China: Our knight in shining armor or . . . ?

For a quarter of a century we have desperately clung to idea that exports are the future of crop agriculture. While a persuasive case can and has been made in support of that idea, the long-promised sustained growth in crop exports has not materialized. The total volume of exports of grains and oilseeds has been flat for over 20 years while domestic demand has increased steadily.

For the last decade, China has been seen as this mysterious Knight in Shining Armor who will finally make-good on the export promises made to U.S. farmers over a generation ago. I hope that comes to pass. But I doubt it will.

I do not think that China wants to be dependent on the U.S. for a significant portion of its food. After all, China is a country that keeps in storage over 50 percent of their annual needs of corn and wheat.

China is likely to do what this country and many other countries have done in a similar stage of development: invest in agricultural research in the hopes of expanding her ability to produce for home, and, if possible abroad.

In addition to spending on agricultural research, China has a need to transform its agriculture into more productive size units and to improve the agriculture's infrastructure including the functions normally provided by agribusinesses. There are numerous indications that China is doing all these things and more.

A November 22, 2002 article in China's People's Daily announced that "the findings of a team of Chinese scientists with regard to the precise sequencing of rice chromosome four" was recently published in the British science journal "Nature." The work of the Chinese scientists is a part of a larger effort by eleven nations including the United States to determine the precise genetic makeup of all 12 rice chromosomes.

In making the announcement, People's Daily noted that determining the genome sequence in rice "could in turn provide the basis for the genetic breeding of high-yield and pest-resistant rice."

Li Xueyong, a vice minister from China's Ministry of Science and Technology is quoted as saying that this scientific advance "will speed improvements in nutritional quality, crop yield and sustainable agriculture to meet the country's growing needs.

But the investment in yield/production increasing technology did not begin with and does not end with the sequencing of the rice genome. As we have reported before, researchers at Shandong University under the leadership of Prof. Chen Huimin announced the development of a strain of wheat that can successfully be grown in saline-alkali soil of which there are large areas in China. It is reported that the hybrid wheat yields 111 bu./ac with protein levels of from 17.7 to 20 percent.

In addition, China is gaining access to the equipment needed to move their agriculture from a small field, low tech operation to the industrialized model. John Deere already owns 51 percent of a tractor factory in Tianjin China and has plans to turn out 9,000 55, 60, and 75 horsepower tractors annually.

Not to be left behind Cargill is busy making sure that Chinese farmers have access to high quality fertilizer as they provide leadership in the modernization of China's fertilizer industry. To help use the fertilizer as effectively as possible Cargill is also making the latest precision agriculture techniques available to its Chinese customers.

And when the crop has been produced Cargill is there with feed plants in seven provinces not to count the oilseed processing facilities and a high-fructose corn-syrup refinery.

I hope China will be our Knight in Shining Armor, and yet I can't help but think that China did not join WTO so she could become dependent upon food imports (to be able to use the threat of world competition as the rallying cry to convince rural residents that the pain of transforming their agriculture is essential to China's food security maybe, but not so that she could import more agricultural products from the U.S.). In my mind, China is most likely laying the foundation to make the Chinese agricultural sector one of the most productive in the world.

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