APAC Agricultural Policy Analysis Center
The University of Tennessee

PolicyPennings by Dr. Daryll E. Ray

# Brazil is BIG in terms of production growth and potential

*From February 8-18, 2006, Daryll Ray and Harwood Schaffer were a part of a research/study tour led by Robert Wisner, University Professor, Iowa State University. The nine person group studied the various factors that affect Brazilian agricultural production, processing, and marketing, with a focus on soybeans. This column is one in a series describing their trip.*

What you have heard about the mammoth increase in production in Brazil during the last decade is either correct or more staggering than you thought. Ditto for their potential growth in the future.

Agricultural production in Mato Grosso, the major agricultural growth area of Brazil, is a part of a long range economic development process that began with (1) a subsistence economy 30 to 40 years ago. The succeeding steps are (2) primary production, (3) establishment of value-added industries, (4) industrial diversification beyond agricultural products, and (5) export activities. At the present time they see themselves in the third stage of developing value-added industries like ADM's soybean crush operation and the Feltrin's prototype biodiesel plant.

Much of this information was provided in a presentation given by several members of Famato, the Mato Grosso Federation of Agriculture. This is a farmer-based organization that provides production and marketing information for those living in Mato Grosso.

The growth in Mato Grosso's agricultural production in the last decade and a half have been phenomenal with the planted area increasing from 4.7 million acres in 1990/91 to 21.1 million acres in the 2004/05 crop year, more than a four-fold increase. Production grew at an even faster six-fold rate due to increasing yields in addition to the area increase.

This growth is a major reason why Brazil ranks first in the world in the export of soybean complex (the sum of soybeans, soybean meal and soybean oil). Over 60 percent of Mato Grosso's soybean production heads to the export market.

At present 99 percent of all of Mato Grosso's world exports are from agricultural and cattle production with soybeans accounting for two-thirds. The largest importers of Mato Grosso's agricultural products are China, the Netherlands, Italy, Iran, Spain, Thailand, and Germany. In 1991 exports were valued at 224 million US dollars. By 2005 this number had jumped to 4.2 billion US dollars.

The most dramatic number came when they pointed out that the state of Mato Grosso contains 222 million additional acres of land that are suitable for crop production after allowing for grasslands, native forests and environmental reserves. This number, nearly equal to total US cropland, does not include the potential of other Brazilian states.

The problems they face in bringing this area into production include factors that we had previously heard described: Asian Soybean Rust, transportation problems, and lack of storage capacity. In the same period that agricultural production increased 125 percent storage capacity only increased 5.7 percent.

In terms of transportation, Brazil has slightly fewer miles of railway than they had 80 years ago with an increased demand. Unlike in the US, many rural areas have no rail access including most of Mato Grosso. In the 1990s, the total miles of paved roads increased at an average rate of 1.38 percent per year. Brazilian federal investment in road construction has declined from 2.3 percent of Gross National Product (GNP) in 1987 to 0.4 percent of GNP in 2003. In addition, the average truck on the road is 17.5 years old with most of that driven over poor quality roadbeds.

In the afternoon we flew to Londrina where we visited a virgin timber park that allowed us to see the pre-development condition of the area. Appropriately, during this visit to the rain forest it rained. The weather quickly cleared up and clear skies and pleasant temperatures resumed as we returned to the hotel.

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