## **COLLEGE OF AGRICULTURAL, CONSUMER AND ENVIRONMENTAL SCIENCES**



COOPERATIVE EXTENSION SERVICE • VOLUME 67 • June, 2021

## Brazil.... A country to watch

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Often time's people get caught up in their day to day lives, working hard just to make a living in agriculture here in the United States. Getting a global perspective allows us to see our industry from a different perspective, gain knowledge, and get a real feel of "the competition". In August of 2019, the New Mexico Department of Agriculture hosted their second Agricultural Innovation and Trade Mission trip. Funded in part by the Healy Foundation of New Mexico, this program helped a group of producers, NMSU faculty, and members of the New Mexico Agriculture Leadership program to learn more about some of the agriculture systems in Brazil.

Data showed in 2018, Brazil ranked second in beef and soybeans, and third in corn exports (app.fas.usda.gov/pdsonline/, 2018). In just two short years, this country has now become the leader in beef, soybean, sugar, coffee, and orange juice. They are also rapidly gaining ground on corn production and export volume, now ranking second globally behind the United States.

Getting out to the country and seeing their beef and crop systems, it is easy to see why Brazil is a country to watch. The primary region for both row crop and beef production is in the state of Mato Grosso. The state covers an area twice the size of Texas and is made up of predominantly pasture lands. Mato Grasso receives an average of 53" of rain per year. These conditions allow for maximum production with the help of technology.

With appropriate fertilization of the soil, producers there can have two to three cash crops per year: one corn, one soy, and one cattle. They grow grass in between the rows and finish steers on the residue/grass mixture. They also take advantage of the rapidly growing eucalyptus tree. In pastures they will grow the trees for shade for cattle and are able to harvest mature trees every five years. The lumber is then used to fuel their large and rapidly growing ethanol industry.

The ethanol industry is unique in Brazil. The industry has grown over 500% in since the oil crisis in the mid-1970s. As a result, over half of the vehicles driven in the country today run on pure ethanol. They have the ability to rely on sugar cane as an energy source. Very little of the byproducts from this process are used for livestock feed. Rather they go into making "bio electricity" and recycled energy back into the plant.

The beef industry in Brazil is unique as well. They utilize animals best adapted for their environment. The dominant breed in the country is the Nelore; a large framed Bos Indicus breed that can withstand the heat and humidity of the climate. Most are finished on pasture or "almost feedlots", that are made up of small paddocks with a bunk line. The stocking rate of these paddocks range from 3 to 5 head per acre. The feed is a high concentrate mix, with minimal roughage.

Producers in the country realize in order to become more competitive with the United States, they need to improve their beef quality and production efficiency. Ranchers are now incorporating more English breeds into their cow herds. Angus is the primary breed used in these crosses, with Hereford being the second.

They currently do not have a true quality grading system. Therefore, the country is developing a Brazil Beef Quality Program. This BQA will be a step towards a more specific grading system. Brazil's beef industry also intends to increase in the number of traditional feedlots. By combining new genetics and grain-based rations, their beef quality will likely more closely reflect that of the U.S.

With a strong export potential seen in soy, corn, and cotton, there is a push to convert pasture to farmland. It was made clear multiple times during the trip that the expansion of farming was not at the expense of Amazon forest. There are regulations put in place that if you farm or ranch on key areas, you are required to reserve 35% of your land for preservation. If you are a new landowner or are closer to more sensitive areas, that conservation rate increases to 85%.

"Cattle ranchers are ruining the rainforest" has been an ongoing narrative in Brazil. As it was explained to our group, any deforestation taking place is being done by "land thieves". They move into indigenous territory and simply start to farm it. This is highly illegal in Brazil but will be an ongoing challenge for the country with such promise in the agriculture industry there.

Brazil's agriculture industry is less than 50 years old. In that time, they have been open to new technologies that have allowed them to grow at a staggering pace. At the same time, they are sensitive to their export customers. Their recourses allow them to cater to markets that want grass fed, hormone free beef. Many cattle are reaching finishing weights under the 30 months of age benchmark, making them eligible for export to the EU and China. The only thing stopping this freight train is their own logistical system and infrastructure. Economically, Brazil is not in a financial position to take care of this issue anytime soon. However, other countries like China, and large companies like ADM are willing to invest to see that Brazil's agriculture continues to move forward.

Of more concern is the Brazilian owned company JBS and its subsidiaries. This company currently controls 23% of all meat processed in the United States. They also own some of the largest feedlots, swine, and poultry operations in the country. This company was recently in the news for a cyber-attack on their slaughter plants. This crippled the entire meat production supply chain for the days it was unable to function. This level of involvement in the U.S.'s food supply has resulted in empty shelves and dramatic price increases in the meat case. Even prior to the attack, several beef cattle organizations met to discuss their concerns of the monopoly structure of the meat packing industry. The goal was to get members of congress and the department of justice involved to establish a more equitable and fair market structure.

The United States can still boast having the most efficient meat production systems in the world. The beef industry has increased total production with fewer animals, reduced emissions, and reduced the overall carbon footprint within their system. Fortunately, Brazil still has many steps to take to meet this level of efficiency. However, being aware of global competitors is vital for the U.S. to remain competitive.

## **UPCOMING EVENTS**

Dairy Consortium May 17 – June 25

New Mexico Youth Ranch Management Camp June 13 – 18

Water Conservation on the Ranch Webinar June 24 <a href="https://aces.nmsu.edu/county/mora/water-conserve.html#anchor">https://aces.nmsu.edu/county/mora/water-conserve.html#anchor</a> 227896

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