

We can sell more beef—Dan Thomson, PhD, DVM

Introduction: How Did We Get Here?

My title may sound like economics or the discovery of more markets for beef products. But, in reality, it is about sustainability in our beef industry and reclaiming market share we have lost in the US over the years. In my work with McDonalds Corporation, I have been lucky to work with Mr. Bruce Feinberg. One day he told me that I needed to quit thinking about consumer and retail demands on our industry as an audit, punishment, or criticism. But rather, start thinking that if we make continuous improvement in the field, our retailers have the messages to sell more beef.

I have been fortunate to be involved with agriculture and veterinary medicine my entire life. I lived through the 80's when we lost so many farms. We witnessed the consolidation of the swine industry from small herds to large integrators. While I was an undergraduate we focused on genetic improvement and as a graduate student we had the advent of metabolic modifiers.

In the 1990s food safety, E. coli, Jack in the box, and HACCP in packing plants were a focus, but until the big Conagra recall in 2001-2002 we did not see pre-harvest food safety action take place in the feedlots. Also during the early 2000s, the animal welfare era, factory farms, and animal rights groups kicked up. We experienced animal health and disease outbreak with BSE, FMD, avian influenza, porcine epidemic diarrhea and more. Over a decade or so, the natural/organic labeling and specialized grocers increased, bringing debate on technology in agriculture. GMO feed and antibiotic usage have been front and center as of late. Human resource issues and keeping rural America's mainstreets and schools open have been topics over the last 40 years. And now, traceability of beef products and plant-based proteins are challenging our industry.

All of these events had an impact on sustainability of livestock systems. They made us balance the issue at hand with all others in concert to figure out how to feed the world. Constant monitoring of all variables is imperative and we can not let a single agenda, mission, or issue to define sustainability.

What is Sustainability?

The dictionary says sustainability is the ability to be sustained, supported, upheld, or confirmed. It is mostly tied back to ecology, the planet's health, and environmental indicators. However, it means different things to different people depending on where you sit. Is it the sustainability of humankind? Is it the sustainability of the people in your country? Your individual commodity industry? Is it your corporation's sustainability? How about the sustainability of your household spendable income? Do you practice in your personal life what you represent in your professional life? Do you drive a hybrid, eat too much, have kid skip the YMCA league to be on a traveling basketball team? Sustainability of livestock production has individual, operation, local, state, national, and international definitions and for every complex problem there is a simple answer and it is wrong.

We must eat. Agriculture is necessary. Livestock systems are necessary. So, ag sustainability is important and necessary for humankind sustainability. Sustainability is measured by outcomes such as profit, performance, mortality, green houses gasses, food security etc. But, agriculture sustainability could be measured by human health as well.

Balance and Monitoring: Nothing Lasts Forever

"Life is like riding a bicycle. To keep your balance you must keep moving." Albert Einstein

Sustainability and industry evolution are balances. They never sit still and they are complex. Antibiotic usage, food safety, food security, environmental stewardship, animal health, human health and so much more must be measured constantly and kept in balance. Sustainability should not be audited as pass/fail but rather constantly tracked for continuous improvement of sustainability key performance indicators which are moving targets.

A quote from a paper from the National Academies of Science written by Mario Herrero and Phillip Thornton¹ says, "Recent global assessments have considered particular elements of livestock and livestock systems, but none addresses such systems and their considerable variations in a comprehensive, integrated way. This has led to inaccurate simplifications of the messages surrounding how to manage the livestock sector's growth in the future. The lack of a systems perspective has also curtailed explorations of more sustainable options for the sector's development. This needs to be rectified. Global change will have highly differentiated impacts on food, livelihoods, and ecosystem goods and services from livestock systems around the world."

The livestock industry must practice brutal honesty. In Wheeler's book² *Understanding Variation: The Key to Managing Chaos*, to change an outcome you must change the process, distort the process, or distort the data. What are the real time signals we can use to monitor our industry sustainability beyond supply and demand that help us understand where to improve to remain in business? In other words, which operations are utilizing the correct management practices with the right genetics to remain in business in the future. We can't quit learning. We can't quit improving.

The more I read about sustainability, globalization and climate change, more I am certain that the environment changes will have more impact on the production of livestock than livestock production will have on environmental change.

Sustainability could be a holistic view of production systems and technology adaptation. There are many examples of balancing sustainability indicators directly and indirectly related to livestock production. In turn, these indicators can be used by retail to market more beef to our consumers. Sustainability is a balance between playing defense and offense. Our industry has been too defensive minded for too long.

- Animal health and food safety
- Animal growth efficiency and animal welfare: animal housing, factory farming perception, slow growth
- Intensive agriculture and animal health: Bovine respiratory disease, liver abscess and bloat, water
- Extensive agriculture and animal health: Avian influenza, PED, prey
- Extensive agriculture and reliance on weather: drought, blizzard, etc.
- AB usage and human health/animal health: antibiotic usage, antibiotic resistance
- Food safety and security: safe, wholesome, nutritious, affordable, available

Marketing of Sustainability Indicators

Anthony Robbins as self-help guru of the 1980s said, “The two things that drive people are fear and pleasure.” Today, we see human pharmaceutical companies market disease to get people to use their products, just ask your doctor for a free trial. Some ads sell drugs from the fear of dying or being in pain and others sell pleasure of better complexion or less pain.

Activists masquerading as consumers are convincing restaurants to market their activist “fear” agendas to sell our beef, poultry, dairy, and pork products. David AbiDaoud blogged³, “Fear is an interesting emotion which affects the thought process and reaction of individuals. Therefore, fear can be used as a unique marketing tool to make consumers loyal. It may not be the safest tactic but if used correctly it can create huge impact.” Restaurants have fought over a captive 4% of personal income of people in the United States. Restaurants do not feed the poor. They feed those that can afford you to plan the meal, cook the meal, and do the dishes. Grocery stores feed the poor. They take food stamps and SNAP coupons. In the end, sustainability has many definitions that can fit many different marketing platforms.

The rich can afford to error on the side of safety and feel pleasure in saving the planet from buying organic food. The poor just need to eat. Retailers must have patience and use sustainability modeling prudently. Getting this right is so important. Most people literally can’t afford for us to get it wrong.

Food costs play a major factor in the determination of poverty in this country. Removal or discontinued use of technology or AB or management or housing without evidence-based or outcome-based decision will have lasting effects on society beyond next quarter or next year’s sales report. If food prices go up with no changes in incomes, poverty increases. Reliance on food stamps increases. The value of our tax dollar decreases. This is not just an agriculture sustainability issue, it is a societal sustainability issue. This is a human health issue.

We have forgotten how little money most people make and the decisions are being made by people that can afford almost any change. Based on data from USDA Economic Research Service⁴, food insecurity in the US occurs at the same rate, around 15%, in urban, suburban, and rural areas. The rate of food insecurity is twice as high Latinos and African Americans than in Caucasian families in the US. We must feed our people. The highest rate of food insecurity occurs in homes where a single mom is raising children at 36%. Don’t show up on a Saturday to box a meal or to give a meal for so many dollars spent in your store then remove practices or technology that increases the price of food without proper due diligence.

Bill Gates was quoted to say, “If we can spend the early decades of the 21st century finding approaches that meet the needs of the poor in ways that generate profits and recognition for business, we will have found a sustainable way to reduce poverty in the world.”

Conclusion

Appropriate, honest sustainability studies are necessary for agriculture and livestock producers. Maybe there are changes a person can implement to improve their sustainability, or maybe they need to change what they raise? Global sustainability, humankind sustainability, national sustainability, local sustainability. We have to feed people. We have to keep food affordable. Sustainability always is tied to economics. Wealth = Food and Poverty = Starvation. It is hard for starving people in poverty to worry about 100 years from now when they are worried about eating tomorrow. Likewise, people who have abundance want to make sure it continues over time.

Our globe’s climate is going to change. Water availability is going to change. We will be able to grow crops in different areas of the world, and maybe in another world. New disease outbreaks will occur. Population centers of people are going to change. People’s tastes are going to change. Therefore, where and how food is produced is going to change over time and with that so will sustainability of agricultural products. In developing countries, sustainability studies are used to determine how, what, when, and where to best raise livestock to feed their people.

In our developed countries, our sustainability efforts are entwined with so many political agendas because we have an overabundance of food, unbelievably sustainable food production—and we can afford it. Local, national, and global distribution of food is our downfall but we are getting better. Globalization is here to stay. “Our” developing countries need the livestock systems and the developed countries need to focus more on the mission making sure everyone gets fed. The proper use of sustainability modelling will tell us how to feed the world. We must have humane leadership that makes sure we do not undo all the good that has been done for so many but look to the future for feeding the planet.

