WEDNESDAY, MARCH 2, 2022

Impact of Global Government Policy on the Beef Industry

7:30 – 8:30 am **Registration/Continental Breakfast**

9:00 – 9:15 am **Welcome**
***James O. Reagan**, Ph.D., Zoetis, Chairman, International Stockmen's Educational Foundation*
***Chris Boleman**, Ph.D., President and C.E.O., Houston Livestock Show and Rodeo™*
***Brett Sarver**, Chair, International Committee, Houston Livestock Show and Rodeo™*

9:15 – 9:25 am **Moderator:** ***Keith E. Belk**, Ph.D., Professor and Head Department of Animal Science, Colorado State University*

9:25 – 10:05 am **Keynote Address: Focus Forward: Navigating Climate Change Policy and Sustainability in the Beef Industry.**
***Kim Stackhouse-Lawson**, Ph.D., Director of AgNext and Professor of Animal Science, Colorado State University*

By the end of this century, the global population is expected to nearly double to 12 billion. The need for increased food security and to protect our natural resources is often at odds. How are we going to feed this increase in population? Governments worldwide are proposing climate change policy and legislation to reduce the emission of greenhouse gasses and reduce the use of carbon-emitting fossil fuels. What will agriculture and the meat industry face with the addition of these new policies and legislative measures? Increasing pressure to reach time-bound NetZero goals from multi-national food companies will be felt across the supply chain as these large companies aim to reduce their impact on climate change. AgNext at Colorado State University aims to identify forward-focused solutions to help close the tremendous gap in understanding how producers can reduce greenhouse gas emissions while maintaining sustainable and profitable industries that support vibrant communities.

10:05 – 10:30 am **Break/Networking**

10:30 – 11:10 am **Regenerative Agriculture: What Is It and How Livestock Benefit the Climate?**
***Logan Thompson**, Ph.D., Postdoctoral Fellow, AgNext, Colorado State University*

Regenerative agriculture is a growing trend in the livestock industry and has recently grown in popularity among producers as a means of climate mitigation. This management strategy is hard to define, leading to confusion about what it is and what benefits may be obtained by adopting this approach. In practice, regenerative agriculture is a gradient of management styles that fit the context of the region and the management style of the producers who adopt it. Impacts from regenerative agriculture can vary, but generally, this management style can produce benefits such as improved soil nutrient cycling and carbon sequestration, protecting already stored carbon, improved water retention, and overall enhanced system resiliency.

11:10 -11:50 am **Greenhouse Gas Emissions from Animal Agriculture and the Potential for Carbon Markets.**
***John Sheehan**, Ph.D., AgNext and Research Scientist, Department of Soil and Crop Sciences, Colorado State University*

Carbon emissions, particularly from the burning of fossil fuels by the transportation, energy, and electrical generation segment, are targeted by government policy and the sizeable activist investment funds. To mitigate carbon emissions, companies can purchase carbon offsets in a nascent carbon market. The carbon market has not been thoroughly vetted; nonetheless, the private sector offers to pay farmers and ranchers for management practices to increase their operation's carbon sequestration. Grazing systems that sequester carbon in the soil are one opportunity. Managing for reduced methane emissions from cattle and manure in both grazing and feedlot operations is another. Finally, controlled production of methane from manure offers an opportunity to offset fossil CO2 emissions by displacing natural gas as a fuel. But how should these emission savings be reported? Methane is a potent greenhouse gas but is short-lived in the atmosphere, while a significant amount of CO2 emissions remain in the atmosphere indefinitely. How the climate impacts of methane are valued remains controversial. Conventional CO2 equivalent valuations may over-value methane's value in the carbon market. Here, we will discuss the trade-offs of different metrics for trading, including the recently proposed "GWP star" metric that is better aligned with the actual warming impacts of methane. Finally, we will consider how the transient carbon capture in the soil can be appropriately accounted for carbon markets.

12:00 – 1:30 pm **Lunch – Student and Alumni Recognition**

1:30 – 1:40 pm **Moderator: *Ross Wilson**, President and CEO, Texas Cattle Feeders Association*

1:40 - 2:15 pm **Animal Versus Plant Products: How do Livestock Industries Win the Information War?**
***Diana Rodgers**, R.D., Executive Director, Global Food Justice Alliance*

Many voices, from the environmental community to vegan activists, have painted all meat as unhealthy, unsustainable, unethical and unnecessary. Many industries, from fossil fuels to ultra-processed foods stand to win from scapegoating meat as the source of our failing health and warming planet. Even though the science is misrepresented, changing meat's perception in the court of public opinion is not going to be won with facts. What can the livestock industry do to help reshape the anti-meat narrative? Learn tips on how to best communicate the nutritional and environmental benefits of meat, plus suggest the best messengers and the most important consumers to sway.

2:15 – 2:50 pm **How Will Beef Industry Deal With Increasing Demand for Water?**
***Thomas Borch**, Ph.D., Professor, Department Soil and Crop Sciences, Colorado State University*

By 2025, approximately 1.8 billion people will be living in regions with water scarcity. Scarcity of water leads to migration and societal instability. The western United States, Brazil, and Argentina are experiencing a drought leading to the liquidation of cattle herds and fallow croplands. Climate change will be exacerbating the problem in the future. The concept of the Water Foot Print and supply-chain thinking in water management is an essential component of a proactive stance in the sustainability of the meat industry. The industry from the producer through the processor is making great strides in the conservation of water. However, additional efforts must be undertaken, including expanding recycling in processing plants, improving soil health, and enhanced targeted irrigation on the crops. At the same time, the livestock industry must be vigilant in avoiding the contamination of the water supply. Governmental policies could have a significant impact on water use by the beef industry. If the anti-technology movement, such as seen in Europe, prevails, it will lead to a larger ecological footprint by the livestock industry that could question its sustainability.

2:50 – 3:25 pm **Current Administration Policies Impact on Beef Production From the Producer, Feeder, Processor Through to the Retail Consumer.**
Jay Truitt, *CEO, Policy Solutions, LLC, Washington, DC*

Government policies are in flux regarding their impact on animal agriculture. Headlines can be outlandish, with some angling for the complete removal of growing animals for food. One approach is to burden the meat industry with regulations that impact the economics, resulting in a slow erosion of infrastructure shrinking the industry. In the U.S., the administration proposes a 30-30 program, 30% of the land for 30 years, setting 400 million acres for addressing climate change. U.S.D.A. reports this will incorporate the rancher's and farmer's input at the local level in designing the program. Not so locally driven is the administration returning to reinstating agency, E.P.A., control of the local waters, i.e., W.O.T.U.S. In the end, there will be good news along with bad news affecting the livestock and meat industry. How will these policies in combination affect the industry over the next five to ten years?

3:25 – 4:00 pm **Break/Networking**

4:00 – 5:00 pm **Panel Discussion – Impact of Future Adjustments in the Beef Industry**
Moderator: ***Kim Stackhouse-Lawson****, Ph.D., Director of AgNext and Professor of Animal Science, Colorado State University*

This session opens with an overview followed by the six previous speakers giving their brief takeaway on the program presented. The outcome of this discussion will help shape our future view of the beef industry.

6:00 – 7:00 pm **International Committee Reception – Café on the Park (followed by the evening rodeo performance at the Houston Livestock Show & Rodeo**

THURSDAY, MARCH 3, 2022

Key Changes Coming to the Beef Industry

7:00 – 8:00 am **Continental Breakfast**

8:00 – 8:15 am **Moderator: Jim Pattillo**, Pattillo Group, Canada

This session will link the previous day's discussion to focusing on the fundamental changes that will impact the entire beef production chain.

8:15 – 8:55 am **Keynote Address: Developing Dual Sourcing Resilient Supply Chains to Replace the Just in Time Model.**
Don Close*, Animal Protein Analyst, Rabo AgriFinance, RaboResearch Food & Agribusiness Group*

Just in time delivery of components has delivered an economic advantage to commerce, reducing warehousing of time-sensitive products. However, just in time, the delivery has concentrated production to localized areas of the world. This model requires an intricate transportation system of shipments by sea, unloaded and loaded at accommodating ports, and delivered to the retailer and consumer by trucks and rail. Moreover, the global pandemic has led to a shortage of manufactured goods due to understaffed factories and transportation not anticipating the unprecedented demand. These issues have also exposed the deficiencies in a country's infrastructure to accommodate the massive movement of goods. The supply chain disruption has exposed the risk to a country's economic health and, ultimately, a national security issue. Furthermore, an extended transportation system has an environmental cost in a high greenhouse gas emission. How can the agricultural enterprise reset to a supply chain that is more resilient with a lowered environmental cost and less social disruption?

8:55 – 9:30 am **The Future of Incorporating Verification and Tracing in Brand Differentiation from Producer to Consumer.**
***Leann Saunders**, Where Food Comes From, Inc.*

A heightened interest by the consumer in purchasing a wholesome product that meets their societal norms has led to an explosion of branded beef and meat products. Branded beef is the trend of the large beef processors and grocery chains and has also created an opening for the smaller locally raised entities. The cooperative arrangements between all segments of the meat industry will result in a synergistic added value, especially to the rancher and feeder, to capture additional returns on their livestock. A successful branded program will require third-party verification of the production chain from the rancher through to the processor. Furthermore, to compete on the world export stage, a selling entity will need to show traceback verification of a healthy product that is disease-free. This need is most evident in the national security issue of a safe meat supply interrupted in a Foot and Mouth or African Swine Fever outbreak that would devastate the livestock industry. Hence, a verifiable trace back branded product that stands out in the marketplace adds value to the production chain and keeps the food chain safe and healthy.

9:30 – 9:50 am **Break/Networking**

9:50 – 10:30 am **Major Beef Packing Companies' Views of Increased Dispersion of Harvest Processing Plants to Build Resilience to Supply Chain Disruption.**
***Herb Meischen**, HM Consulting, LLC, and Former Vice President of Strategy & Customer Development, Cargill*

A significant portion of the industry's beef and pork harvesting segments have consolidated into large meat processing companies. Consolidation led to increased efficiencies bringing profitability and a supply of wholesome, affordable beef for the consumer. Affordable beef for lower-income families is an issue overlooked by many activitist that rails against the livestock industry. The major processors did admirably well in providing the consumer with meat in the challenging throes of the pandemic. However, the 2020 pandemic exposed an Achilles heel of the concentrated meat processing industry, supplying the public with the meat needed to feed an expanding world population. The public looked to the smaller, regional meat shop for their beef. The shortage of beef and large plants unable to process market-ready animals left the rancher and feeder overwhelming smaller regional processors. Across the U.S., there is support for expanding the processing capacity with smaller localized plants that will lead to a 4% expansion of kill space in just this year. At the same time, large processors are also expanding, but in or near existing facilities. This latter approach, although efficient, doesn't address the over-reliance on a centralized system that will again be stressed in a "Black Swan" event such as a global pandemic or weather or conflict-related disruption of the supply chain. How do the large packers view the expansion of regionalization of the processing capacity? Are these smaller entities seen as a relief valve to the industry or competition that reduces price advantage?

10:30 – 11:30 am **Panel Discussion – Key Changes in the Beef Industry**
***Moderator: Jim Pattillo**, Pattillo Group, Canada*

This session opens with an overview followed by the previous speakers giving their brief takeaway on the program presented. The outcome of this discussion will shape our future view of the beef industry.

11:30 – 12:00 pm **2022 Congress Overview and Closing**
***Jason Strong**, Managing Director, Meat and Livestock Board Australia*

12:00 pm **Adjourn**