

NAS STUDY

CONSIDERATIONS FOR THE FUTURE OF ANIMAL SCIENCE RESEARCH

COMMENTARY FROM THE BEEF CATTLE INDUSTRY PERSPECTIVE

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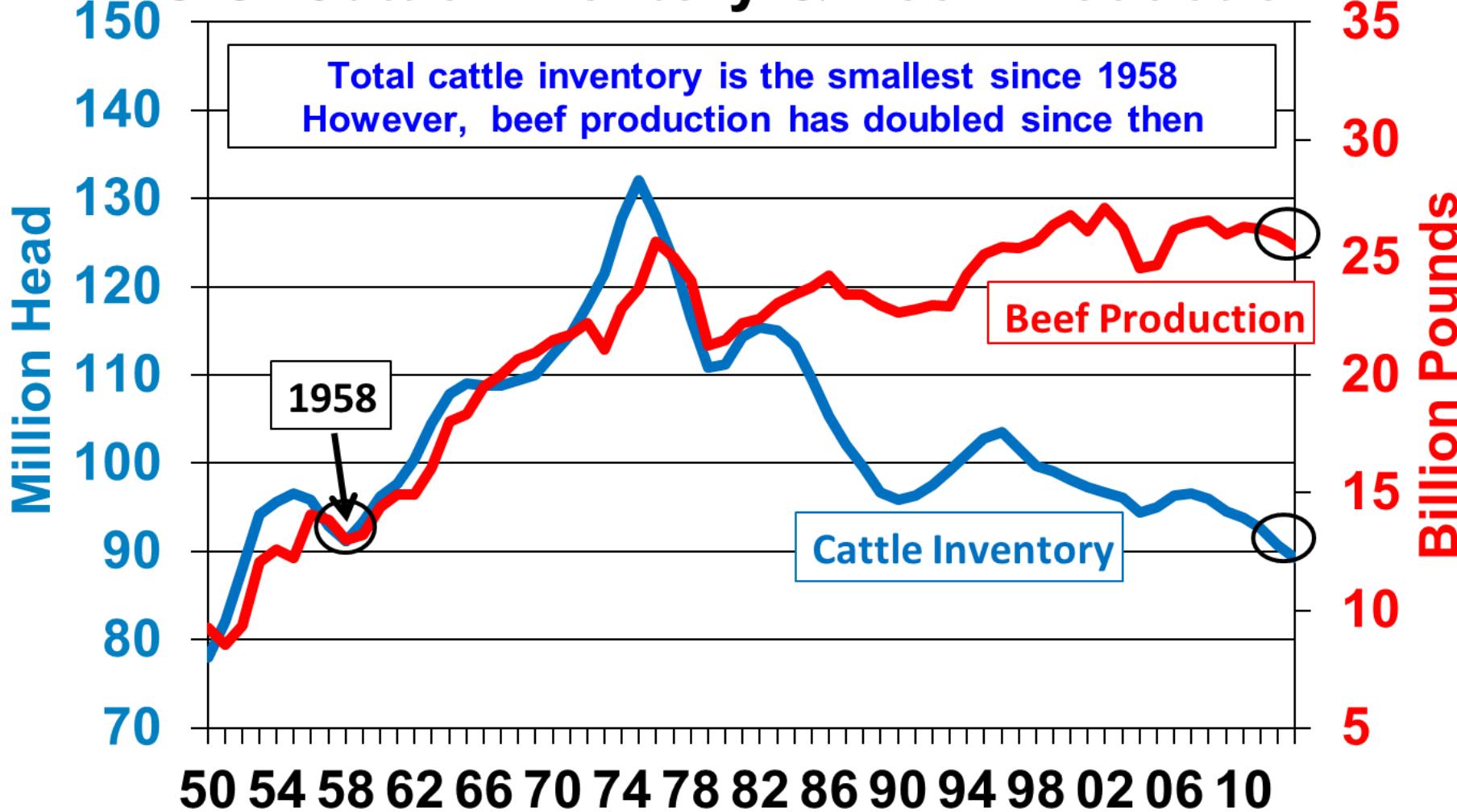




**UNITED STATES CATTLE HERD
89 MILLION HEAD**



U.S. Cattle Inventory & Beef Production



Source: USDA

YEARS



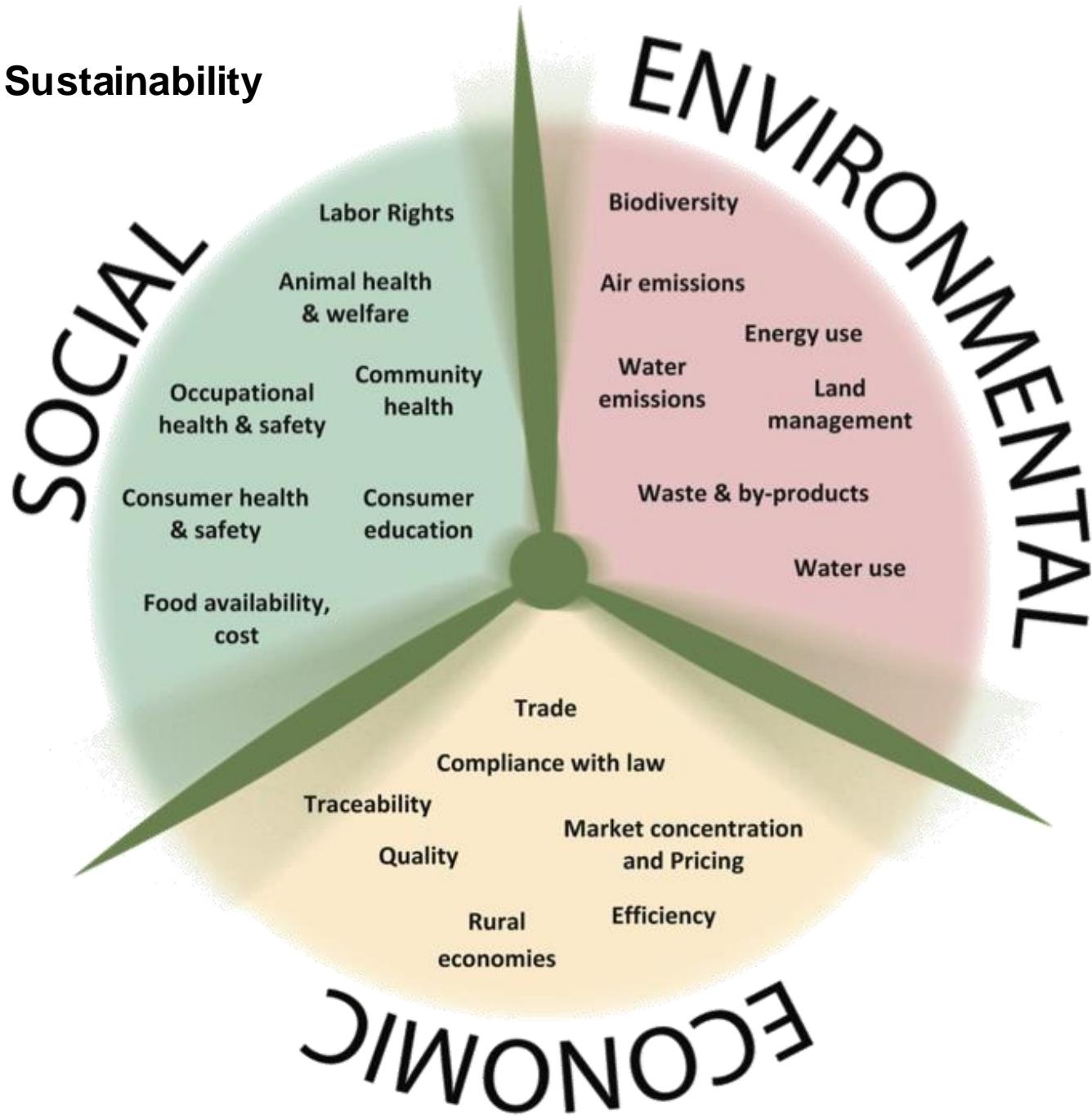


Sustainability

Executive Summary

Download available at
www.beefresearch.org

Pillars of Sustainability



BEEF INDUSTRY SUSTAINABILITY ASSESSMENT

- **National Standards Foundation Certified Results**
- **2013 Release of Assessment Findings for 6 years between 2005 to 2011**
- **A Pathway to Continuous Improvement**
 - Beef Industry has improved sustainability 5% in 6 years
 - Environmental and social improvement of 7%
- **Identified Innovations Within the Food System**
 - Crop yields, machinery and irrigation technology, manure management, precision farming, and animal performance
 - Biogas capture, closed-loop water cooling systems, waste water recycling, and “right size” packaging



COMMENTS REGARDING THE STUDY'S STATEMENTS OF TASK

- **Develop a more holistic view** for an understanding of the ecosystem services that animal products have on the environment--open space, wildlife habitat, clean water through natural filtering systems rather than a traditional focus on greenhouse gases.
- **Consider a whole supply chain approach**, with the entire chain working together to feed the world. The beef industry has identified the end consumer target in the United States as the millennial generation consumer and sustainability research should ultimately be relevant to consumer concerns.
- **Focus on the evolution of sustainable animal production systems relevant to production efficiency metrics, while remembering that regional differences occur**, even within the United States, based on climate, terrain, weather patterns and management schemes.
- **Consider all three pillars of sustainability**—economic, environmental and social in addition to consumer acceptability.



FASS-2012 FAIR

PRIORITIES FOR SUSTAINABILITY CONSIDERATIONS FOR THE FUTURE OF ANIMAL SCIENCE RESEARCH

Food Security

- Feed Efficiency/Nutrition
- Reproductive Performance/Genetics
- Improved Production Technologies

Animal Health

- Intersections with Human Health
- Vaccine Development

Stewardship

- Natural Resource Management
- Housing Systems



SUSTAINABILITY RESEARCH BENEFITS

- **Expand upon the foundational knowledge of the beef sustainability story**
- **Create a sustainability outlook based upon sound-science**
- **Identify appropriate areas of the supply chain to work to improve sustainability**
- **Apply scientific knowledge to address the needs for more sustainable alternatives**



THANK YOU AND QUESTIONS

