SYSTEMS APPROACH TO BEEF CATTLE SUSTAINABILITY



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A Systems Approach...

- > A mindset or way of thinking
- > Seeing the whole...and how the parts are interconnected

Why a Systems Approach?

- > To **UNDERSTAND**...
- > To find **LEVERAGE**...
- > To overcome the **CHALLENGE**





FOCUSING QUESTION

Why is "Sustainable" beef production so challenging?

First, what does "Sustainable" mean?

- > To many of us it means something like:
 - ✓ passing on the ranch/beef enterprise to sustain the next generation while maintaining or improving the natural resources for generations to come...
- > GRSB:
 - "...a world in which all aspects of the beef value chain are environmentally sound, socially responsible and economically viable."





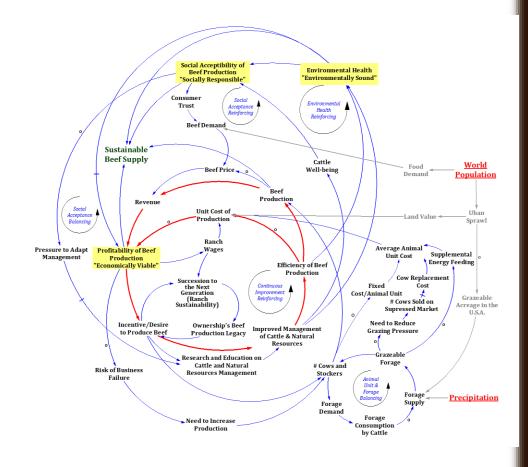
IMPORTANT TRENDS ASSOCIATED WITH BEEF PRODUCTION SUSTAINABILITY

Global/National Impact

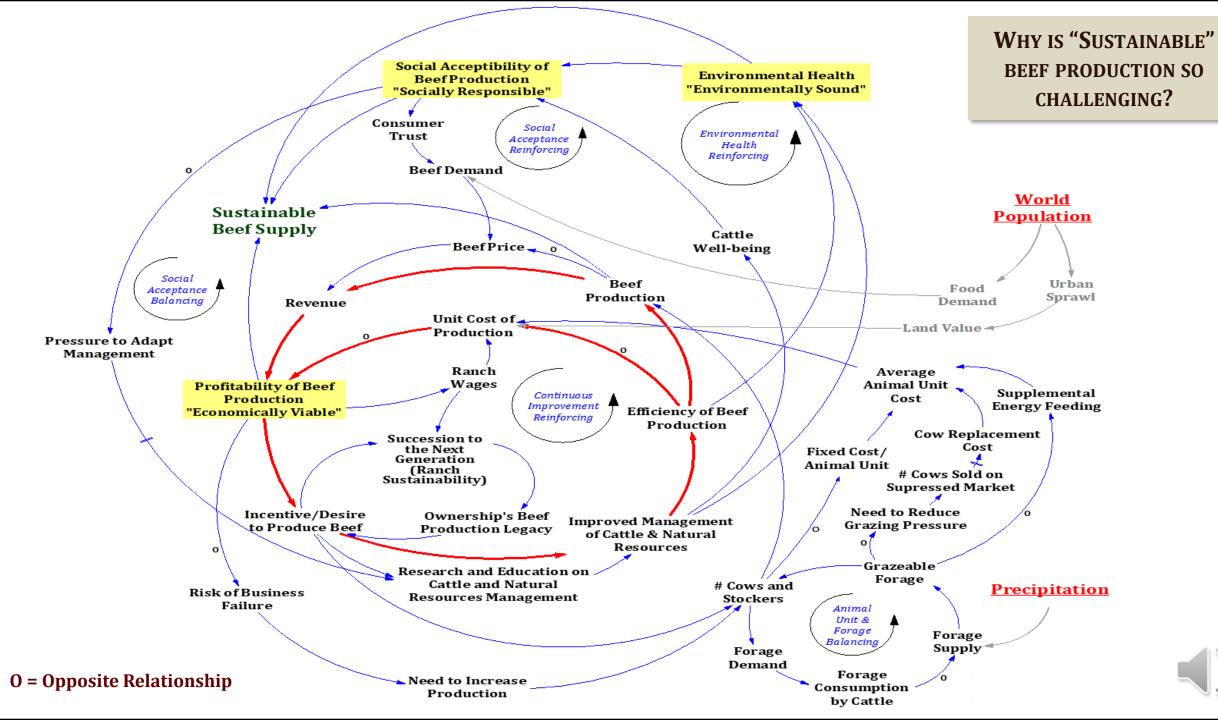
- > \tau World population/food demand
- > 1 World population/urban sprawl/land value
- > 1 Consumer interest in food production practices
- Regulations and complexity of business (6.7%/yr)
- > 1 Speed of technology development

Enterprise/Ranch-Level Impact

- > \(\text{Climate variation/drought} \)
- ↑ Commodity/input prices (>beef price)
- > 1 Land values
- ➤ ↓ Willing and skilled ranch labor





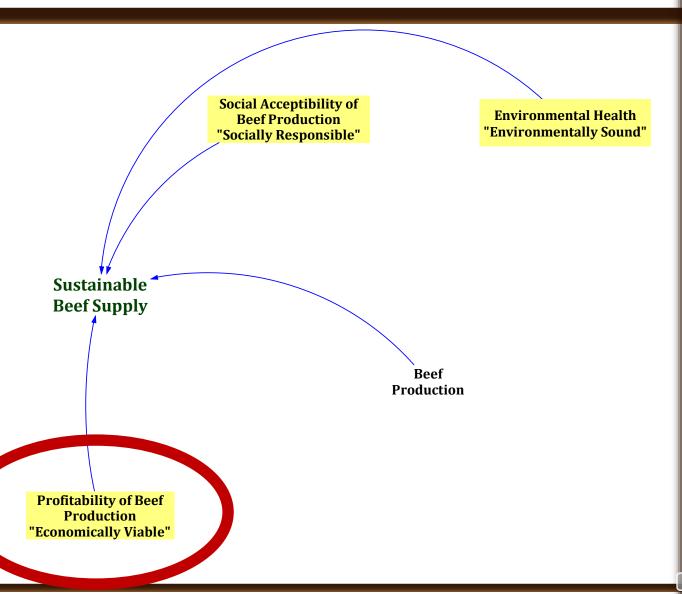




Triple Bottom Line = Sustainable Beef

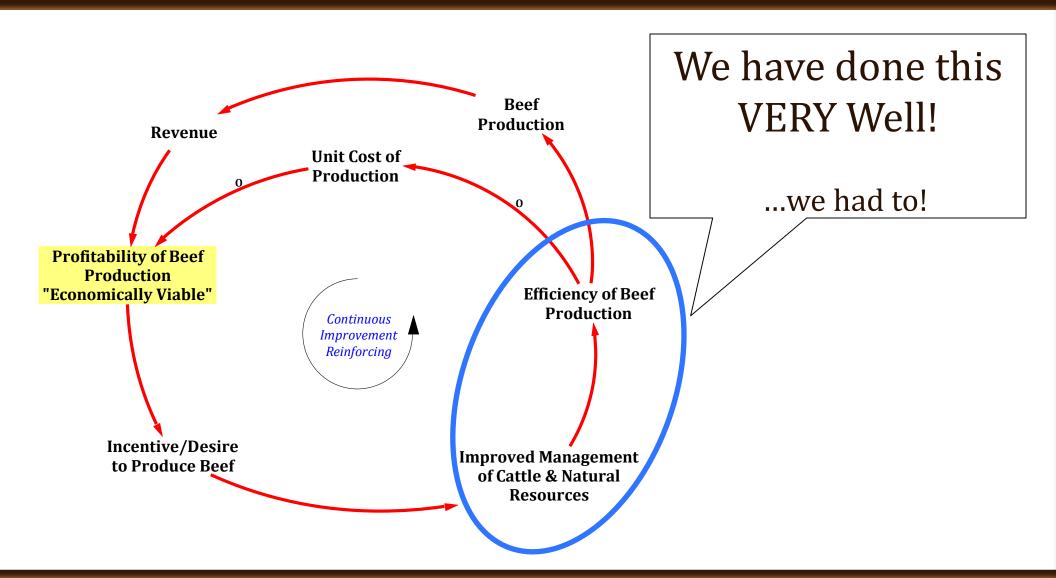
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...envisions a world in which all aspects of the beef value chain are environmentally sound, socially responsible and economically viable.





ECONOMICALLY VIABLE/CONTINUOUS IMPROVEMENT

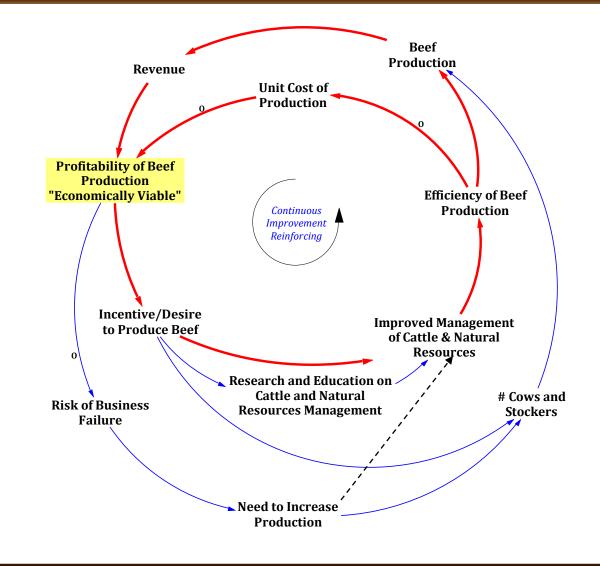




ECONOMICALLY VIABLE/CONTINUOUS IMPROVEMENT

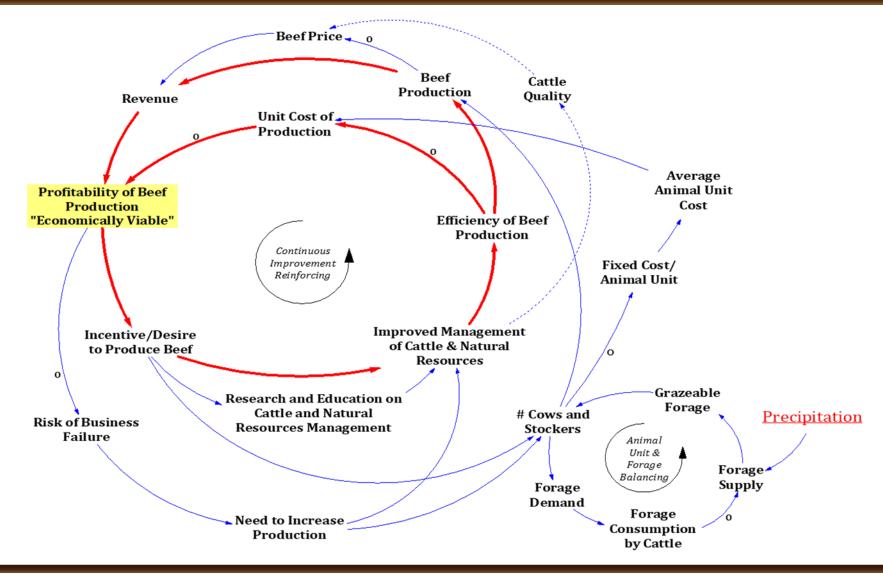
What's driving efforts to increase profit?

- **>**Opportunity?
- ➤ Risk of Failure?



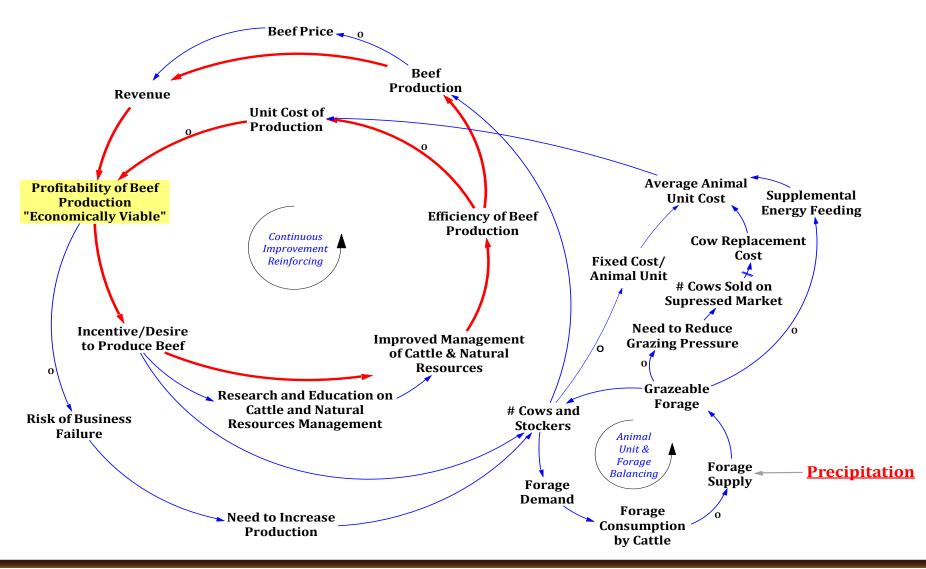


EXTERNAL INFLUENCE ON PROFITABILITY



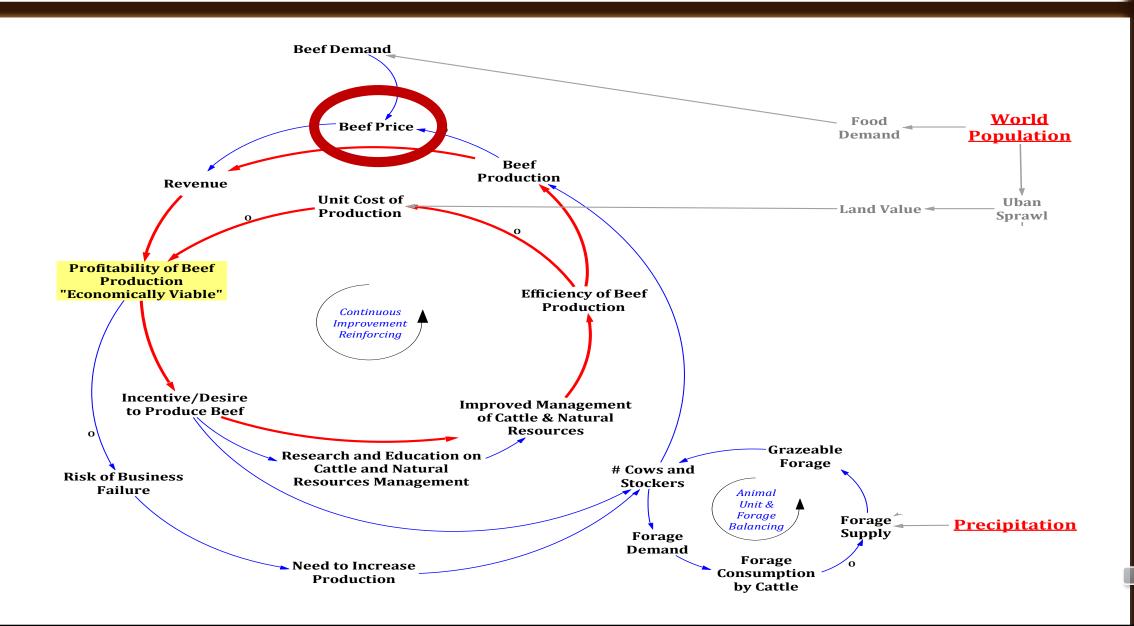


LIMITATIONS OF FORAGE/PRECIPITATION





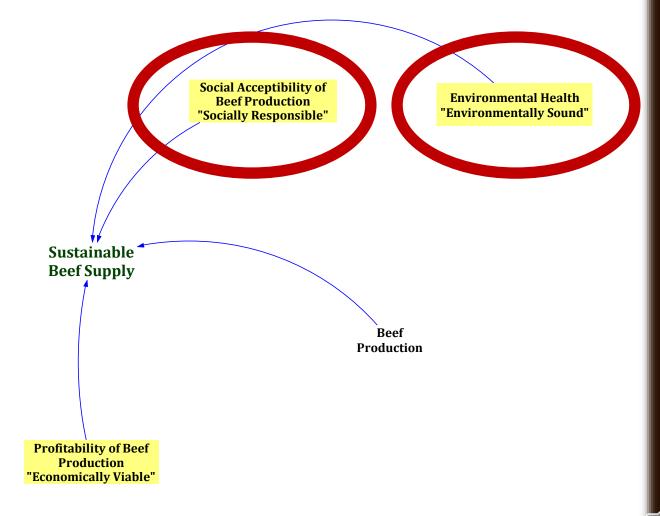
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† Consumer Interest in Food Production Practices

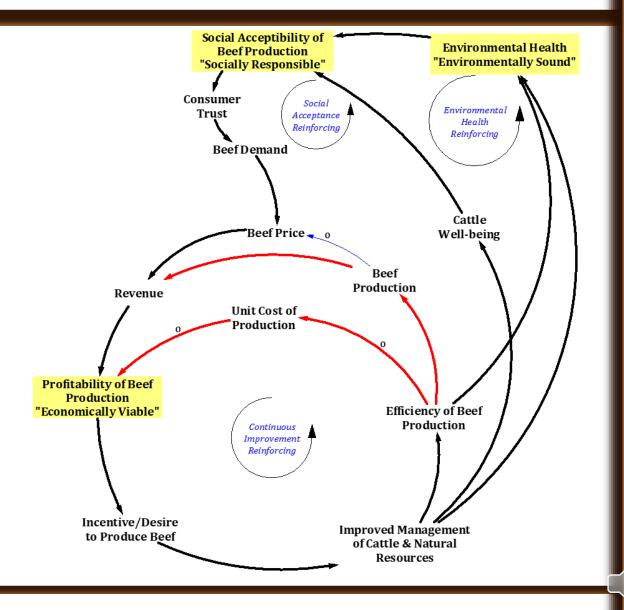
Social Acceptability Cycle

Environmentally Sound Cycle

> Virtuous?

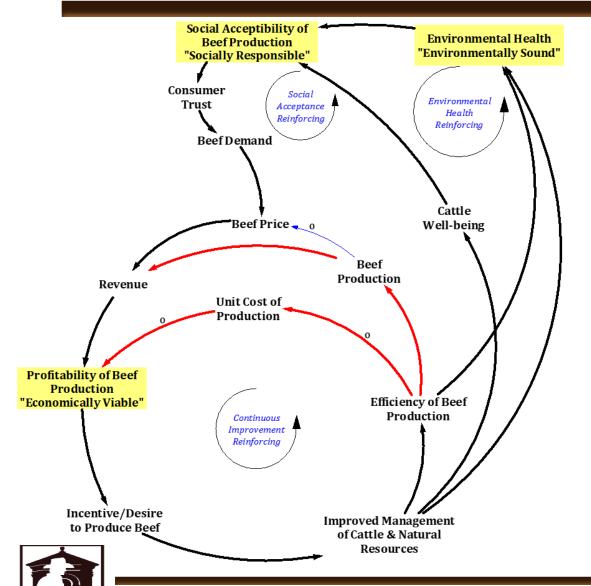
or

Vicious?



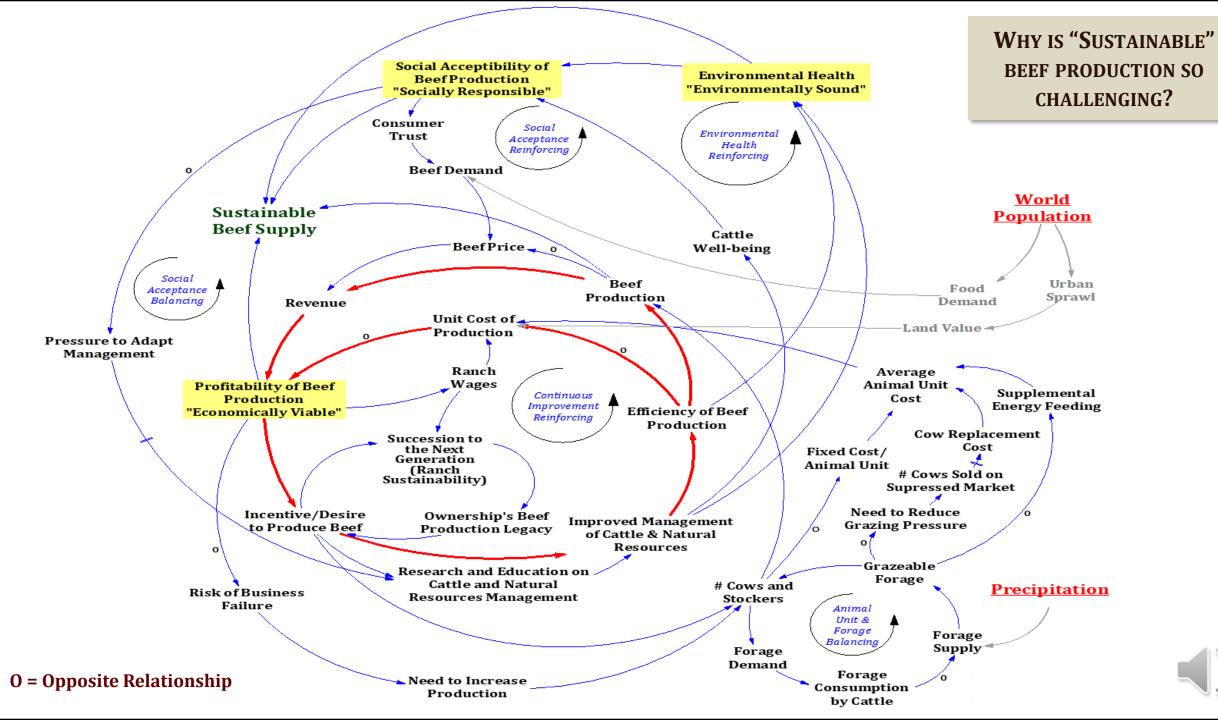


THE CYCLE MUST BE VIRTUOUS!



USRSB Mission

To advance, support and communicate continuous improvement of sustainability across the U.S. beef value chain.





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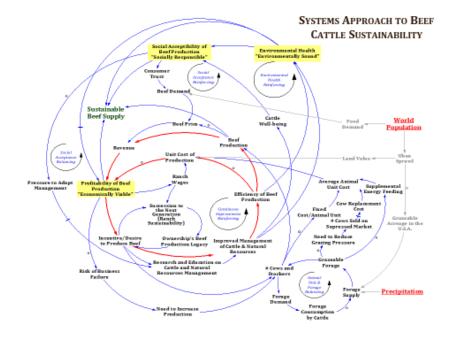
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We are Counting on this to ↑ PRICE





Costs!

Where do we find LEVERAGE to Overcome the Challenges

As an industry?

- Consumer Trust
- Improved Cattle Management

At the Beef Enterprise Level?

Improved Cattle Management



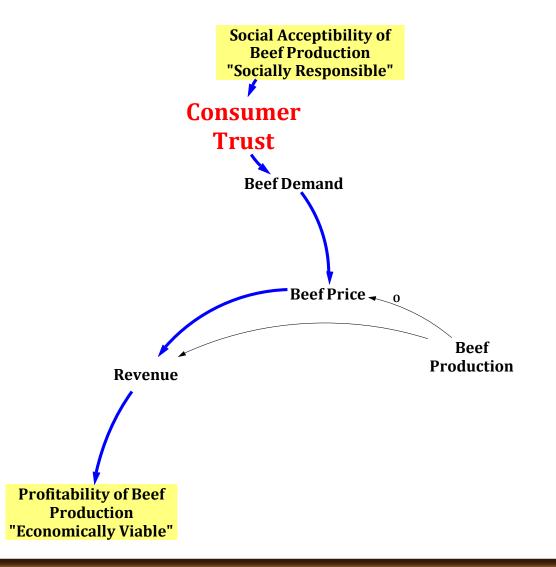


WHY "CONSUMER TRUST"

(SOCIALLY ACCEPTABLE!)

Revenue:

- > Weaning Rate
- > Weaning Weight
- > Calf Value
 - ✓ Genetics
 - ✓ Marketing
 - ✓ Markets
 - **■ Domestic** ~ 85%
 - Export ~ 15%





GREATEST OPPORTUNITIES

#1. Export Market Expansion

- Product Quality
- Policy and Trade Negotiations
 - ✓ Identification System
 - ✓ Process/Practice Verification

#2. Domestic Market

- Product Quality
- Product Consistency
- > Social Acceptance
 - Handling Practices
 - ✓ Cattle Well-Being
 - ✓ Environmental Impact





CONSUMER TRUST...

Our license to manage land, livestock, water, wildlife, and to sell food products will be valid only if we maintain consumer and social TRUST





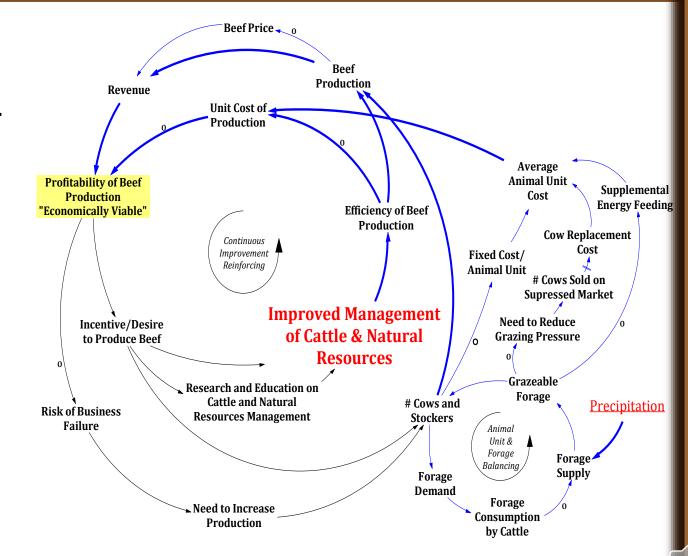
WHY "IMPROVED CATTLE MANAGEMENT"

As an Industry

- Some producers are not responsive to financial signals for improvement
 - Are the production methods and beef products from those operations continuously improving?

At the Beef Enterprise Level

- Sustained profitability results from implementing efficient production systems designed to withstand the impacts of drought and other external challenges
 - We must build more resilient production systems

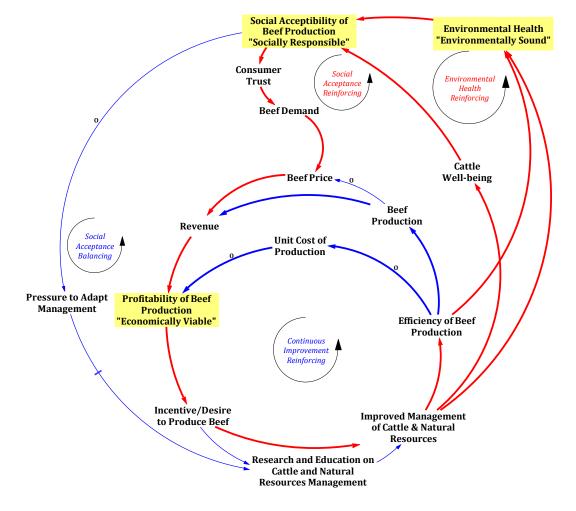




ENVIRONMENTALLY SOUND & SOCIALLY RESPONSIBLE & ECONOMICALLY VIABLE

These virtuous cycles must be virtuous...not vicious!

The system must be economically viable!





FINAL COMMENT

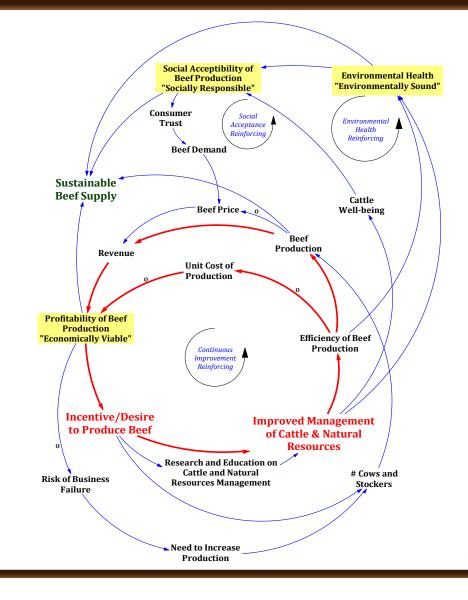
Continuous Improvement

CANNOT and WILL NOT occur unless there is a

Incentive/Desire to Produce Beef

OTHERWISE

All Virtuous Cycles become **VICIOUS!**





THANK YOU!



Clay P. Mathis

Director and Robert J. Kleberg, Jr. and Helen C. Kleberg Endowed Chair www.krirm.tamuk.edu

