

US Beef industry. Drive to sustainability.

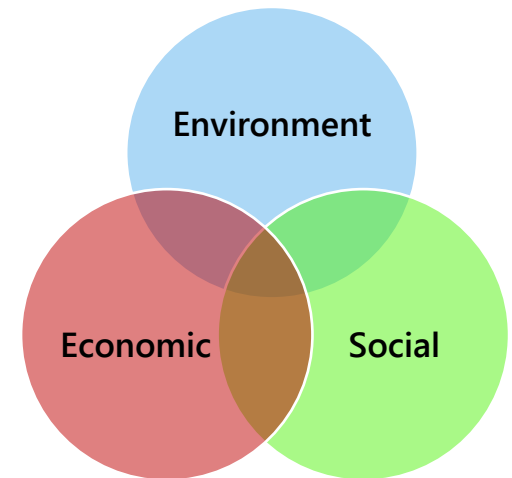
Dispelling the myths, providing the facts.



The
buzzword.....

.....

Sustainable
food supply
balances
efficient
production with
environmental,
social and
economic
impacts, while
recognizing
tradeoffs.



Sustainability check-box.



Climate change impacts (CO₂, GHG emissions);



Crops/plants vs livestock production;



Small scale vs large scale commercial farms;



Animal welfare standards;



Use of science and technology;



Economic and social impact;



Carbon footprint /climate change

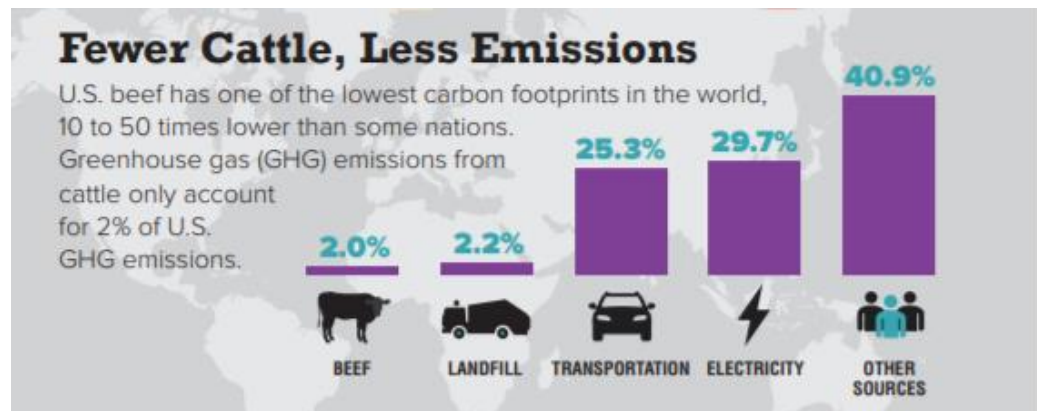
Myth

- Commercial farming has enormously large impact on global carbon foot print and GHG emissions.
- Cattle production is “ruining” planet through GHG emissions (methane from belching).
- Livestock production using large amounts of vital natural resources (water, land, feed).

Reality

- Cattle’s natural habitat, in fact, prevent the release of CO2 into the atmosphere.
- Beef production is responsible for 2% of GHG emission in the USA (25% attributed to transportation)

Beef sustainability facts.



Carbon footprint of US beef

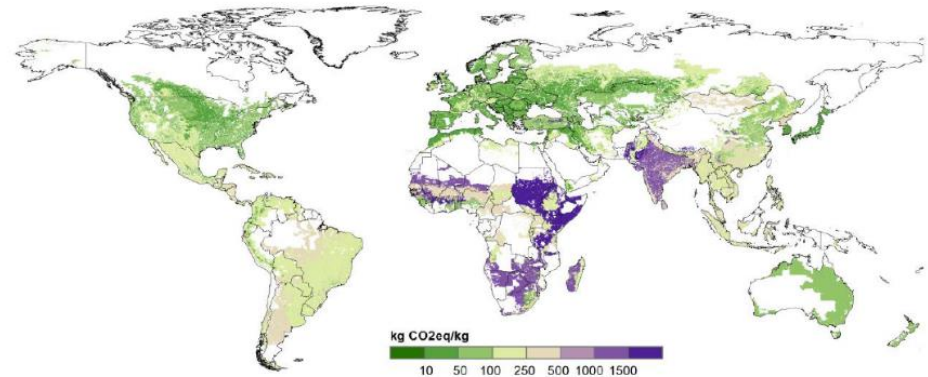


Figure S 47. GHG efficiency of bovine meat production (expressed in kg CO₂eq/g protein) in the year 2000

- Source: Herrero et al., 2013. *Proc. Natl. Aca. Sci.* 110: 20888-20893



Plant-based vs livestock production

Myth

- Plant-based food is more environmentally sustainable.
- Switching from beef to plant-based food will “benefit” the planet.

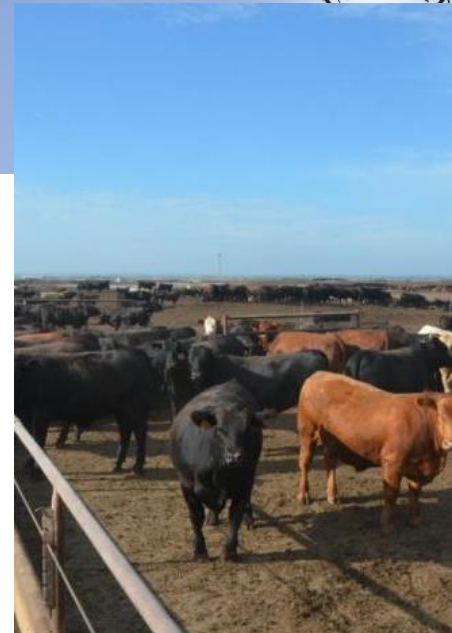
Reality

- Beef allows to use the land that is unsuitable for crop production.
- Cattle upcycle: 90% of cattle’s diet is forages and plant leftovers (inedible). Only 10% of diet is corn.
- Cattle converts human-edible food for energy more efficiently than humans.
- Cattle production allows for preservation of natural grassland and biodiversity



View from above....

Are we really talking about "destroying" the planet through livestock farming?



Another view...

Large-scale farms/ feedlots/ grain feeding...



Myth

- US beef production is all about “factory-style” commercial farming.



Reality

- 91% of US farms are family owned and have less than 50 heads of cattle.
- Cattle spends most of their life on grass pastures;
- Most grazing pastures are also natural habitat for wildlife.
- Grain feeding is only 10% of diet.
- Grain feeding is the most efficient system of producing more with less.



Use of science and technology in modern beef farming

Myth

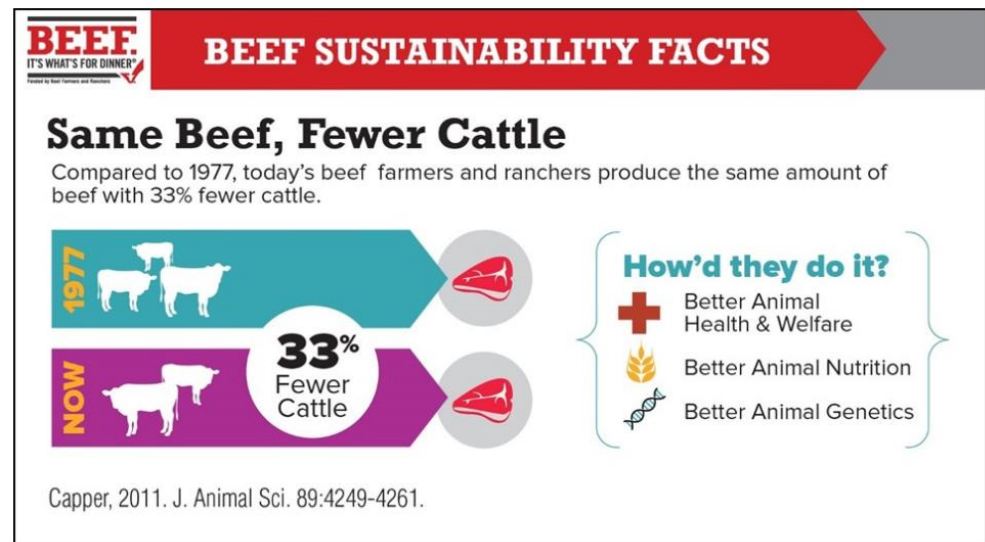
- Beef today is not a natural product.
- Beef production today is all about antibiotics and hormones.
- Modern beef production subjects animals to suffering.

Reality

- Science and technology is a way to improve efficiency of production, produce more with less, improve animal and human health and, ultimately, feed the planet.
- With double the population to feed by 2050, can we sustain on old production methods?
- Healthy and “happy” animals are key to efficiency.
- Plant-based food and its efficient production is also a product of extensive science and technology.
- Vigorous oversight in its use and application – on all levels.

Sustainability is very much about efficiency/productivity

- The USA has the most environmentally- efficient beef production system in the world. And it is constantly improving.





Economic and Social Impact

Economic

- Creating viable business model;
- Providing jobs for the rural communities;
- Making food more affordable;

Social

- Maintain traditions of farming
- Providing nutrition to the growing population.
- Improving well-being of animals;
- Improving quality of life
- Preserving wild life habitat



The bottom line...

“The beef community uses a technology that produces high-quality protein from solar energy locked within human inedible plants. The technology produces a natural organic fertilizer, and is mobile without using fossil fuels. The technology self-replicates.”

“The technology is...Cattle.

Beef is the original plant-based meat”

Sara E. Place, Ph.D., Senior Director, Sustainable Beef Production Research, National Cattlemen’s Beef Association, a contractor with the Beef Checkoff



Resources

NCBA:

- <https://www.beefresearch.org/sustainability/index.html>
- <https://www.beefitswhatsfordinner.com/raising-beef/beef-in-a-sustainable-diet>
- <https://www.beefitswhatsfordinner.com/resources/infographic-library>
- <https://www.agriculture.com/livestock/cattle/qa-sara-place-of-ncba>

NPB:

- <https://www.pork.org/environment/>

Dr. Frank Mitloehner – UC Davis

- <https://ghgguru.faculty.ucdavis.edu/about/>
- Twitter - @GHGGuru

U.S. Roundtable for Sustainable Beef

- Twitter - @USRSBeef

U.S. Sustainability Alliance

- <https://thesustainabilityalliance.us/>
- Twitter - @SustainableUSAg

Sustainable Dish (Grass finished focused, alt. meat articles)

- <https://sustainabledish.com/podcasts/sustainable-dish-episode-83-the-truth-about-greenhouse-gas-emissions-in-livestock-production-with-frank-mitloehner/> (Podcast with Dr. Mitloehner on GHGs)
- <https://www.sacredcow.info/>