



GLOBAL AGENDA FOR
SUSTAINABLE LIVESTOCK

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ANIMAL WELFARE FOR IMPROVED SUSTAINABILITY IN LIVESTOCK SUPPLY CHAINS

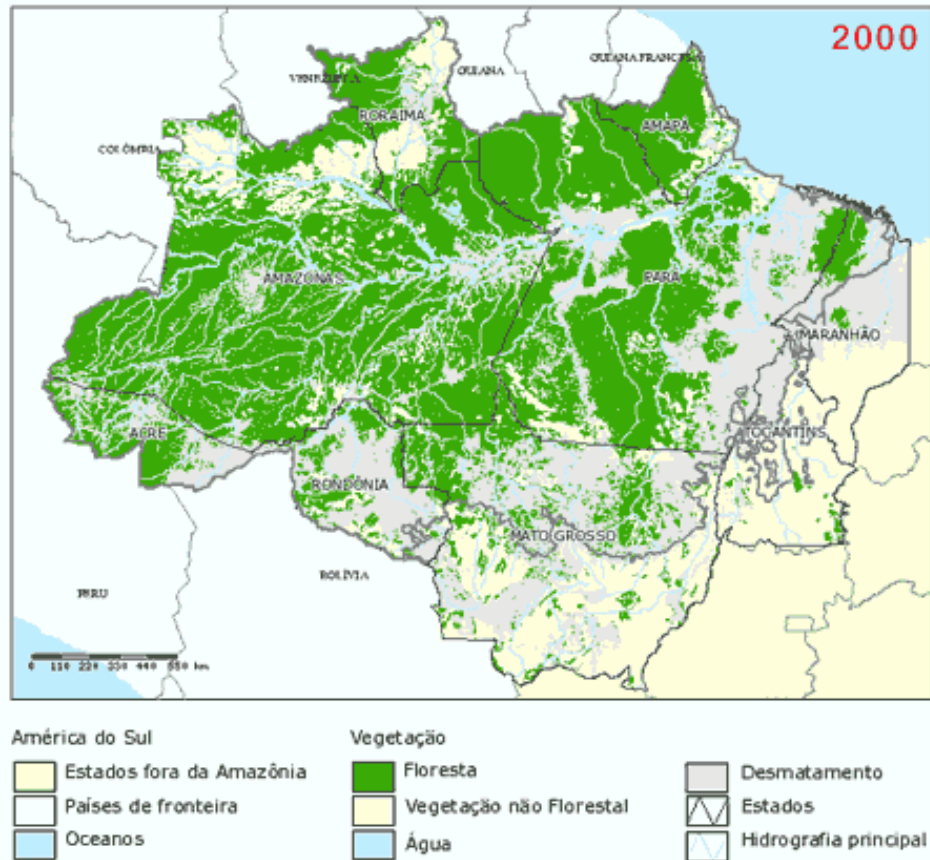
Panama, 20-23 June 2016

BUILDING TOGETHER **SUSTAINABLE LIVESTOCK**
for people, for the planet

Practical example

DEVELOPING SUSTAINABLE SYSTEMS OF BEEF CATTLE PRODUCTION IN THE AMAZON REGION: CHALLENGES AND ACHIEVEMENTS

Desmatamento - 2000 à 2005



**Challenging situation for beef cattle producers:
Extensive beef cattle production and Amazon
deforestation**



Slaughtering the Amazon

Publication - 1 June, 2009

The cattle sector in the Brazilian Amazon is the largest driver of deforestation in the world, responsible for one in every eight hectares destroyed globally. Efforts to halt global deforestation emissions must tackle this sector.



GREENPEACE

www.greenpeace.org

Slaughtering the Amazon
Executive Summary



Executive summary: Zero deforestation is a climate imperative.

Forests play a vital role in stabilising the world's climate by storing large amounts of carbon that would otherwise contribute to climate change. The Amazon is estimated to store 80-120 billion tonnes of carbon. If destroyed, some fifty times the annual GHG emissions of the USA could be emitted.

Destruction of the Amazon, the world's most important forest carbon store, is being driven by the cattle sector.

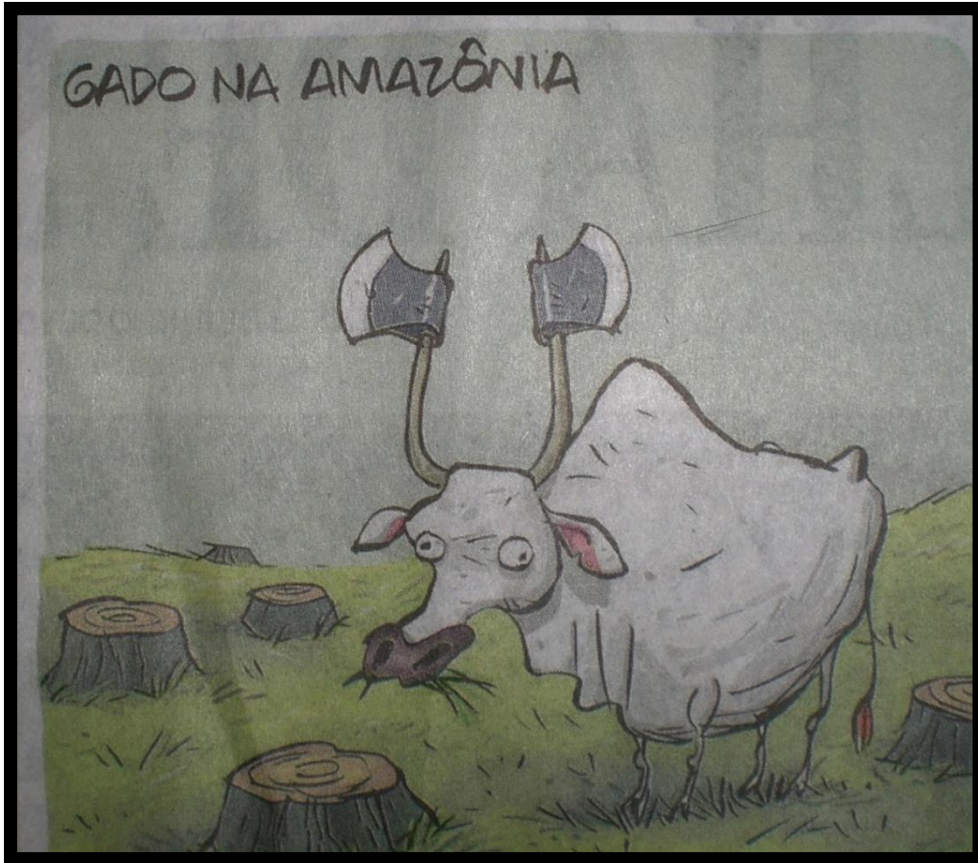
The Brazilian Amazon has the greatest annual average deforestation by area of anywhere in the world. The cattle sector is the key driver of deforestation in the Brazilian Amazon. According to the Brazilian government: 'Cattle are responsible for about 80% of all deforestation' in the Amazon region. In recent years, on average one hectare of Amazon rainforest has been lost to cattle ranchers every 18 seconds.

Take Amazon destruction off my plate! How leading Brazilian slaughterhouses cut its ties to deforestation in the Amazon rainforest

Blogpost by **Oliver Salge** - 2 June, 2015 at 11:56



Cattle production in Amazon: Environmental and welfare challenges



Folha de São Paulo, June 13th, 2009



Folha de São Paulo, June 13th, 2009



World | Fri Jun 12, 2009 3:12pm EDT
Brazil retailers ban beef from cleared Amazon area



Reuters, June 12th, 2009



Folha de São Paulo, June 21st, 2009

Would we be able to change this picture?

Sixth Multi-stakeholder Partnership (MSP) meeting
Panama 20-23 June 2016

Would we be able to change this picture?

YES!



Folha de São Paulo, June 13th, 2009



Folha de São Paulo, June 19th, 2009

- Banning commercial cattle herds in the Amazon area! Huge economical and labour losses.
- Adopting intensive systems. Feed lots were set down, usually using high content of grains in the diets.
- Adopting sustainable systems! Technology should be developed.

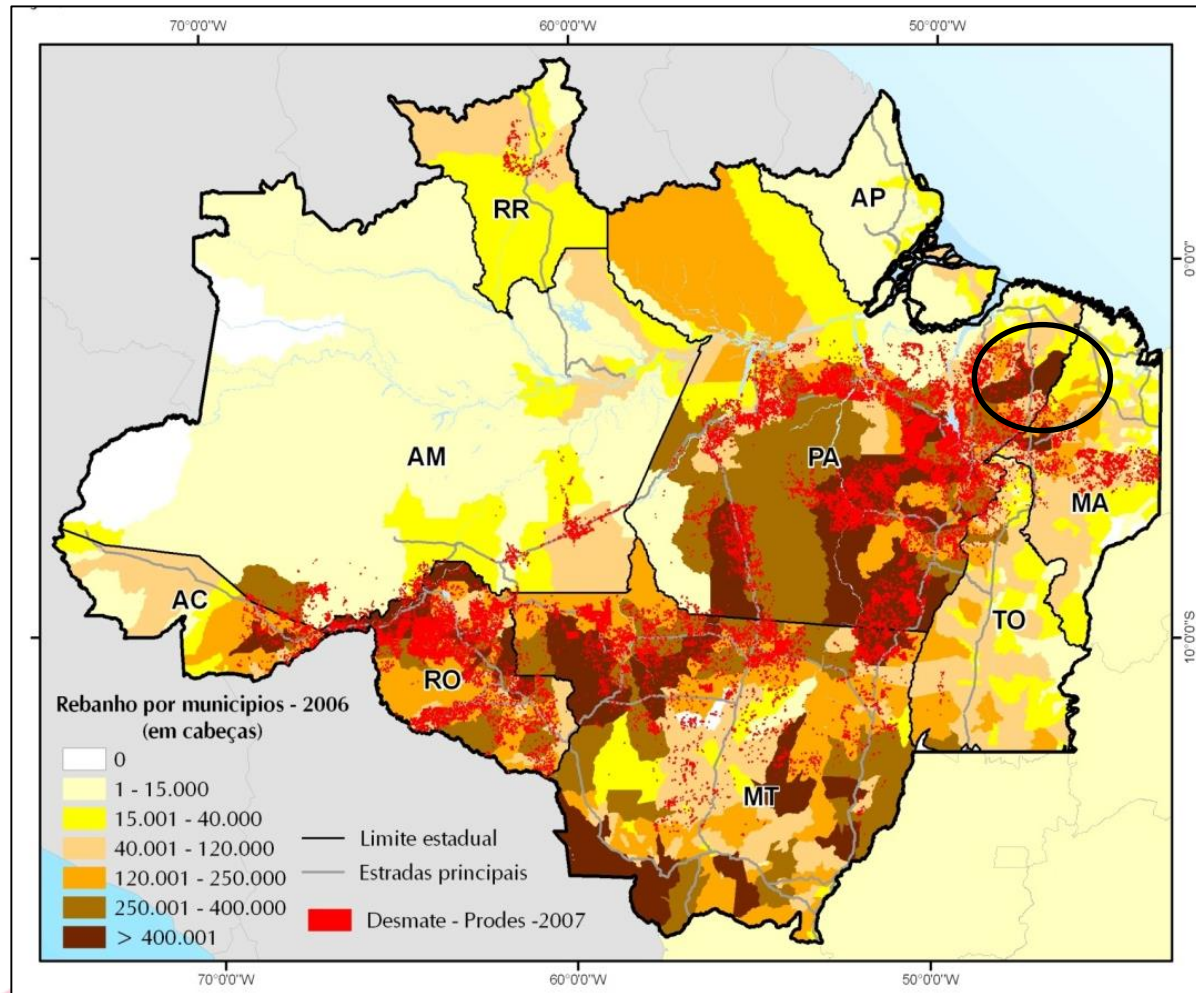


Looking for the development of sustainable system for beef cattle production in the Amazon region



Projeto Pecuária Verde: Research and extension

Paragominas County, Pará State, Brazil



Cattle population per county

Projeto Pecuária Verde, Paragominas – PA, Brazil

Program for environmental and agricultural adjustments in rural properties of Paragominas-PA, Brazil

- Environmental adjustments
- Intensive systems for beef cattle production on pasture
- Adoption of good practices of handling to promote human and cattle welfare



Adoption of good practices of handling to promote human and cattle welfare

Working plan:

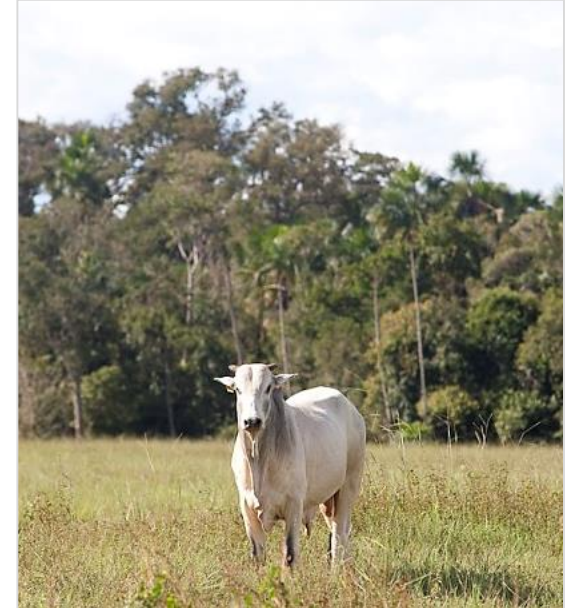
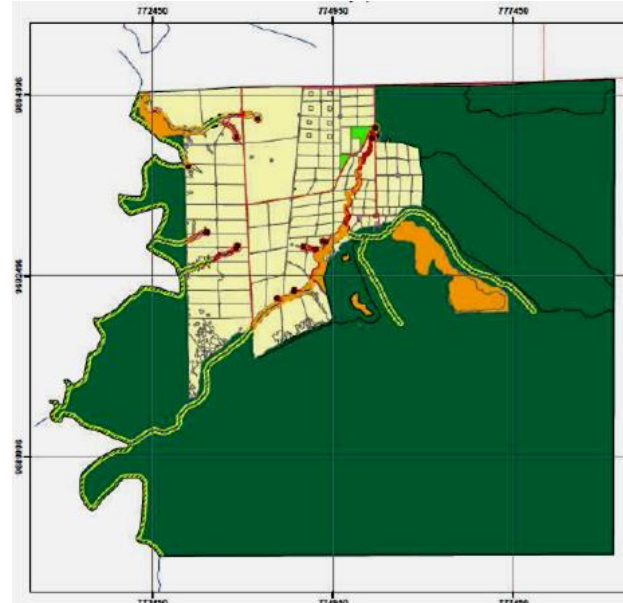
- Education
 - Academic (working together with local Universities)
 - Training livestock people to improve their handling skills
- Improving handling facilities
- Applied research



Projeto Pecuária Verde, Paragominas – PA, Brazil

Results:

- Reduced deforestation
- Recovery of damaged areas
- Improved productivity
- Reduced the animal losses
- Improved the labor conditions
- Improved the labor efficiency
- Improved human and animal welfare
- Opened new trade opportunities



THERE ARE STILL PROBLEMS TO SOLVE

Intensive systems for beef cattle production on pasture

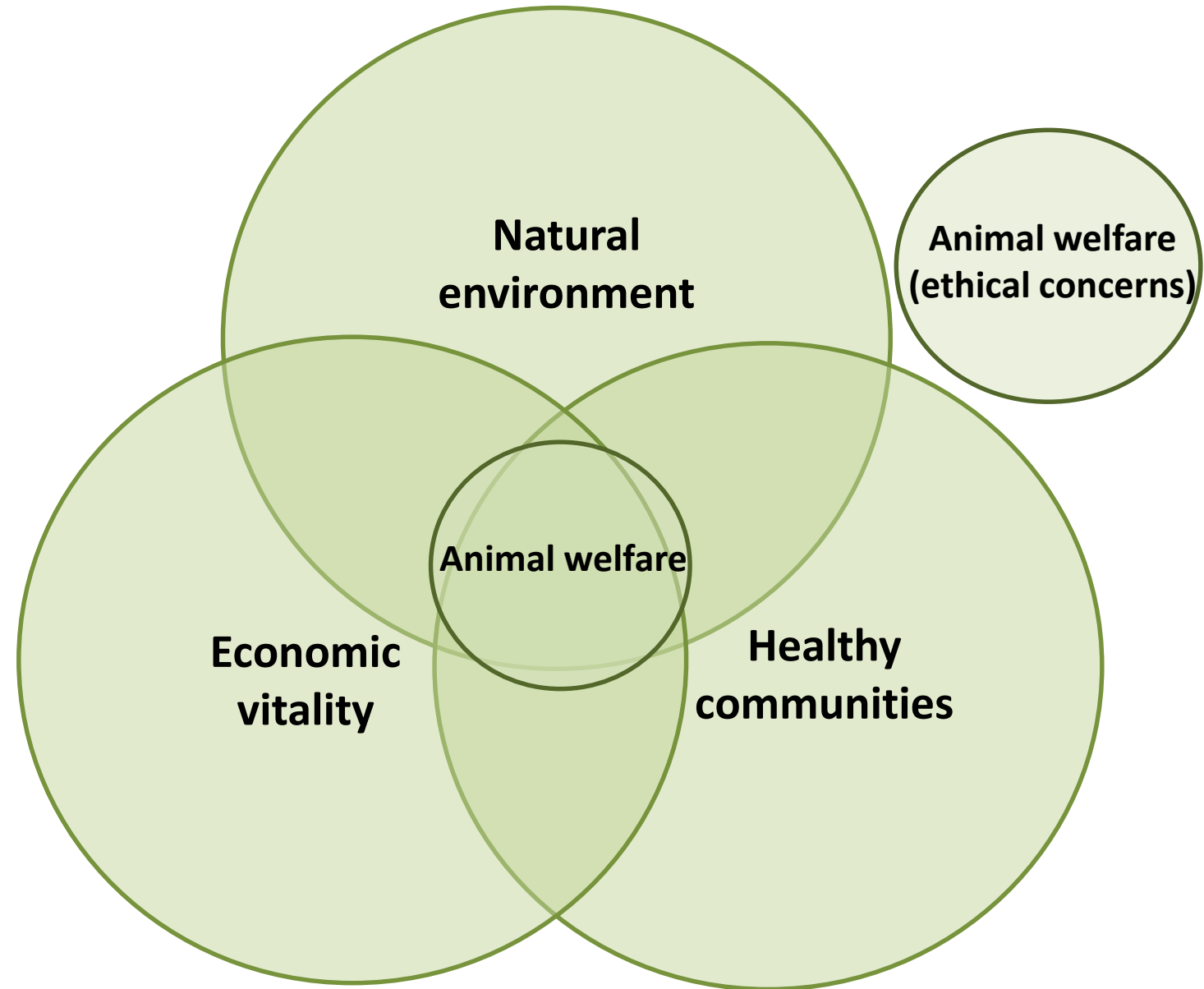
Challenging situation:

Pastures are usually big. Due to this the system demands also big lots of cattle, making handling more difficult (e.g. driving, watering and feeding cattle with supplement)



ANIMAL WELFARE AND SUSTAINABILITY

**ANIMAL WELFARE IS A
COMPLEX SUBJECT
WITH SCIENTIFIC,
ETHICAL, ECONOMIC,
CULTURAL AND
POLITICAL DIMENSIONS
(OIE, 2008)**



Animal welfare and sustainability

CRITICISM CONCERNING ANIMAL PRODUCTION

- Land and other resources use
- Environmental degradation
- Intensification.
- Selection for high yield.
- Diets with high concentrate content.
- Abusive use of antibiotics.
- Painful procedures (castration, dehorning, beak trimming, etc).
- Transport and slaughter.

There is a need for a deep reflection about these points!

Environmental Protection and Animal Welfare Movements



IMPACTOS SOBRE O
MEIO AMBIENTE
DO USO DE ANIMAIS
PARA ALIMENTAÇÃO

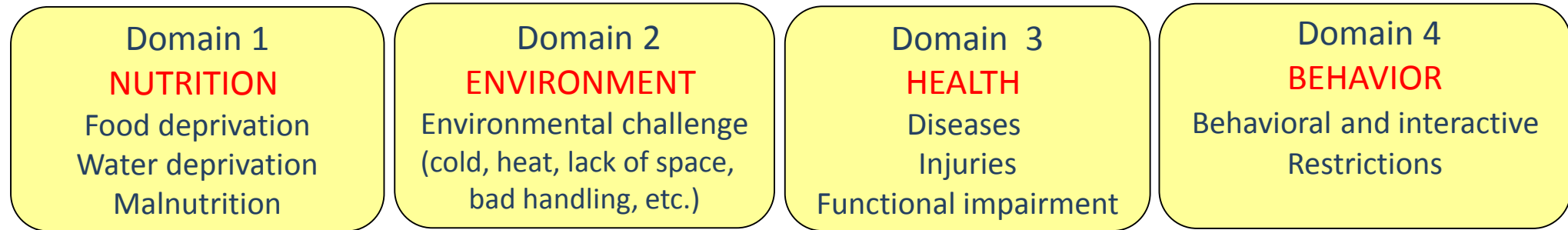


POLUIÇÃO ATMOSFÉRICA - PERIGO NOS OCEANOS - DESERTIFICAÇÃO
ESCARSEZ DE ÁGUA DOCE - SUSTENTABILIDADE - MATRIZ ENERGÉTICA
SOCIEDADE DE CONSUMO - NOVOS PARADIGMAS - SOLUÇÕES POSSÍVEIS

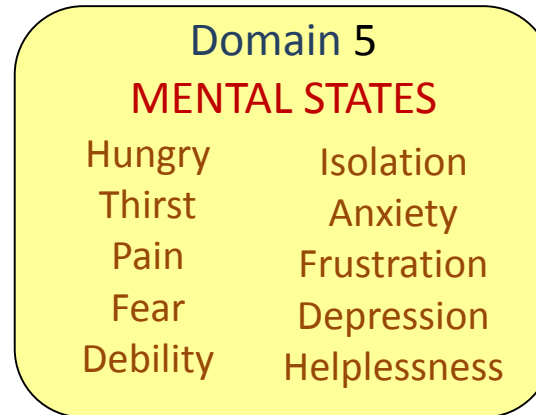


ANIMAL WELFARE PROBLEMS - FIVE DOMAINS MODEL *(Mellor and Reid, 1994)*

PHYSICAL COMPONENTS



MENTAL COMPONENT



ANIMAL WELFARE STATUS

Sixth Multi-stakeholder Partnership (MSP) meeting
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Livestock welfare problems and related costs

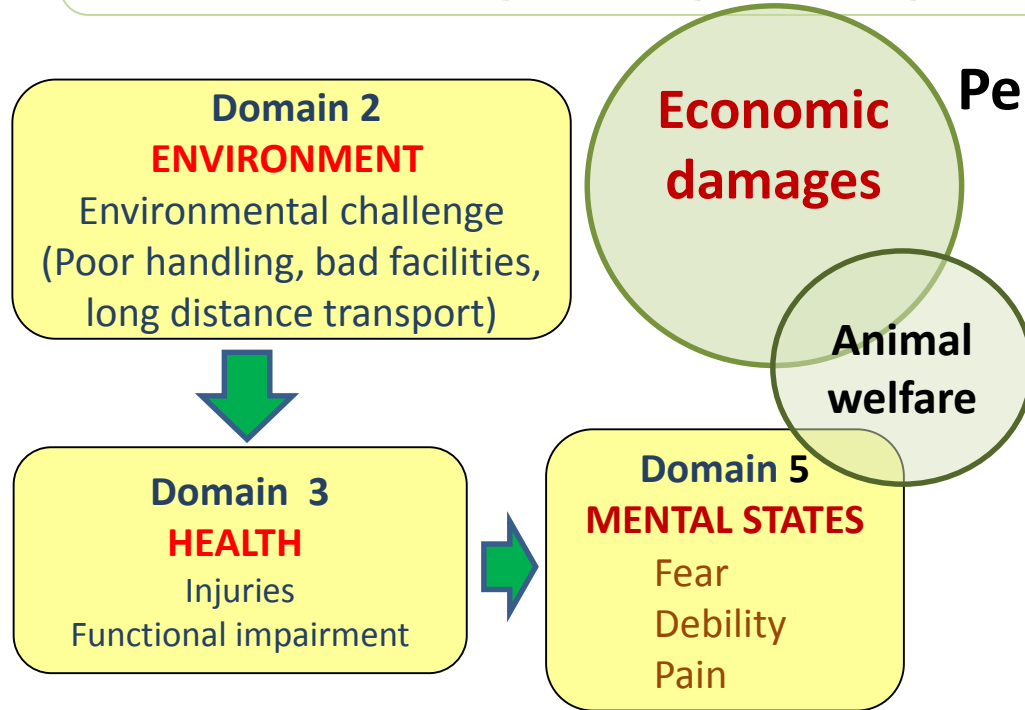


- Animal losses (deaths)
- Productivity losses
- Loss of the product quality
- Increases the risk of labor accidents
- Reduces labor efficiency
- Increases the risk of market loss
- Harms the image of livestock production chains

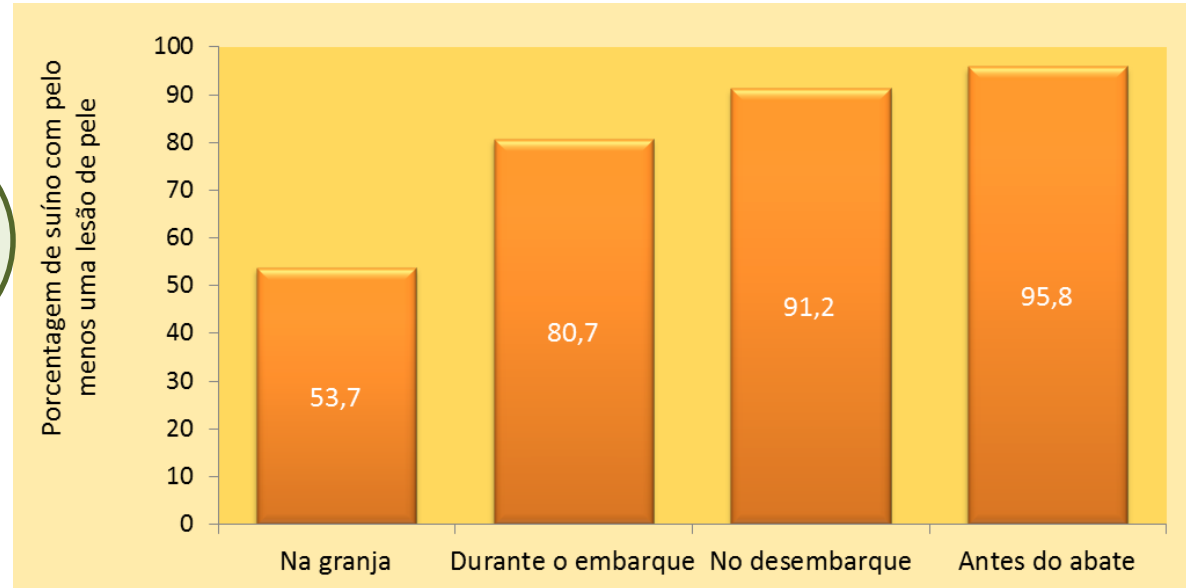


Example with pigs:

Fails in handling during loading, transport and unloading procedures



Percentages of carcasses with skin lesions - Brazil



Dalla Costa et al. (2009)

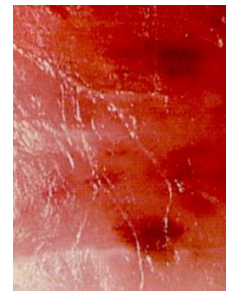
- Animal suffering
- Waste of food
- Economic loss
- Spreading wrong message ("bad becoming normal")



Skin lesions



Bruises



Broken bones



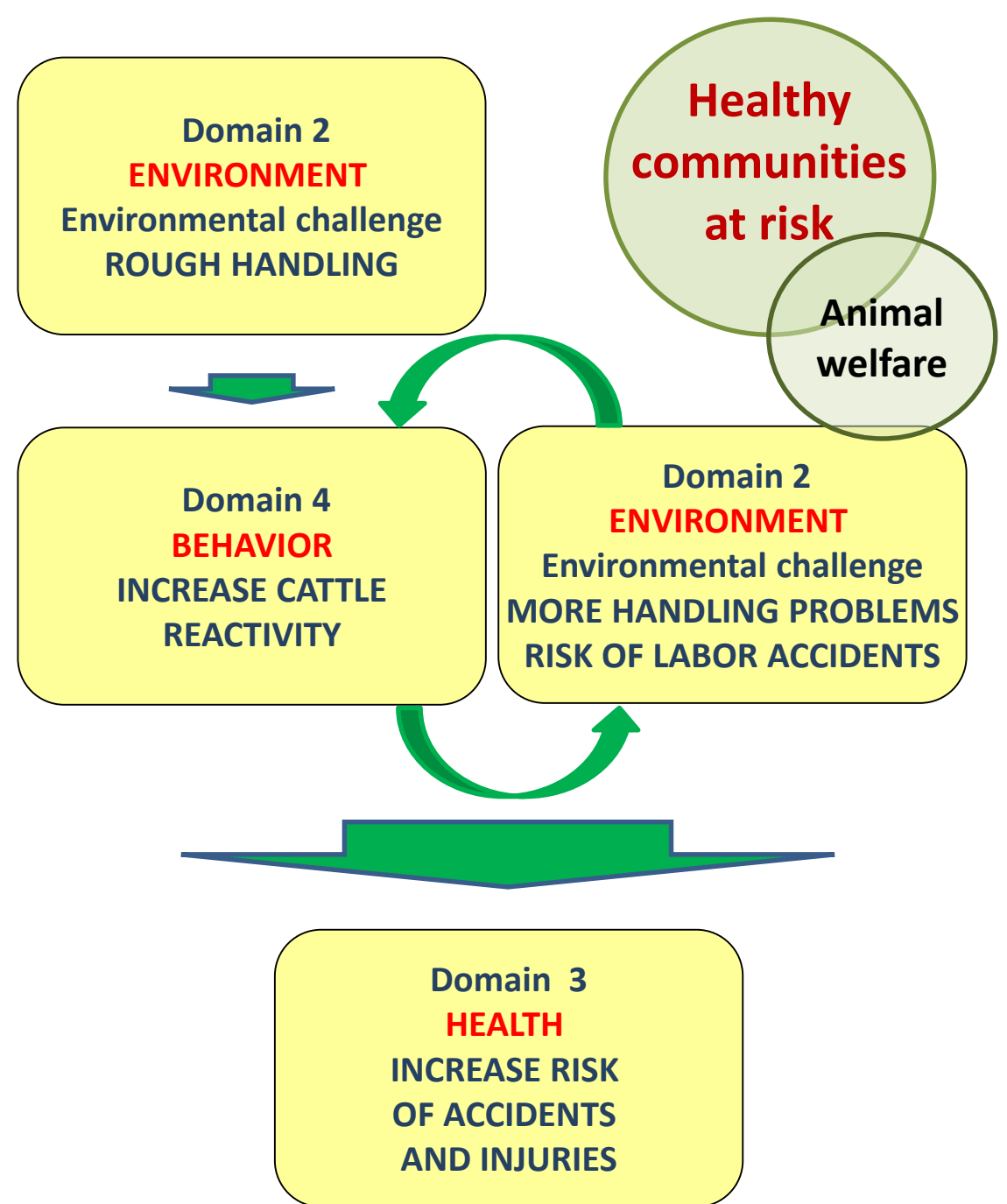
PSE meat



DFD meat

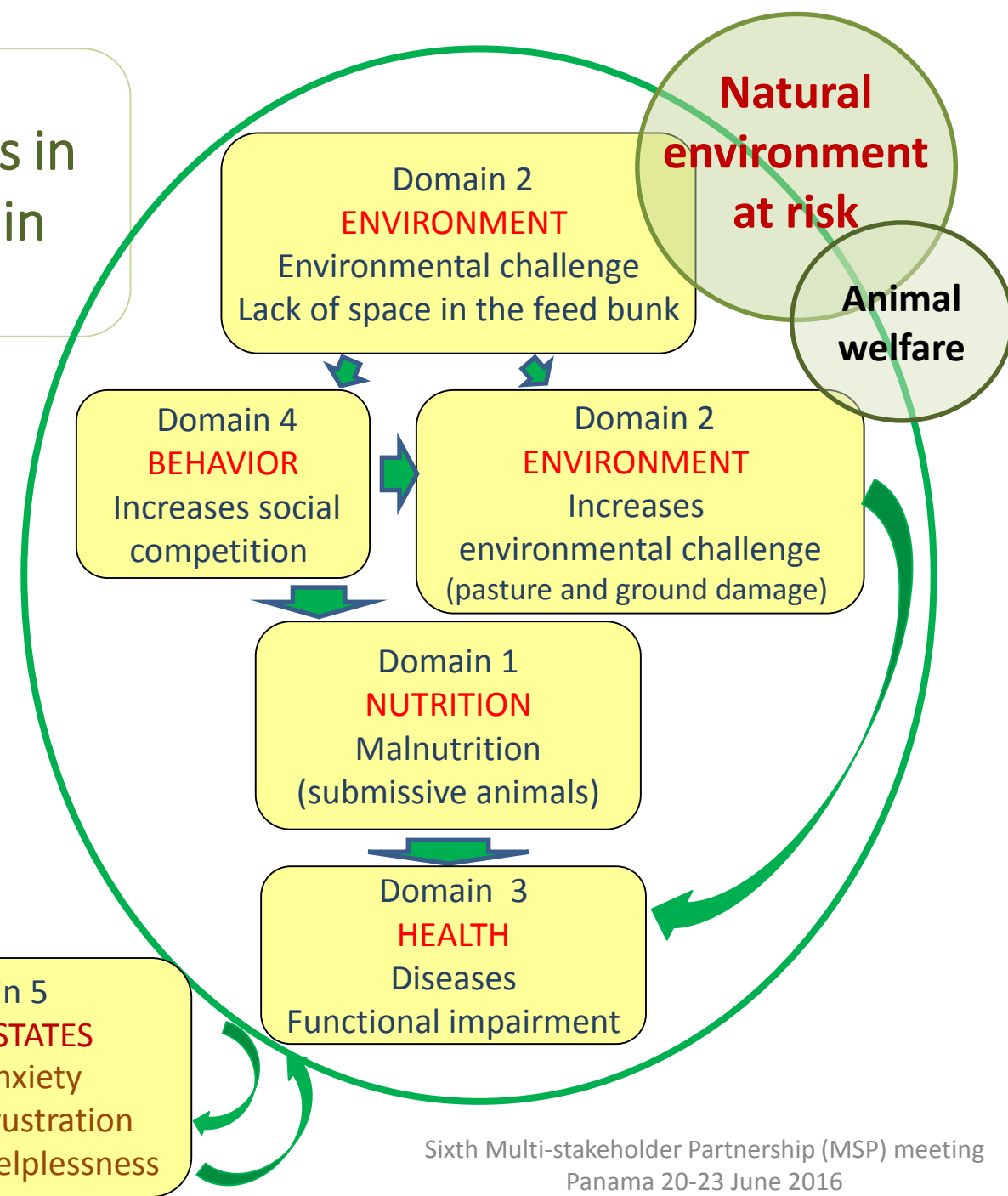
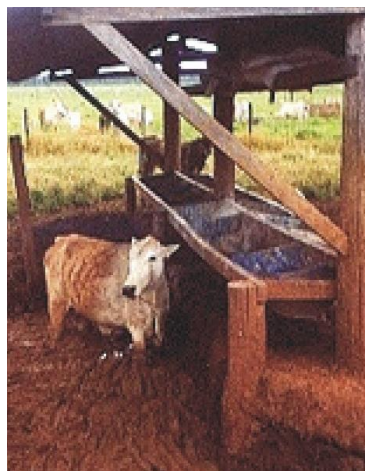
Example with beef cattle

Rough handling welfare problems in cattle



Example with beef cattle:

Environmental and animal welfare problems in grass fed cattle caused by the lack of space in the feed bunks used for supplementation



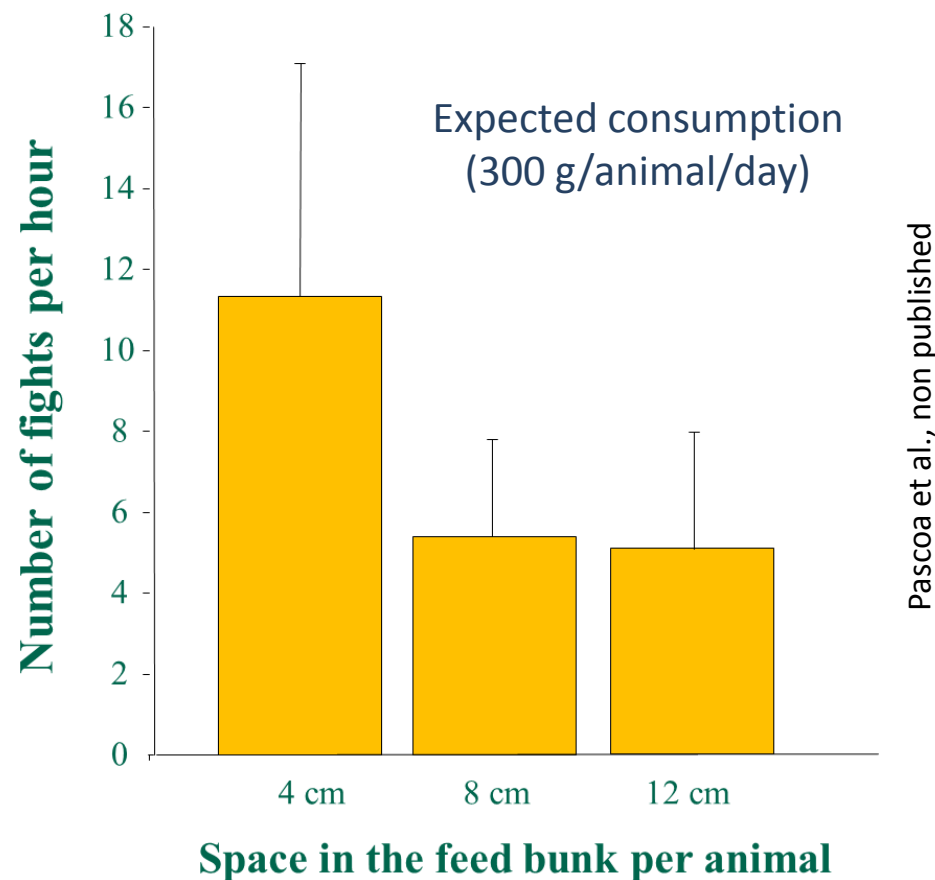
Example with beef cattle:

Social competition (reduced space in the feed bunk)

4 cm/head



12 cm/head



Average number of fights (\pm SD) per hour according to the space in the feed bunk

Example with beef cattle:

Botulism outbreaks in cattle in Brazil associated with contaminated water

Surtos de botulismo em bovinos no Brasil associados à ingestão de água contaminada¹

Iveraldo S. Dutra², Jürgen Döbereiner³, Ivan V. Rosa⁴,
Luiz A.A. Souza⁵ e Mário Nonato⁵



A feed bunk surrounded by contaminated water

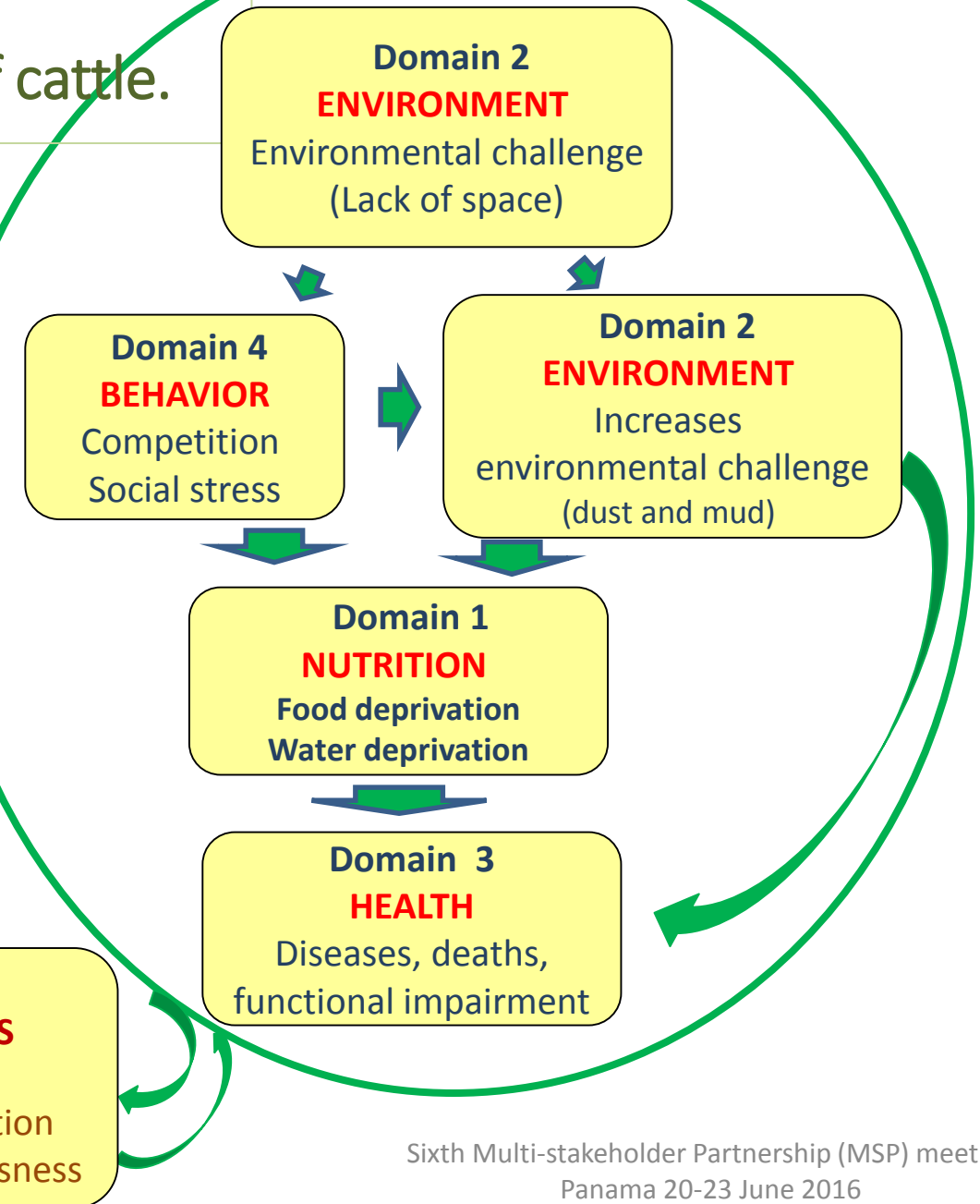
ABSTRACT.- Dutra I.S., Döbereiner J., Rosa I.V., Souza L.A.A. & Nonato M. 2001. [Botulism outbreaks in cattle in Brazil associated with contaminated water] Surtos de botulismo em bovinos no Brasil associados à ingestão de água contaminada. *Pesquisa Veterinária Brasileira* 21(2):43-48. Depto Apoio, Produção e Saúde Animal, Unesp-Campus de Araçatuba, Cx. Postal 533, Araçatuba, SP 16050-680, Brazil.

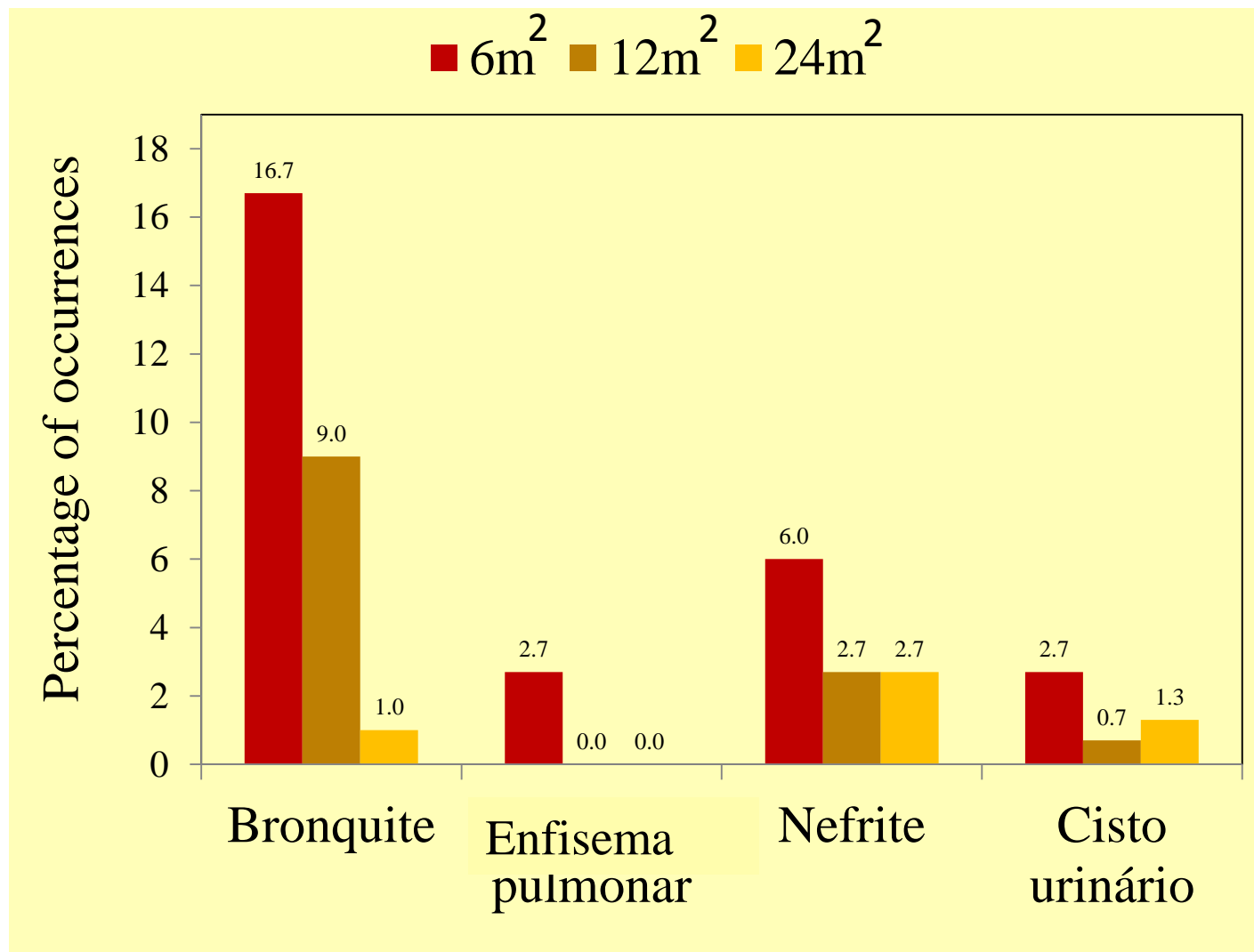
Botulism in cattle occurs by ingestion of botulinum toxin C and/or D. Seven outbreaks of the poisoning in the states of Mato Grosso do Sul and São Paulo are reported. The clinical and pathological data, epidemiology and laboratory findings indicate a possible intake of the toxin through contaminated water. The average mortality rate was 20.1%, with 99.2% lethality and 31.62% morbidity. From about 9,000 cattle involved in the outbreaks, 2,844 animals died, predominantly with a hyperacute and acute clinical picture. The high morbidity rates were observed within a short period and affected all categories of cattle, with a clinical and pathological picture characterized by paresis and paralysis of the muscles of locomotion, swallowing and mastication, with absence of gross lesions at post-mortem examination. The outbreaks were related to the presence of decomposed animal carcasses or vegetal material in the drinking water. Botulinum toxins C and/or D were detected in water samples, viscera and blood serum of a considerable number of materials examined.

Pesq. Vet. Bras., 21(2): 43-48, 2001

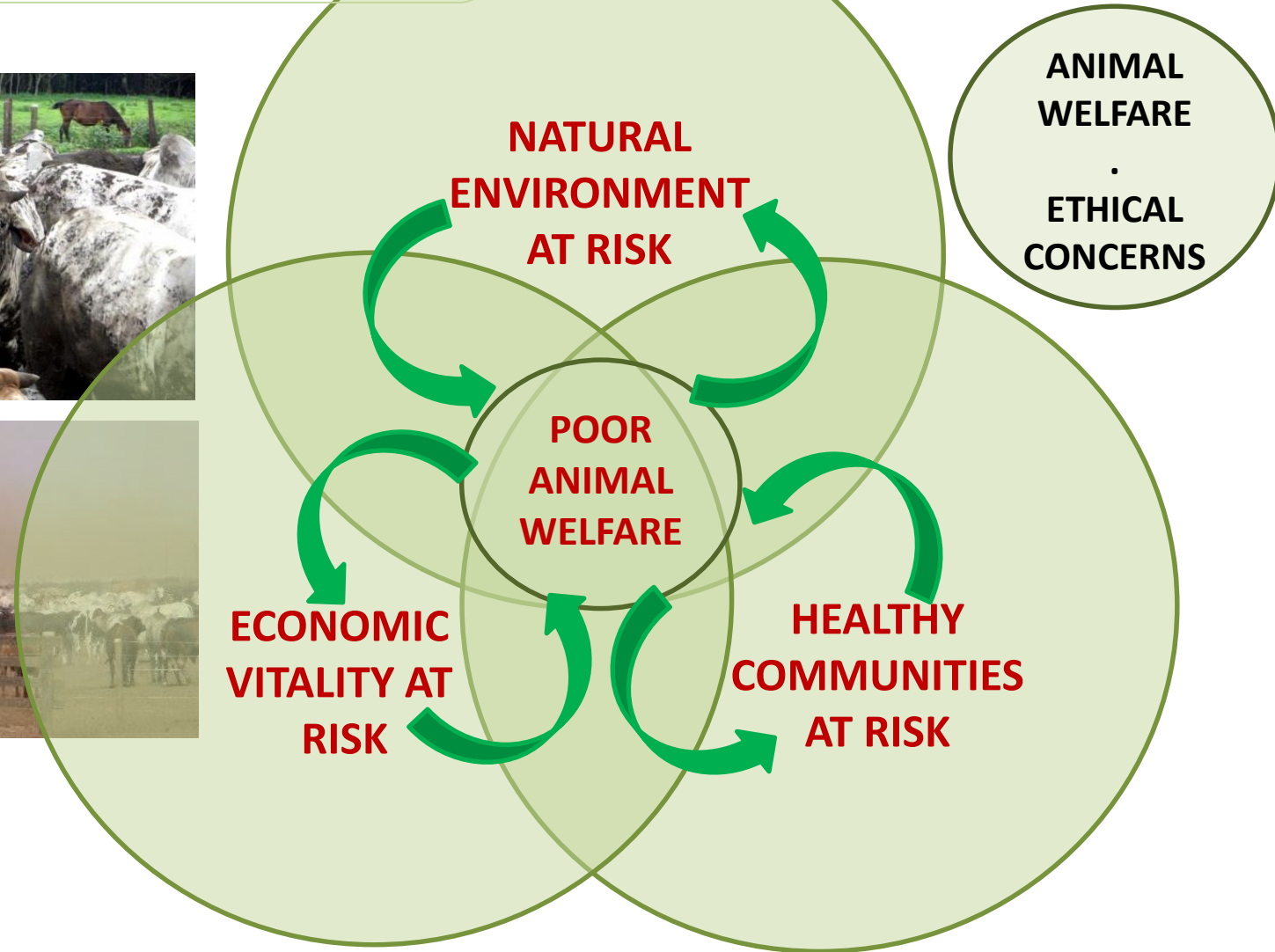
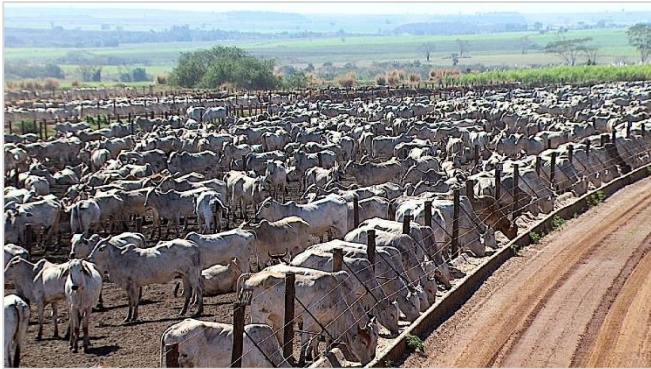
Example:

Welfare problems in high density feedlot beef cattle.





ANIMAL WELFARE AND SUSTAINABILITY



“...YOU BECOME RESPONSIBLE FOREVER FOR WHAT YOU HAVE TAMED...”

(Antonie de Saint-Exupéry, The Little Prince)



*Thank you
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