Feedlot expansion and integration with rapidly changing agriculture in central Brazil

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Extension and Outreach
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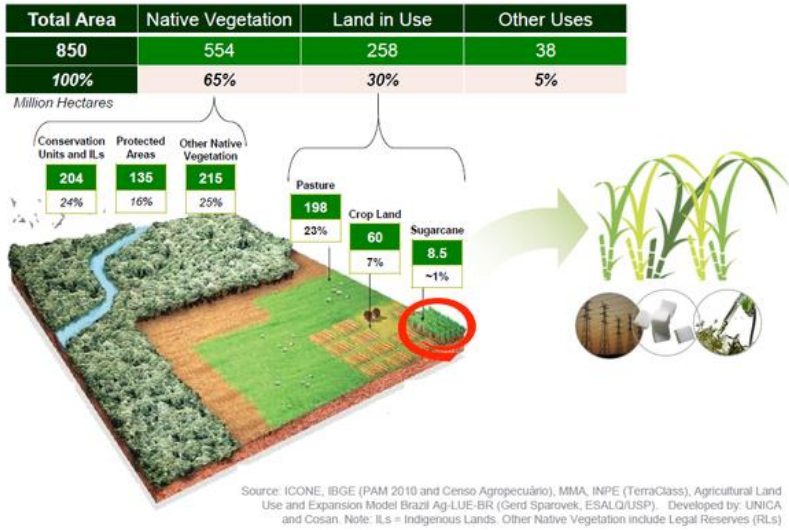
What we can learn from a rapidly growing, immature beef industry…

And what they can learn from us.

- Brazil and beef production
- Brazil and grain production
- Livestock and crop integration
- Feedlot production marketing



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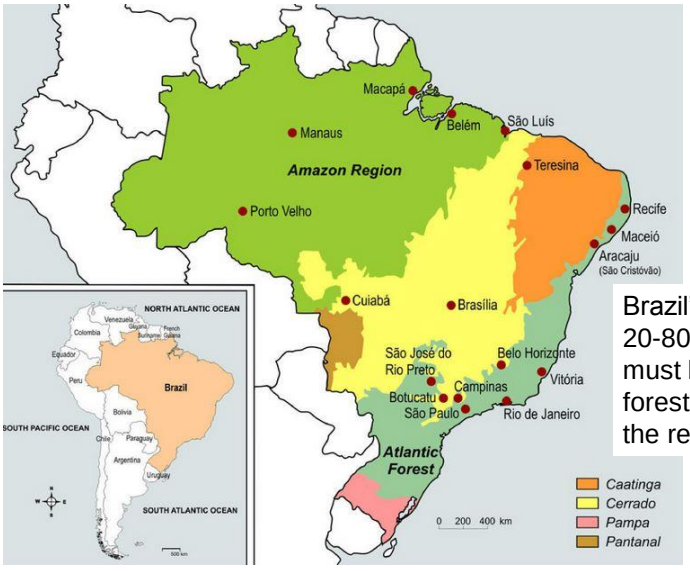
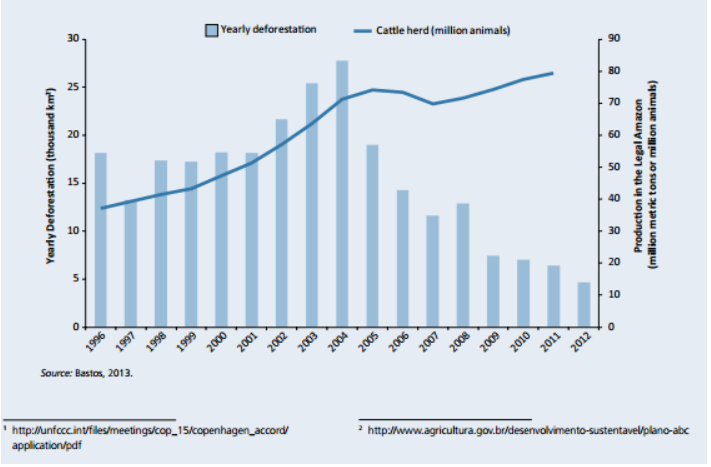


Brazil's "Forest Code": 20-80% of each farm must be conserved in forest, depending on the region.

Cattle herd and deforestation in Brazil



[1] http://unfccc.int/files/meetings/cop_15/copenhagen_accord/application/pdf

[2] http://www.agricultura.gov.br/desenvolvimento-sustentavel/plano-abc

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1,000 miles in 3 days

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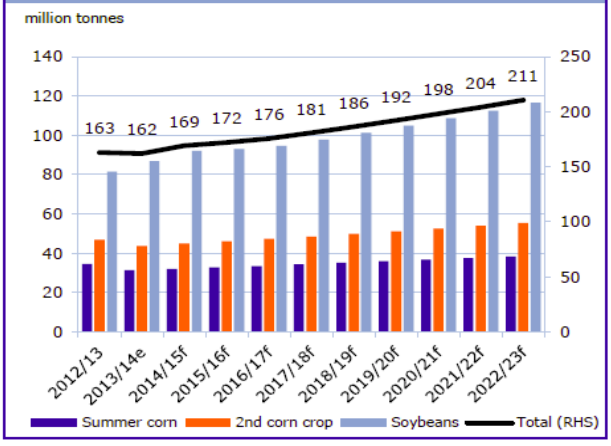
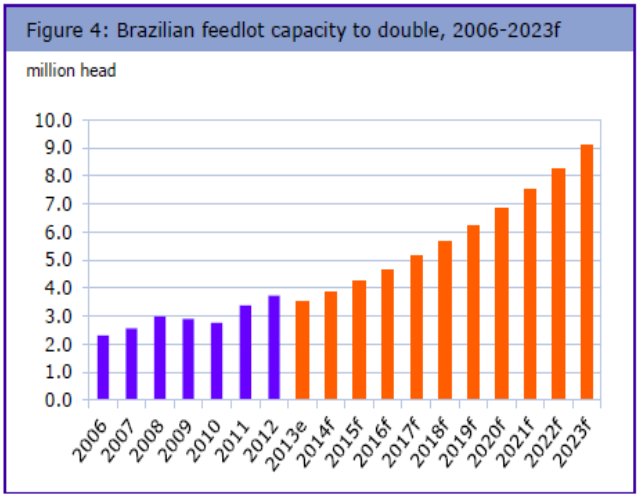
Figure 3: Sharp increase of Brazilian grain production by 2023 to allow for beef intensification, 2012/13-2022/23f



Source: Rabobank, 2014

Figure 4: Brazilian feedlot capacity to double, 2006-2023f



Source: Rabobank, 2014

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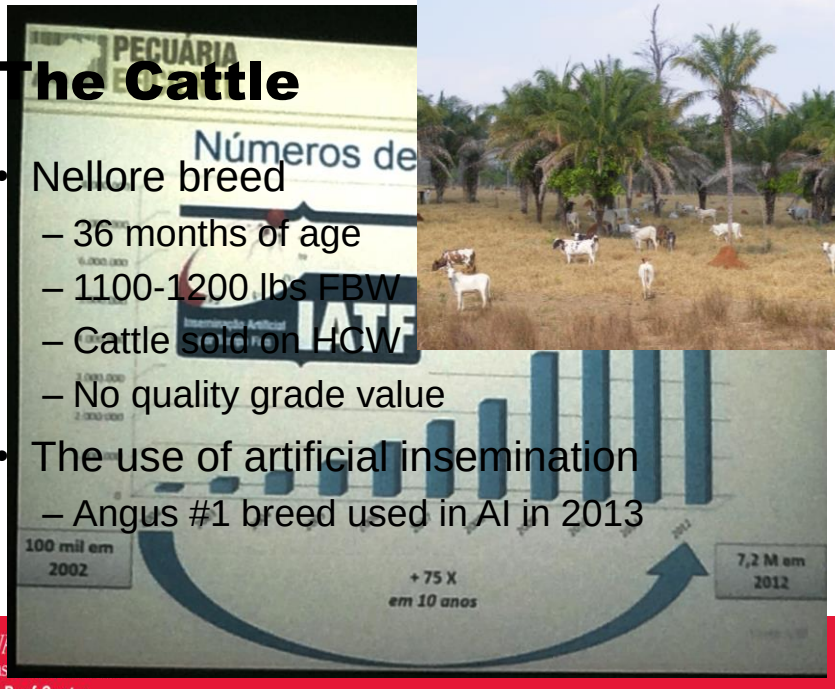
The Cattle

- Nellore breed
  - 36 months of age
  - 1100-1200 lbs FBW
  - Cattle sold on HCW
  - No quality grade value
- The use of artificial insemination
  - Angus #1 breed used in AI in 2013



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Braganca Feedlot

(Lucas do Rio Verde, MT)

- 2013 Nelson Pineda National Award Winner for most efficient feedlot
- 25,000 head per year planning to expand to 50,000 next year
- Integrated crop-livestock farm with corn-soybeans and edible beans.
- Excellent nutrition, data management, animal health

Paulo Roberto Parron, DVM

LARG.
3,20 m
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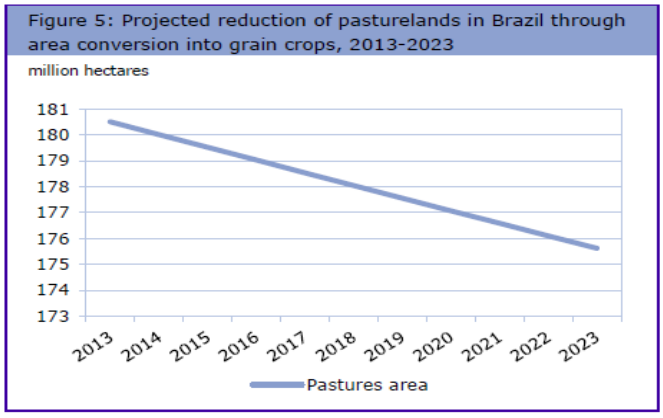
Intensification of cow herds and integration with crop rotations



Source: Rabobank, 2014

Agropecuarias Mafra e Propecus - Elder Bruno

- 44,000 ha: 12-15,000 in crops and 3,000 ha perm pasture
- Goal = 22,000 ha crop system
- Transitional rainforest area so 50% must be in forest
- 9,000 cows; 5,000 hd feedlot
- Crossbreeding, retained ownership, innovative crop-cow herd integration through crop rotations and cover crops

Crop rotations Mafra e Propecus

- Three cropping systems:
  1) Soybeans-annual tropical grass-millet
  2) Soybeans-corn-annual tropical grass
  3) Soybeans-grass (panicum) for 3 years then back to 1 or 2.

Crop rotations Mafra e Propecus

- 4,000 cows fixed time AI
- Reproductive data
  - 60% success timed AI
  - 92% weaning rate, 5% jaguars

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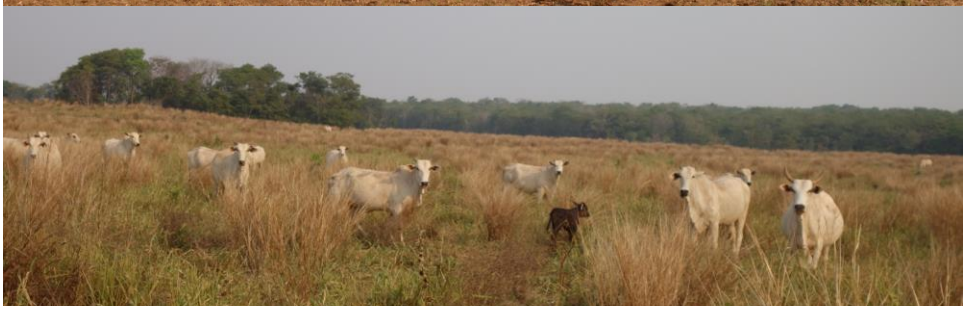

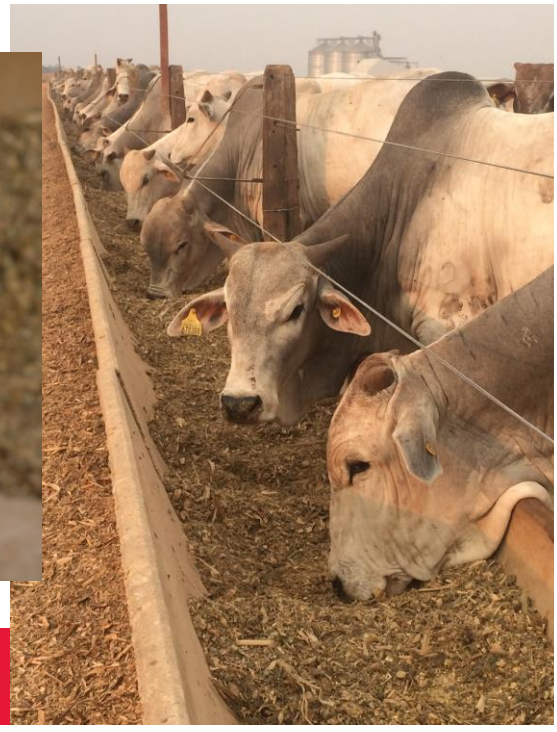

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Bortoluzi Farm (Matupa)

- 25,000 hd/year
- Also planning to double next year
- 9 months of rainy season
- Very interested in managing mud

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Fazena Mirante Feedlot

- Goiania (Goias State)
- Poorer soils, less farming
- Sorghum, corn silage, cottonseed, tomato waste
- Custom feedlot
- Test lot for GA feedlot software
- “Most photogenic” feedlot in Brazil

Traceability and Marketing

BERTIN
QUARTO TRASEIRO
Brazilians consume 80% of production
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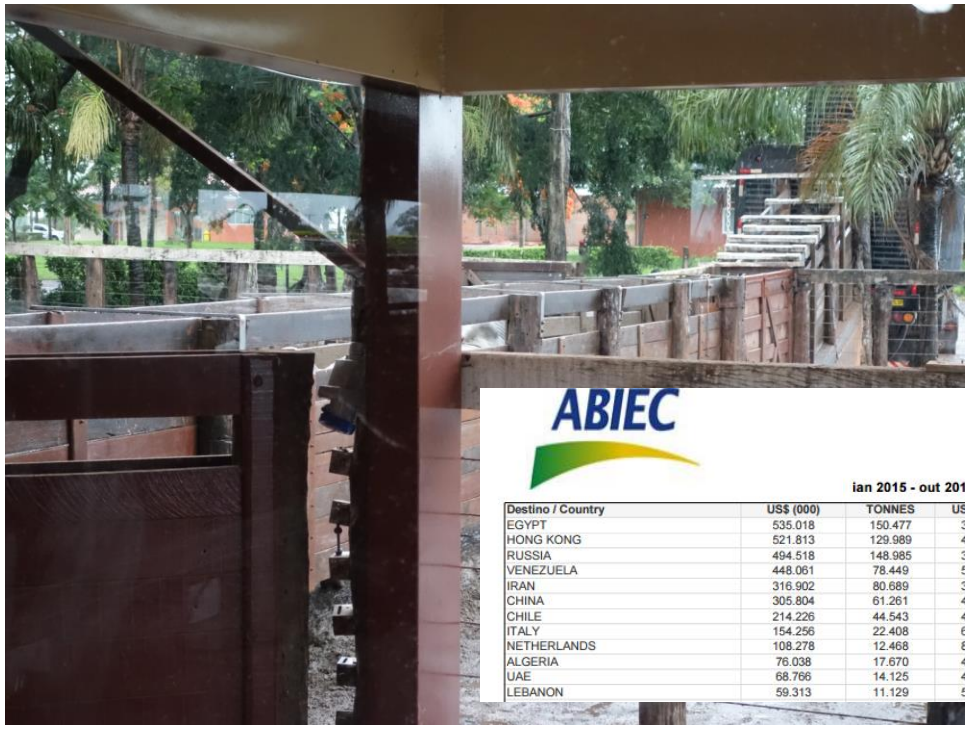
Brazillian beef exports, Jan - Sep

		2011	2012	2013
		000 tonnes		
Total fresh/frozen		**609.9**	**678.5**	**851.5**
To:	Russia	193.4	205.9	238.3
	Hong Kong	48.4	67.3	162.2
	Ven	40.6	54.2	96.7
	Egypt	62.2	96.0	93.8
	Chile	18.4	45.4	56.0
	EU-27	33.6	37.9	50.7

Source: GTIS



ABIEC

ian 2015 - out 201

Destino / Country	US$ (000)	TONNES	US
EGYPT	535.018	150.477	3
HONG KONG	521.813	129.989	4
RUSSIA	494.518	148.985	3
VENEZUELA	448.061	78.449	5
IRAN	316.902	80.689	3
CHINA	305.804	61.261	4
CHILE	214.226	44.543	4
ITALY	154.256	22.408	6
NETHERLANDS	108.278	12.468	8
ALGERIA	76.038	17.670	4
UAE	68.766	14.125	4
LEBANON	59.313	11.129	5

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Global Roundtable for Sustainable Beef and GTPS, the Brazilian Roundtable on Sustainable Livestock
GTPS
Grupo de Trabalho da Pecuária Sustentável
Brazilian Roundtable on Sustainable Livestock
Major Supporters of the 2014 Global Conference on Sustainable Beef

Integration of livestock and cropping systems are sustainable solutions to expanding the cowherd.

Can the US and Brazil provide beef for a hungry world?
• Competition
• Communication
• Cooperation

IFBF Brazil Market Study Tour

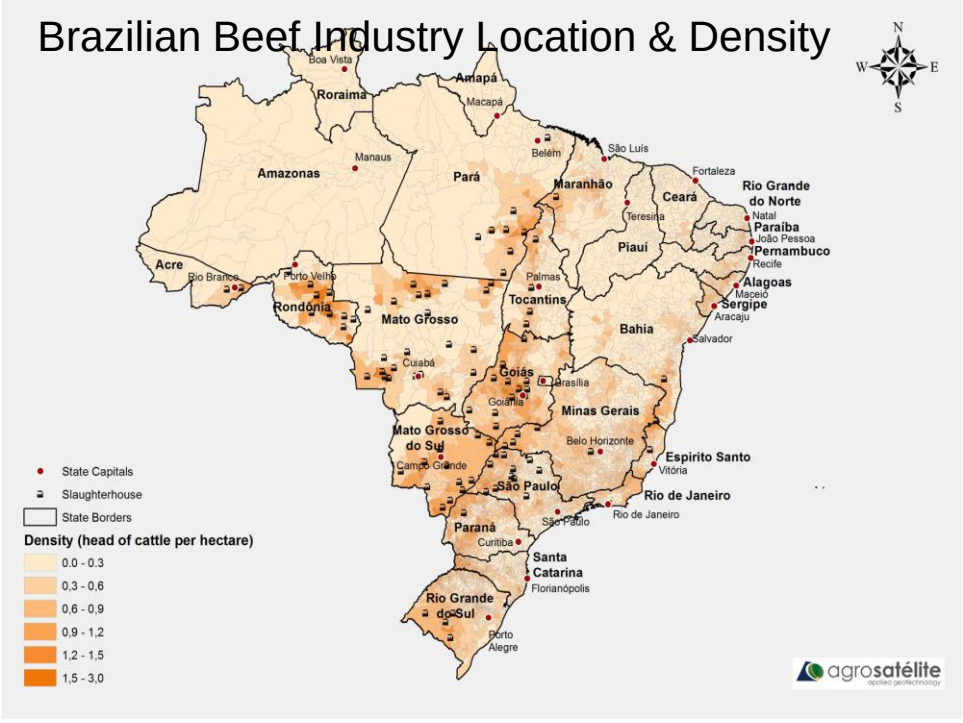
Guzerat Cattle

The IFBF Group

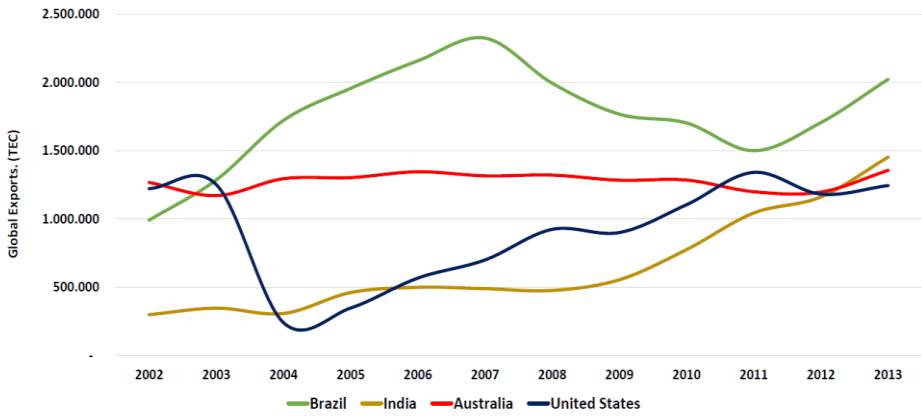
Global Ranking of Brazilian Production and Exports

Main Products	Global Ranking		World Comercial share
	Production	Exports	
Orange Juice	1º	1º	77%
Sugar	1º	1º	45%
Coffee	1º	1º	28%
Beef	2º	1º	22%
Chicken	2º	1º	35%
Soybeans	2º	2º	39%
Corn	3º	2º	17%
Soybean oil	4º	2º	12%
Soybean meal	4º	2º	22%
Pork	4º	4º	10%
Cotton	5º	3º	10%

Source: USDA ; Estimation of 2014 and 2015



GLOBAL BEEF EXPORTS
Yearly



- 5 million cattle farms; 208 million head inventory;
- 43 million head annual slaughter; 521 lb avg carcass
- 10.2 million tons beef; 80% domestic consumption; 20% export

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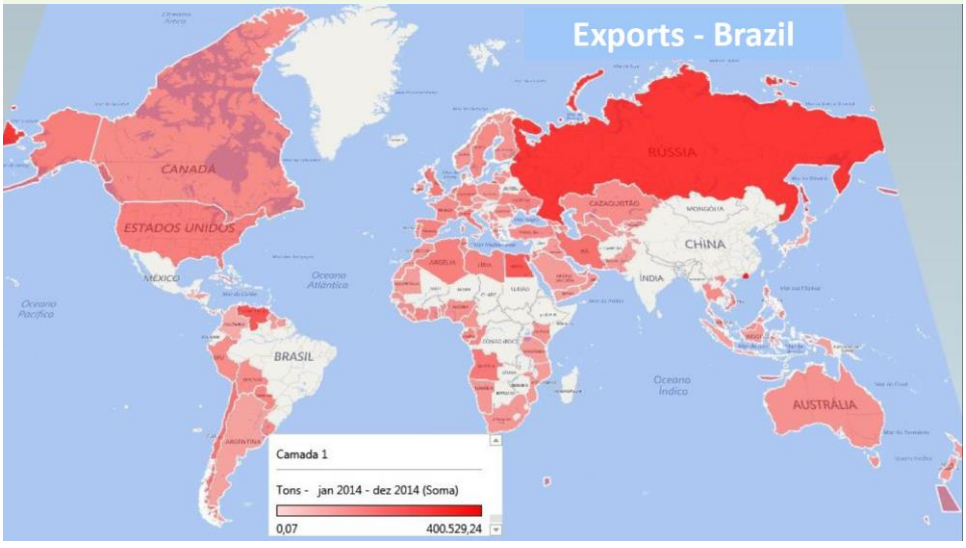
IOWA FARM BUREAU

Brazilian Beef Export Footprint



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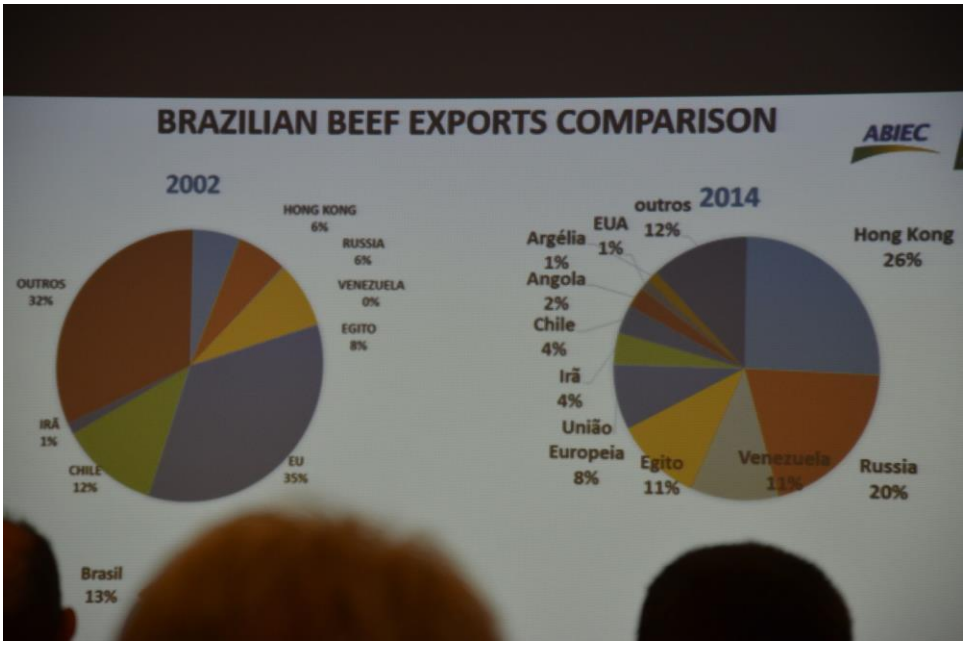

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Quality Breeding Stock

Alta Genetics Facility

Brazilian Beef Industry Facts

- Angus is #1 breed for semen sales in Brazil.
- Live carcass weight of 350 kg.
- 70-80% of beef produced in Brazil is consumed in Brazil.
- Panacum is the main grass; grow to 35 inches and graze down.
- Average herd size is 600 head; a good life is 1,500 head.

Lush Pastures

Pasture & Grass Research

Grid Sampling Pastures

Integrated Forestry & Beef

Integrated Forestry & Beef

- Eucalyptus trees are harvested at 12 years of age.
- The trees reduce grass production by 12% but the profitability of wood production easily offsets the decreased grass production.
- The middle row in the row of three produces straight trees and thus wood that is good enough quality for furniture and the other trees are sold for paper products.
- Rows of 1 tree are not profitable enough to offset the loss of grass production.

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Nelore Cattle

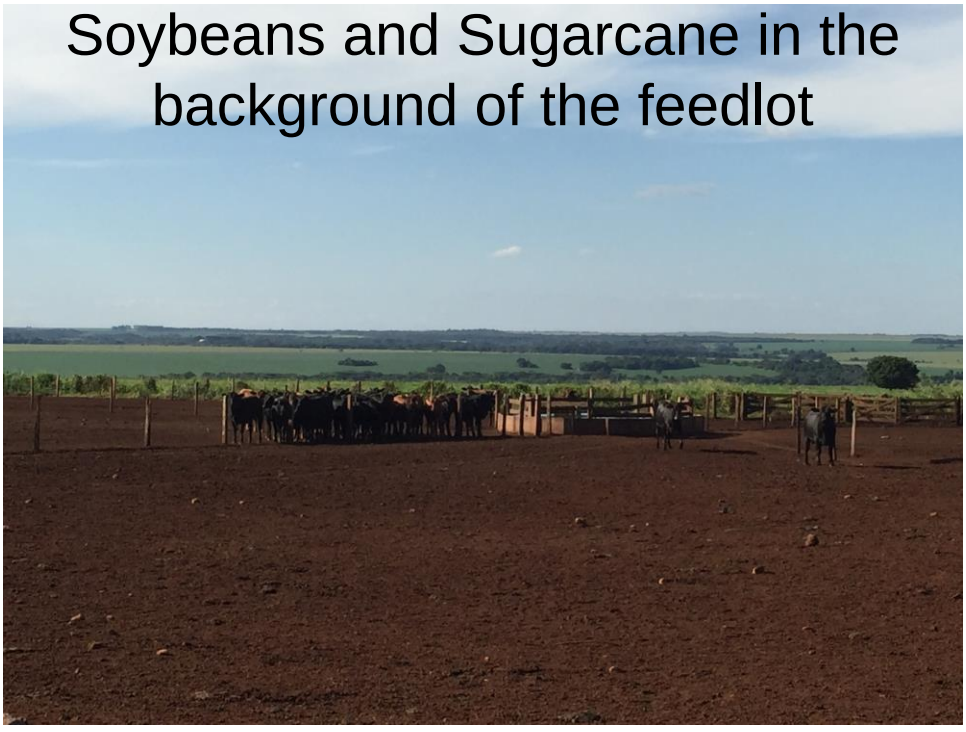
Disappearing Orange Groves

Zebu Cattle

Zebu & English Crossbreds

Crossbreds in a feedlot

Soybeans and Sugarcane in the background of the feedlot



JBS “Swift Black” Feedlot

JBS

JBS Slaughter Plant
JBS

Integrating Corn, Pasture & Beef

10 miles of this road to get to the farm

Working Corral

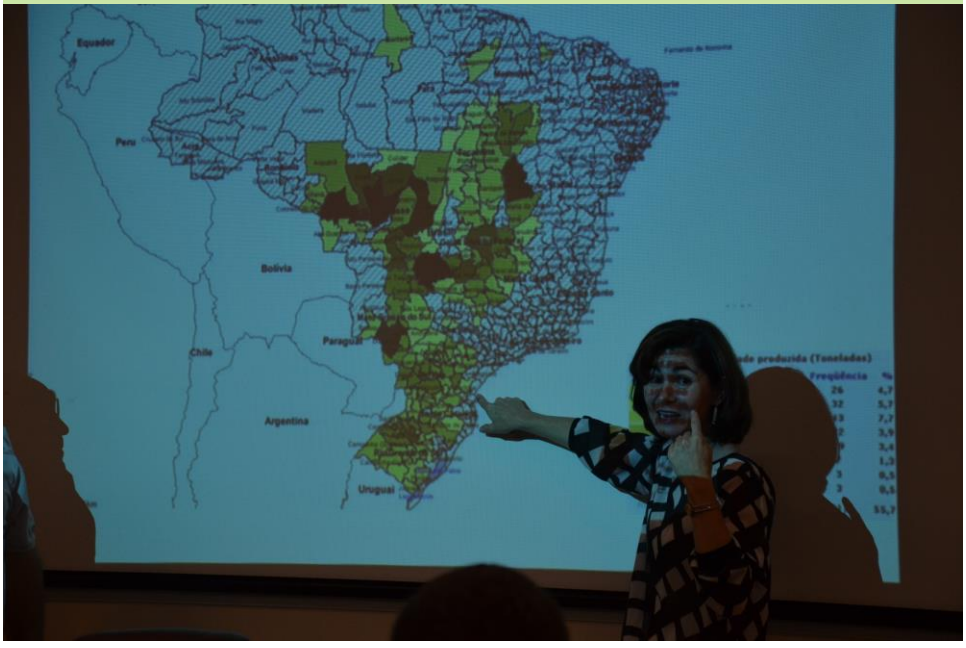
Recently Weaned Calves

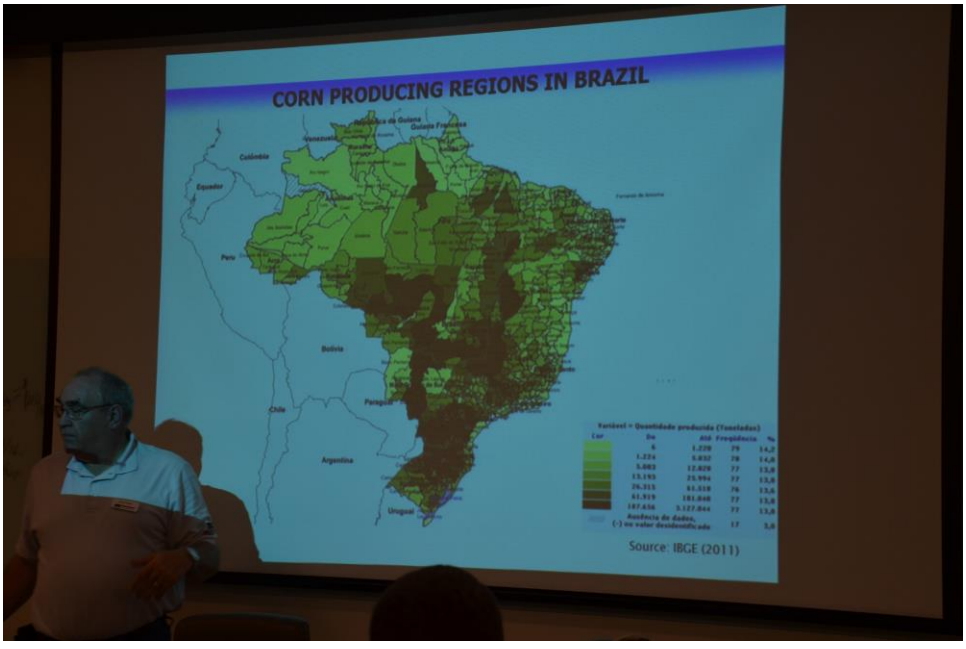
Water Tower for Farm Supply

Housing for Farm Employees

Waygu Beef Farm near Sao Paulo

Major Soybean Production Areas in Brazil





Grain Cleaning

Sugarcane fields

Conclusions

- Brazil – Great Potential, but…..
  - Infrastructure issues
  - Cultural issues
  - Political issues
  - Industry structure

Questions?