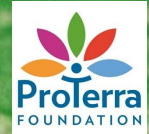


Futtermittelhandelstag am 11./12. Mai 2016

„Marktentwicklungen in Brasilien –
Sicherheit in der Supply Chain“

Augusto Freire



Brazil - Europe Supply & Demand Market Forecasts

NON-GMO SOY AND SOY PRODUCTS AS FEED
INGREDIENTS



Testing

Certification

Services

GMO
Pathogen
Speciation
Allergen
Authenticity

Non-GMO
BRC and SQF
Ohne Gentechnik
ProTerra
Sustainability

Non-GMO Project
Consulting
Food Labeling
Training
Supply Chain



SWITZERLAND 2004: BASEL CRITERIA FOR RESPONSIBLE SOY PRODUCTION



SOUTH AMERICA AND BRAZIL

Agriculture in South America is in general well developed, mainly in Brazil, Argentina, Paraguay, Uruguay, Colombia.

Export model is based on industrial agriculture highly mechanized and technical.

Brazil: South – family agriculture, coops
Center-West – industrial agriculture

SOUTH AMERICA AND BRAZIL

Production costs lower than in America or Europe.

BRAZIL

- Logistics is still less efficient, quality and scale compensate.
- 2-3 crops per year – soy, maize, cotton.
- Non-GMO + GMO soy total 99 million MT 2015-16
about 10% **Non-GMO ≈ 9.9 million MT:**

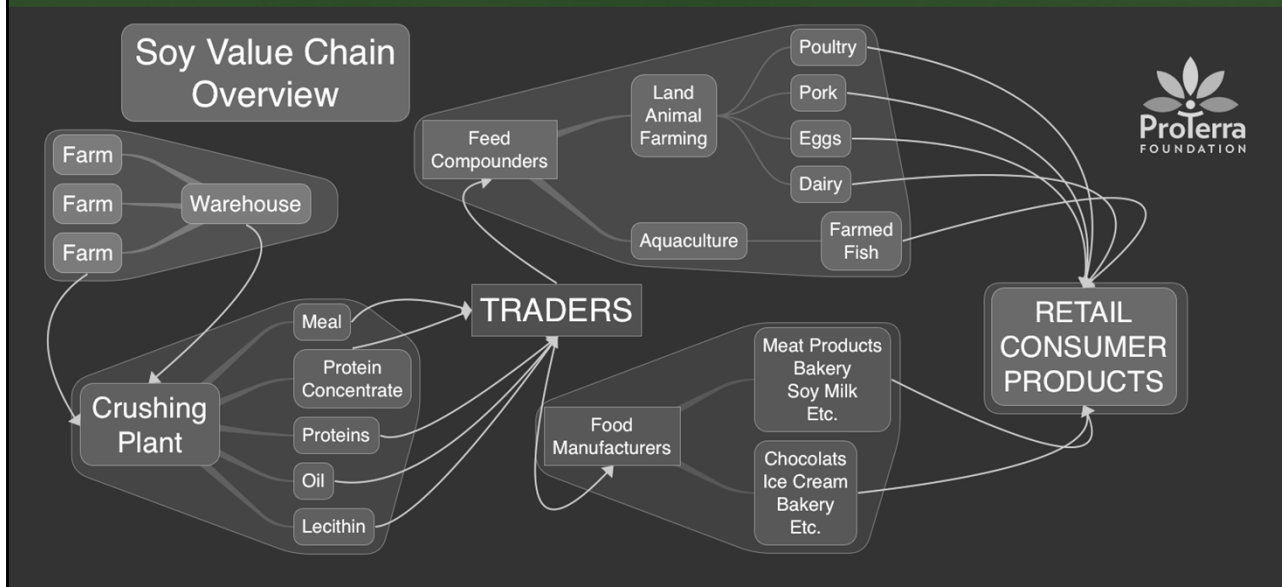
SOUTH AMERICA AND BRAZIL

Corruption and political instability across the continent, with centre-left parties being replaced by right-wing parties - and in some cases ousted (Paraguay).

Political and internal economic crisis in Brazil has NOT affected agriculture and the export industry materially.

Commodity prices have fallen, following oil, but \$ has appreciated against local currencies such as the BRL.

AN INTRICATE CHAIN



EUROPE



Market conditions in Europe

Requirements: regulatory, social aspects, sustainability, Non-GMO market requirements, GMO Labelling regulation.

How will the market change in Europe?

BRAZIL ↔ EUROPE MARKET CONDITIONS

New restrictions to South American soy based on assumptions and marketing directives not always realistic for all producing regions.



EUROPE MARKET CHANGE



Local soy higher cost in general lower protein.

Substitution is not proven to same efficiency.

No Board of Trade and futures market for peas, lupines, fava beans, etc.

BRAZIL ↔ EUROPE MARKET CONDITIONS

Yield Intacta X Non-GMO premia – producers of GMO and Non-GMO state costs of production of GMO varieties including Intacta are more expensive.

Problem is post-harvest handling of Non-GMO. Farmers must sell their Non-GMO productions fast, they will not afford costs of segregation for too long and might eventually commingle Non-GMO with GMO.



GLOBAL FIGURES – AVAILABILITY PROTERRA NON-GMO CERTIFIED



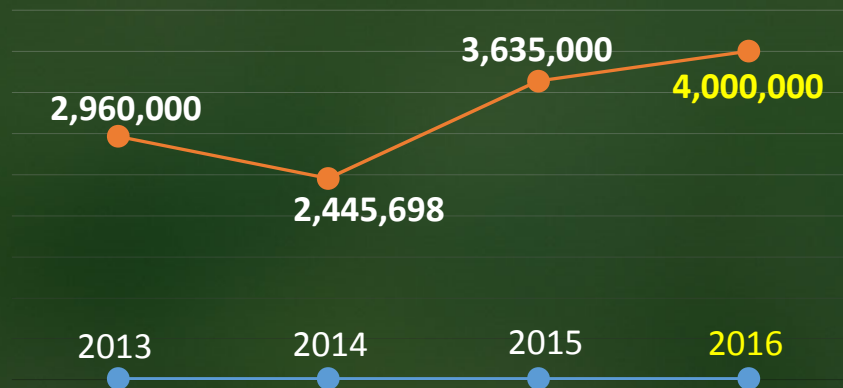
NON-GMO SOYBEAN SUPPLY (in MT) - GEOGRAPHIES						
	RU	FR	CA	BR	USA	TOTAL MT
2013	0	5,000	25,000	2,930,000	0	2,960,000
2014	20,000	5,000	20,000	2,400,698	0	2,445,698
2015	30,000	5,000	20,000	3,560,000	20,000	3,635,000



GLOBAL AVAILABILITY AND FORECAST PROTERRA CERTIFIED



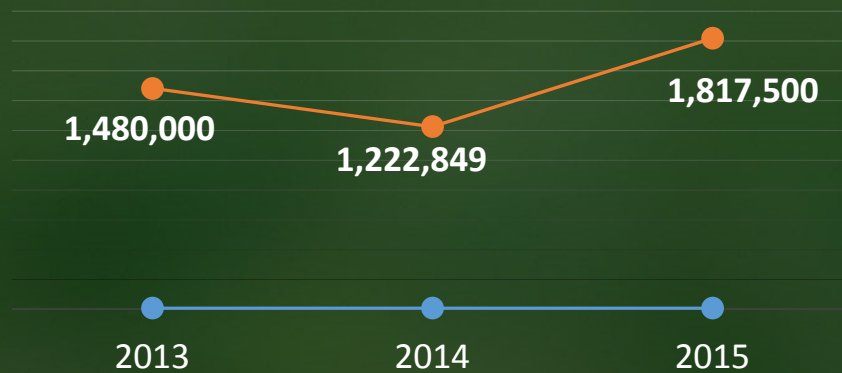
Metric Tons - Non-GMO Beans



GLOBAL AVAILABILITY AND FORECAST PROTERRA CERTIFIED








Area in Hectares





NEEDLE MOVERS FOR NON-GMO & SUSTAINABLE


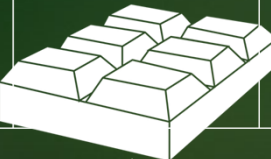


Sectorial Agreements			
UPTAKE 	RETAIL FEED	POULTRY, EGGS	
		FISH	
		DAIRY	
		PIGS	



NEEDLE MOVERS FOR NON-GMO & SUSTAINABLE





Sectorial Agreements		
UPTAKE 	RETAIL FOOD 	LECITHIN, PROTEINS CONFECTIONERY, BAKERY, SOY PRODUCTS, MEAT PRODUCTS



NEEDLE MOVERS FOR NON-GMO & SUSTAINABLE



Sectorial Agreements		
AVAILABILITY	PRODUCTION	
		CONVENTIONAL GENETICS, SEED PRODUCERS, GROWERS, COOPS, CRUSHERS, TRADERS, LOGISTICS

SOUTH AMERICA AND BRAZIL

Vast swaths of land under agriculture.

Brazil Center-West agriculture and Amazon Biome.

Sustainability – farm and not crop (added value).

Reduce use of pesticides and chemical fertilizers.

Reduce emissions, water pollution, decrease risk of scarcity of potable water.



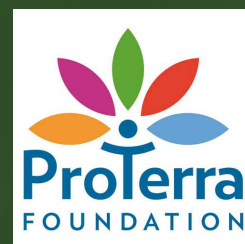
EUROPEAN PULL-THROUGH



Why ProTerra ?

Protein production is the hub for
global warming.

Need for sustainability globally.



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Danke, Thank You, Obrigado!



Credits: Pictures by Luis Prado, Arthur Slain
and Juan Pablo Bravo.