

# *Brazilian Agribusiness*



# *The 10 biggest problems of the world for the next 50 years*

## **AGRICULTURE**

**Energy**

**Water**

**Food**

**Environment**

**Poverty**

**Education**

**Democracy**

**Population**

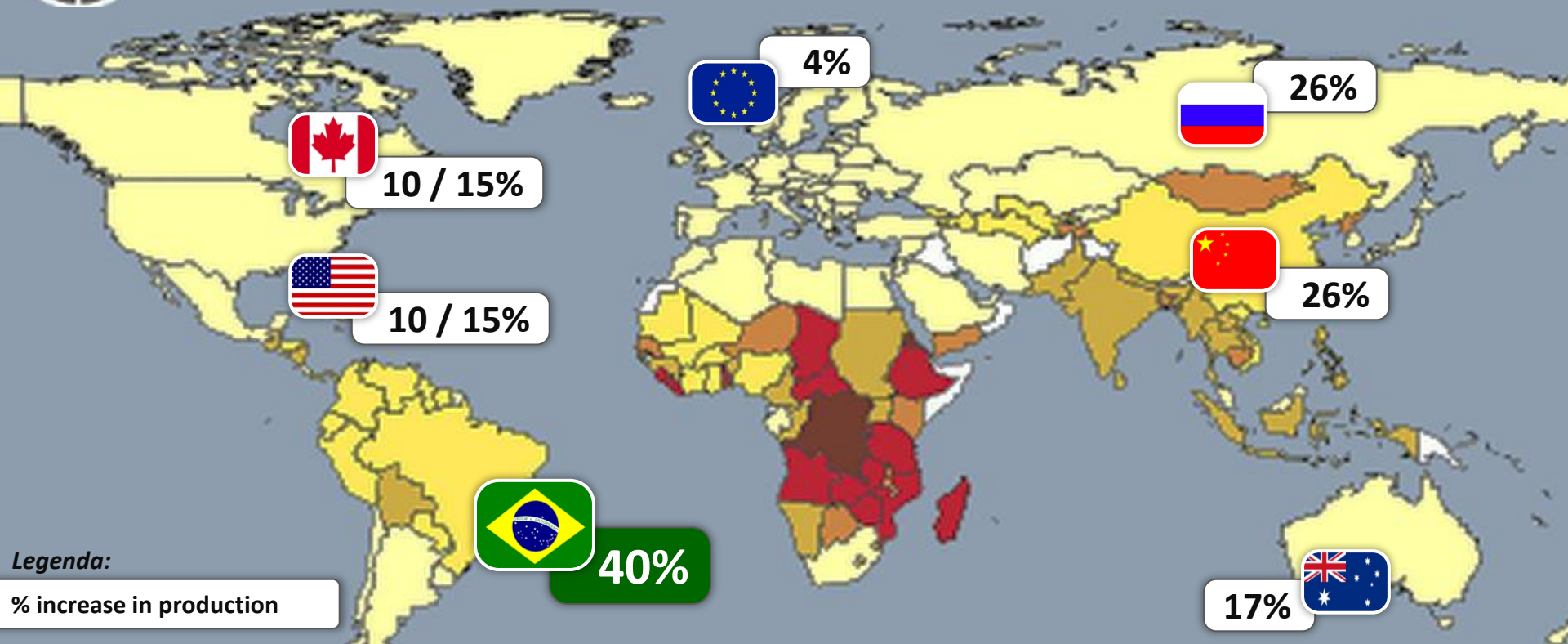
**Diseases**

**Terrorism & War**

# OECD - projection of food production by 2020



Map of undernourished population (% of total)

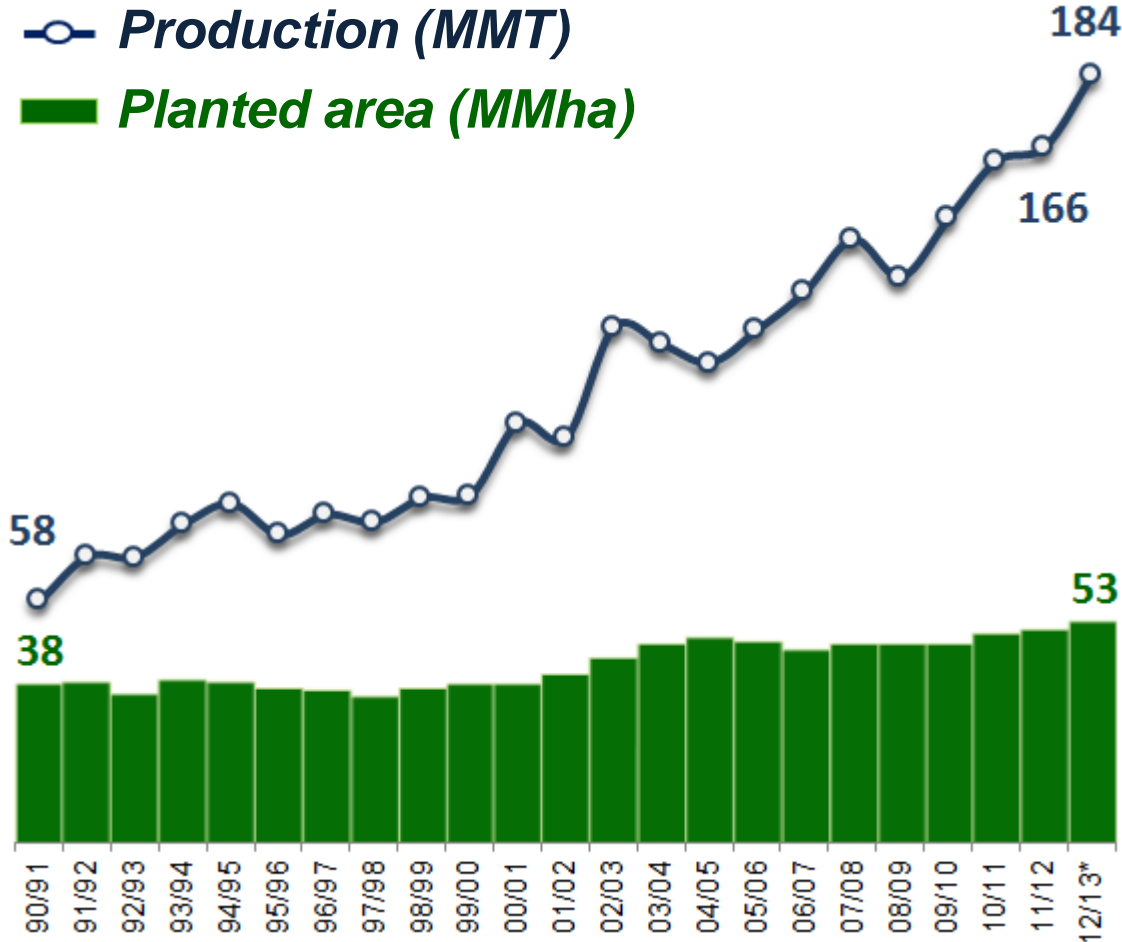


Legenda:

% increase in production

OECD projects to meet the 20 percent increase in world food production required to meet the market demand of estimated population levels in 2020. **Brazil is by far the fastest growing agricultural producer, with output expected to rise by more than 40% between now and 2019/20.** (OCDE, 06/2010)

# Brazilian production of grains



**Variation %  
Harvests 1990/91 to 2012/13**

**Production: + 217%**

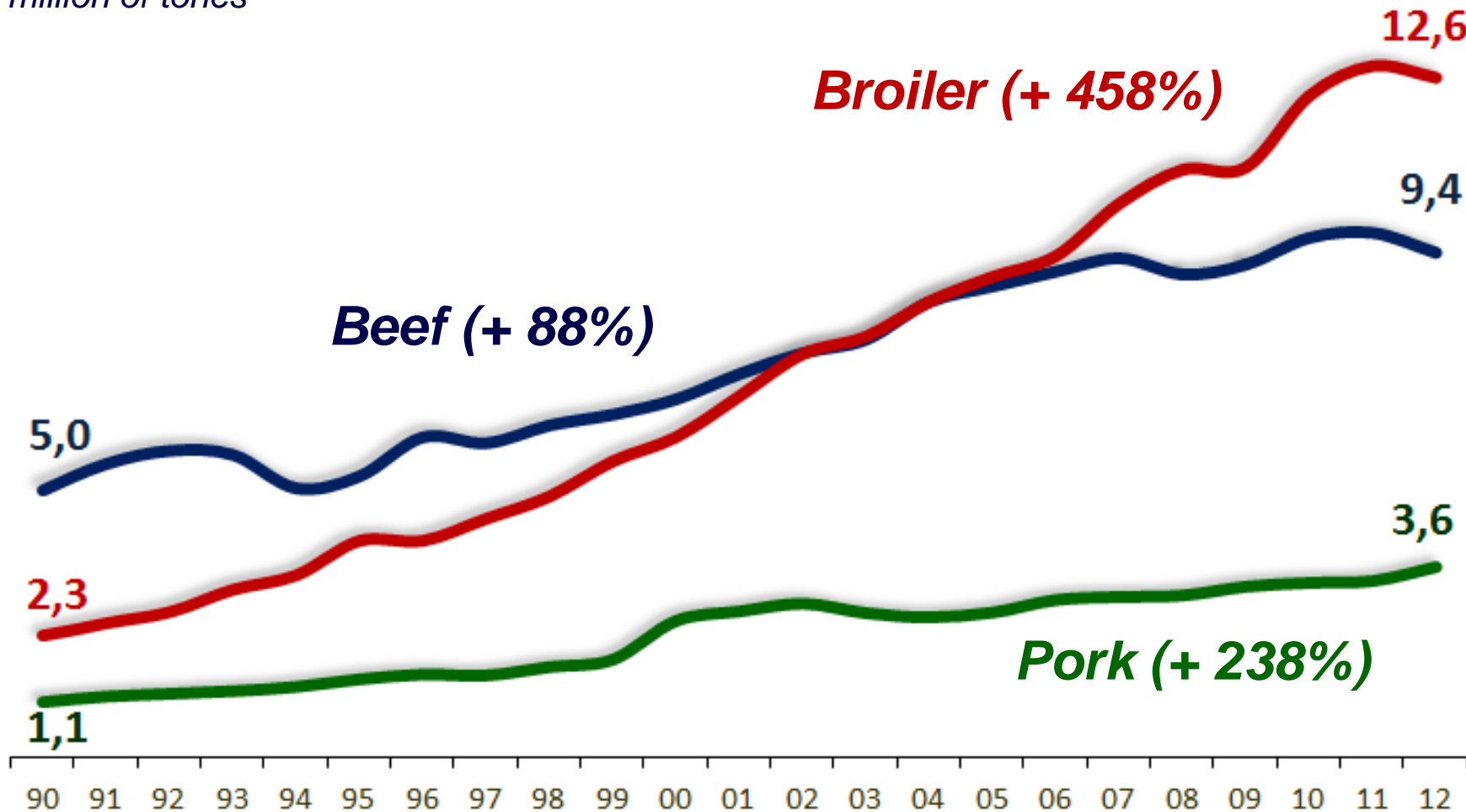
**Area: + 40%**

**Yield: + 127%**

*The successive yield increases have saved **67 MMha.***

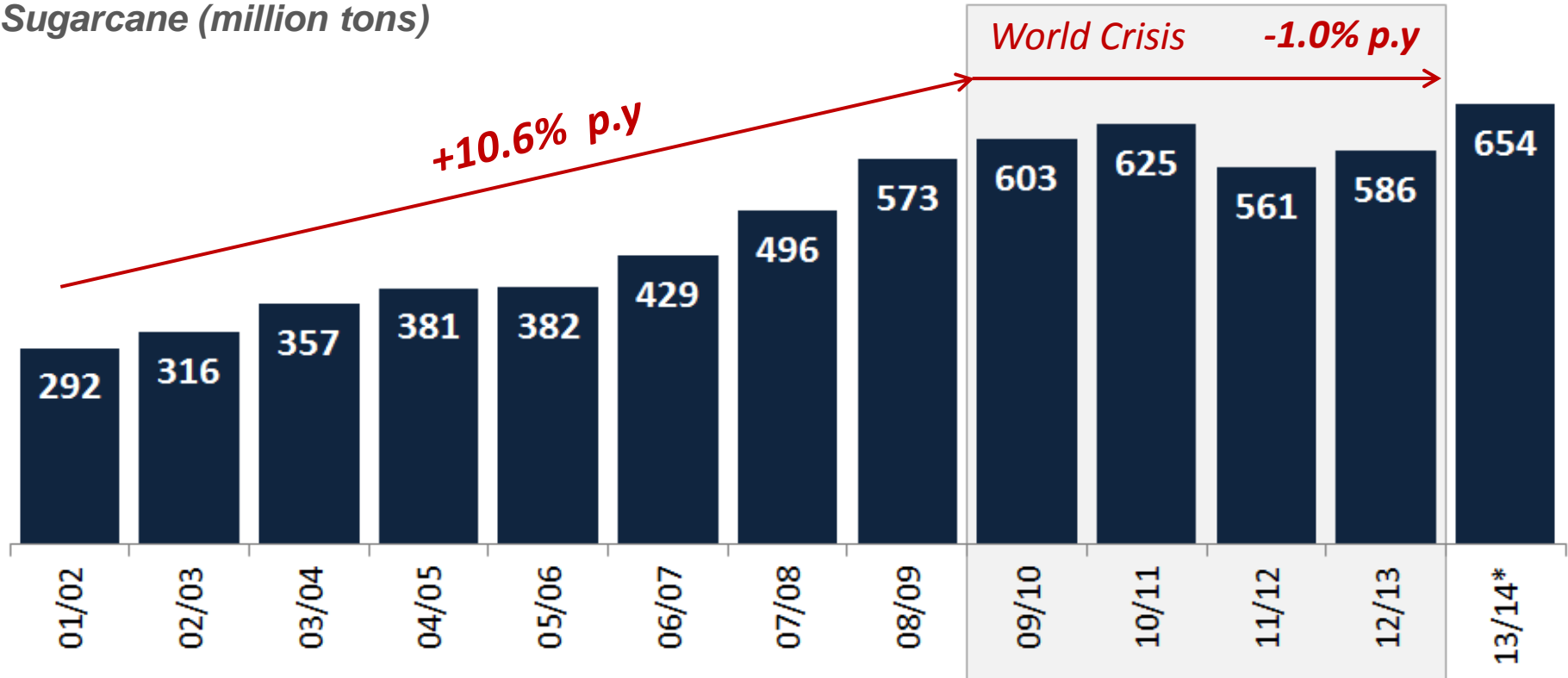
# Brazilian production of meat

in million of tones



# Brazilian Production

Sugarcane (million tons)



Since 1975 Brazil has preserved more than 6 MMha.

Sugar (million tons)

2000/01: 16.0

2013/14\*: 43.5

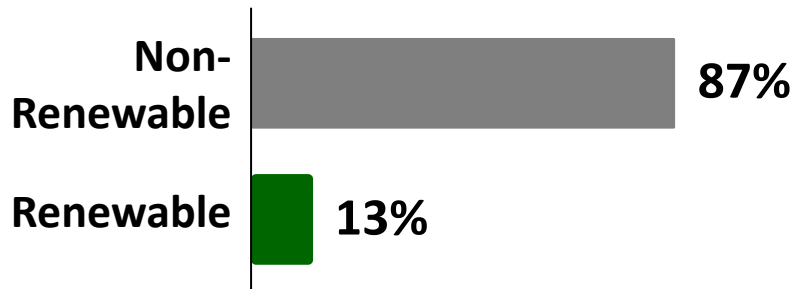
Ethanol (billion liters)

2000/01: 10.5

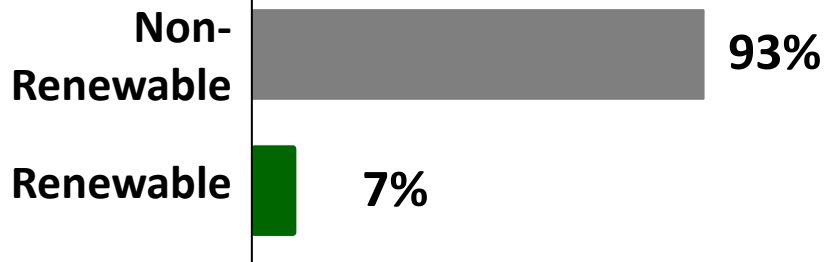
2013/14\*: 25.8

# Energy matrix (2011) – Brazil's example

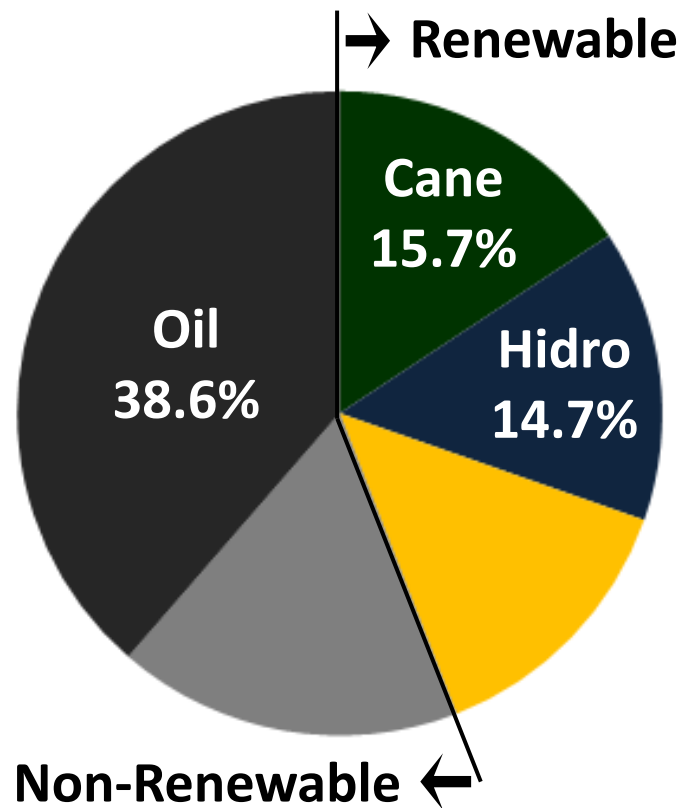
## World



## OECD

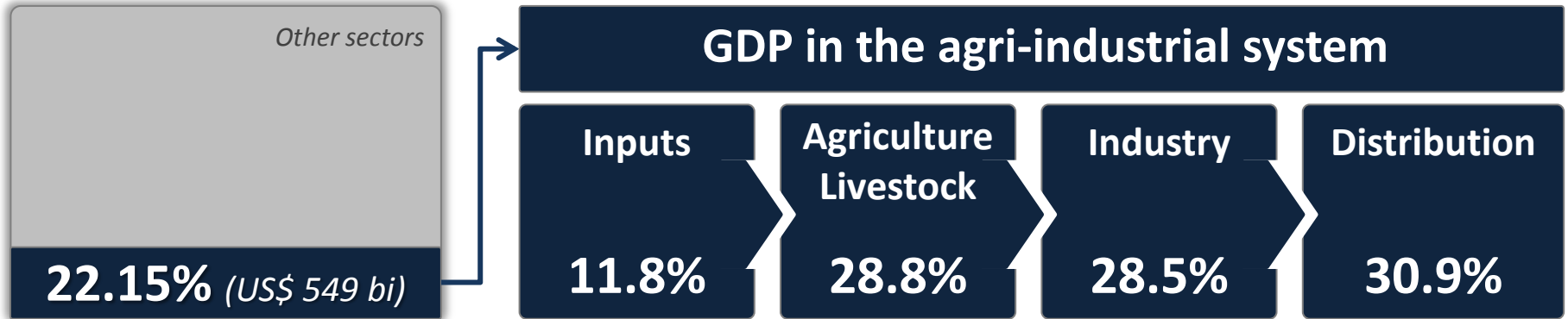


## Brazil

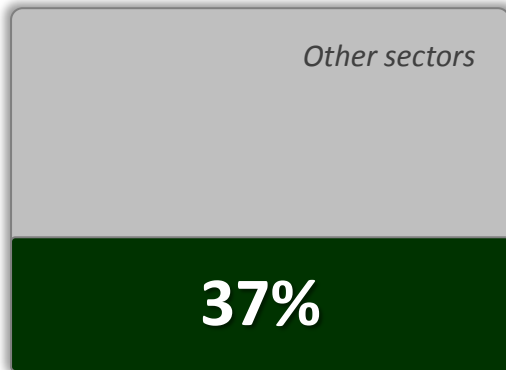


# Agribusiness in Brazil

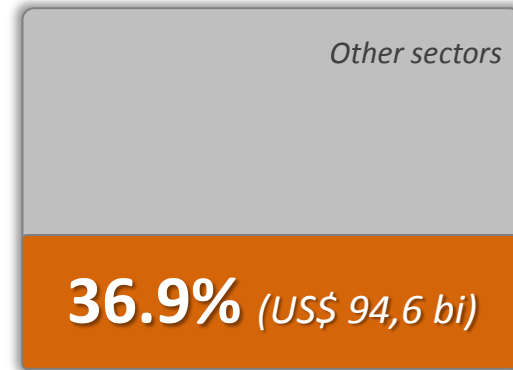
## GDP (2011)



## Jobs (2007)

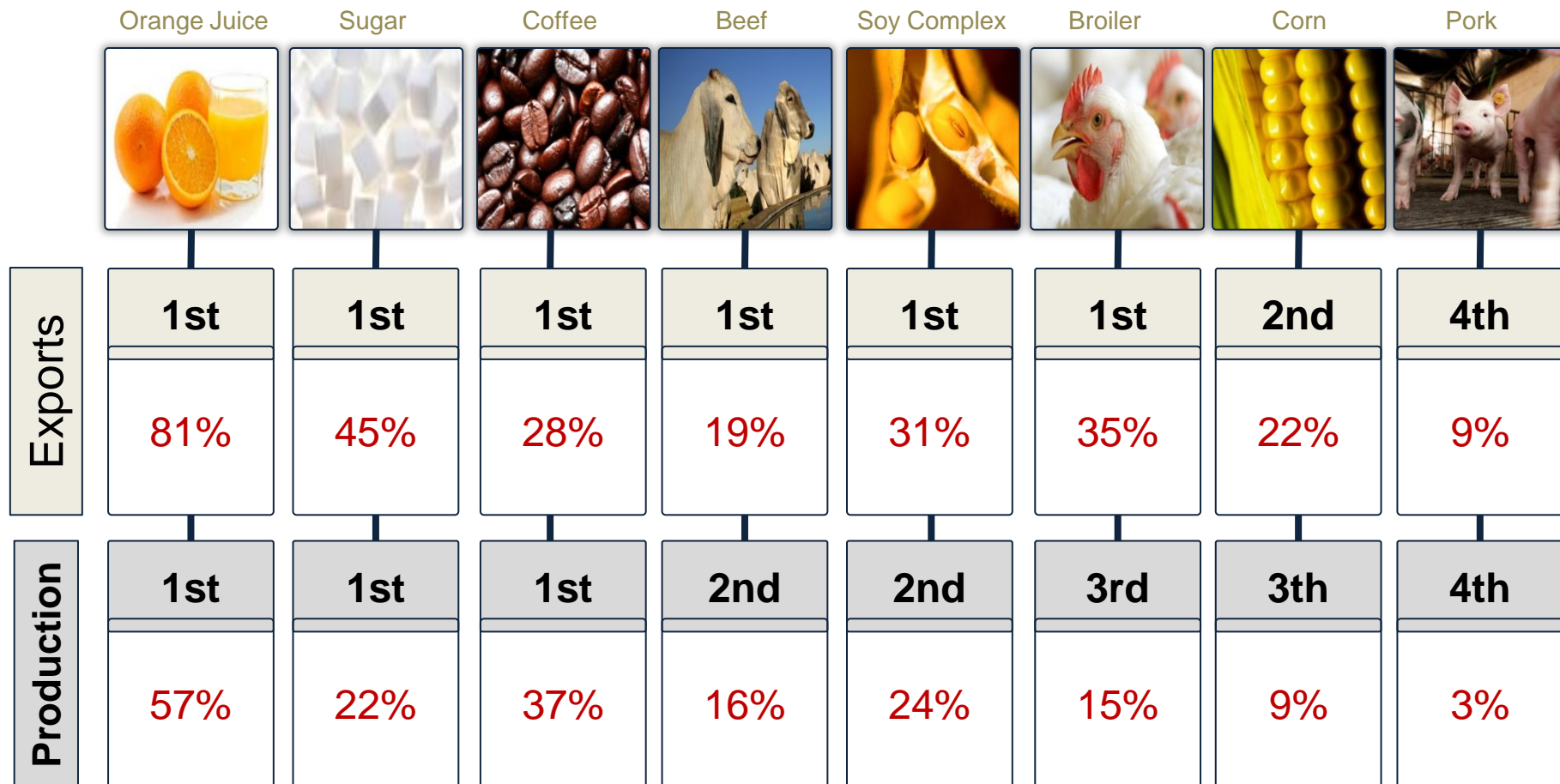


## Exports (2011)



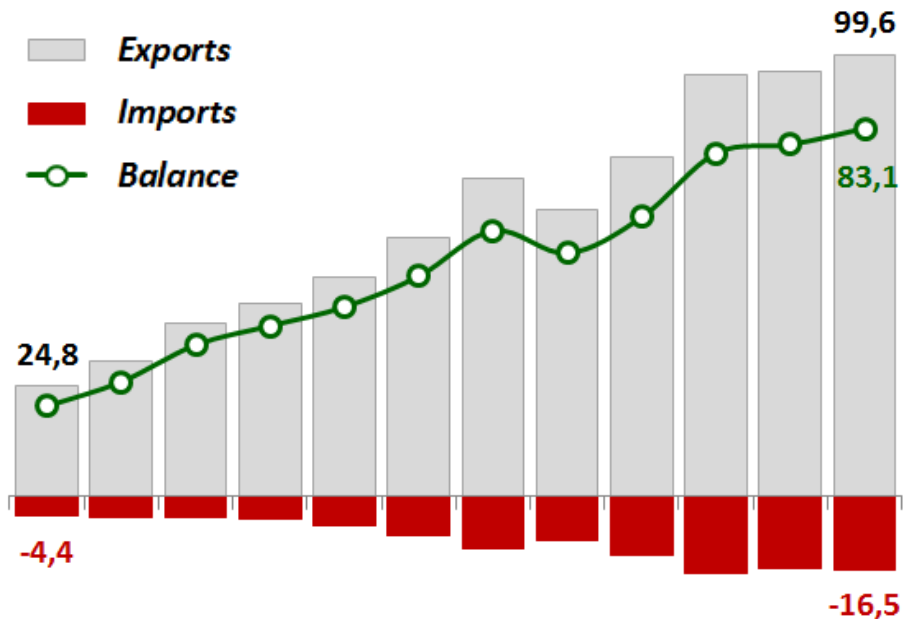


# Brazilian Leadership in World Ranking - 2012

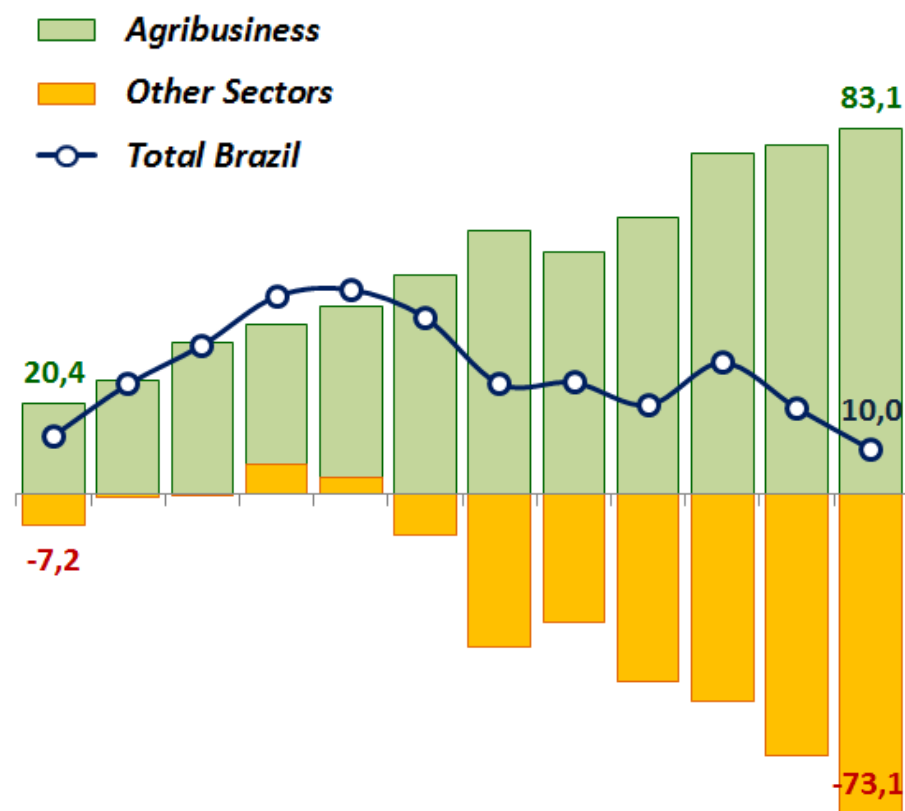


# Brazilian Foreign Trade (US\$ billion)

## Brazilian Agribusiness Trade Balance



## Brazilian Trade Balance

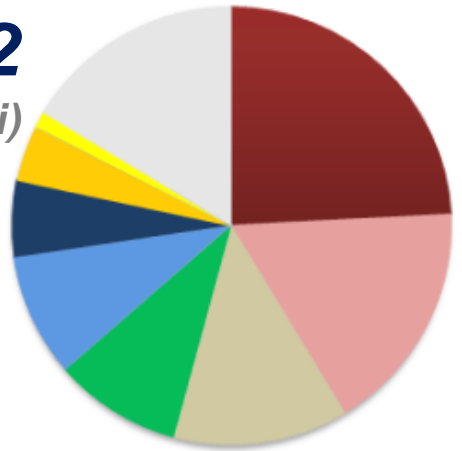


02 03 04 05 06 07 08 09 10 11 12 13\*

02 03 04 05 06 07 08 09 10 11 12 13\*

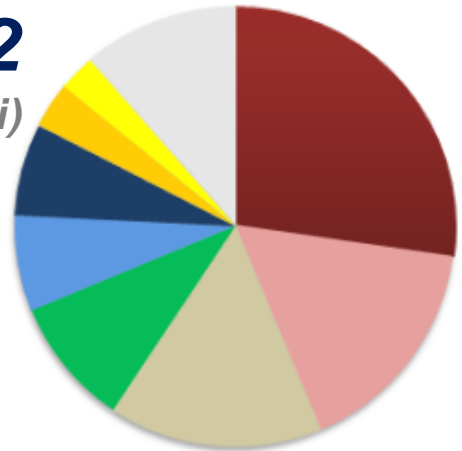
# Brazilian Agribusiness Exports | Main Products

**2002**  
(US\$ 24.8 bi)



- Soy Complex - 24.2%
- Forest Products - 17.2%
- Meats - 12.9%
- Leather and Products - 9.4%
- Sugar and Ethanol - 9.1%
- Coffee - 5.6%
- Tobacco - 4.1%
- Cereals - 1.3%
- Others - 16.4%

**2012**  
(US\$ 95.8 bi)

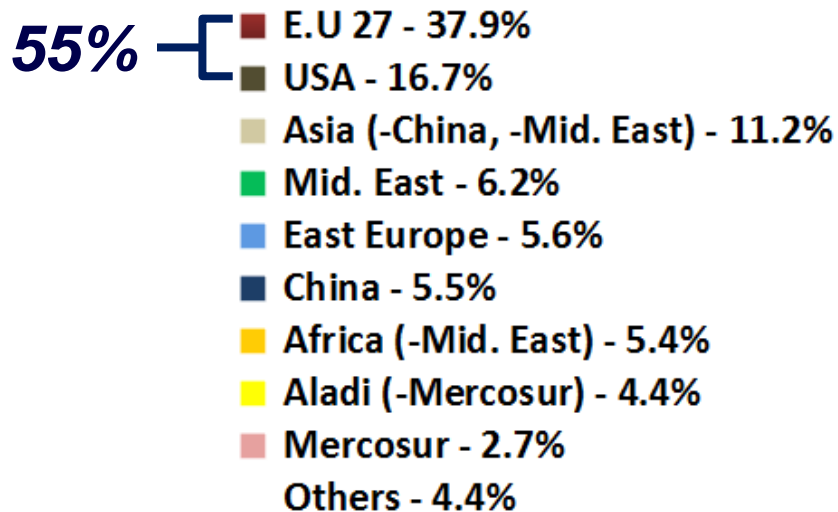
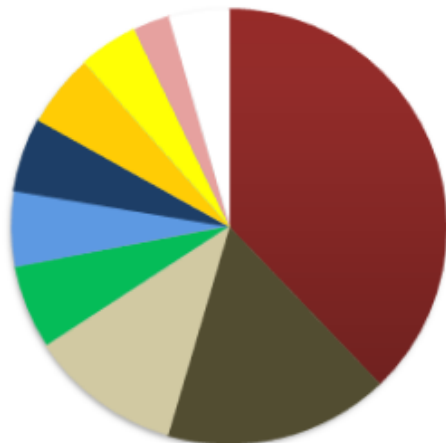


- Soy Complex - 27.3% ▲
- Meats - 16.4% ▲
- Sugar and Ethanol - 15.7% ▲
- Forest Products - 9.5% ▼
- Cereals - 7.0% ▲
- Coffee - 6.7% ▲
- Tobacco - 3.4% ▼
- Leathers and Products - 2.7% ▼
- Others - 11.3%

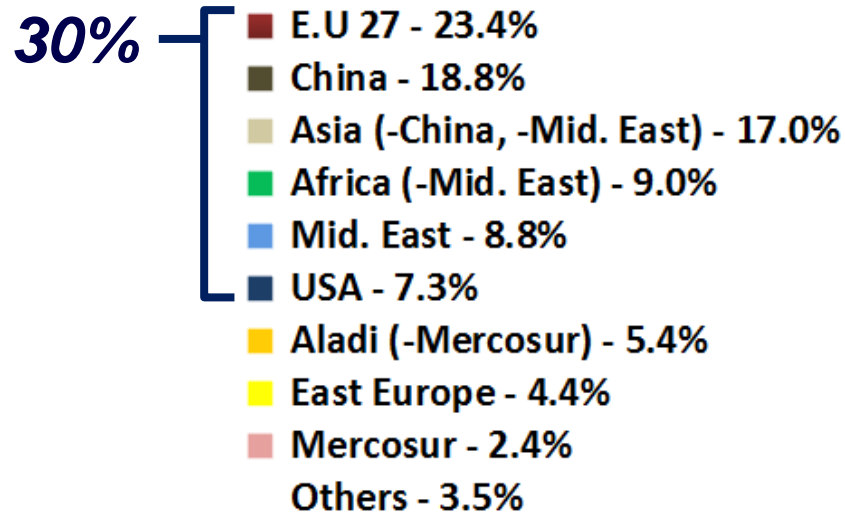
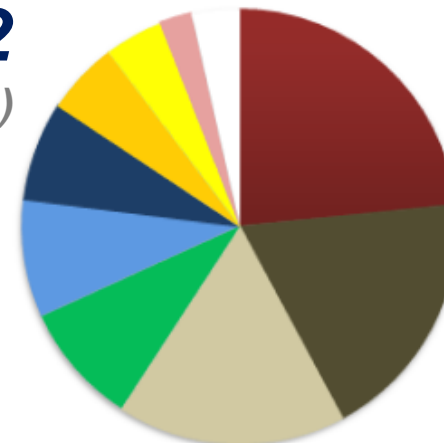
Source: MAPA. Elaboration: Fiesp-Deagro.

# Brazilian Agribusiness Exports | Main Destinies

**2002**  
(199 markets)



**2012**  
(219 markets)



# Brazil – Comparatives Advantages



→ *Available Land*



→ *Human Resources*



→ *Technology*

# Brazil – land use

<i>Territorial Distribution (million ha)</i>		<i>% Total Land</i>	<i>% Arable Land</i>
<b>Brazil</b>	<b>851</b>	<b>100%</b>	<b>---</b>
<b>Arable land</b>	<b>329.9</b>	<b>38.8%</b>	<b>100%</b>
<b>Planted area (annual and permanent)</b>	<b>72.2</b>	<b>8.5%</b>	<b>21.9%</b>
Grains	49.9	5.9%	15.1%
<i>Soybean</i>	24.2	2.8%	7.3%
<i>Corn</i>	13.8	1.6%	4.2%
<i>Bean</i>	4.0	0.5%	1.2%
<i>Rice</i>	2.8	0.3%	0.9%
<i>Wheat</i>	2.1	0.3%	0.7%
<i>Cotton</i>	1.4	0.2%	0.4%
<i>Other grains</i>	1.5	0.2%	0.5%
Sugarcane	9.2	1.1%	2.8%
Coffee	2.2	0.3%	0.7%
Orange	0.8	0.1%	0.3%
Planted forests	6.5	0.8%	2.0%
<b>Pasture</b>	<b>172.0</b>	<b>20.2%</b>	<b>52.1%</b>
<b>Available area</b> <i>» arable land - (planted + pasture)</i>	<b>85.7</b>	<b>10.1%</b>	<b>26.0%</b>

- 1. Biotechnology***
- 2. Nanotechnology***
- 3. Animal genetic improvement***
- 4. Agroenergy***
- 5. Integration crop-livestock-forest***
- 6. No-till and Precision Agriculture***
- 7. Agricultural inputs and Mechanization***
- 8. Coordination of research***
- 9. Diffusion of technology***





***The “Low-Carbon Agriculture” Plan (ABC), aims to stimulate a new sustainable agriculture, reducing global warming and mitigating carbon emissions. ABC program fosters 6 initiatives with goals by 2020.***

***The agriculture and livestock plan (PAP) for 2013–14 allocate R\$ 4.5 bi for Low-Carbon Agriculture. Each producer has a credit limit of R\$ 1 million, with an annual interest rate of 5% and a repayment period of 5–15 years.***





## **No-tillage system**

*The goal is to expand the current 26 million hectares to 33 million hectares of crops established by no-till. This will reduce 16 to 20 million tons of carbon emissions by 2020.*



## **Recovery of Degraded Pastures**

*The goal is to transform degraded land into areas suitable for the production of food, fiber, meat and forests, thus recovering 15 million hectares and reducing between 83 and 104 million tons of CO2 equivalent.*



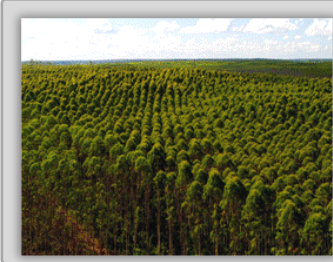
## **Crop-Livestock-Forest Integration**

*The goal is to increase system utilization by 4 million hectares and reduce 18 to 22 million tons of carbon emissions by 2020.*



## **Biological Nitrogen Fixation**

*The goal is to encourage the use of this technique in the production of 5.5 million hectares, and reduce the emission of 10 million tons of CO<sub>2</sub> equivalent.*



## **Planted Forests**

*The goal is to expand planted forest area in 3 million ha , reaching 9 million hectares in 2020.*



## **Animal waste treatment**

*The goal is to treat 4.4 million m<sup>3</sup> of waste from pig farming and other activities, thus preventing 6.9 million tons of CO<sub>2</sub> equivalent from being released into the atmosphere.*

- 1. Production**
- 2. Food supply**
- 3. Governments only take care about the food supply**
- 4. The necessity of a global governance**
  - Production systems (technology)**
  - Global stocks**
- 5. The opening of the world agricultural trade (WTO)**

***Thank you!***

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