# Update on Ag Logistics Infrasctructure in Brazil

Ag Transportation Summit
Chicago, July/2013
Marcelo Duarte Monteiro

# APROSOJA – Mato Grosso State Soybean and Corn Growers Association

- APROSOJA represents soybean and corn farmers from Mato Grosso-Brazil on domestic and international policy and regulatory issues.

- Soybean farmer advocacy, with policy focus on farm programs, sustainability, biotechnology, transportation, biodiesel, land use, regulatory and research.

- Communications and education with farmers and on behalf of farmers

- 5000+ farmer members, representing 30% of Brazilian soybean production

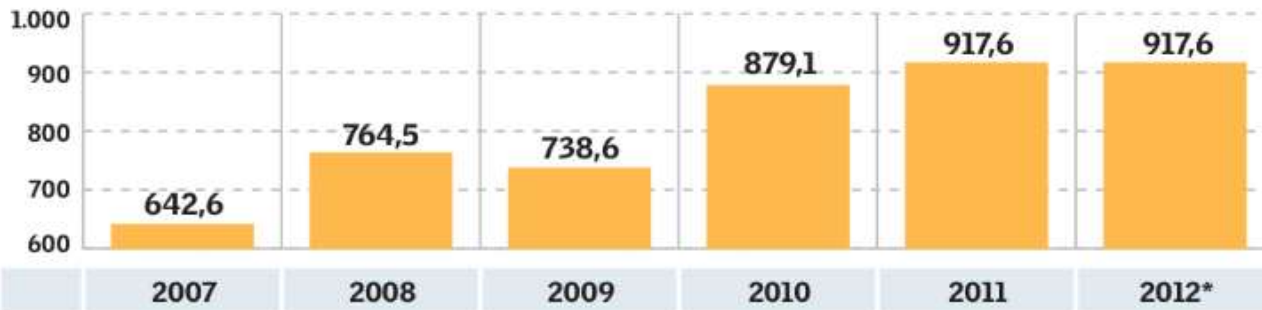
- Headquartered in Cuiabá-MT, and affiliated to Aprosoja Brasil, located in Brasilia.

# Agribusiness Sector in Brazil

# Grain and Oilseed Production - Brazil

APROSOJA

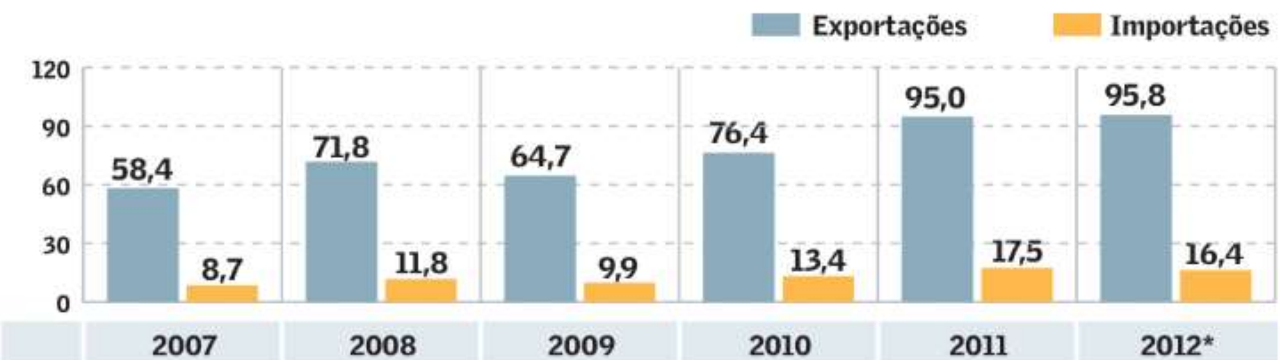
## PIB - em R$ bilhões / Agribusiness GDP in R$ Billions




## Participação no PIB / Agribusiness GDP % of Total

| 2007 | 2008 | 2009 | 2010 | 2011 | 2012* |
|---|---|---|---|---|---|
| 24,1% | 25,2% | 22,8% | 23,3% | 22,1% | 20,8% |

## Balança comercial - R$ bilhões / Agribusiness Foreign Trade

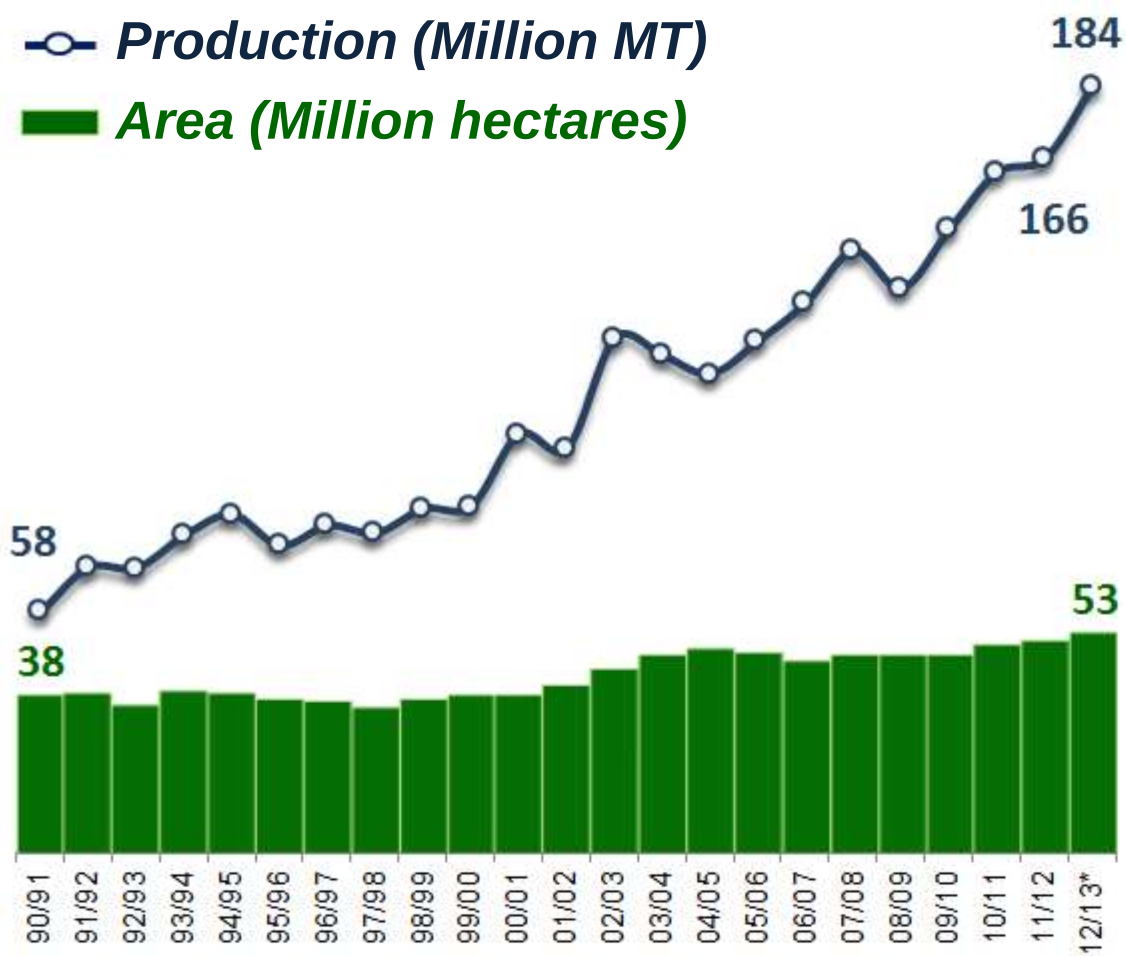



## Participação nas exportações totais do país / Ag Foreign Trade % of Total

| 2007 | 2008 | 2009 | 2010 | 2011 | 2012* |
|---|---|---|---|---|---|
| 36,36% | 36,28% | 42,53% | 37,86% | 37,00% | 39,50% |

*Source: MAPA*

# Grain and Oilseed Production - Brazil




**Change %**

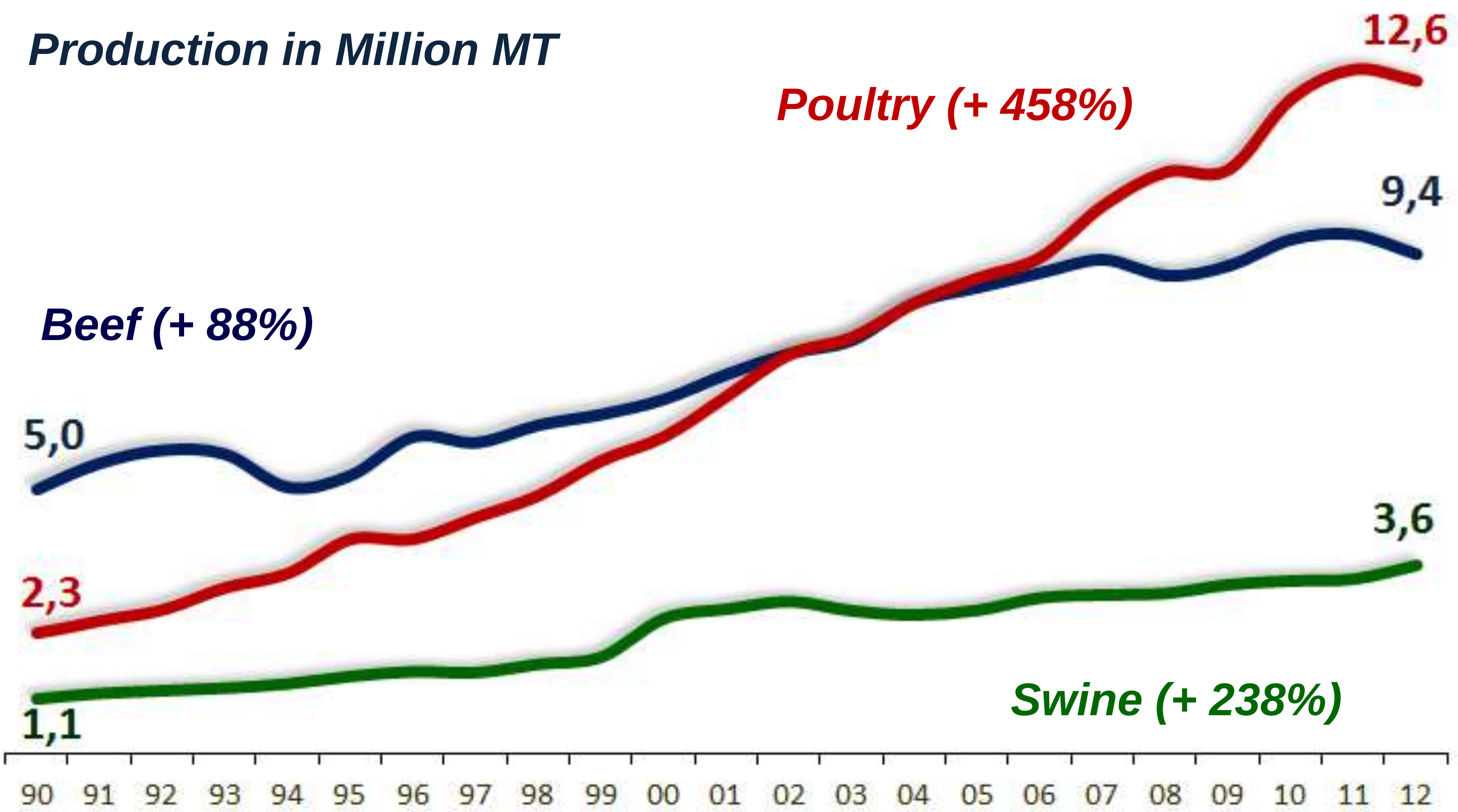
***Seasons 1990/91 to 2012/13***

| | |
|---|---|
| **Production:** | **+ 218%** |
| **Area:** | **+ 40%** |
| **Yield:** | **+ 127%** |

***Increases in yield allowed acreage "savings" of approximatelly 67 Million hectares.***

*Fonte: Conab (Mar/2013). Nota: * 8ª Estimativa. Elaboração: Fiesp-Deagro*

# Meat Production – Brazil




Fontes: CNPC, ABIEC, UBABEF, ABIPECS, USDA. Elaboração: Fiesp-Deagro.

# Brazil Agribusiness Exports in US$ - 2012

## *By Product*

## *2012*

***(US$ 95,8 bi)***

- **Complexo Soja - 27,3%** / Soy Complex
- **Carnes - 16,4%** / Meats
- **Açúcar e Etanol - 15,7%** / S&E
- **Produtos Florestais - 9,5%** / Forestry
- **Cereais - 7,0%** / Cereals
- **Café - 6,7%** / Coffee
- **Fumo e Produtos - 3,4%** / Tobacco
- **Couros e Peleteria - 2,7%** / Leather
- **Demais - 11,3%** / Other

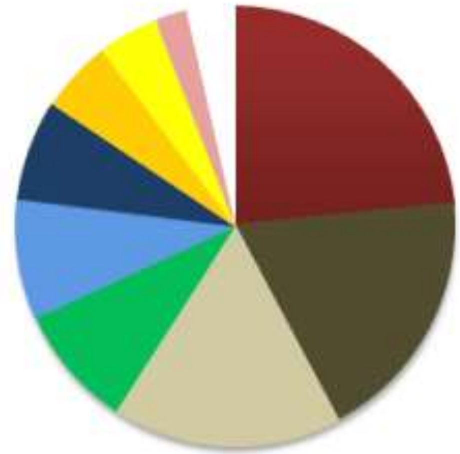
*Fontes: MDIC*

# Brazil Agribusiness Exports in US$ - 2012

## *By Destination*

## *2012*

***(219 Countries)***



- **U.E 27 - 23,4%** / EU
- **China - 18,8%**
- **Ásia (-China, -Or. Médio) - 17,0%**
- **África (-Or. Médio) - 9,0%**
- **Oriente Médio - 8,8%** / Middle East
- **EUA - 7,3%** / USA
- **Aladi (-Mercosul) - 5,4%** / Latin America
- **Europa Oriental - 4,4%** / Eastern Europe
- **Mercosul - 2,4%**
- **Demais - 3,5%**/ Other

*Fontes: MDIC*

# Brazil is a Major Player in Important Ag Commodities





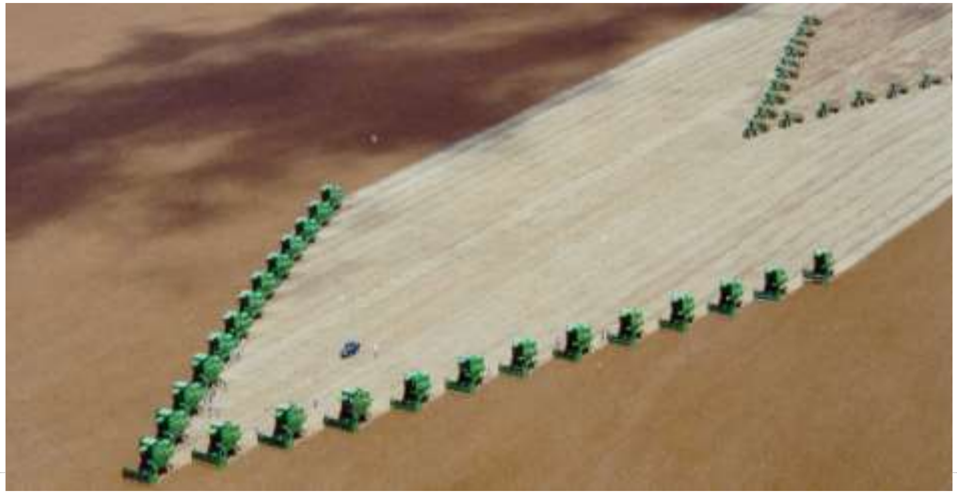



| | Orange Juice | Sugar | Poultry | Coffee | Beef | Soybeans | Corn | Pork |
|---|---|---|---|---|---|---|---|---|
| Exports | 1st | 1st | 1st | 1st | 1st | 1st | 3rd | 4th |
| | 79% | 47% | 36% | 29% | 20% | 29% | 10% | 10% |
| Production | 1st | 1st | 3rd | 1st | 2nd | 2nd | 3rd | 4th |
| | 62% | 24% | 16% | 35% | 16% | 23% | 7% | 3% |

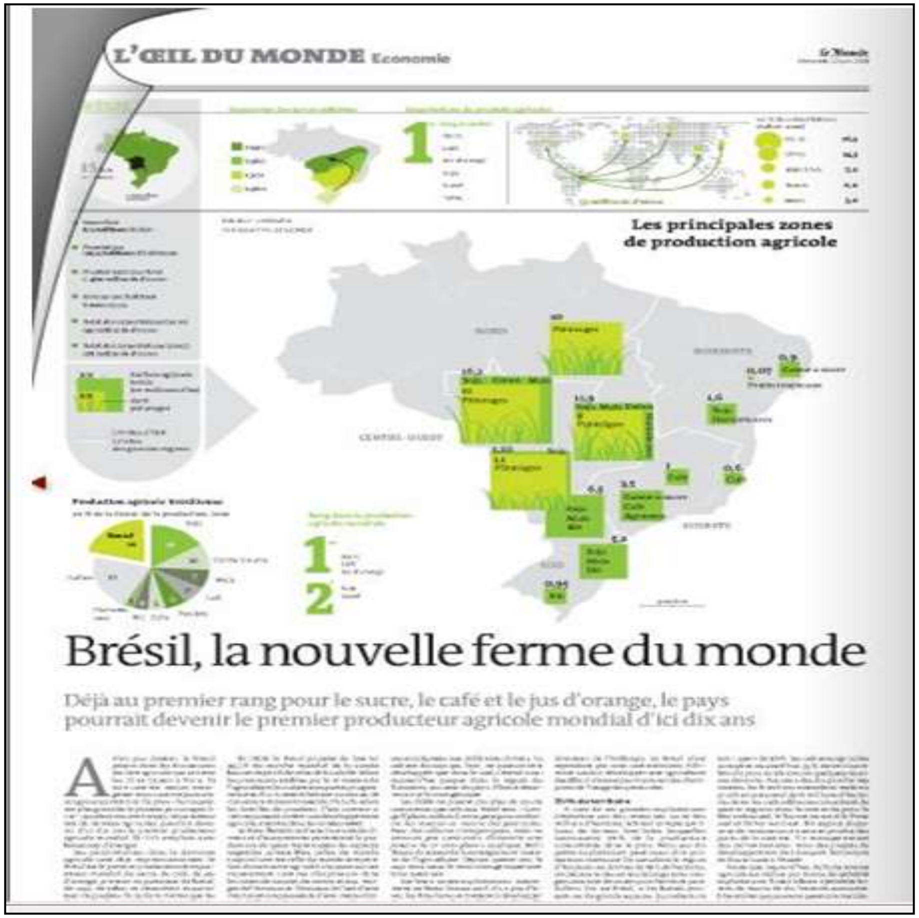
***» Etanol: 2nd Largest Producer***

*Fonte: USDA (jan/2012) Nota: 2011 (carnes) e safra 2010/11 (demais produtos), Elab por DEAGRO/FIESP*

# How we do This? Cutting Edge Technology and Scale

| No-Till | Crop-Livestock Integration |
|---|---|
|  |  |
| Large Scale and Corn $2^{nd}$ Crop | Precision Ag , Top Machinery and Inputs |
|  |  |

# Brazil's Agribusiness Success is a Reality Worldwide



L'ŒIL DU MONDE Economie

Les principales zones de production agricole

# Brésil, la nouvelle ferme du monde

Déjà au premier rang pour le sucre, le café et le jus d'orange, le pays pourrait devenir le premier producteur agricole mondial d'ici dix ans

The Economist

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Brazil's agricultural miracle

## How to feed the world

The emerging conventional wisdom about world farming is gloomy. There is an alternative

Aug 26th 2010

# Ag Logistics in Brazil

# Soybean and Corn Export Route – Example 1

## *Sorriso - Santos*

**1. Sorriso – A. Araguaia, MT**

**522 miles**

**2. Alto Araguaia - Santos, SP**

**687 miles**

**TOTAL: 1.209 miles**


Source: Aprosoja

# Soybean and Corn Export Route – Example 2

## *Querência - Vitória*

**1. Querência, MT – Araguari, MG**

**719 miles**

**2. Araguari, MG – Vitória, ES**

**890 miles**

**TOTAL: 1.609 miles**


Source: Aprosoja

# Soybean and Corn Export Route – Case of Success

## *Madeira River Waterway*

**1. Sapezal– Porto Velho, RO**

600 miles

**2. Porto Velho – Manaus, AM**

691 mi

Or

**2. Porto Velho – Santarém, PA**

1.002 mi


**TOTAL (Manaus): 1.291 mi**

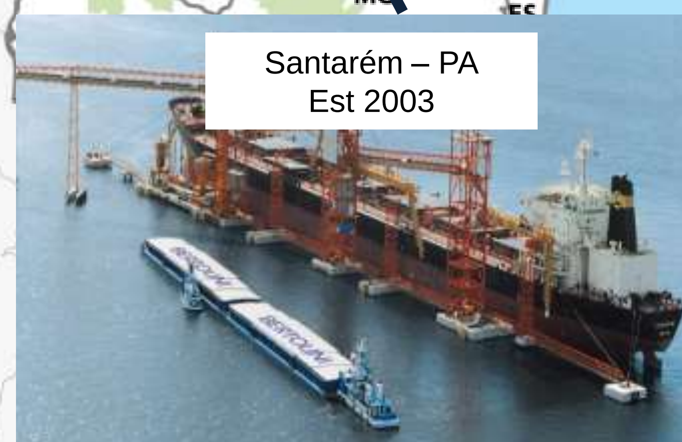
**TOTAL (Santarém): 1.602 mi**

Source: Aprosoja

# Soybean and Corn Export Route – Madeira River

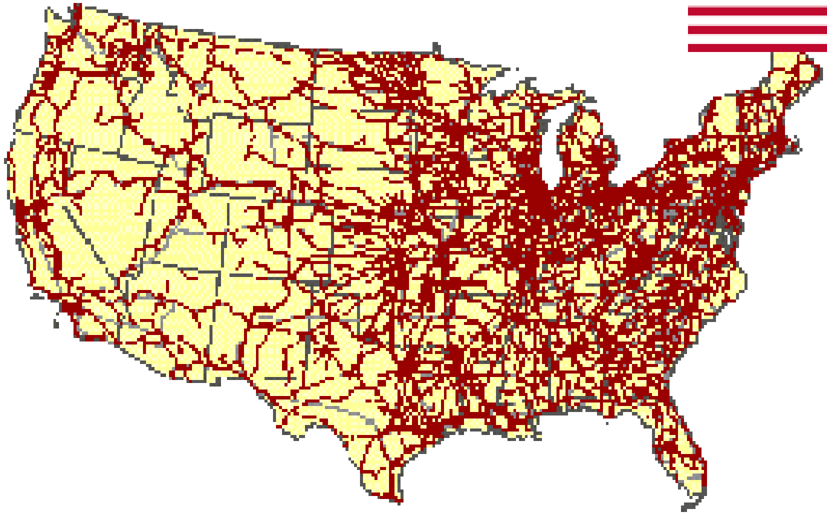

Itacoatiara – AM
Est 1997


Porto Velho – RO
Est 1997

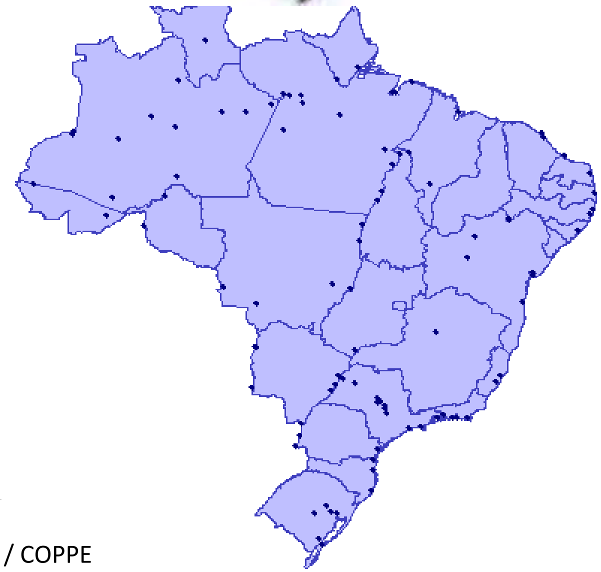


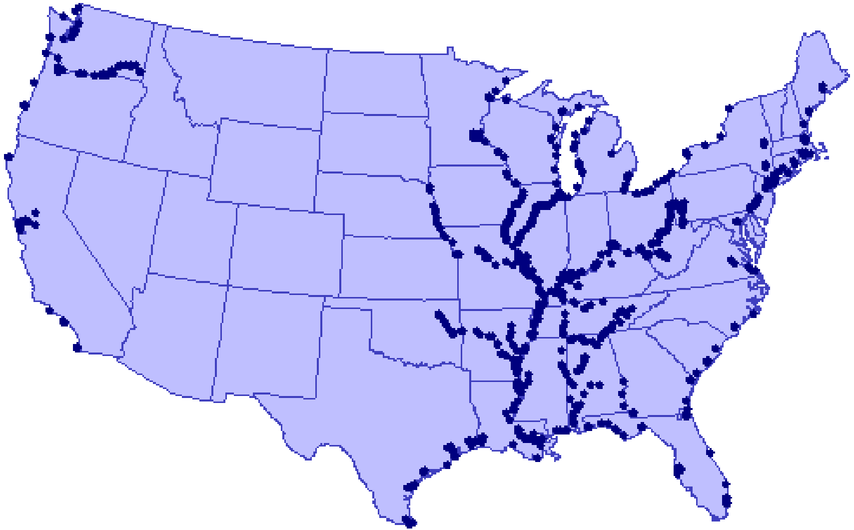
Santarém – PA
Est 2003

# Logistics Infrastructure Benchmark



**Railways**

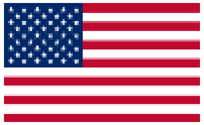




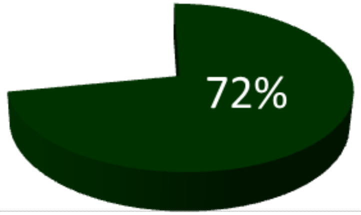
**Ports System**

Source: ANTF / COPPE

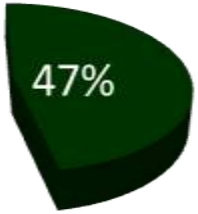
# Soybean Logistics – Main Export Modals




**Road**



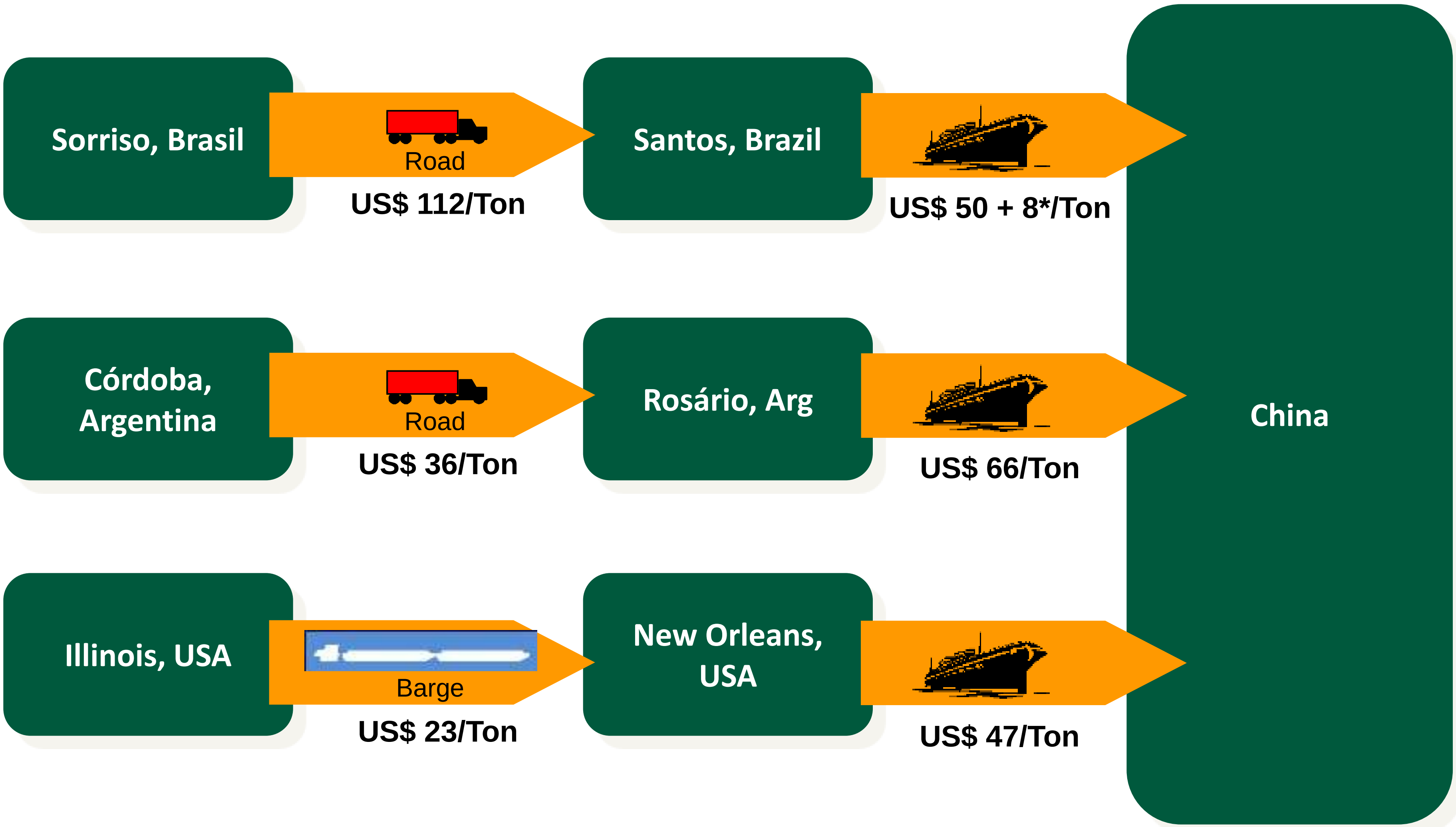

**River Waterways**






Fontes: ANTAQ, ANTT, ABIOVE, AvaCom – Grains & Oilseed e USDA/FAS. Obs.: dados dos EUA de 2010.

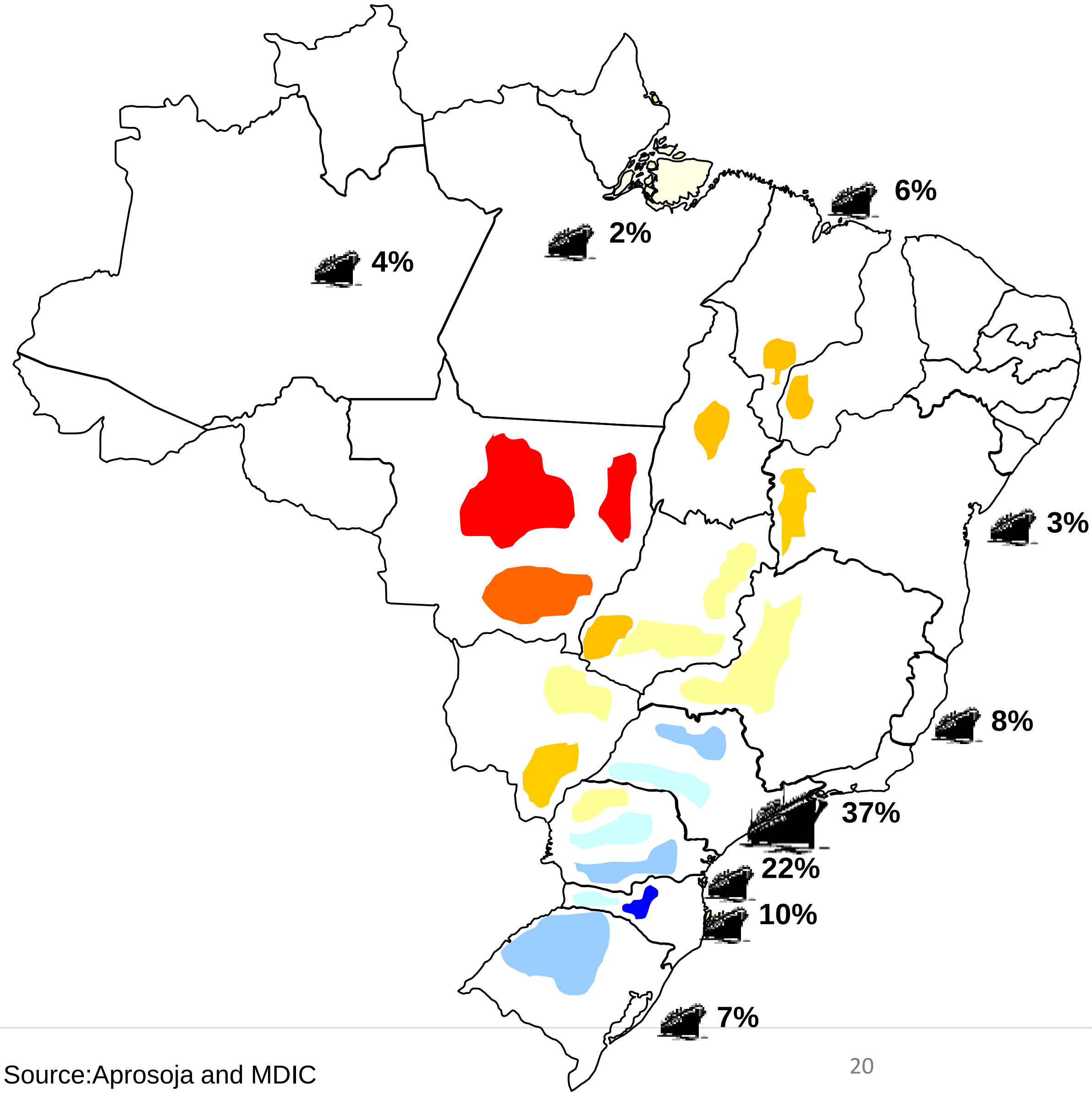
# Logistics Costs Benchmark (2012)

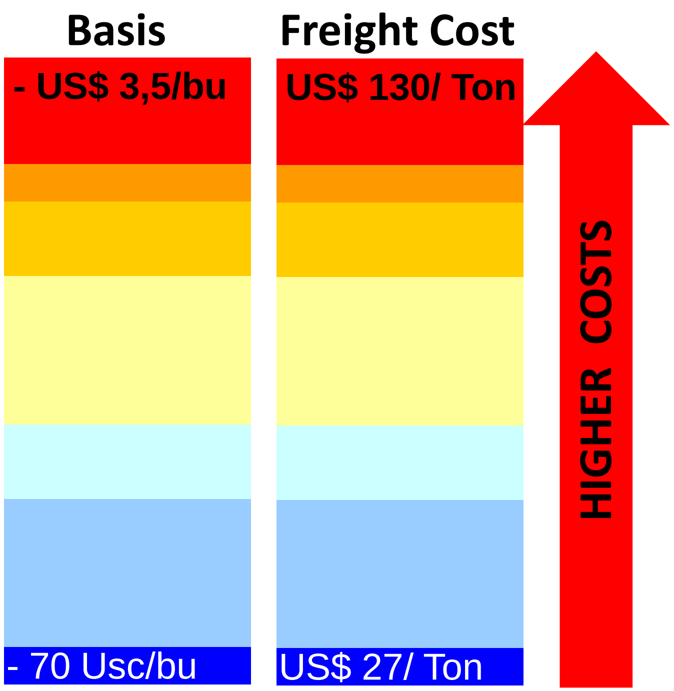



Source: USDA, Aprosoja, BCR Rosário

* US$ 8,00/Ton equals to 20 days line up wait of a Panamax Vessel

# Logistics Costs and Ports Export Share
(Corn and Soybeans 2012)

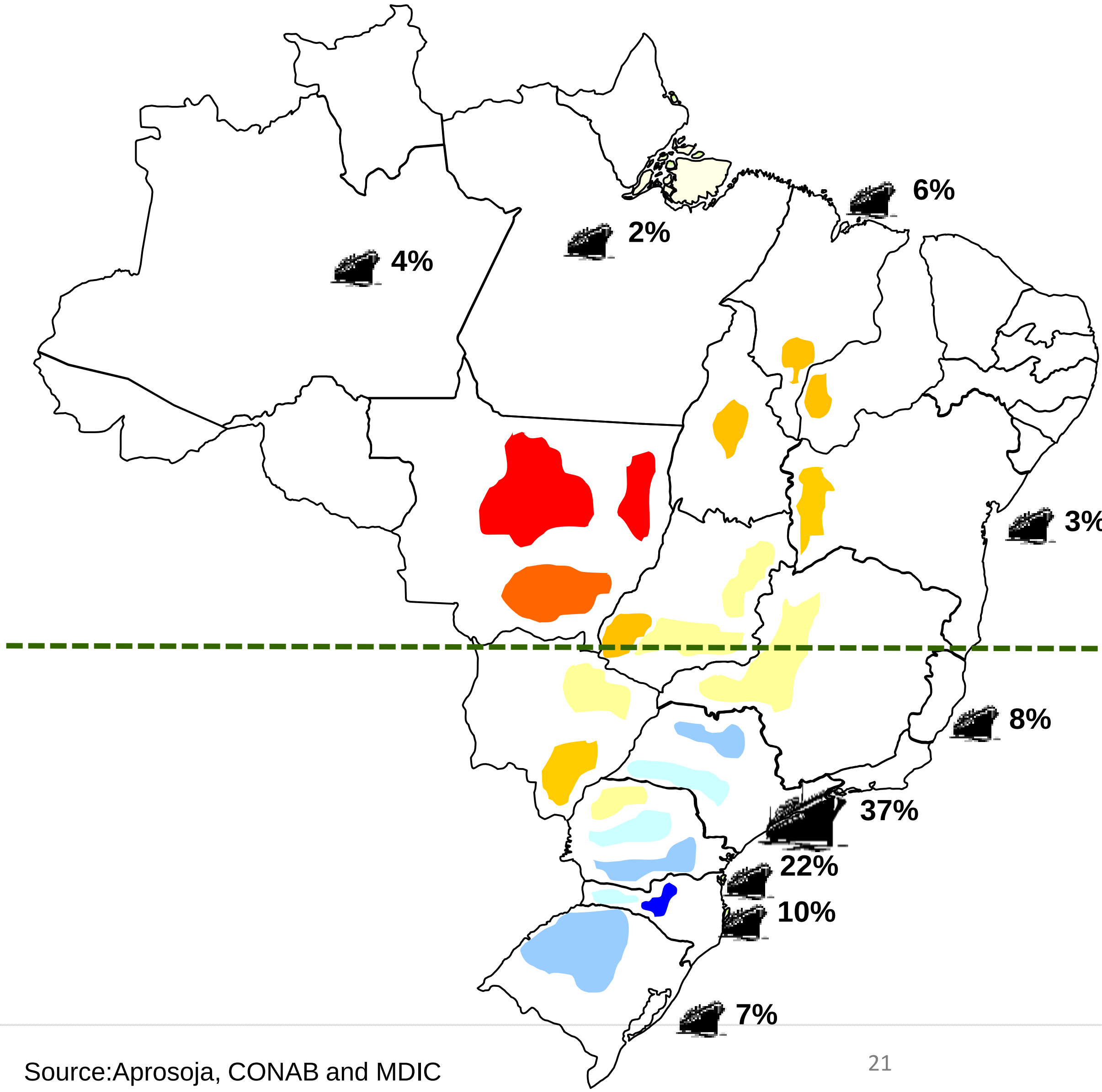


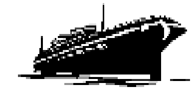




**Total Corn + Soybeans Exports in 2012:**
**<u>52 Million Tons</u>**

Source:Aprosoja and MDIC

# Regional  Unbalance Between North and South
(Corn and Soybeans 2012)



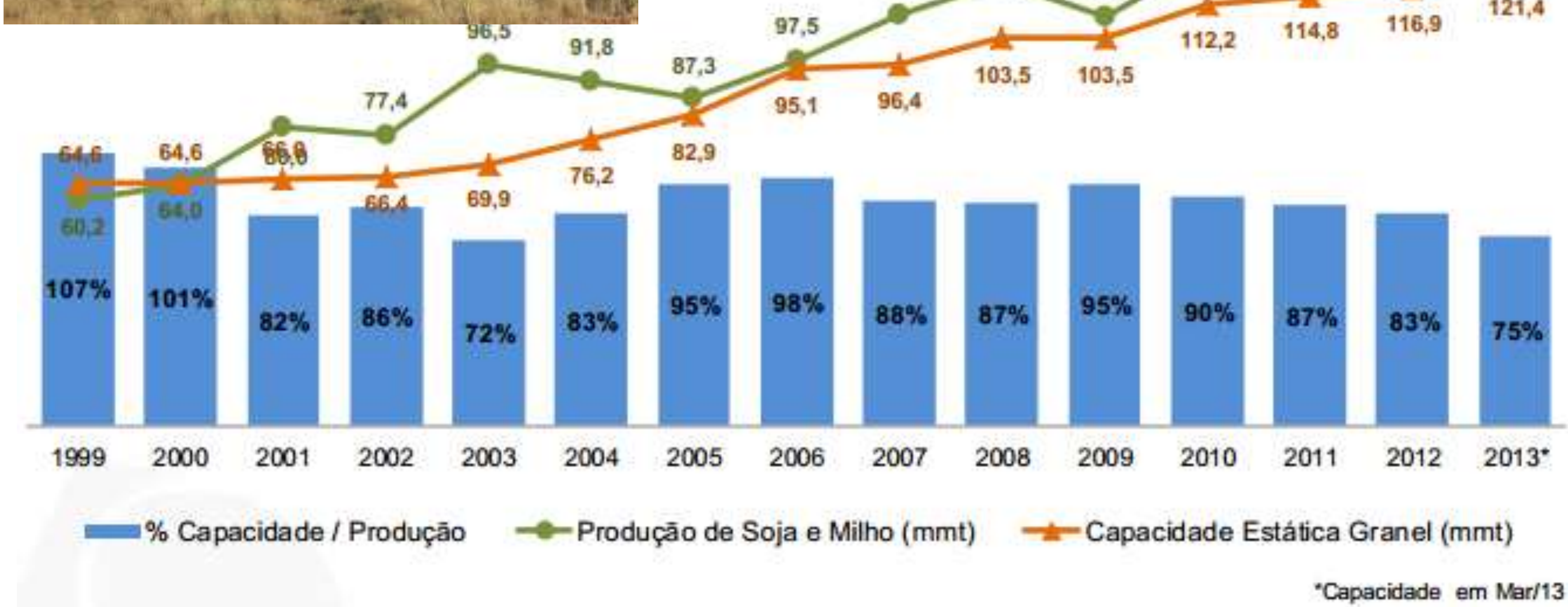



| Soybean + Corn Production | Soybean + Corn Exports |
|---|---|
| 50% | 15% |
| 50% | 85% |

Source:Aprosoja, CONAB and MDIC

# Storage Capacity is not Enough

Goal: 195




Source: CONAB, Elab: Agroconsult

# 2013 – Record Crop, Constant Delays in Projects and New Truck Driver Legislation

APROSOJA

## Projetos bilionários do PAC têm atraso de até 54 meses

· É o caso da Ferrovia Norte-Sul e do Eixo Leste da Transposição do Rio São Francisco



DANILO FARIELLO (EMAIL)
Publicado: 1/04/12 - 21h53 Atualizado: 2/04/12 - 0h34

Ministro Fernando Bezerra Coelho inspeciona obras da Transposição do Rio São Francisco O Globo / Hans von Manteuffel

BRASÍLIA - Cinco anos após a criação do Programa de Aceleração do Crescimento (PAC), as maiores obras de infraestrutura do país têm atraso de até 54 meses em relação ao cronograma original. É o caso da Ferrovia Norte-Sul e do Eixo Leste da Transposição do Rio São Francisco.

FOLHA DE S.PAULO

mercado

PROPAGANDA Publicidade tem volta parcial às ruas de SP e anima agências

INDÚSTRIA Setor químico quer ampliar uso de plástico com novos produtos

JORNADA PESADA

CAMINHONEIRO CONTRATADO 10 horas

CAMINHONEIRO AUTÔNOMO até 12 horas

# Jornada menor de caminhoneiro aumenta custo do frete em R$ 28 bi

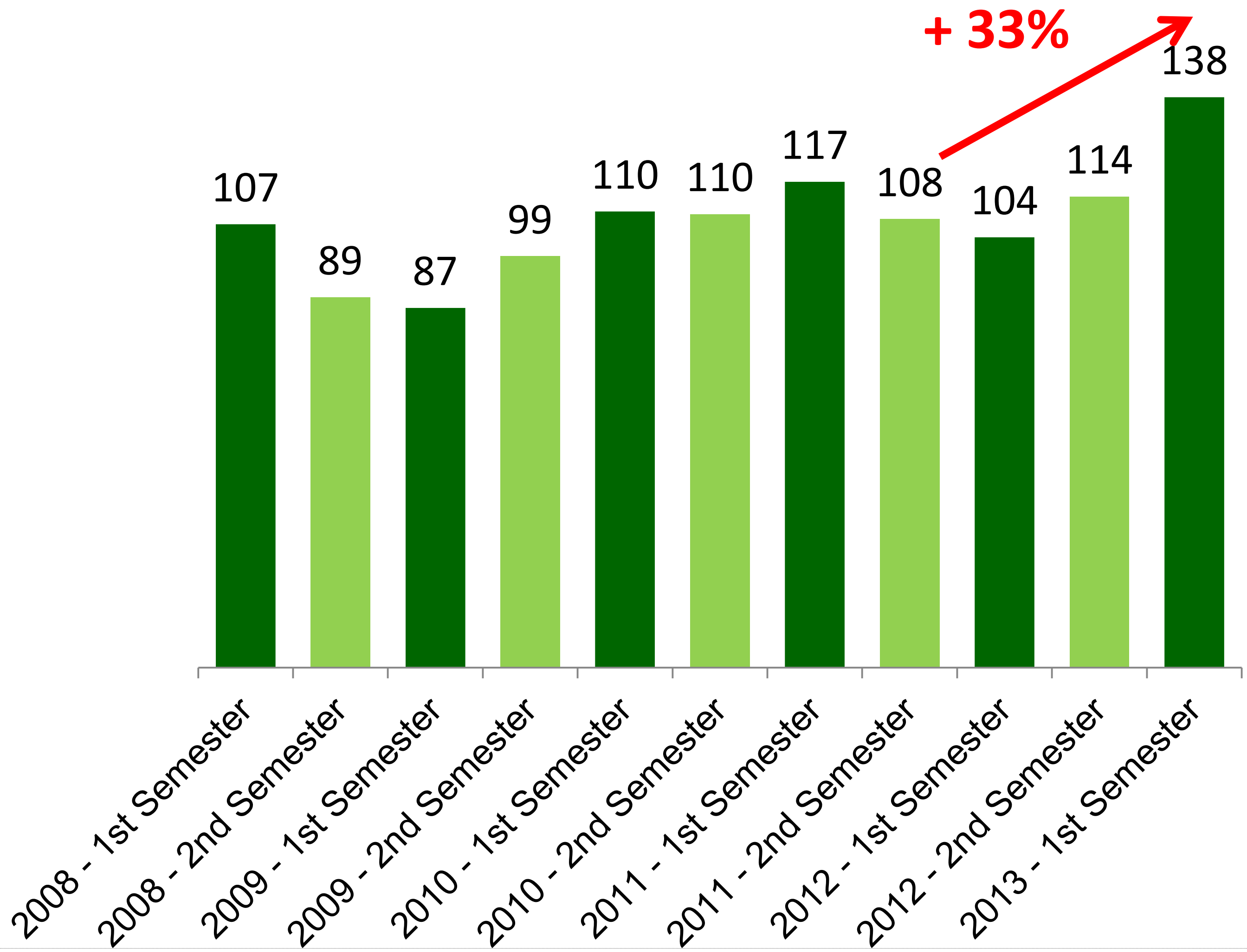
Lei proíbe trabalhador de dirigir mais que 12 horas diárias e torna transporte 14% mais caro em média

Polícia Rodoviária Federal e Ministério Público vão fazer operação para verificar aplicação da legislação

Ao não cumprir lei, empresa está assumindo risco


MOTA

# Transportation Costs – Sorriso – Santos (US$/Ton)

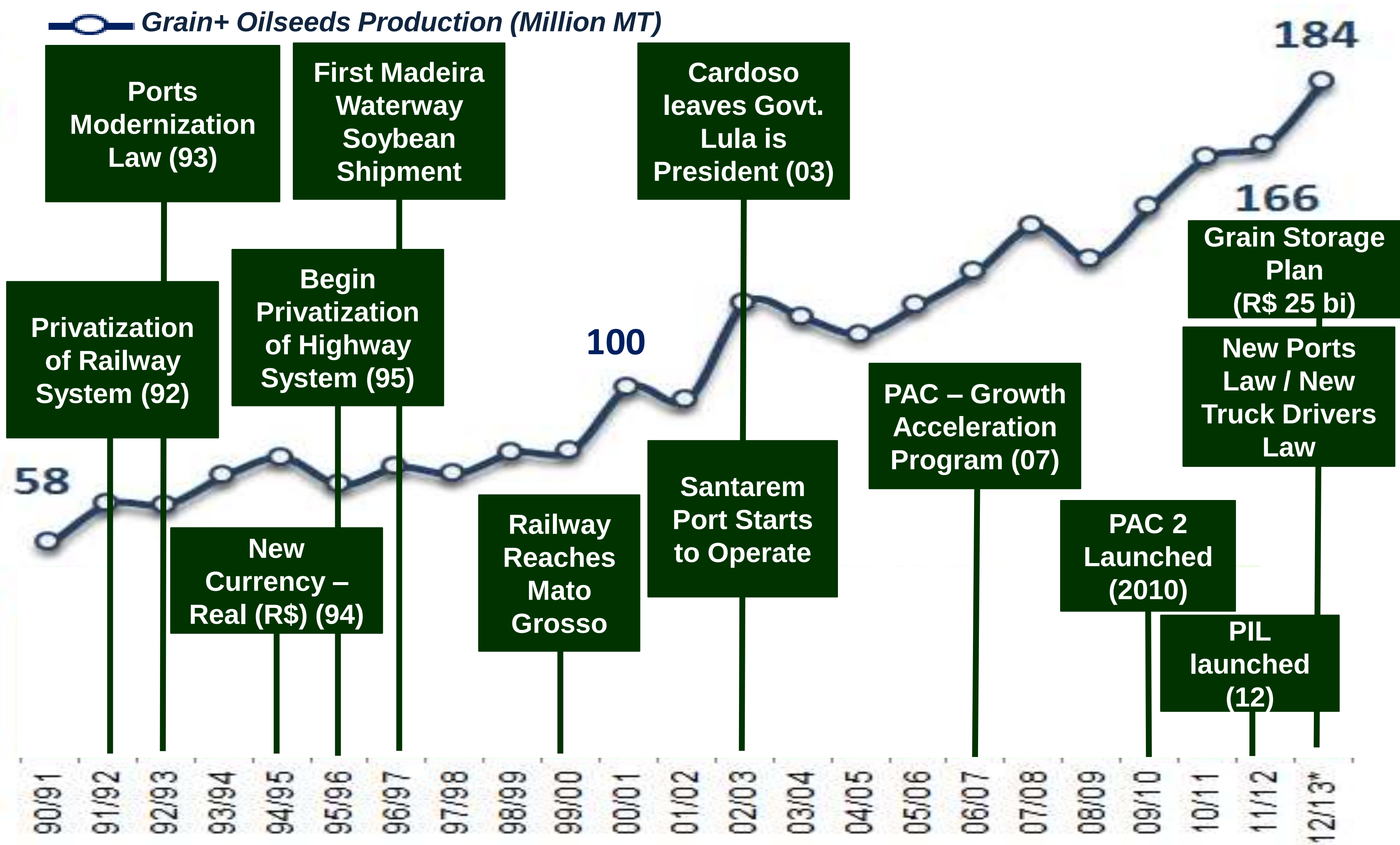



Source: iMEA

# Logistics Caos - 2013

# What Went Wrong?

# Timeline of Brazil Logistics




Source: Aprosoja

# What Went Wrong

| | |
|---|---|
| Poor PAC Administration | From 2007 to 2012 only 60% of the total budget allocated for the PAC Program (1 and 2) was spent (R$ 126 Billion Reais) |
| Excessive Bureaucracy | From 2007 to 2012 only 60% of the total budget allocated for the PAC Program (1 and 2) was spent (R$ 126 Billion Reais) |
| Lack of Planning | The PAC Programs are a collection of projects, therefore it is not based on an integrated long term logistics plan |
| PIL and Strorage Plan were late | PIL, the PAC 3, ou Concessions PAC is centered on PPPS (Public Private Partnerships) and has the <u>potential to overcome some of the bureaucracy problems of the country</u> |
| Recent Success Story | Most of dynamics in the logistics sector, including privatizations, concessions and new developments, only started to happen in Brazil after 1990, and was followed by huge production growth |

Source: Aprosoja

# Rail Investments

# PIL (Plano de Investimento em Logistica) in Summary

***Railways***

**91**

**R$ Billion**
**10,000 km**

**56 R$ billions**
**First 5 years**

**35 R$ billions**
**20 years**

Source: EPL

# Railroad Projects – PAC and PIL (Concession Program)

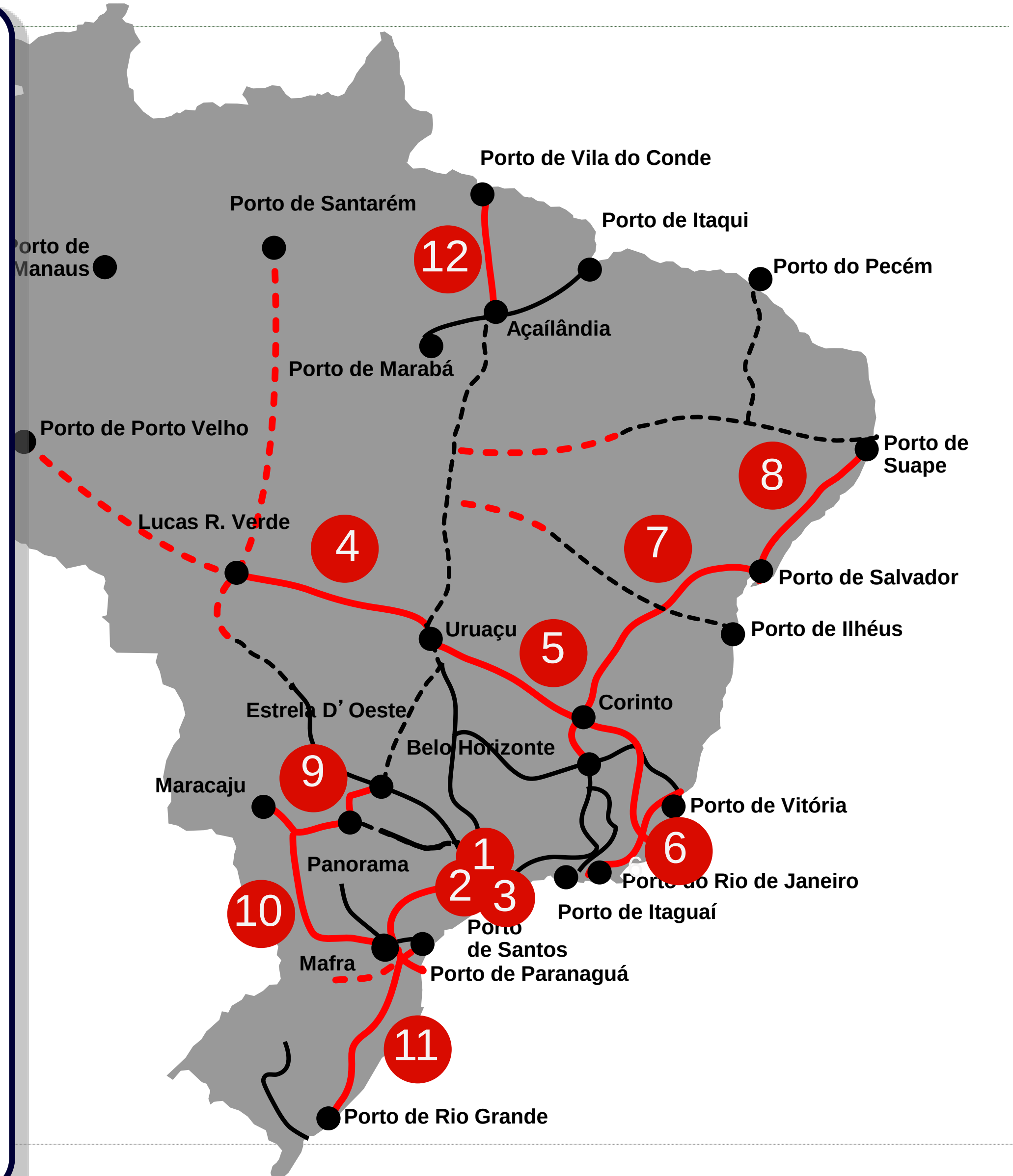
## Railroads - PIL

1. Ferroanel SP – Tramo norte
2. Ferroanel SP – Tramo Sul
3. Acesso ao Porto de Santos
4. Lucas do Rio Verde - Uruaçu
5. Uruaçu – Corinto - Campos
6. Rio de Janeiro - Campos - Vitória
7. Belo Horizonte – Salvador
8. Salvador - Recife
9. Estrela d' Oeste – Panorama - Maracaju
10. Maracaju – Mafra
11. São Paulo – Mafra - Rio Grande
12. Açailândia – Vila do Conde

Rairoads in Study

PAC – in Excution

Current Railroads




Source: EPL

# Railroad Projects – PAC and PIL (Concession Program)

## Railroads – PAC

**2.576 km de obras em andamento – Destaques**

- Ferrovia Norte-Sul – Trecho Sul
  - Palmas/TO-Uruaçu/GO – 89% realizados
  - Uruaçu/GO-Anápolis/GO – 87% realizados
  - Anápolis/GO-Estrela d'Oeste/SP – 33% realizados
- Ferrovia Nova Transnordestina – 40% realizados
- Ferrovia de Integração Oeste Leste – Trecho Ilhéus-Caetité/BA – 16% realizados
- Ferronorte – Itiquira/MT-Rondonópolis/MT – 99% realizados


Source: 7 Balanco PAC – JAN/ABRIL 2013

# New Regulatory Framework for New Rail Concessions

| | |
|---|---|
| Construction | Government will hire contractors to build the railways |
| Demand Risk | Federal Government will buy the entire supply of freight services fo the railroad and resell to logistics carriers |
| Railroad Operator (Concessionarie) | Under this new framework, the company that has the concession does not operate trains or wagons, only manage the system |
| Rail Operators | Independent rail operators (carriers) will be able to operate in the new rail concessions, which should generate competition |
| Unbundling | Rail operators will have access to the entire rail network, an the cost will be controlled by the Federal Government |

# The Public Tender for the Concession is already Late


G1 ECONOMIA

G1 | Mercados | Negócios | Globo Rural | PME | Seu Dinheiro | Mídia e Marketing | Impostos

05/07/2013 15h19 - Atualizado em 05/07/2013 16h15

## Primeiro leilão de ferrovia deve ser em 18 de outubro, diz governo

Trecho vai ligar Açailândia (MA) ao porto de Vila do Conde (PA).
Taxa de retorno para investidor foi fixada em 8,5% ao ano.

Fábio Amato
Do G1, em Brasília

2 comentários | Tweetar 26 | Recomendar 10

O governo federal informou nesta sexta-feira (5) que o primeiro trecho ferroviário do pacote de investimento anunciado pelo governo em agosto do ano passado deve ir a leilão em 18 de outubro.

saiba mais

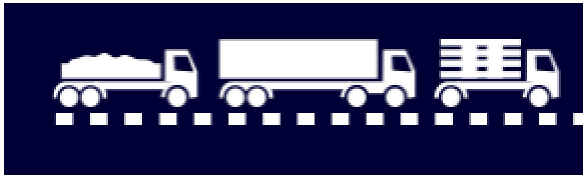
**Primeiro leilão de ferrovia deve ser em 18 de outubro, diz governo**

Este primeiro trecho, de 457 quilômetros, vai ligar **Açailândia**, no Maranhão, a Barcarena, no Pará. A função dessa linha férrea será conecta

Source: EPL

# Roads

# PIL (Plano de Investimento em Logistica) in Summary



***Roads***

**42**

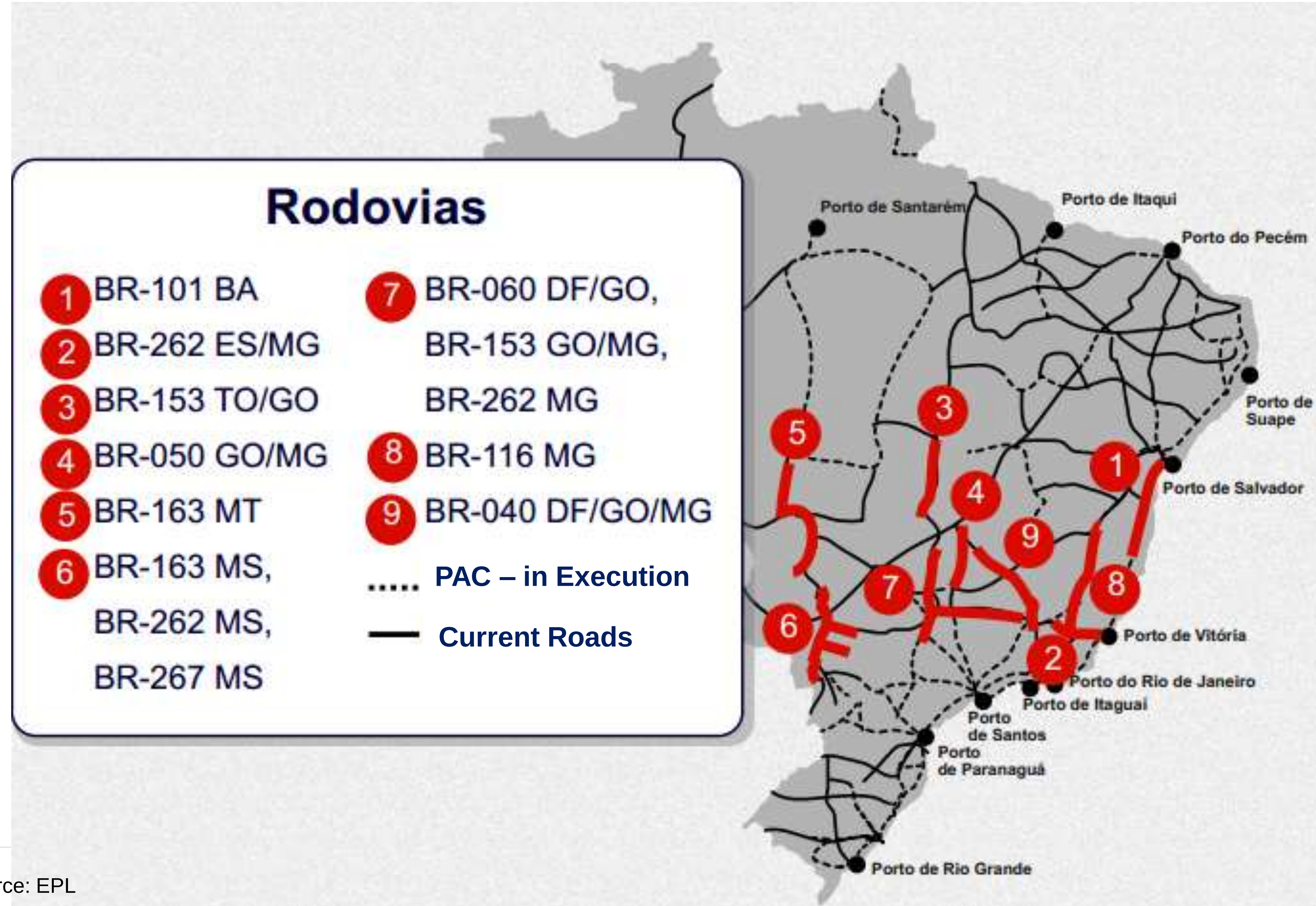
**R$ Billion**
**7,500 km**

**23,5 R$ billions**
**First 5 years**

**18,5 R$ billions**
**20 years**

Source: EPL

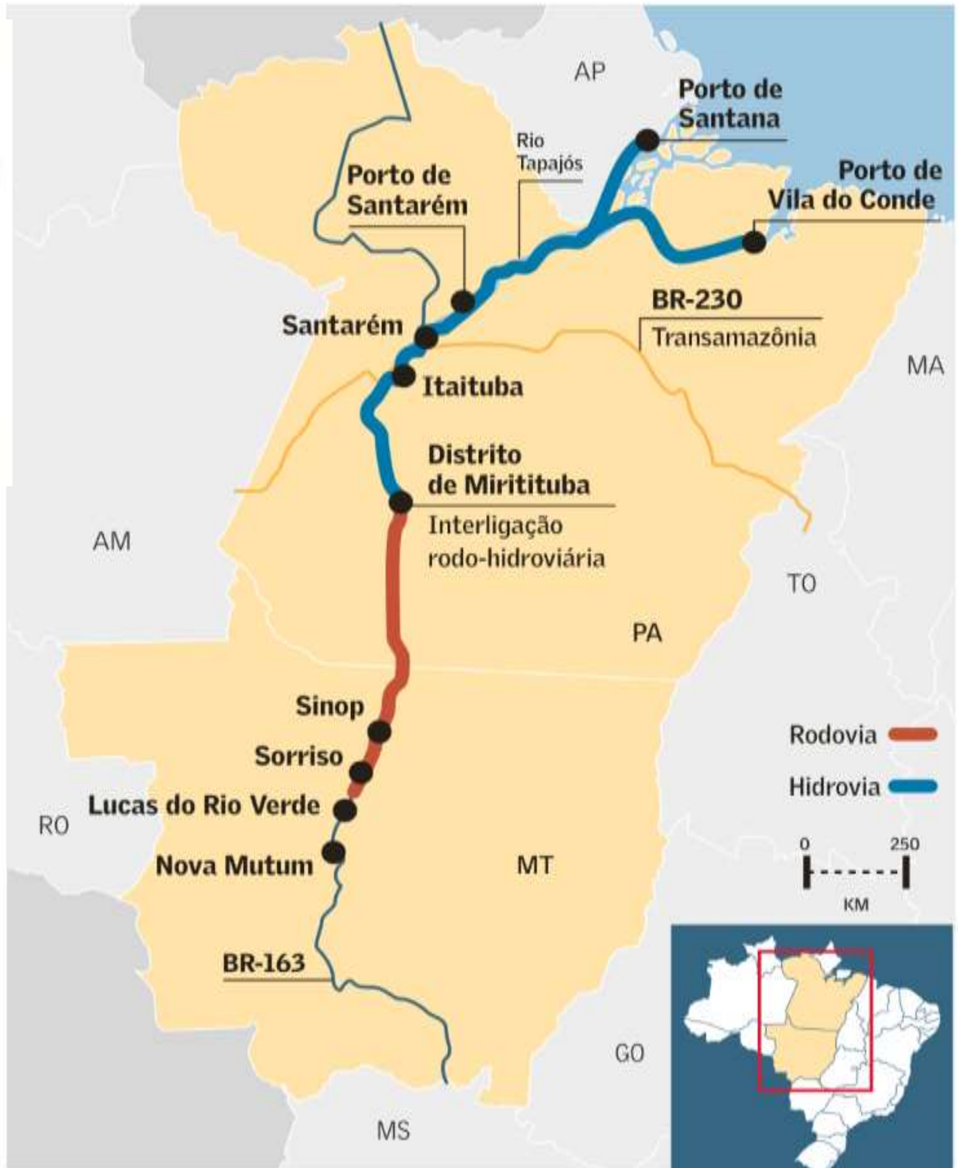
# Road Projects – PAC and PIL (Concession Program)




Source: EPL

# Most Important Road Project in PAC for Ag – BR 163
(1011 km)


46 % FINISHED




Source: Aprosoja


BR 163
RR
AP
AM
PA
MA
CE
RN
PB
PE
AL
AC
RO
TO
MT
Cuiabá
GO
Brasília
BA
MG
MS
ES
SP
São Paulo
RJ

# The Public Tender for the Concession is on time



## Leilão de concessão de 2 rodovias deve ocorrer em setembro

14 de junho de 2013 • 16h15 • atualizado 16h32

NOTÍCIA

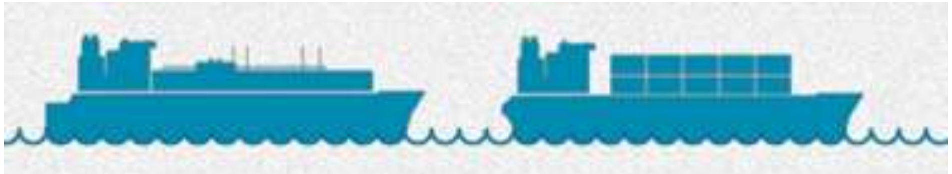
O leilão de concessão das rodovias BR-050 GO/MG e BR-262 ES/MG deverá ocorrer em setembro, informou a diretora da Agência Nacional de Transportes Terrestres (ANTT), Natália Marcassa, nesta sexta-feira. A ANTT divulgou informações nesta sexta-feira sobre a minuta do edital do leilão de concessão das rodovias BR-050 GO/MG e BR-262 ES/MG, com taxa interna de retorno real do projeto de 7,2% ao ano.

Também na coletiva, o presidente da Empresa de Planejamento e Logística

Source: EPL

# Investments in Ports

# PIL (Plano de Investimento em Logistica) in Summary



## *Ports*

**54,2**

**R$ Billion**

**31 R$ billions**
**Until 2015**

**23,2 R$ billions**
**Until 2016/17**

Source: EPL

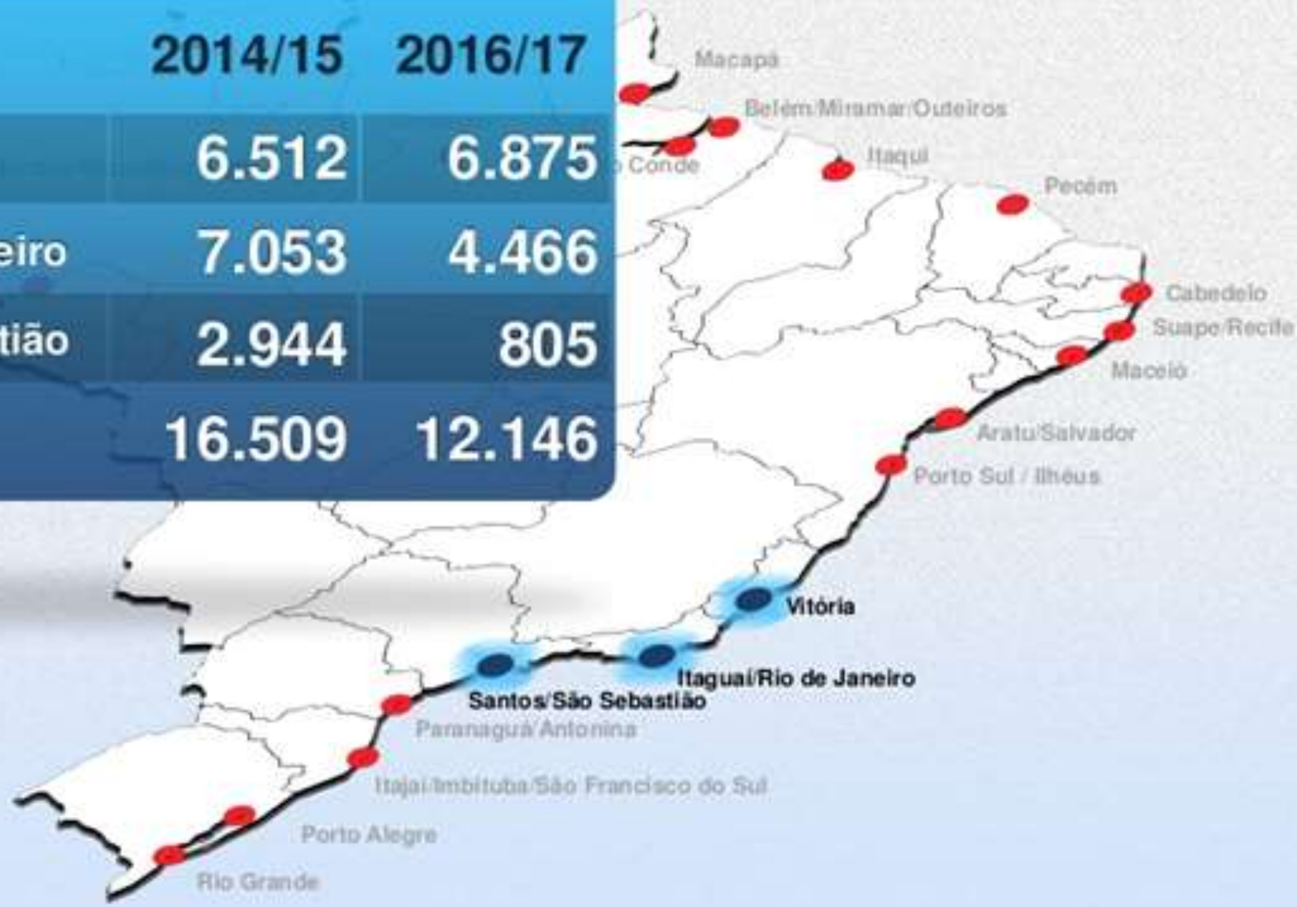
# New Regulatory Framework for Port Concessions
**(MP 595/2012)**

| | |
|---|---|
| Bidding Criteria | Cargo volume capacity, lower tariff per unit and agility, instead of highest premium paid |
| Workers | New legislation did not change this aspect, but kept the right of independent export terminal operators to hire any labor, independently from labor union. |
| Own /Third Party Cargo | Now companies who operate maily third party cargo will be able to apply for independent export terminais (TUPs) |
| Old Contracts | Will be respected.  As these contracts are renewed, they are adjusted to the new legislation |
| 24 hrs | Now all government services in ports will have to be 24/7, including customs, Ministry of Agriculture, etc |

Source: FIESP

# Investment in Ports According to PIL (Concession PAC)

| Sudeste | | Investimentos (Milhões R$) | |
|---|---|---|---|
| UF | Portos | 2014/15 | 2016/17 |
| ES | Vitória | 6.512 | 6.875 |
| RJ | Itaguaí/Rio de Janeiro | 7.053 | 4.466 |
| SP | Santos/São Sebastião | 2.944 | 805 |
| TOTAL | | 16.509 | 12.146 |




Source: EPL

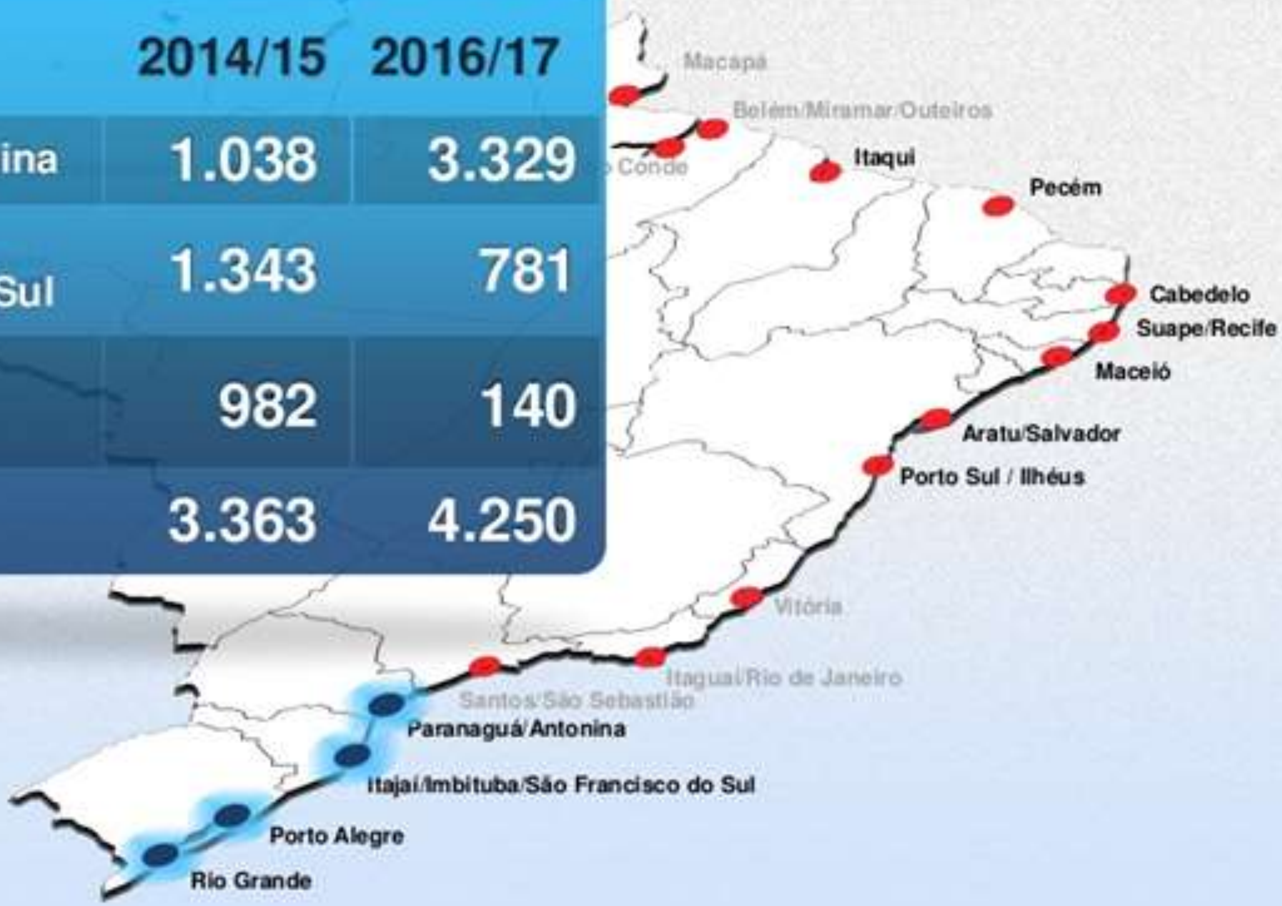
# Investment in Ports According to PIL (Concession PAC)

| Nordeste | | Investimentos (Milhões R$) | |
|---|---|---|---|
| UF | Portos | 2014/15 | 2016/17 |
| MA | Itaqui | 2.722 | 1.872 |
| BA | Aratu / Salvador / Porto Sul / Ilhéus | 1.295 | 2.760 |
| PE | Recife/Suape | 1.414 | 527 |
| CE | Pecém | 1.224 | – |
| PA | Cabedelo | 107 | – |
| AL | Maceió | 12 | – |
| TOTAL | | 6.775 | 5.159 |


Source: EPL

# Investment in Ports According to PIL (Concession PAC)

| Sul | | Investimentos (Milhões R$) | |
|---|---|---|---|
| UF | Portos | 2014/15 | 2016/17 |
| PR | Paranaguá - Antonina | 1.038 | 3.329 |
| SC | Imbituba/Itajaí/ São Francisco do Sul | 1.343 | 781 |
| RS | Porto Alegre/ Rio Grande | 982 | 140 |
| TOTAL | | 3.363 | 4.250 |




Source: EPL

# Investment in Ports According to PIL (Concession PAC)


| Norte | | Investimentos (Milhões R$) | |
|---|---|---|---|
| UF | Portos | 2014/15 | 2016/17 |
| PA | Belém/Miramar/Outeiro/ Santarém/ Vila do Conde | 3.137 | 1.505 |
| AM | Itacoatiara/Manaus | 985 | 92 |
| AP | Macapá | 135 | – |
| RO | Porto Velho | 115 | – |
| TOTAL | | 4.372 | 1.597 |

Source: EPL

# Investment in Ports According to PIL (Concession PAC)

APROSOJA

ON TIME

G1 ECONOMIA

G1 | Mercados | Negócios | Globo Rural | PME | Seu Dinheiro | Mídia e Marketing | Imposto d

05/06/2013 18h13 - Atualizado em 05/06/2013 18h50

## Primeiro leilão de portos sob nova lei será em outubro, diz Gleisi

No total, serão 52 terminais licitados nos portos de Santos (SP) e Pará. Ministra disse que governo pretende licitar mais três blocos até fim do ano.

**Priscilla Mendes e Fábio Amato**
Do G1, em Brasília

Tweet

A ministra da Casa Civil, Gleisi Hoffmann, afirmou nesta quarta-feira (5) que o governo pretende lançar em outubro deste ano a primeira rodada de licitações de arrendamentos de terminais portuários cujos contratos estão vencidos.

**saiba mais**

No total, serão 52 terminais licitados nos portos de Santos (SP) e Pará. As licitações serão

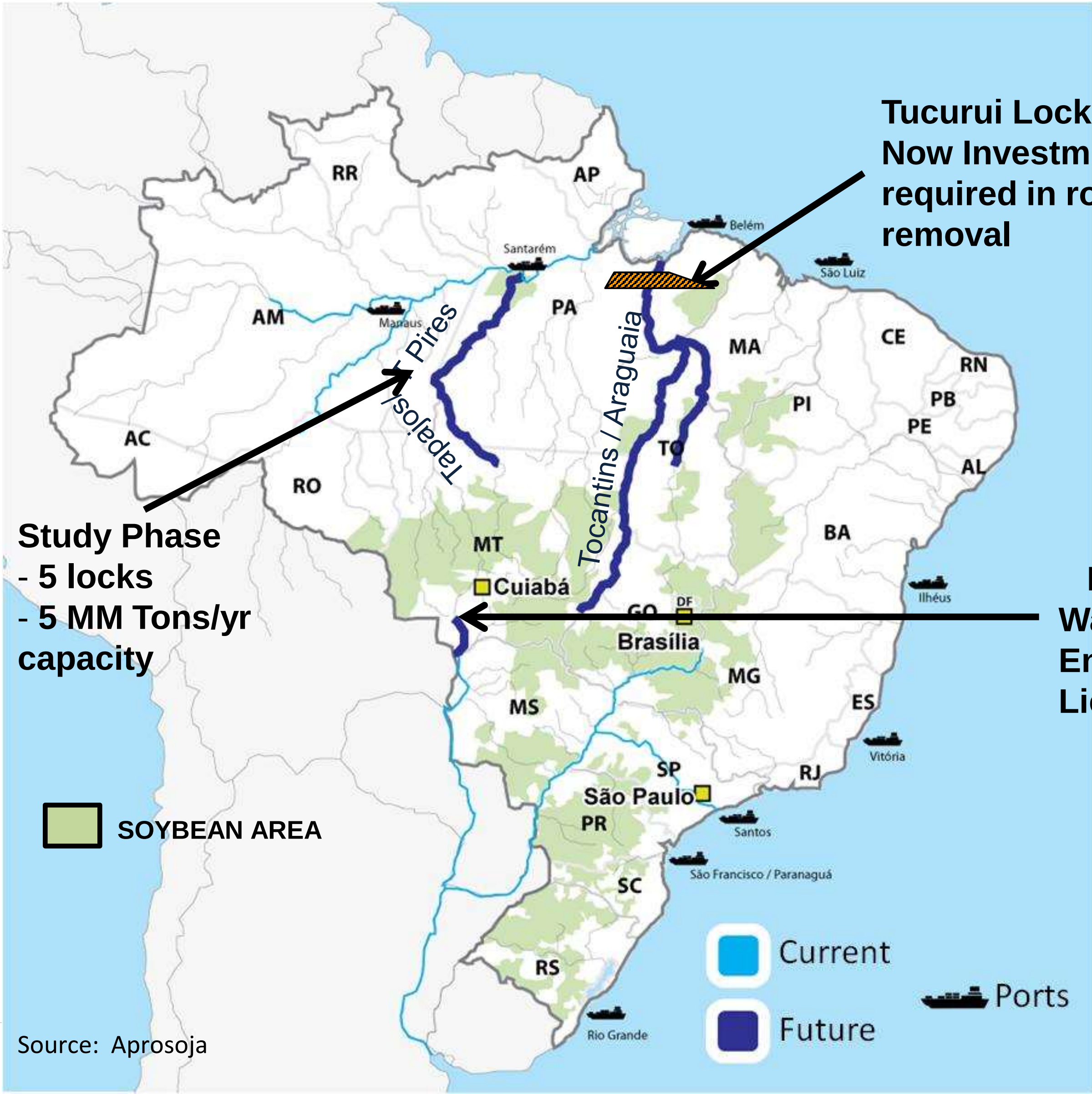
# Investments in Waterways

# Potential Waterways in Brazil


- **44,000 km of Potential Waterways**
- **Only 13,000 km of effctive Waterways**
- **Clearly not a focus of our Government despite of all the benefits**

Fonte: ANTAQ.

# Waterways with Enormous Potential for Grain Transport




Source: Aprosoja

Tucurui Locks- R$ 1 Billion
Finished: July/10

# Future Perspectives

# What Magazine Cover Do We Really Deserve?

**Nov 2009**


**July 2013**


1817 VIVE!
REFORMA TRIBUTARIA
TODOS OS BRASILEIROS SÃO IGUAIS, MAS UNS SÃO MAIS IGUAIS QUE OS OUTROS
POR TRANSPORTE PUBLICO DE QUALIDADE E PREÇO JUSTO!
(MOVIMENTO ESTUDANTIL - DIREITO UFPE.)

# Feasible Projects for the Next 5 Years


- **Ferrovia Norte-Sul** as far as Estrela d'Oeste
- **BR-163 Road** from Northern Mato Grosso to Santarém/PA
- **BR-080 Road**, connecting Mato Grosso to Luis Alves (Goias)
- **BR-158 Road** and BR 242, both in Mato Grosso state
- River Elevator of **Marabá/PA** and Export Terminal of **Vila do Conde/PA**
- River Elevators in **Miritituba/PA** and Export Terminal of **Santana/AP**

Fontes: DNIT, PAC, VALE, ALL, Ministério dos Transportes/ Elaboration: Agroconsult

APROSOJA
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