



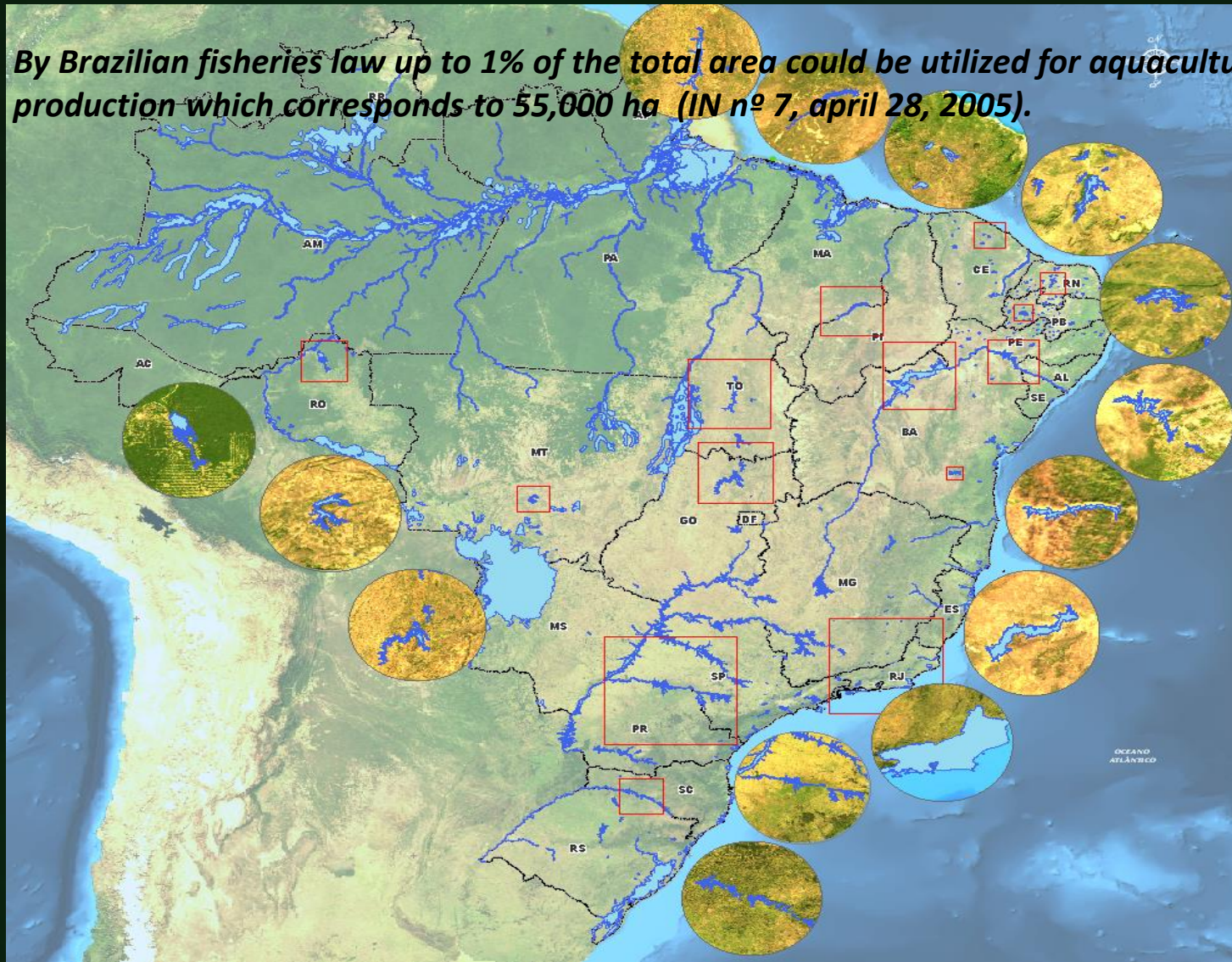
Prospects on Brazilian Aquaculture and the tilapia sector

by Renata Barroso



- 8,500 Km of marine coast - 4.3 million km² of Economical Exclusive Zone;
- 12% of total world fresh water;
- 5.5 million ha of flooded areas - mainly water plant reservoirs;

By Brazilian fisheries law up to 1% of the total area could be utilized for aquaculture production which corresponds to 55,000 ha (IN nº 7, april 28, 2005).



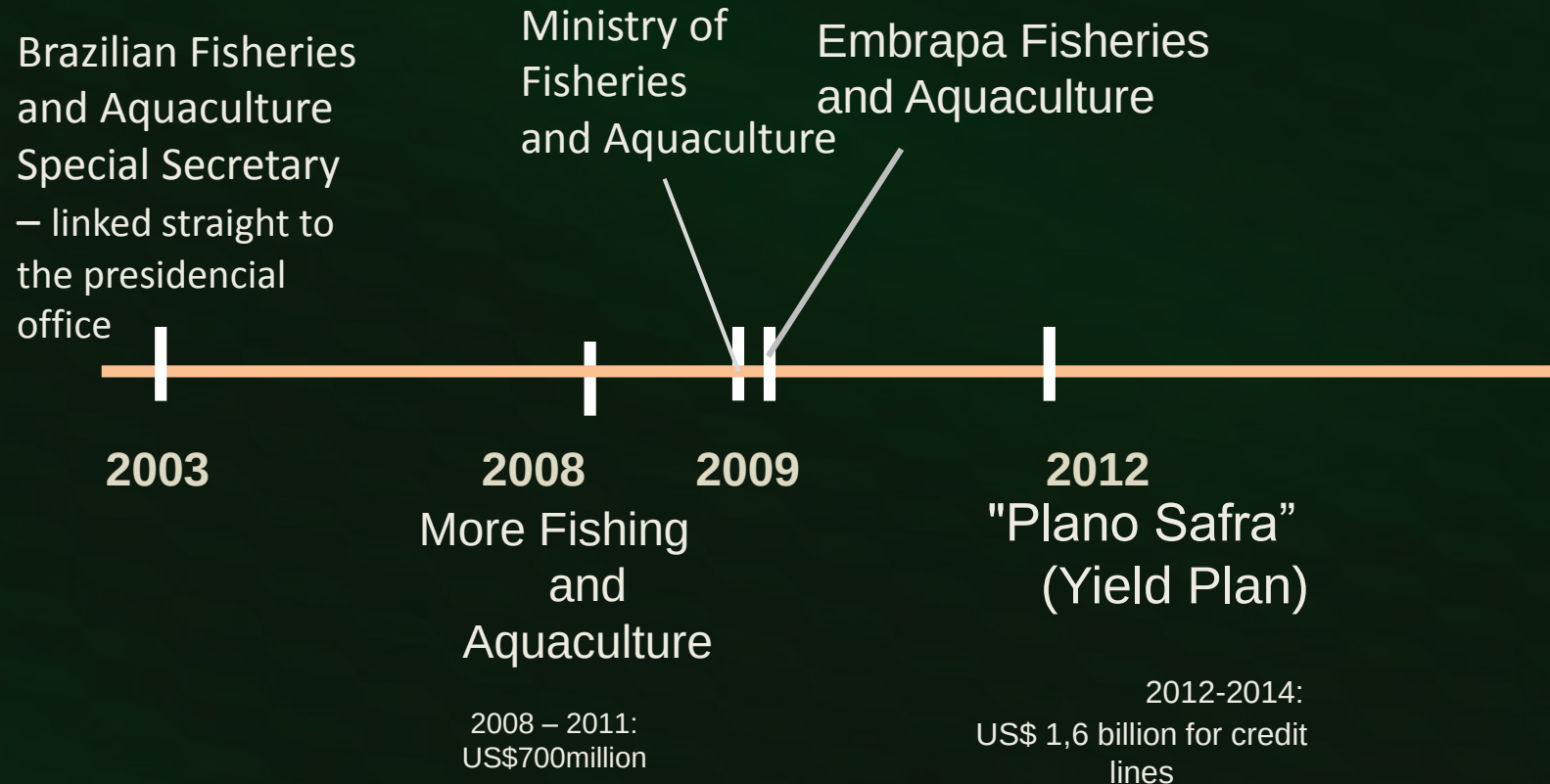
Other important Brazilian facts

- Grain production:
 - 28% soybean world production
 - 7% corn world production
- Globally competitive meat industries
- $\approx$ 200 million habitants
 - Seafood consumption grows 9% / year
 - Beef(2%) **6.8 kg/hab/yr in 2002**
 - Pork (3%) **9kg/hab/yr in 2009**
 - Chicken (5%) **9.7 kg/hab/yr in 2011**

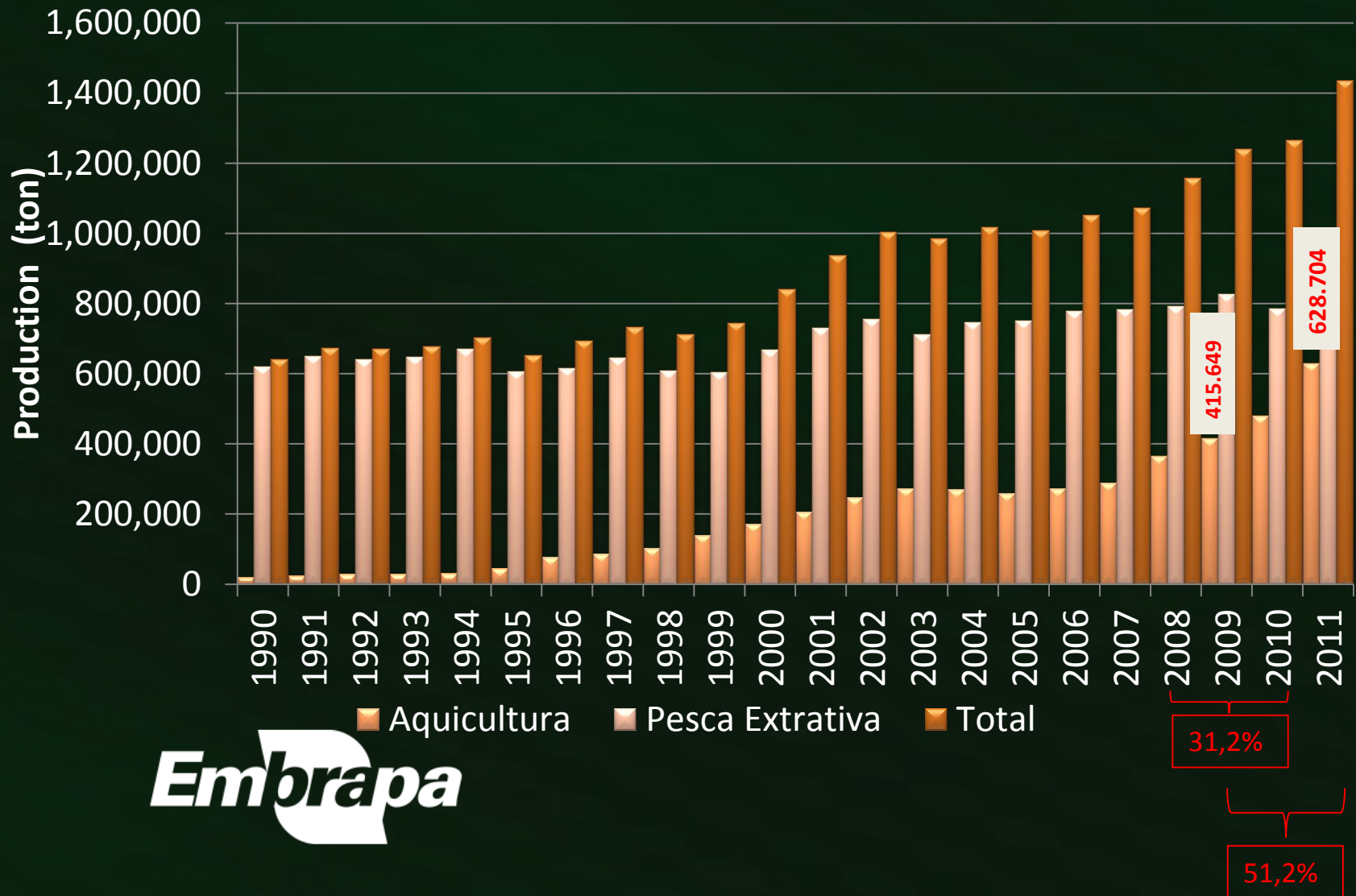


Sustainable Development of Fishing and Aquaculture

the sector underwent important changes since 2003

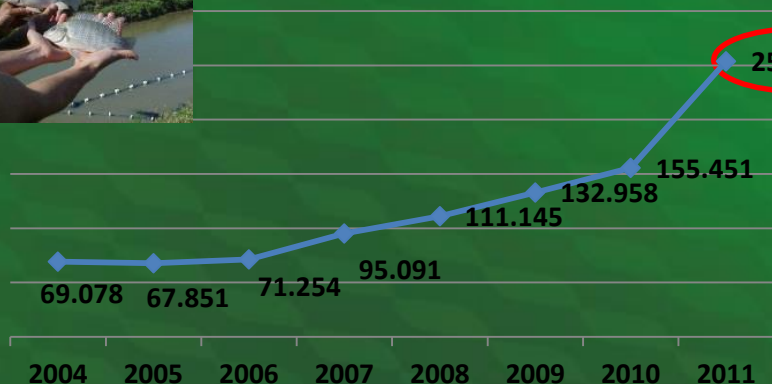


Brazilian capture fisheries and aquaculture production 1999-2011

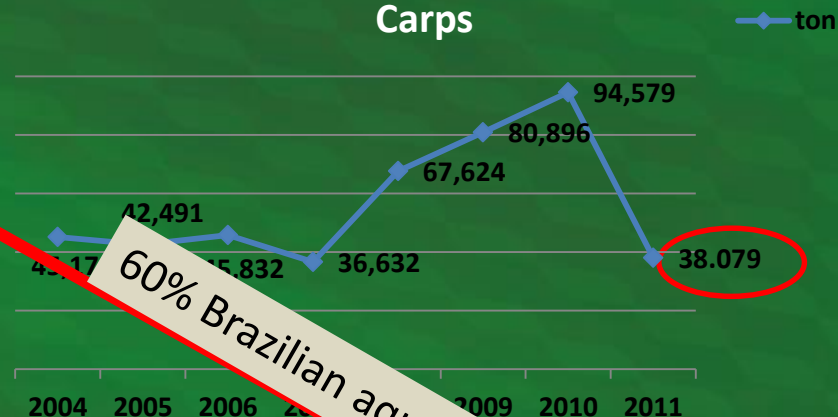


From 40 cultivated species - Main species production (ton), 2011

Tilapia

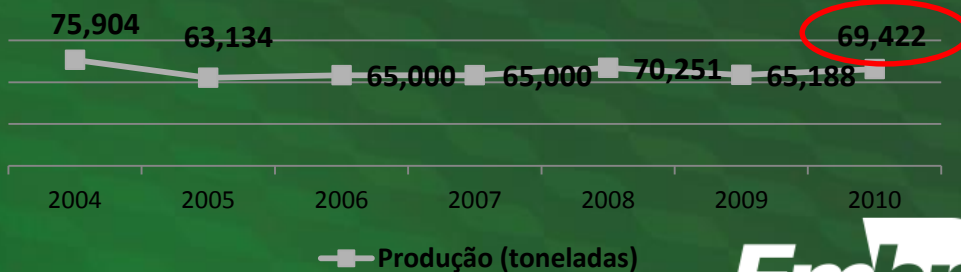


Carps

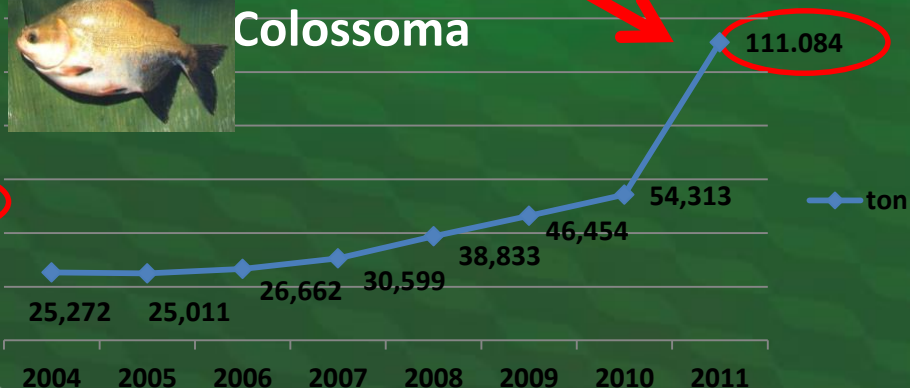


60% Brazilian aquaculture

Cultivated Marine Shrimp



Colossoma



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Brazilian fish exports and imports

Volume (t)

	2009	2010	2011	Δ % (2009-2010)	Δ % (2010-2011)
Exports	42.242	38.204	42.263	10%	11%
Imports	245.345	285.591	349.529	16%	22%
Balance	-203.102	-247.387	-307.265	22%	24%

US\$ (Mil)

	2009	2010	2011	Δ % (2009-2010)	Δ % (2010-2011)
Exports	247.082	263.324	271.193	7%	3%
Imports	722.568	1.011.589	1.262.888	40%	25%
Balance	-475.486	-748.265	-991.695	57%	33%



The size of the Seafood business in Brazil

1,75 million ton (production – exports + imports)

USD 10,8 billion/2011 (FOB Brazil, Average market value)



GROWING SECTOR

The sector is not yet fully structured

Technological development and innovation

Is the internal market able to absorb this increased supply?

Consumption:

Brazil – 9,7 kg / capita / year **X** World - 19,2 kg / capita / year

Regional Variation (INFOPECA, 2011):

- Amazonia state 34kg/hab/year
- Rio de Janeiro 18kg/hab/year
- Brasília 14kg/hab/year
- São Paulo 15kg/hab/year



Are fish reaching consumers?

Higher
income

Number
of stores

Distribution
efficiency



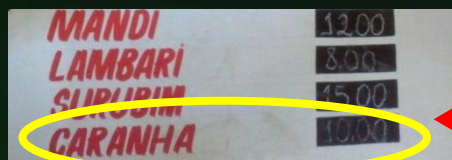
SUPERMARKET = Distribution



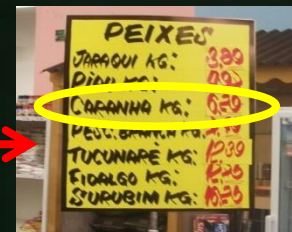
SUPERMARKET = seafood promotion, quality / price/ diversity



Marketing and
Promotion



Price



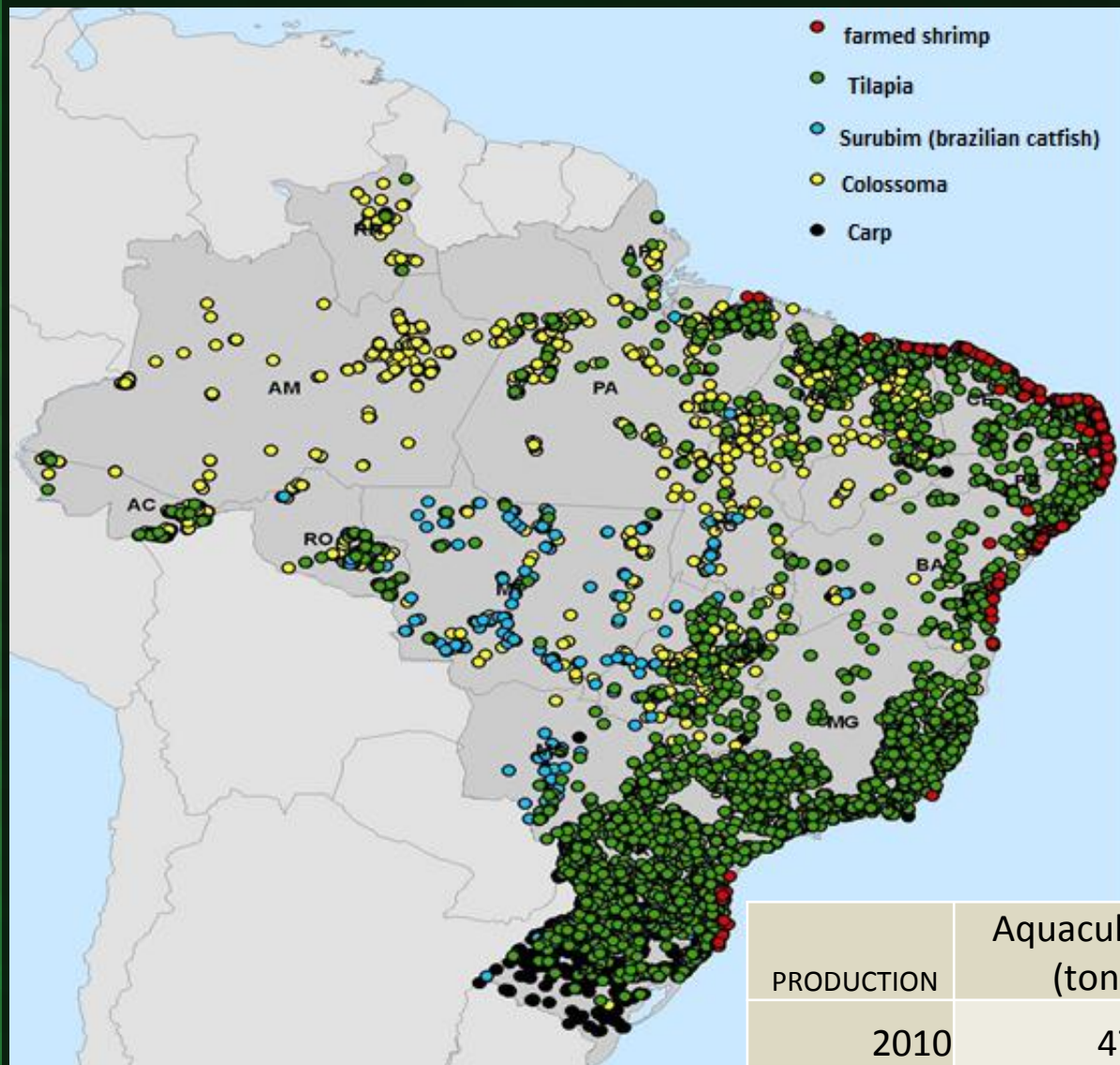


Tilapia

Background

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LAST 10 YEARS - BIG EXPANSION



PRODUCTION	Aquaculture (ton)	Tilapia	%
2010	479.399	155.451	32,4
2011	629.309	253.824	40,3

Technical aspects

Starting size = 0,2 to 0,5g → Comercial size = 600 g to 1 kg

Harvest = 6 to 10 month

28% feed = US\$ 0,35/kg to US\$ 0,40/kg

32% feed = US\$ 0,43/kg to US\$ 0,48/kg

Fries (0,2 to 0,5g) = US\$ 24 to US\$ 48/ thousand

Fingerling (20 to 30 g) = US\$ 104 to US\$148 / thousand



US\$ 1,17/kg a US\$ 1,48/ kg

40 e 250 kg/m³

35% of tilapia farming



US\$ 0,60 a US\$ 1,05/ kg

8 to 80 kg/m²

Tilapia's domestic price (US\$) 2013-2014

Producer	processing plant	supermarket (fillet)	consumer
	US\$1,30/kg	US\$ 7,38/kg fillet	US\$ 10,23/kg

Fresh fillet

Salmon – R\$35,49
Tilapia - R\$23,99

Frozen fillet

Tilapia - R\$ 21,86
Cod - R\$18,98



Photo by Kubitza, 2013

Tilapia's market

➤ Domestic

- High acceptance after industry improvement
- High value products

➤ Exports

Just worth it if BRL 2,80/USD

(currently US\$1.00 = BRL 2,34)

➤ Imports (higher competition foreseen)

Ecuador, Honduras

China, Indonesia, Vietnam

Taxes: maximum 35% (WTO) / Mercosul – max. 10%



Challenges, Bottleneck and Opportunities



Producers

- Scale up production – bigger cages, environmental permission
- Capacity building

Diversification / Adding value

- package, presentation, products
- Certification

Market

- Improve distribution and marketing structure
- Drop distribution and marketing costs - through shorter and more efficient networks
- Assure quality control along the distribution chain

Entire value chain

- Organization in one Unity or representative entity to better defend the sector through public policies

Questions??

Thank you!!

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