Nitrogen, Phosphate, Potash

An Outlook for Fertilizer in 2007

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- Nitrogen Fundamentals
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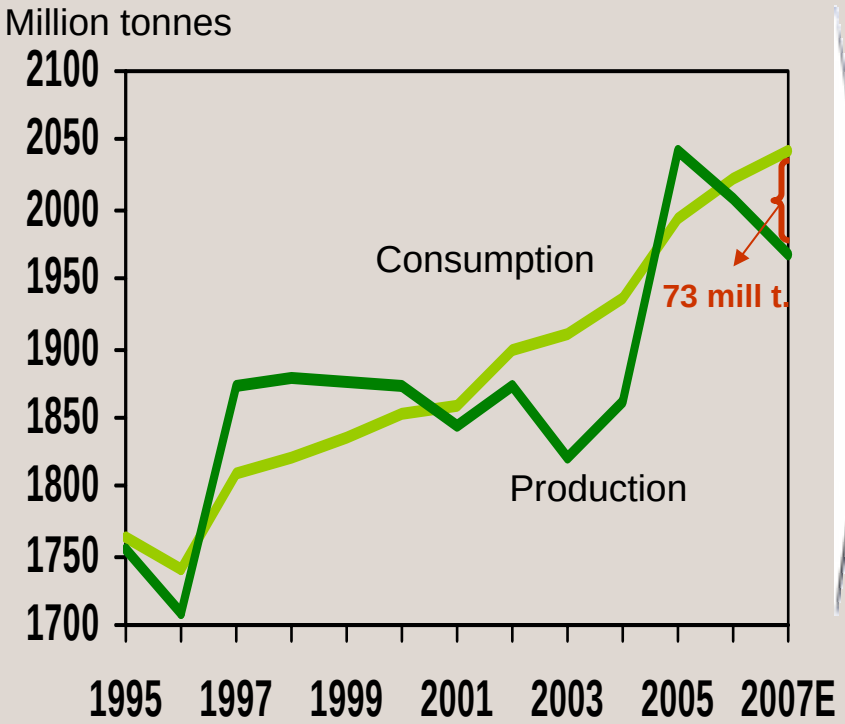
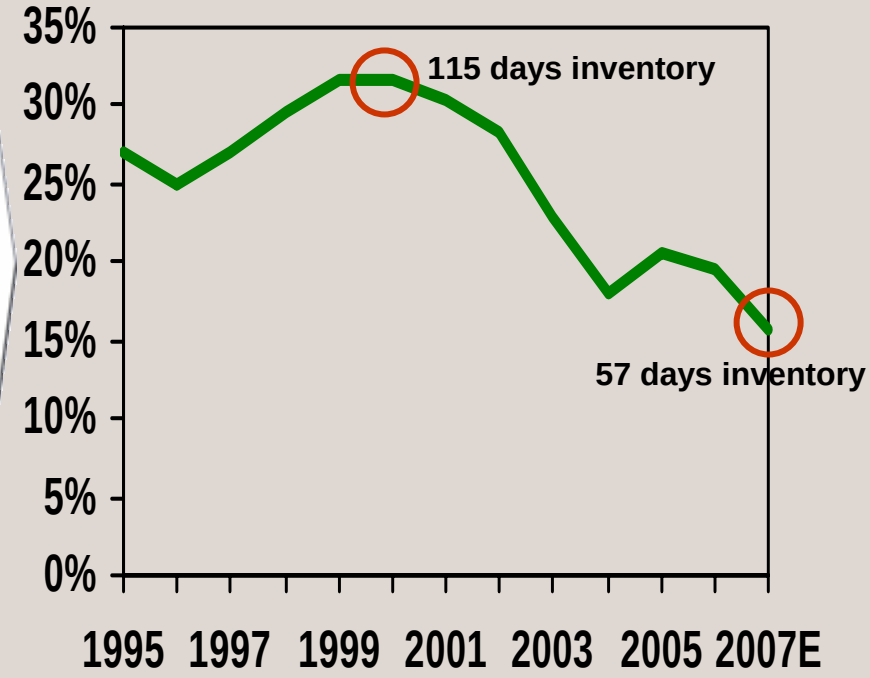
Fertilizer Demand Drivers

High grain prices: A consequence of consumption outpacing production

Grain consumption again expected to exceed production



… leading to halving of global grain inventories in seven years

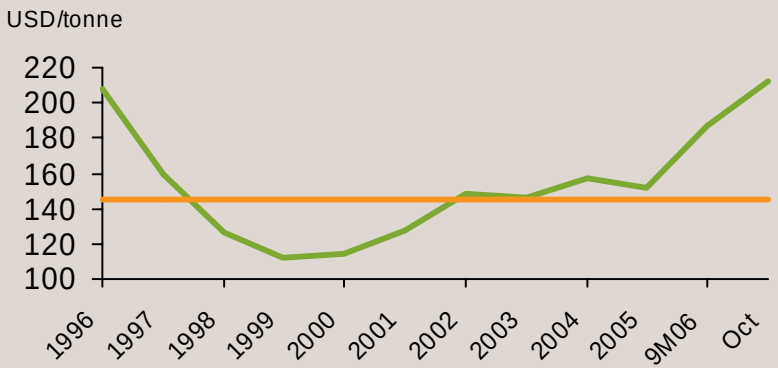


Source: USDA, update November 2006

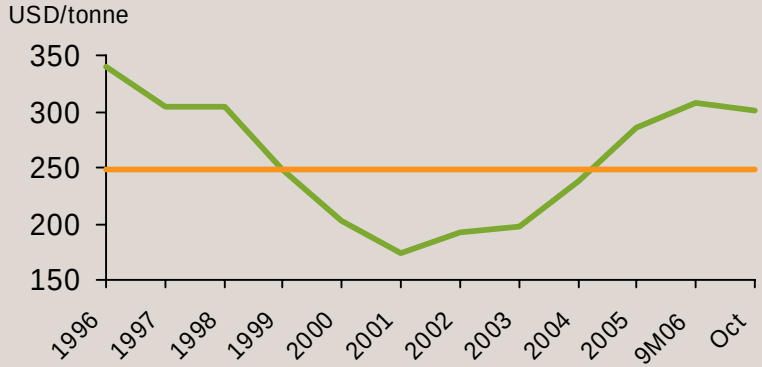
High grain prices bode well for the upcoming cropping season

10-year grain/oilseed prices – yearly averages

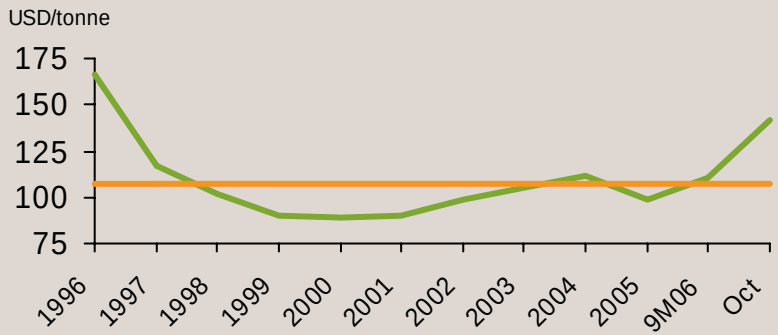
Wheat (HRW US Gulf)



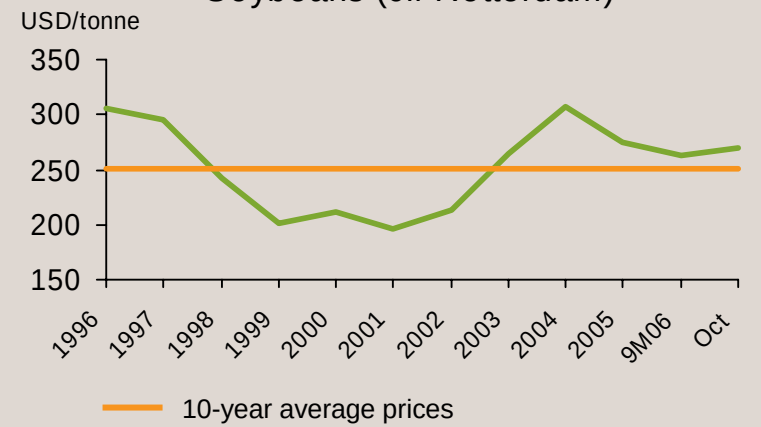
Rice (Thailand)



Maize (US Gulf)



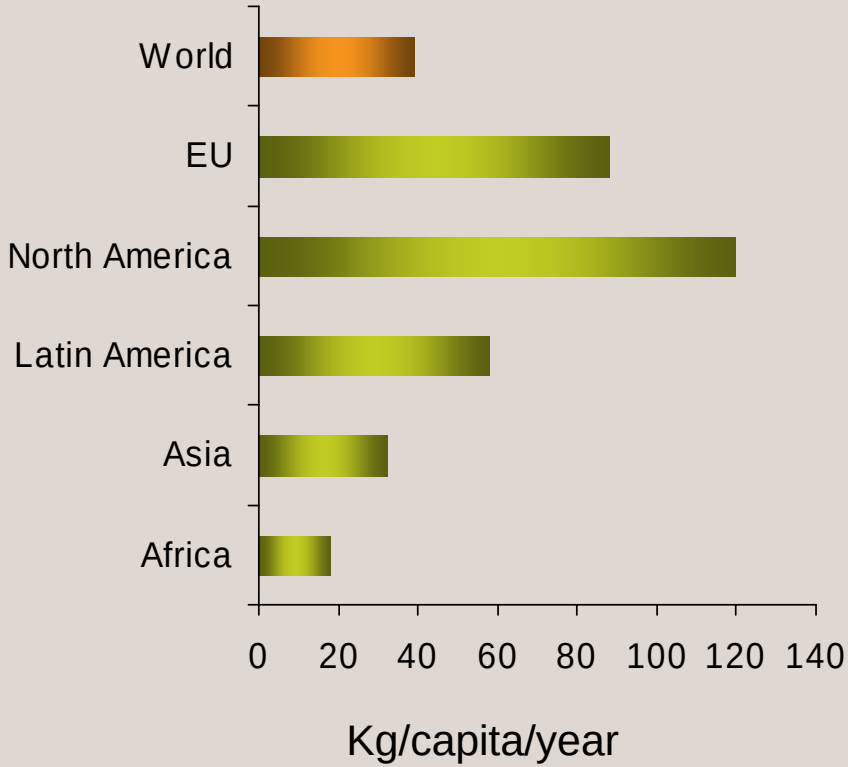
Soybeans (cif Rotterdam)



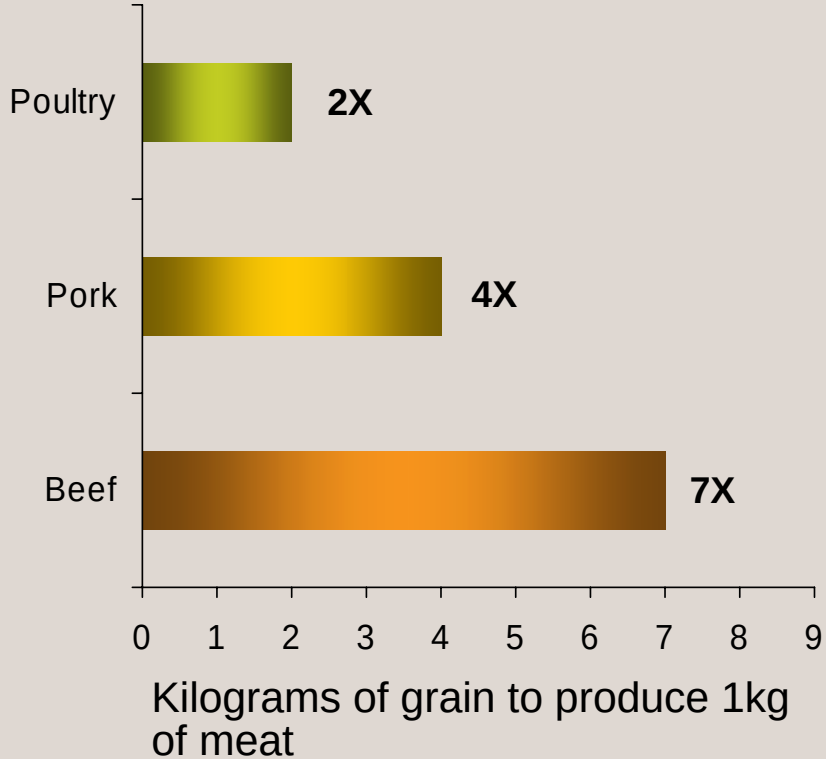
Source: World Bank

Higher demand for meat requires more feed grain

Significant potential for increasing meat consumption in emerging countries

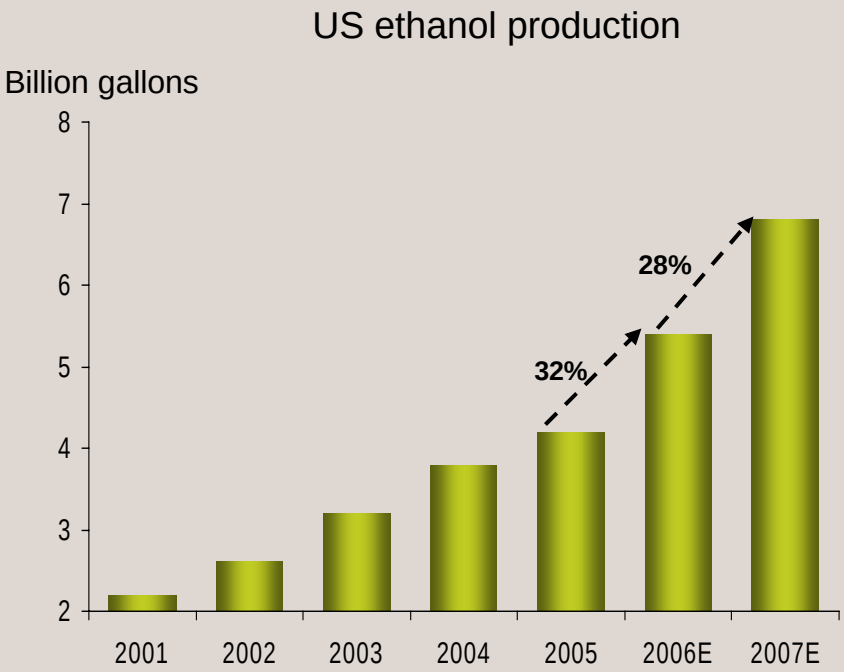


Feed grain multipliers for meat production



Source: FAO

Biofuel production is expected to show strong growth, driven by the US



- In the US, 19% of the corn crop is used for ethanol production this year
- EU target* is 5.75% biofuel for 2010. This could require more than 10% of EU agricultural area
- Energy efficiency for ethanol
  - US: 1.2x – 1.4x fossil fuel input
  - Brazil: 8x fossil fuel input

* Transport fuel as biofuel

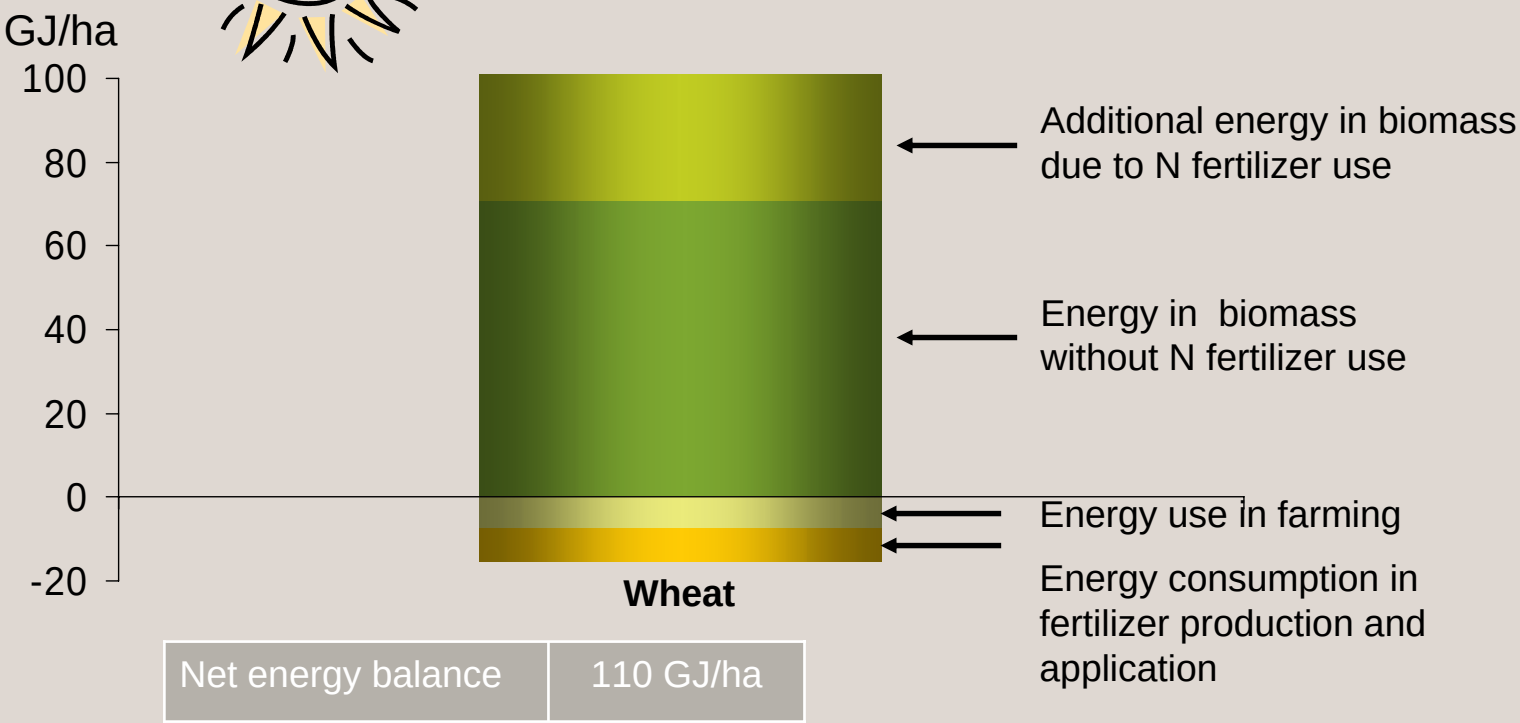
Source: Data and chart used with permission of North America Risk Management Services Inc., CERA, IEA

Steep grain price increases influenced by biofuel growth projections

Source: Chicago Board of Trade, 13 November 2006; December contracts

Fertilizer enhances positive energy balance in crop production...

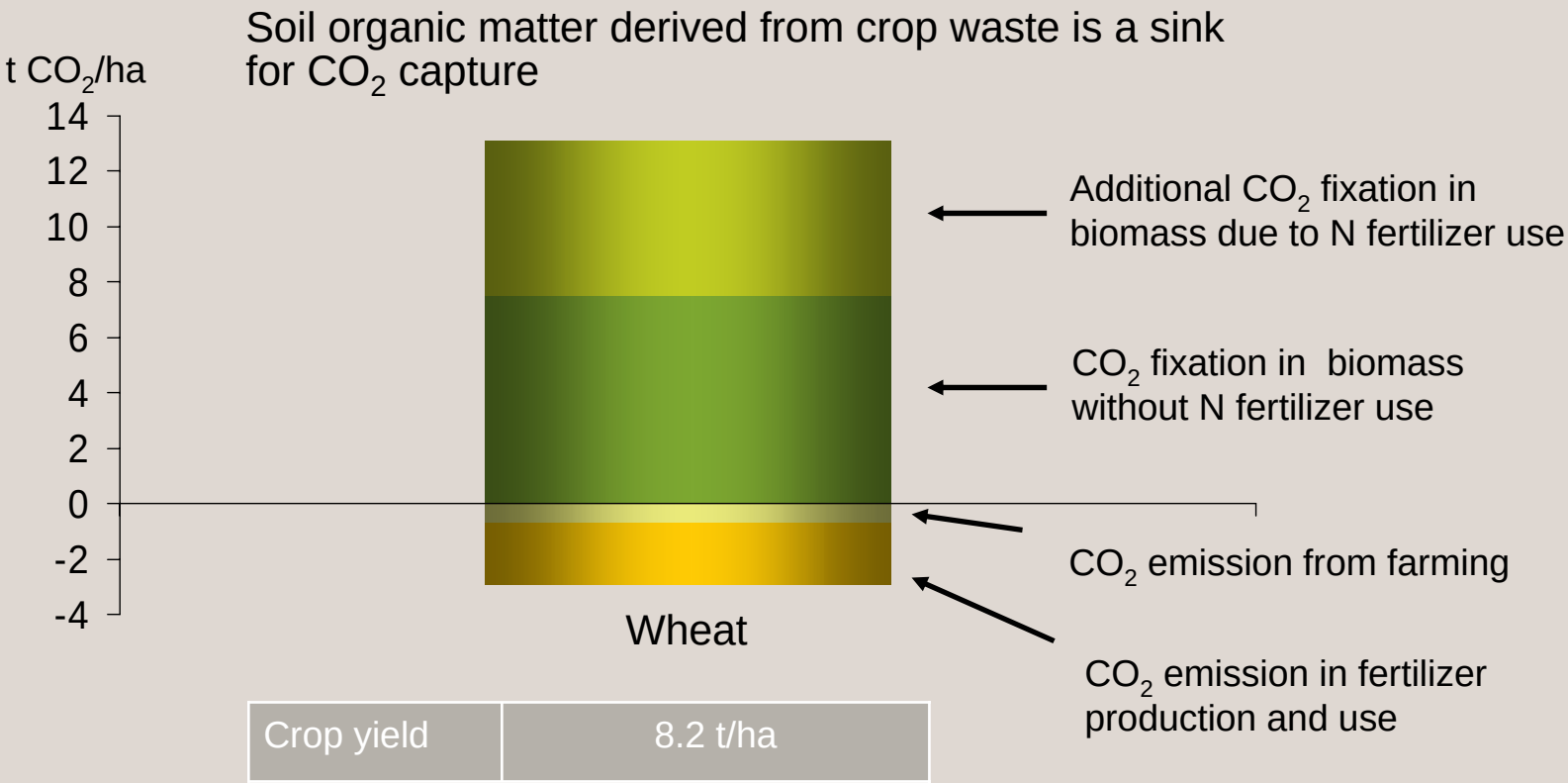
5-10 times more energy is captured by plants from the sun



Net energy balance	110 GJ/ha

Source: Calculations from field trial data, examples

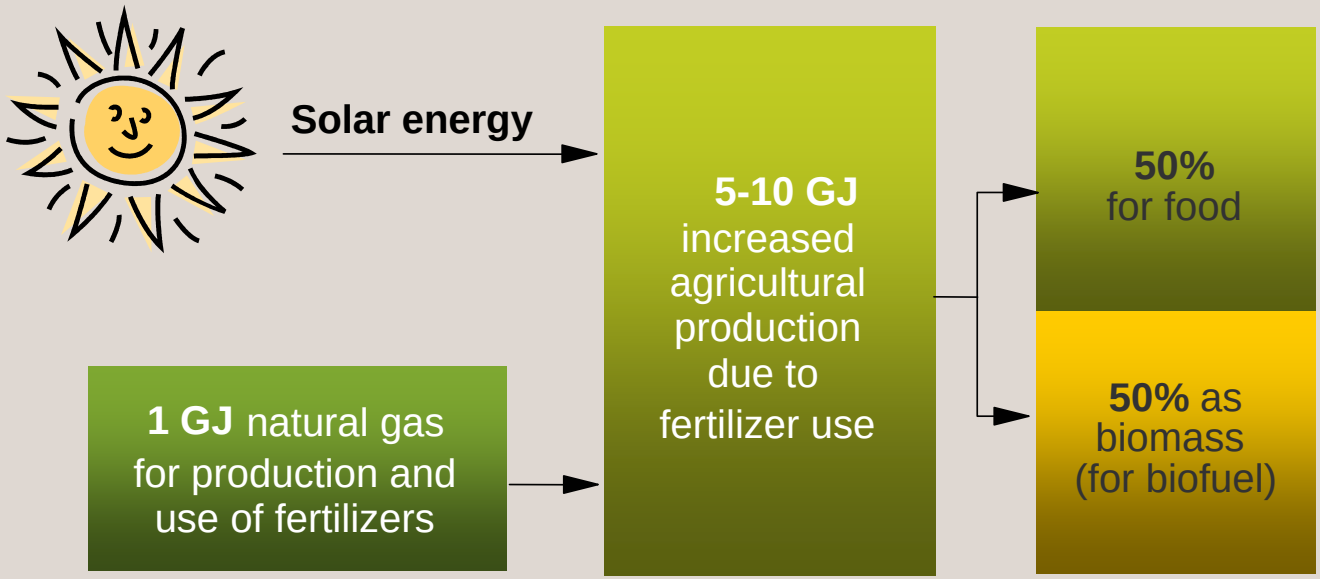
... and CO_2 fixation by crops



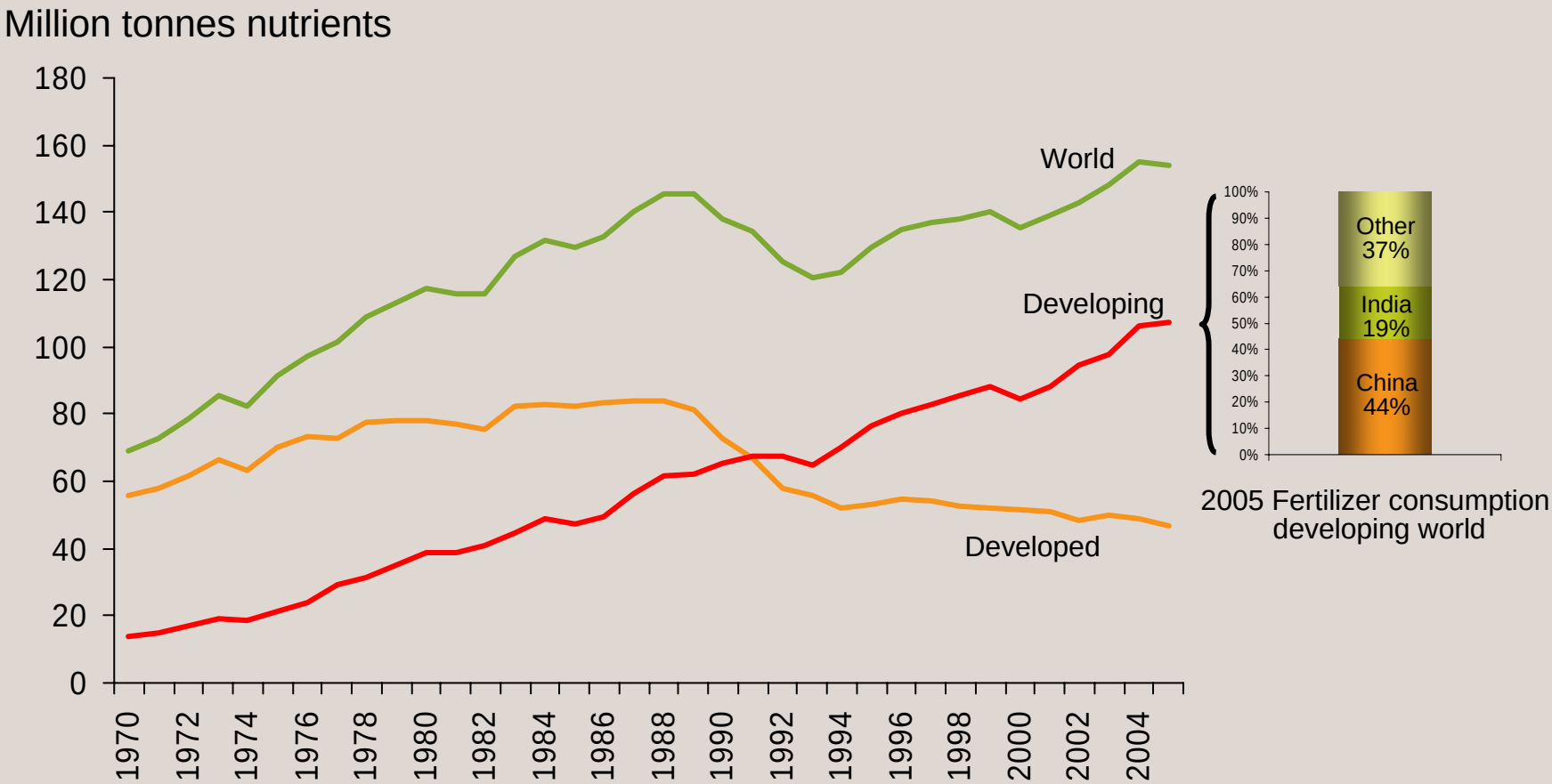
Source: Calculations from field trial data, examples

Fertilizers are a catalyst for cleaner energy

Use of fertilizers =
(1) catalyst for capturing solar energy
(2) reduction of greenhouse gas emissions, if waste is used as energy



Fertilizer consumption is driven by growth in developing countries

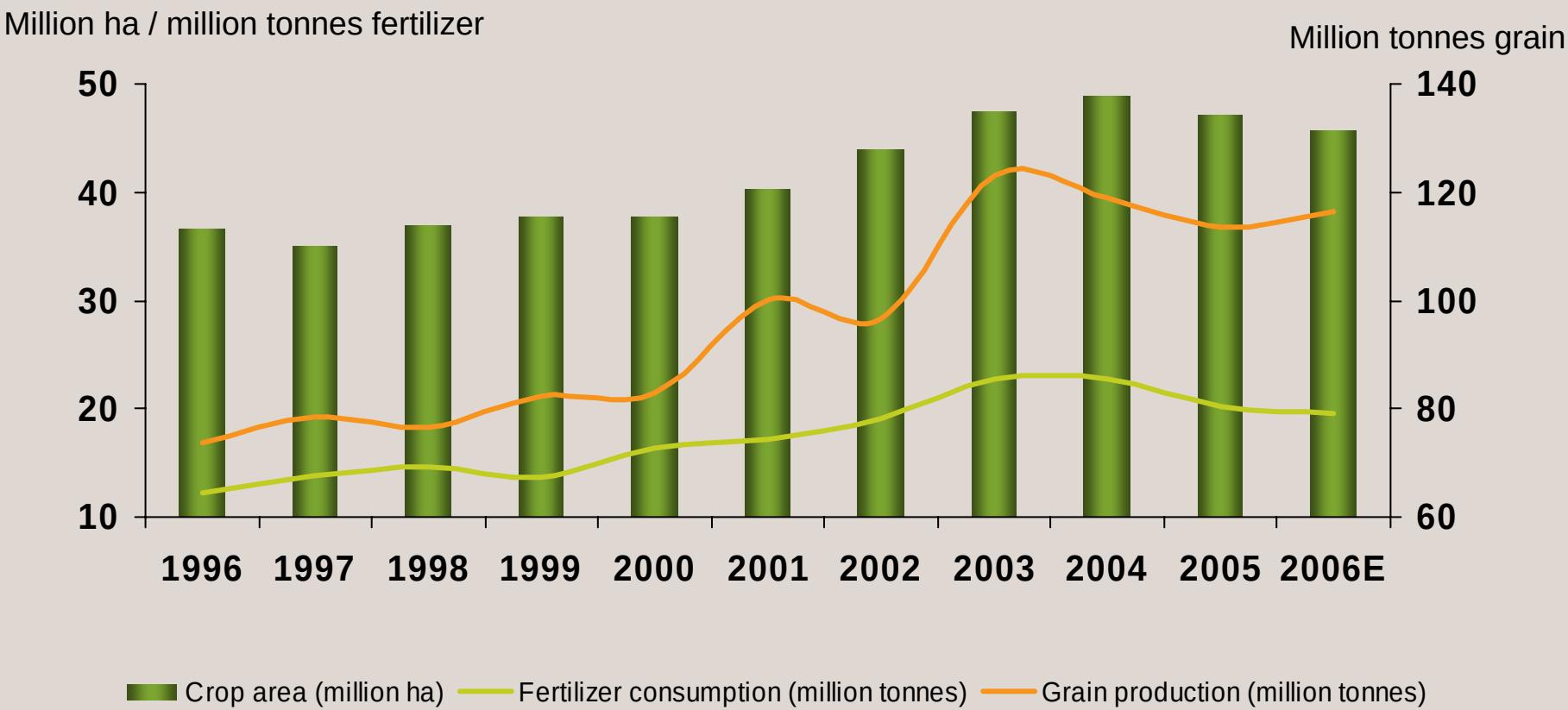


In 2005 the world market for fertilizer was approximately USD 110 billion

Source: IFA

The Example for Growth: Brazil

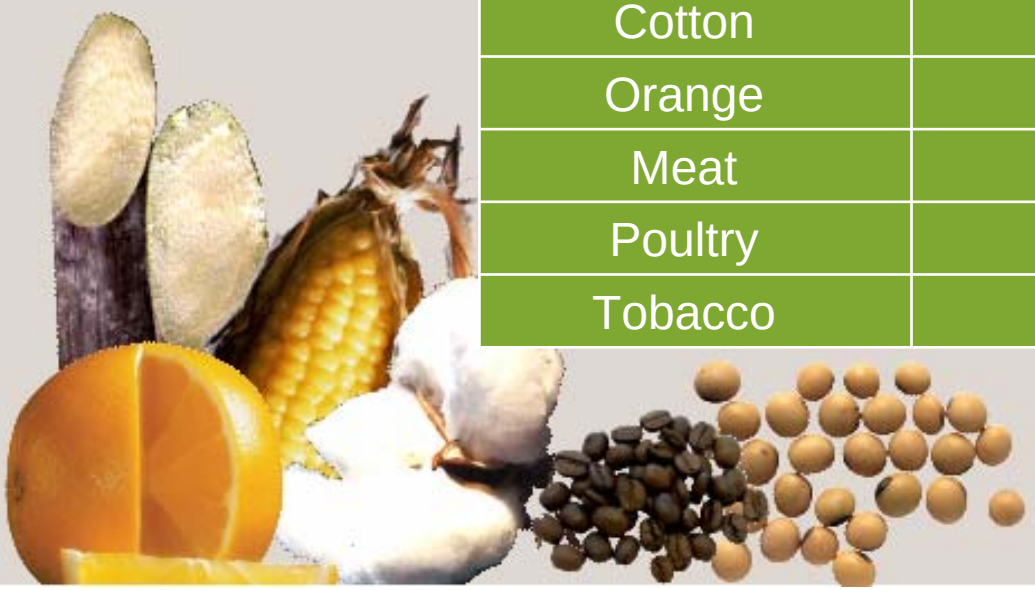
Strong growth in Brazilian agriculture in the past decade



Source: FB Info Memorandum using ANDA, Conab and MB Associates.

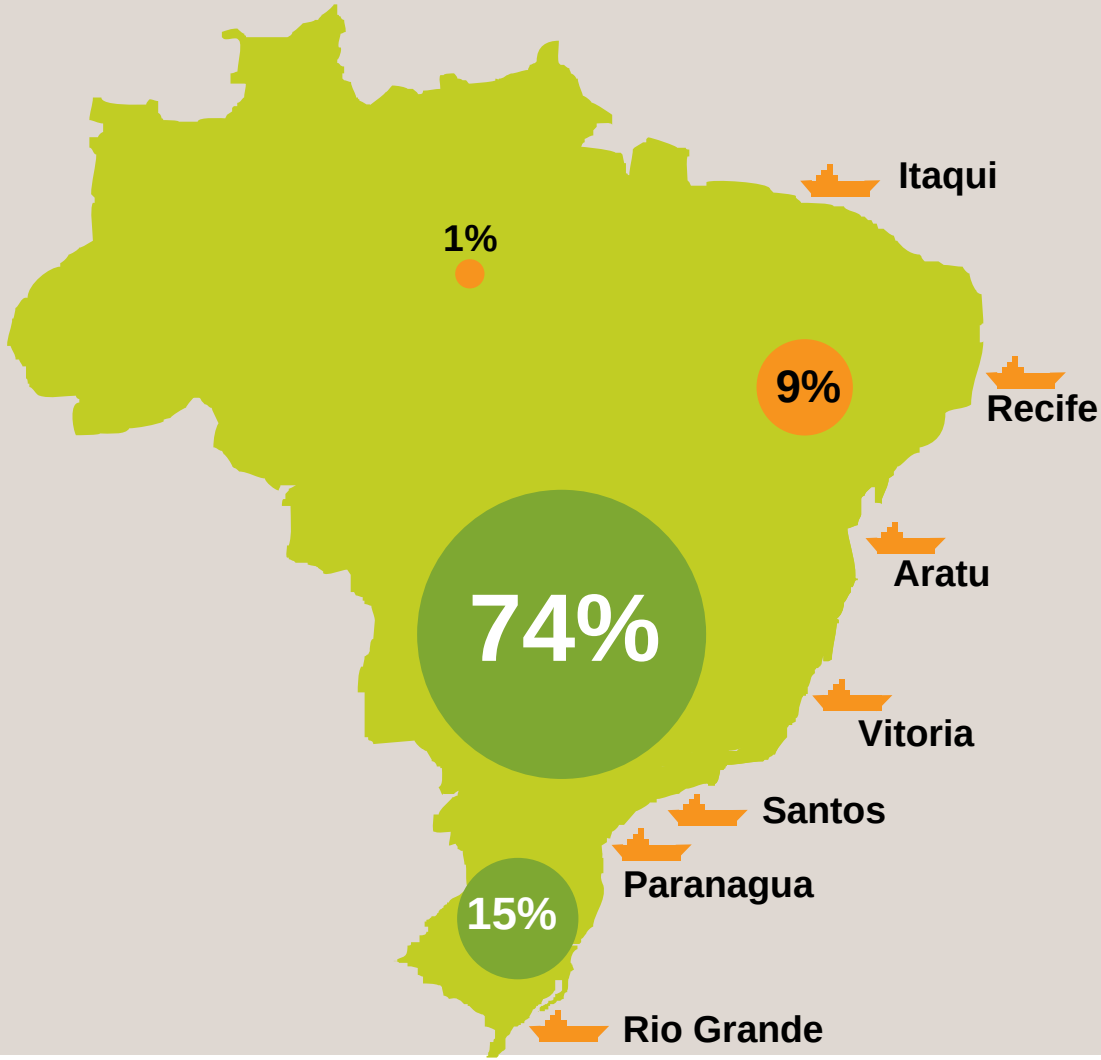
Brazil: a top ranked producer and exporter of several main food products

Crop	Production	Export
Soya	2º	1º
Corn	3º	-
Sugarcane	1º	1º
Coffee	1º	1º
Cotton	-	3º
Orange	1º	1º
Meat	3º	1º
Poultry	2º	1º
Tobacco	2º	1º

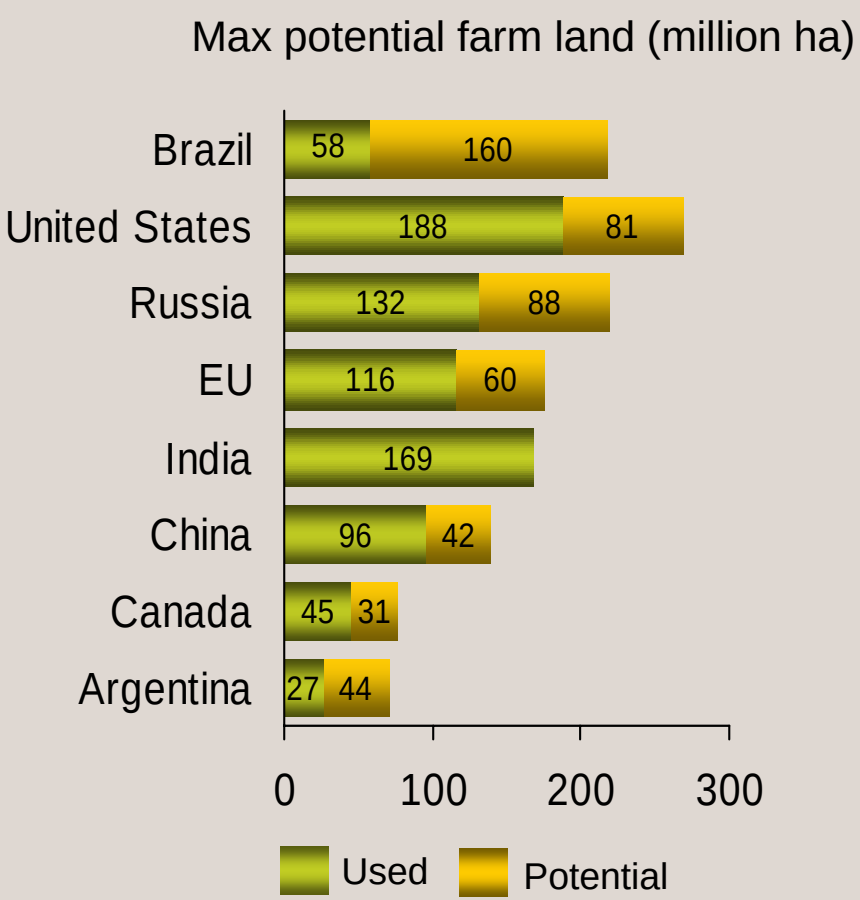


Source: FAO, MB Associates

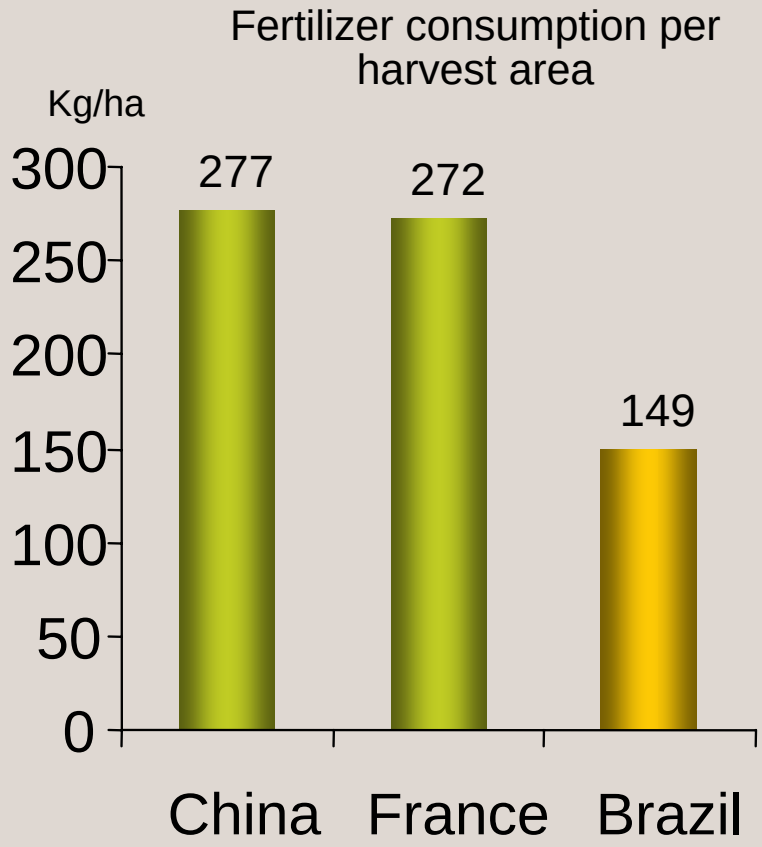
Brazil: Fertilizer consumption by region



Brazil has big potential to increase arable land acreage



Source: FAO/IBGE, MB Associates, EMBRAPA

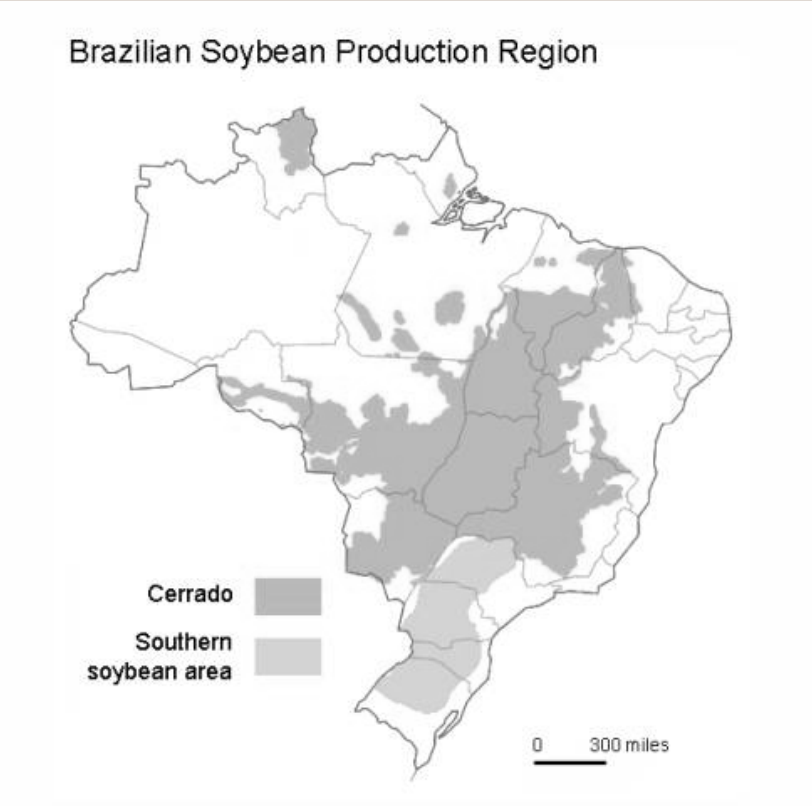


Source: IFA

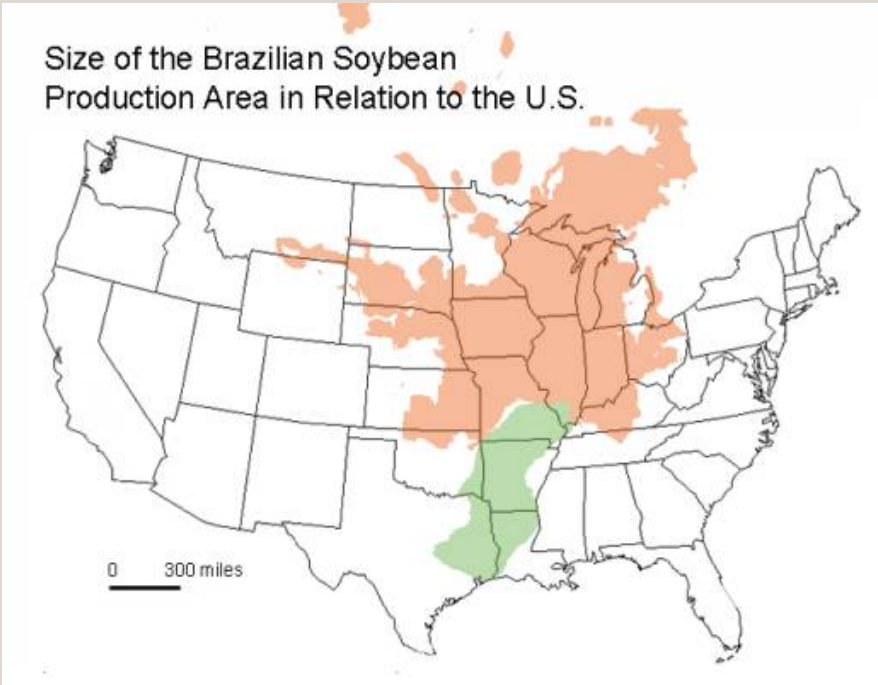
Brazil has favourable economics

- Brazil has much lower land cost than the US: approx. $1000/acre for good land (cleared and ready to plant)
- Brazil has much lower labor cost than the US: about $2.00/hour
- Brazil's main handicap: Infrastructure

Brazil can replace the US as the Bread Basket of the world

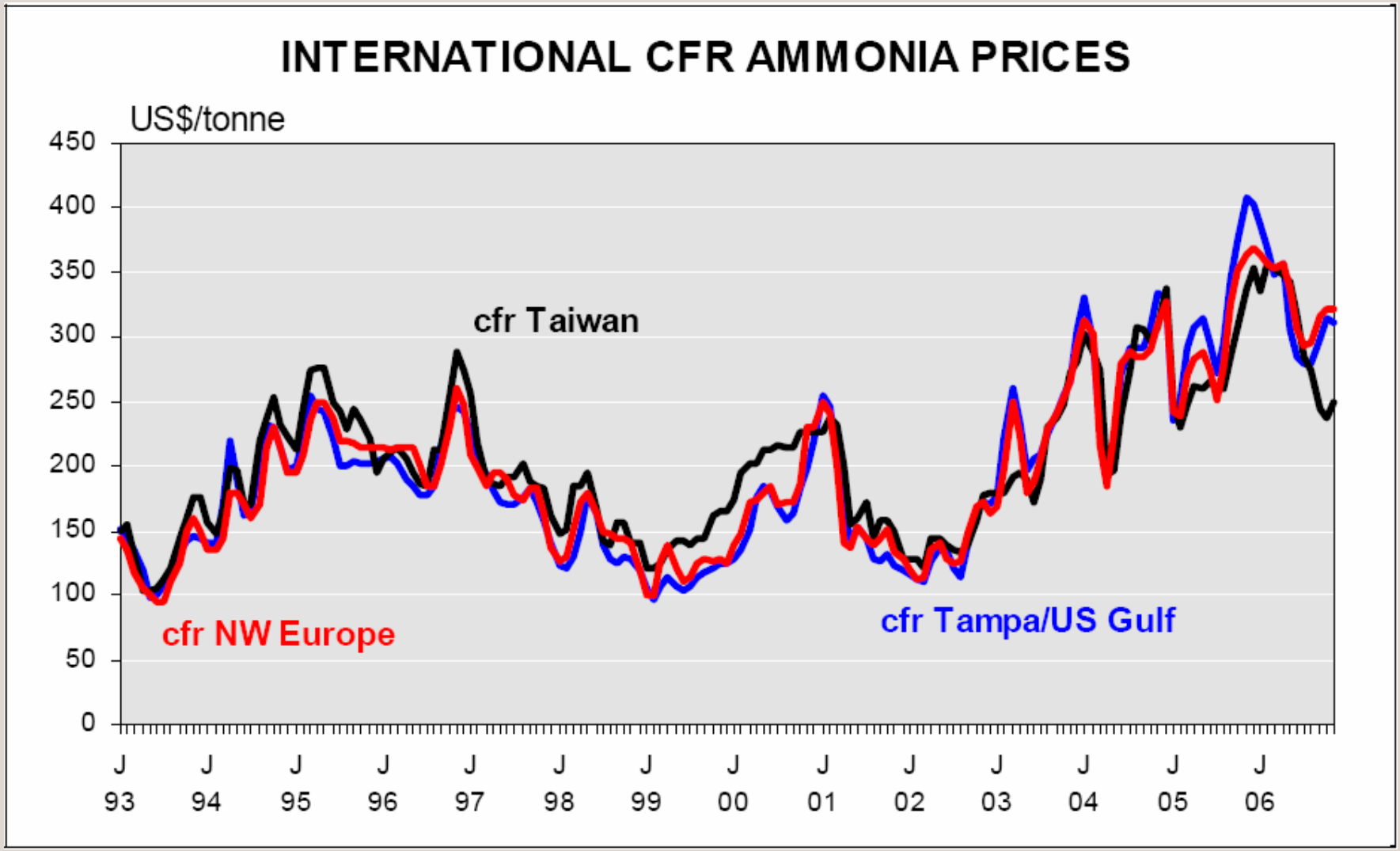


Average annual growth since 1995: 6%



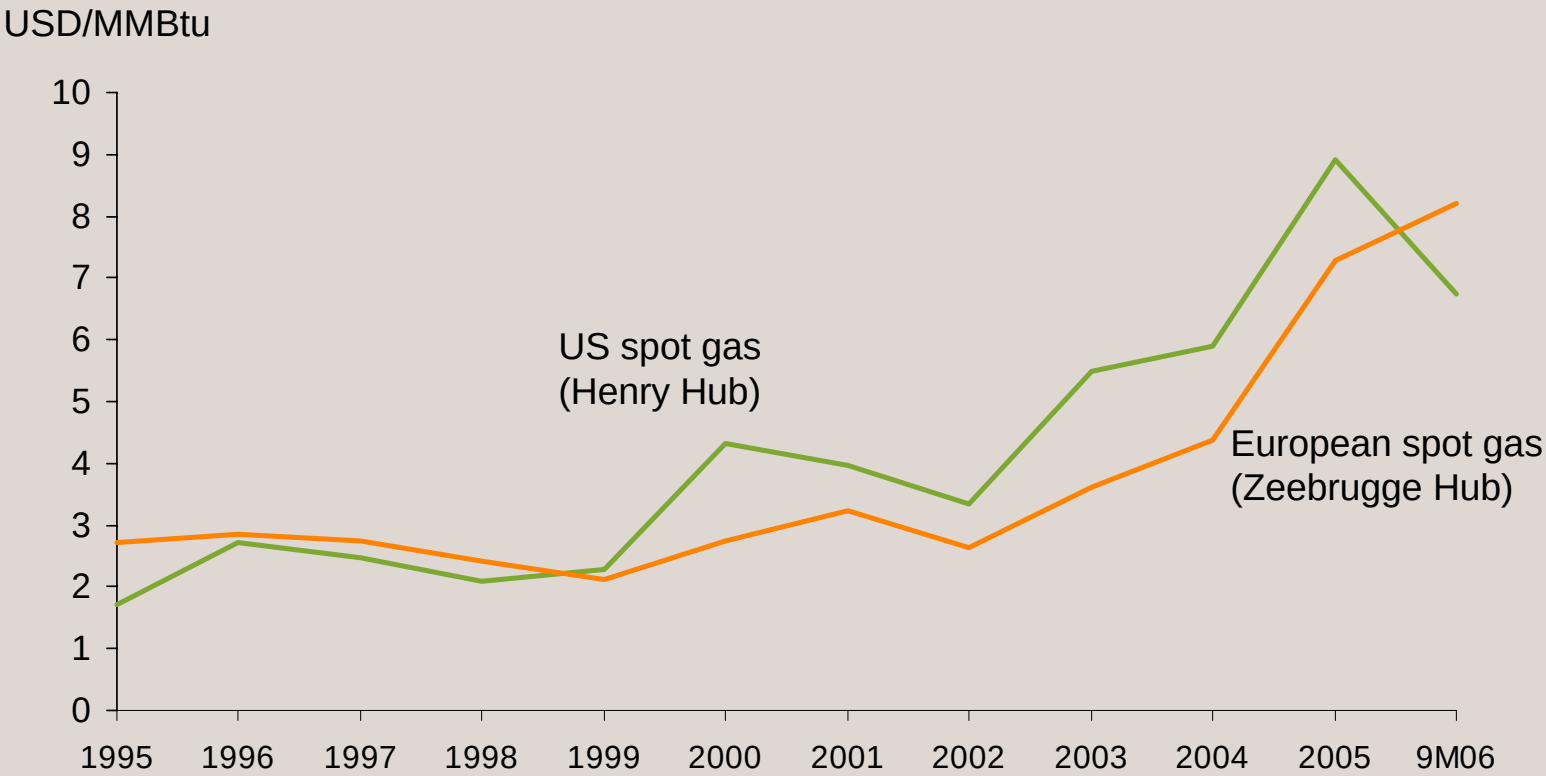
Nitrogen Fundamentals

All nitrogen fertilizer starts with ammonia...



Natural gas cost drives nitrogen prices

Yearly averages 1995 – 2005



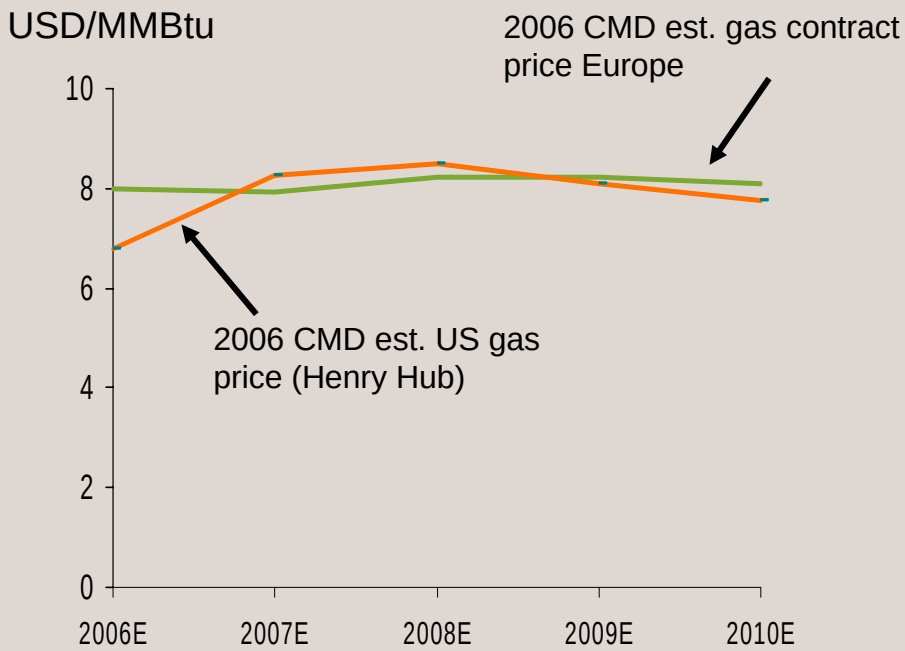
Source: World Bank, Platts (average import price into EU from World Bank used up to 1999)

Natural gas cost changes US nitrogen industry

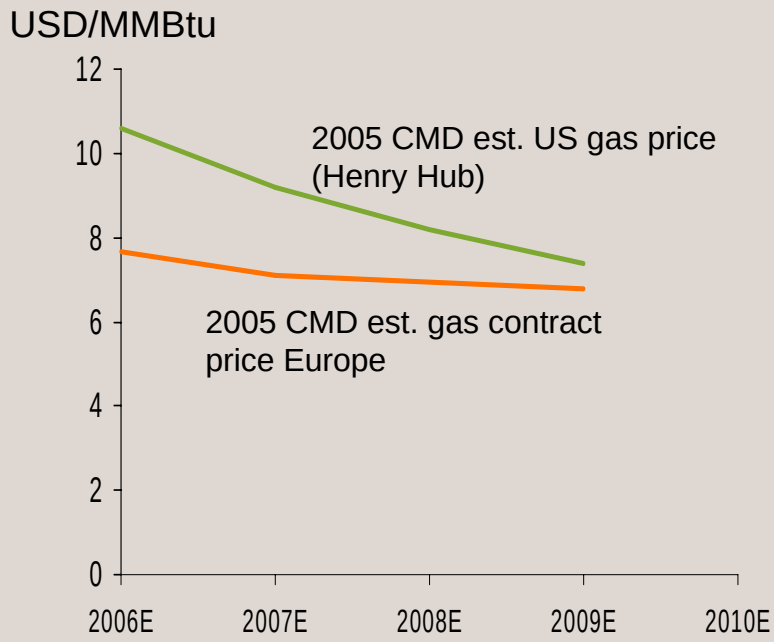
- Ammonia fixation via the Haber-Bosch process requires hydrogen. Natural gas has been the most economical and widely used hydrogen source for ammonia production.
- Natural gas accounts for 70 – 90% of the cost of production for ammonia.
- Since 1998, 19 ammonia plants in the US have shut down because of high natural gas cost. (source: TFI)
- Five plants are currently idled. (source: TFI)
- Alternative hydrogen sources such as petroleum coke are increasingly being used by remaining domestic manufacturers.

Forward market indecisive on potential swing producers for nitrogen

2006: US or Europe as potential swing producer



2005: US as potential swing producer



Source: Nymex, forward prices per 1 Nov 2006 (2005: 9 Nov) ; Yara

In the long term, Europe should have lower natural gas cost than the US

Supporting arguments

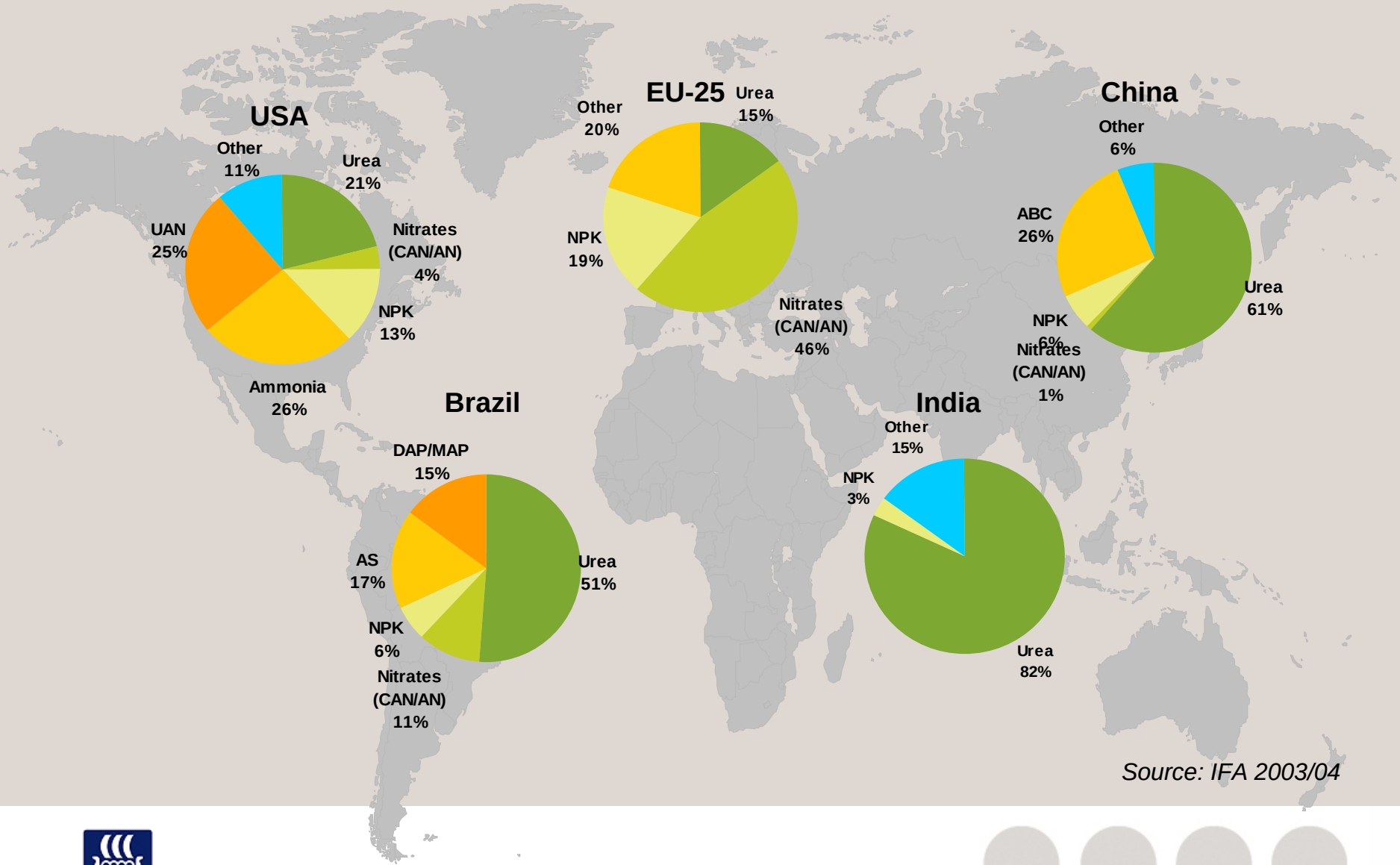
- Natural gas reserves-to-production ratio only ~10 in the North America compared to ~60 in Europe/Eurasia
- Several new pipelines planned for Europe (2010-2015); no major pipelines into the US likely until after 2015
- North America is further away from main LNG sources in the Middle East than Europe

Limiting arguments

- Concentrated distribution system in Europe limiting gas-to-gas competition
- Big producers currently concentrated in few countries and subject to political interference, hampering competition
- Congress just opened up previously off-limits natural gas reserves in the Gulf of Mexico

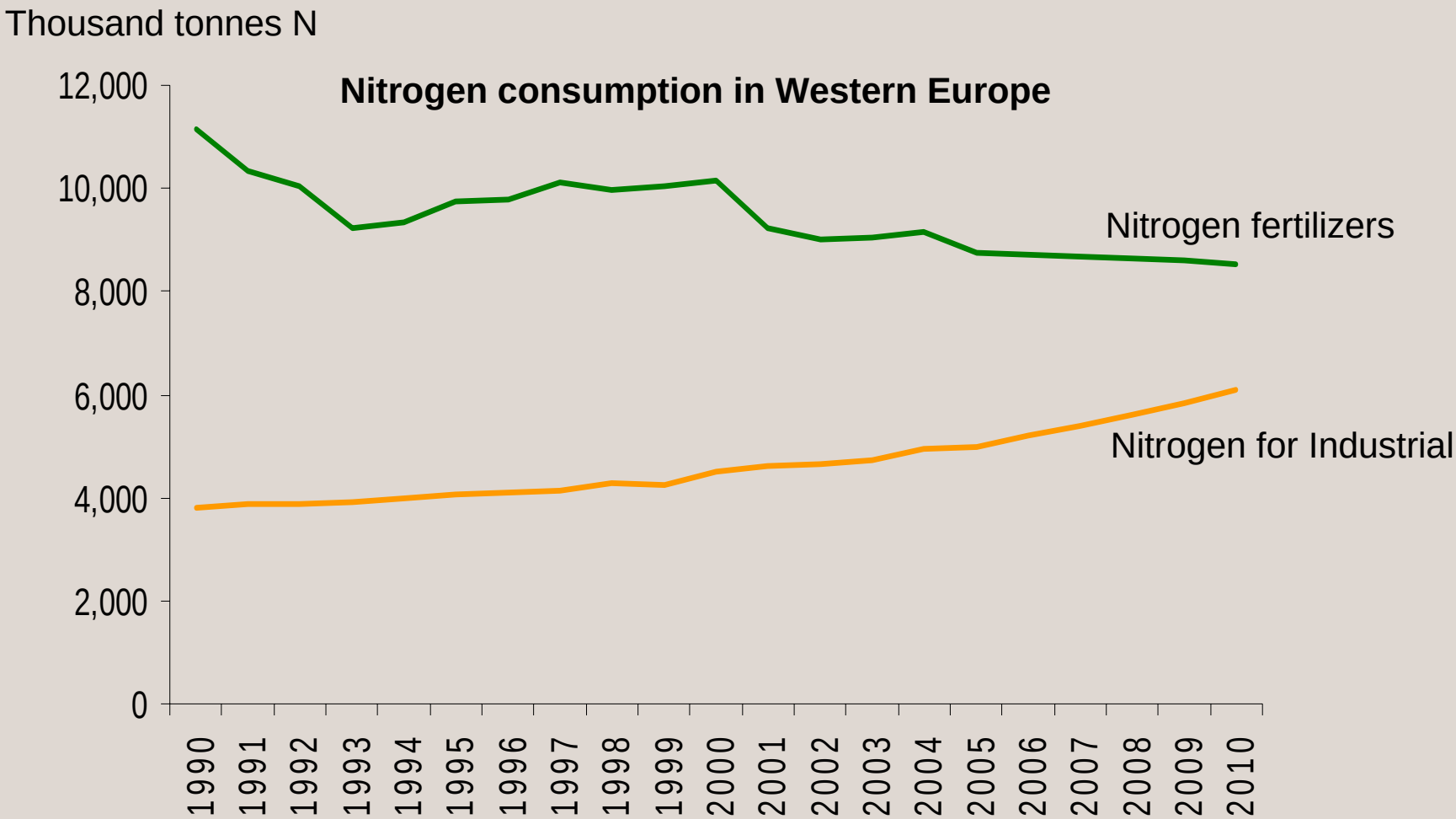
Sources: BP, CERA

Nitrogen fertilizer demand – 5 key regions



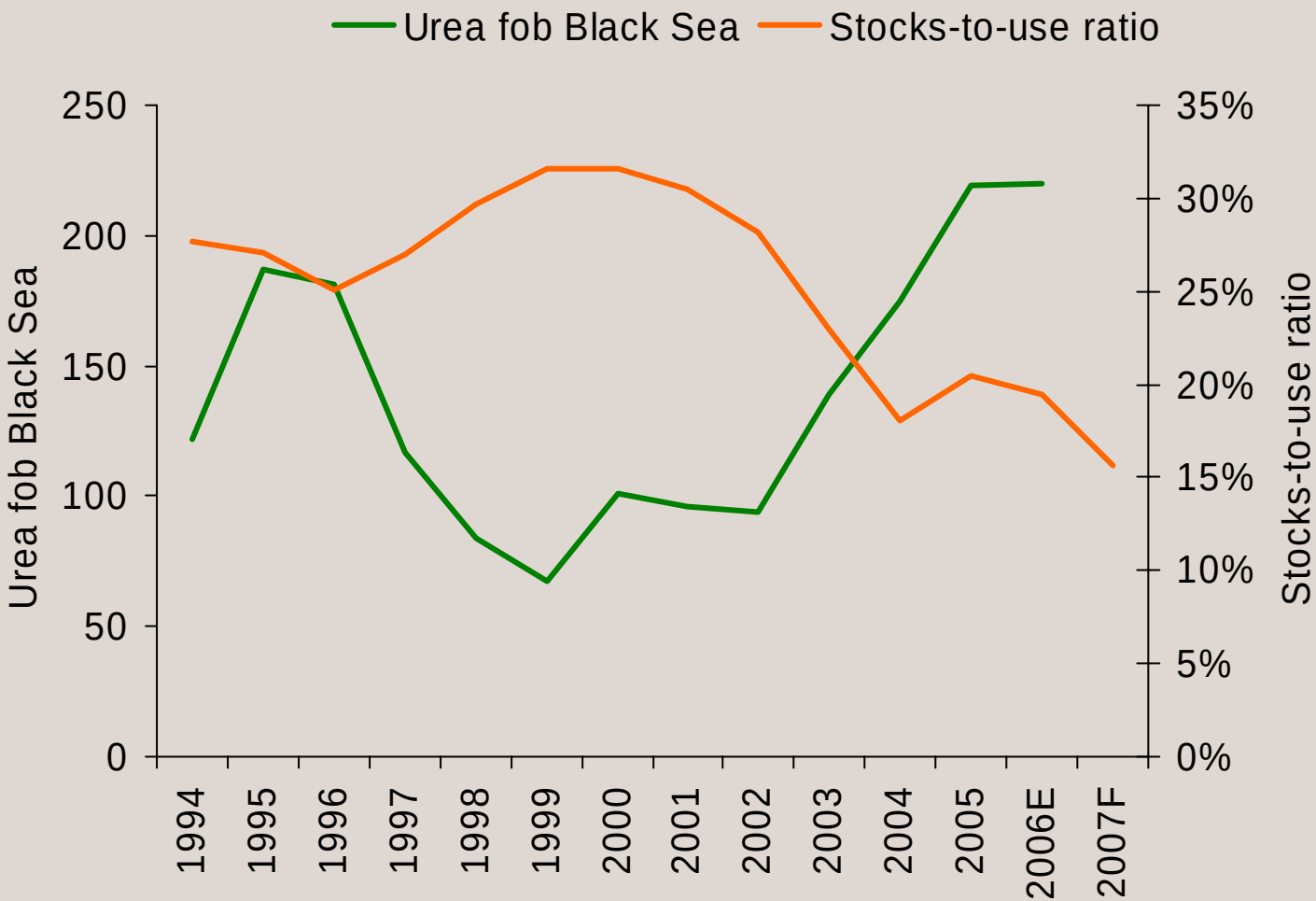
Source: IFA 2003/04

In Europe, more than 40% of nitrogen is expected to go to industrial segments by 2010



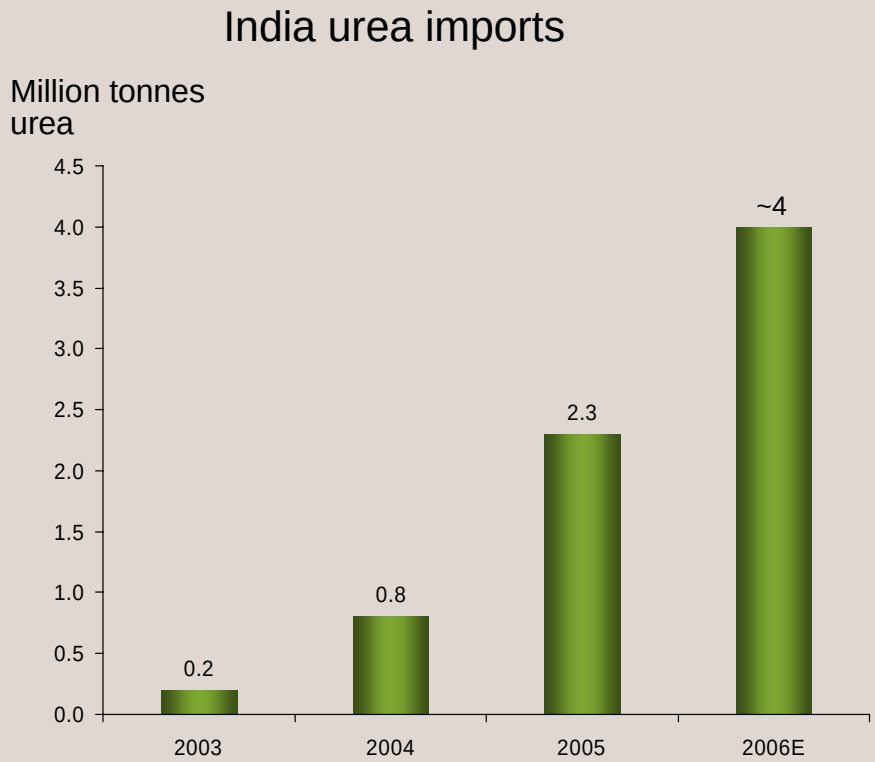
Source: EFMA. Western Europe is EU15 + Norway and Switzerland

Lower stocks-to-use ratio for grain raises urea prices



Source: US Department of Agriculture (USDA), October 2006, Fertilizer publications

World urea supply tightens due to strong demand from India



- Indian urea consumption increased 6% in 2004 and 10% in 2005
- Limited flexibility to boost domestic production
- Urea consumption was 23 million tonnes in 2005
- Department of Fertilizers*, India predicts urea demand to reach 35 million tonnes by 2012
- The Market** estimates Indian urea imports to remain above 4 million tonnes in 2007

* Press release, 07 November
** 30 October 2006 issue

Source: IFA, Yara estimates

Fertecon estimates indicate a tight supply-demand balance for nitrogen

Year	Global urea capacity growth estimate*		Driving regions	
	World	Excluding China	World	Ex. China
2005	3.8% (3.1%)	2.6% (2.3%)	China 55% Oman 18%	Oman 40% Qatar 26%
2006	4.6% (5.0%)	3.3% (3.2%)	China 54% Oman 10%	Oman 22% Egypt 17%
2007	5.2% (4.5%)	4.5% (4.0%)	China 45% Iran 28%	Iran 51% Egypt 27%
2008	4.7% (4.5%)	2.3% (1.9%)	China 69% Oman 13%	Oman 42% Iran 22%
2009	3.5% (2.1%)	2.0% (1.5%)	China 64% Trinidad 11%	Trinidad 31% Egypt 20%

Average urea consumption growth has been 3.5% last 10 years, 2.6% if excluding China

* Including announced closures only

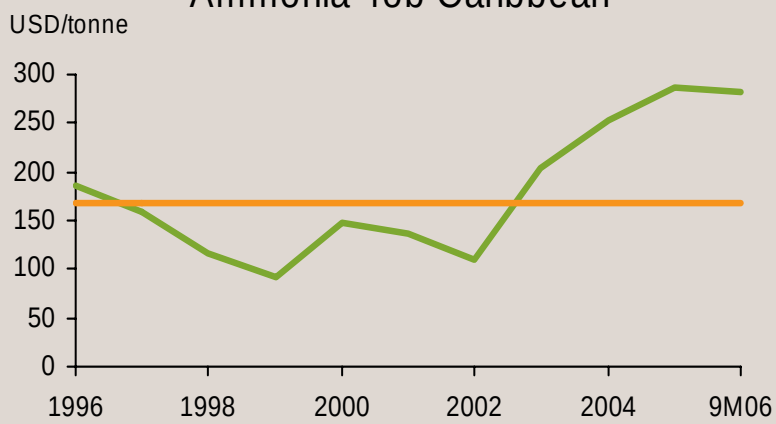
Source: Fertecon update October 2006; ( ) = Fertecon update May 2006, used at Yara's second quarter presentation

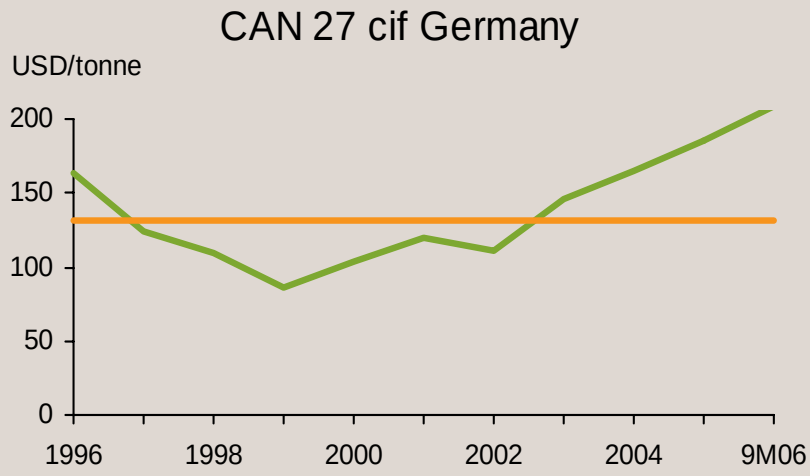
Urea capacity increases beyond 2007 are lower than historical consumption growth

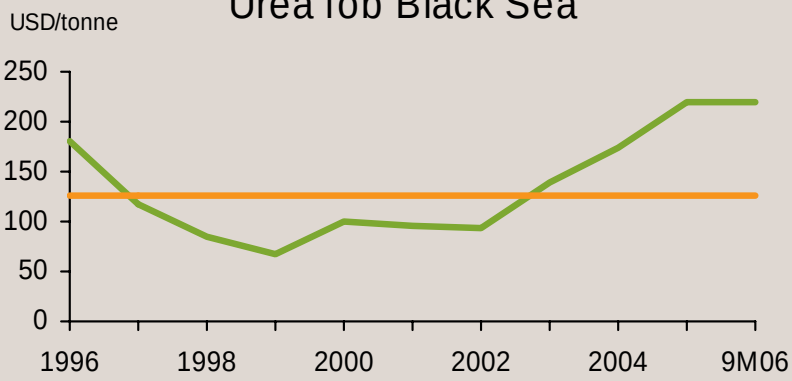
- Increasing price level on “stranded gas” (i.e. domestic natural gas)
  - Alternative uses (LNG, chemical synthesis, metal smelters, power generation)
  - Time constraints and increased costs for developing gas resources
- High investment costs for ammonia / urea plants
- Limited global engineering availability to implement several projects simultaneously
- Private financing and requirement for greater returns on capital invested
- Several low-cost gas regions already have long positions in nitrogen

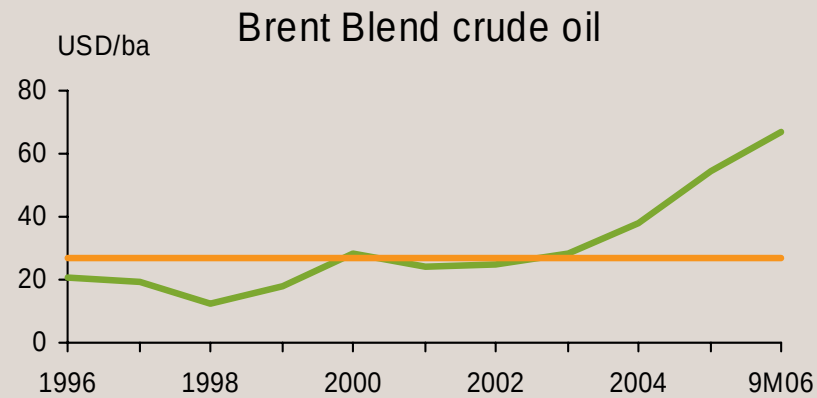
Fertilizer prices above historical averages, mainly reflecting high energy prices

10-year fertilizer prices – yearly averages until 2005



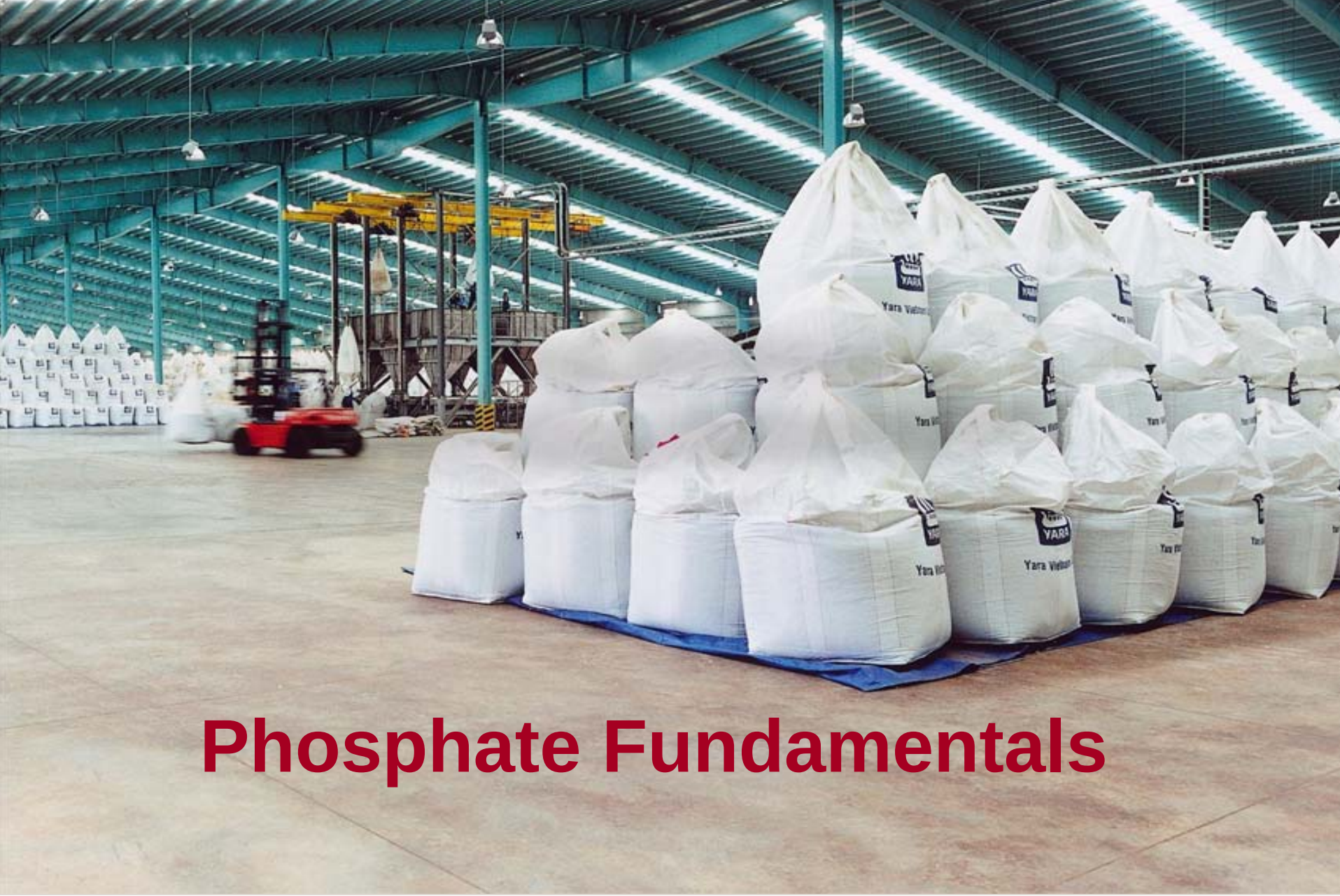






Source: Average of international publications

Average prices 1996 - 2005

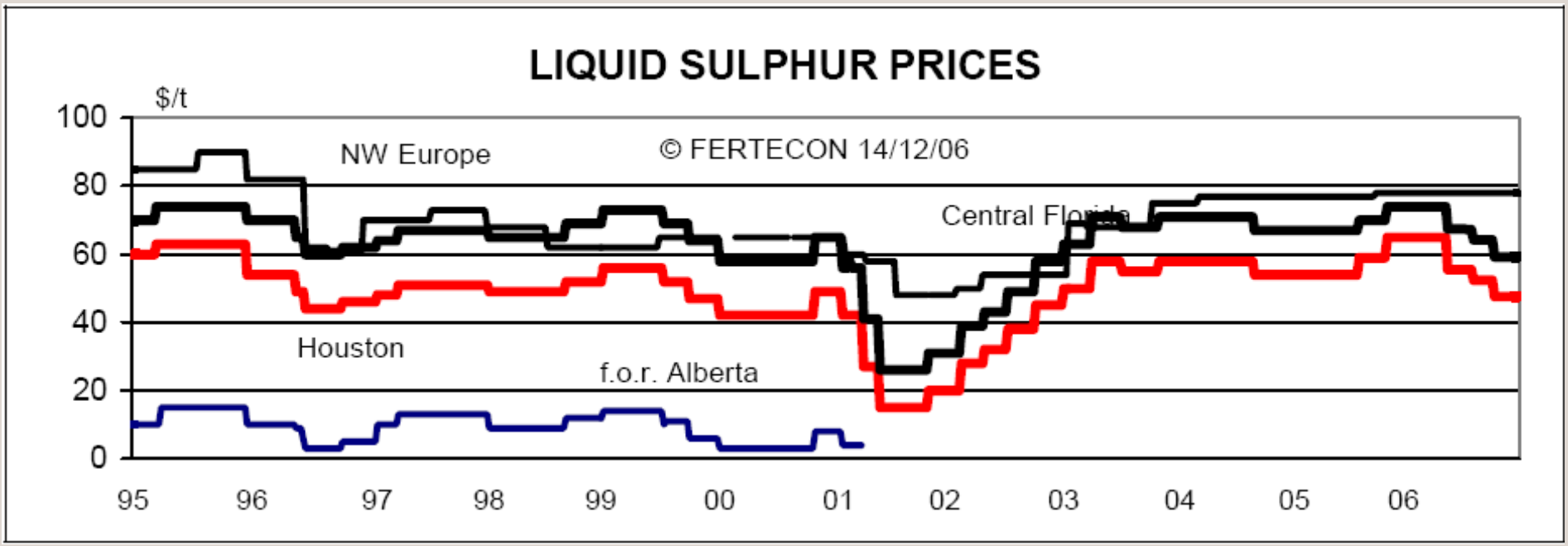


Phosphate Fundamentals

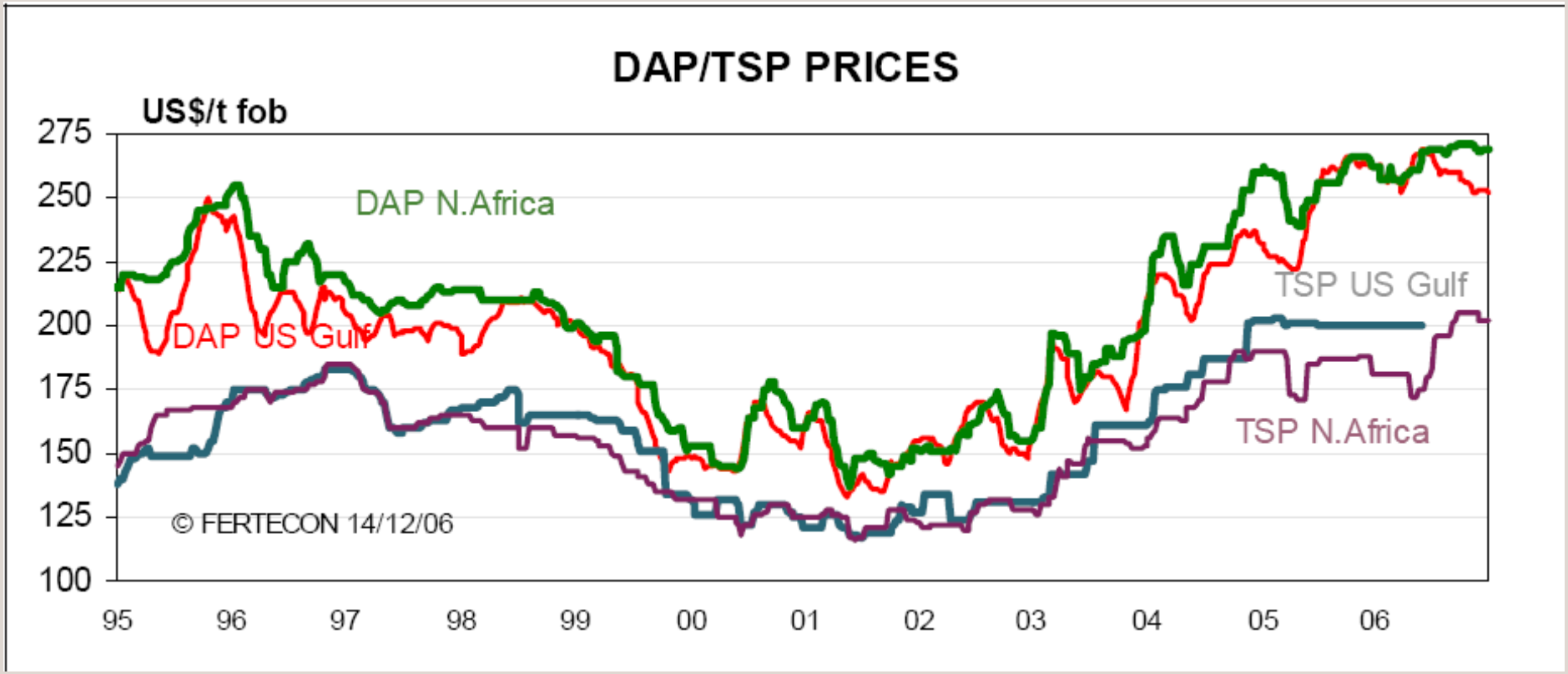
Phosphate prices have many drivers:

- Mining costs (energy, environmental regulations)
- Shipping costs for raw rock and ingredients (ammonia, sulfur)
- Ammonia prices
- Sulfur prices
- Increasing demand worldwide

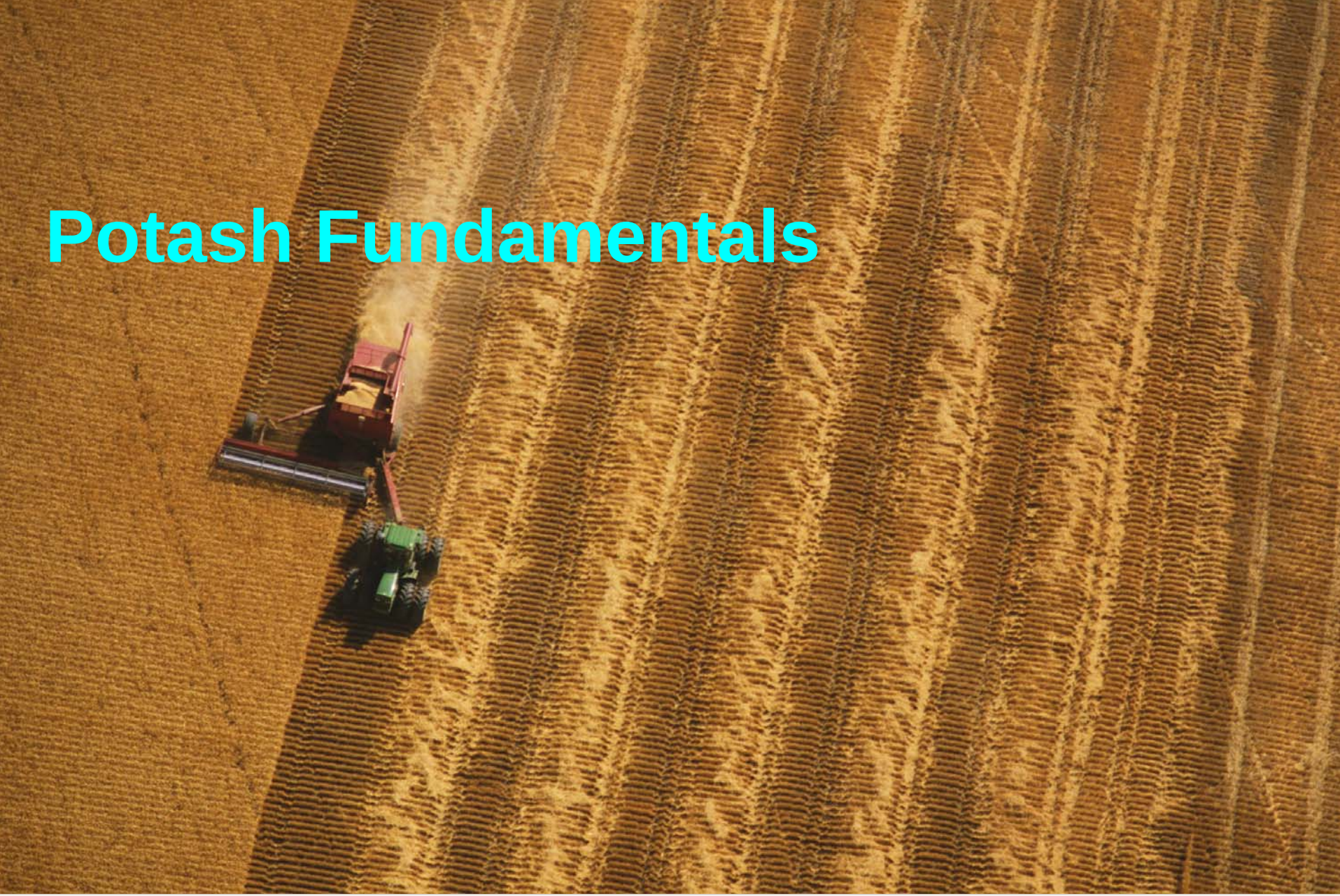
Sulfur: Crucial for processing rock phosphate



Phosphate prices 1995 to present



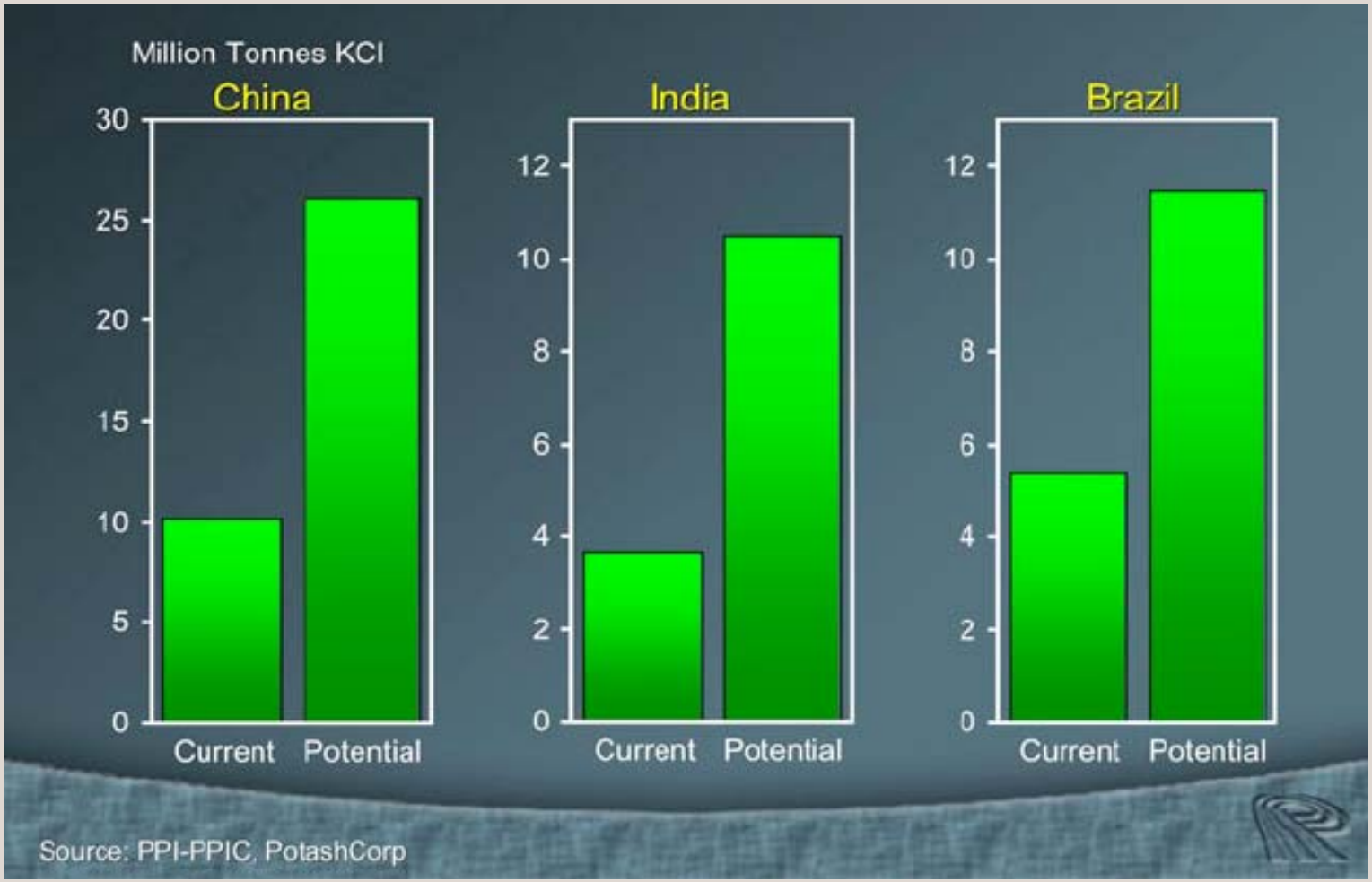
Potash Fundamentals



Potassium is the second macronutrient!

- Crops take up about equal amounts of nitrogen and potassium
- => For quality production, good supply is essential
- Most cultivated soils around the world lack adequate potassium supplies
- => as production expands in developing countries, demand for K will continue to rise.
  - Example Brazil: Soybean production
  - Examples Malaysia and Indonesia: Palm oil production

Expanding economies must increase their potash use to increase agricultural production

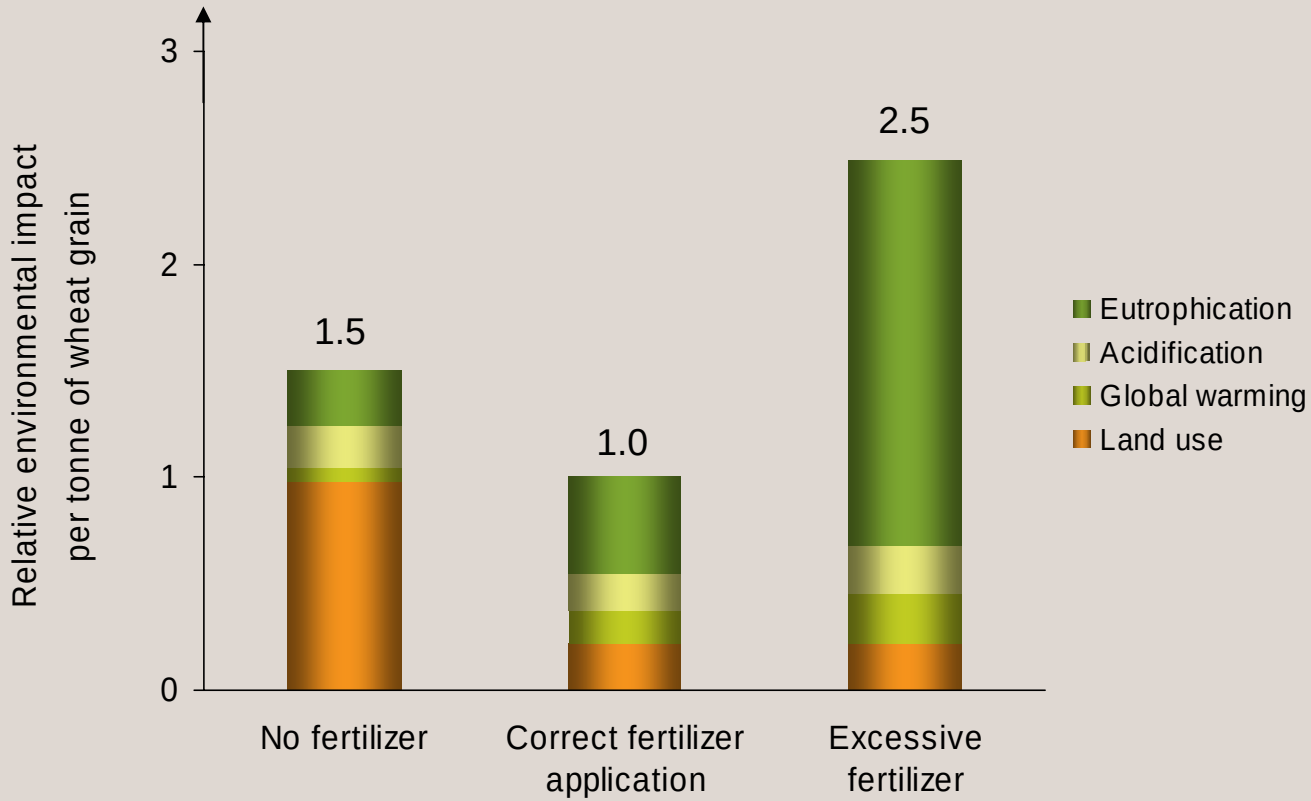


Potash demand-supply balance

- Demand continues to grow worldwide.
- Canadian potash producers (PCS, Mosaic, Agrium) are increasing production
- **but…**
- Russia's largest producer lost a mine due to flooding, representing **2.5%** of world output in 2005.
- => supplies will be tight in 2007

Outlook & Summary

Balanced fertilizer application helps farmers and the environment



Source: Based on trials of N-fertilizer rates, and use of Environmental Life Cycle analysis (Brentrup)

The Crystal Ball

- Nitrogen prices will not decrease substantially from current levels, and may well continue to increase slowly over the next year.
- Phosphate prices are likely to remain at current levels.
- Potassium is still not applied at adequate levels in many countries – expect demand and therefore prices to remain high and possibly increase further.
- Last but not least: Do not take any information presented here as investment advice – I may just be all wrong.

THANK YOU

Wishing You A Very Successful Year 2007!