



# **The Terrain Ahead**

**6 November 2006**

**W. P. O'Neill Jr.**

**International Raw Materials Ltd.**

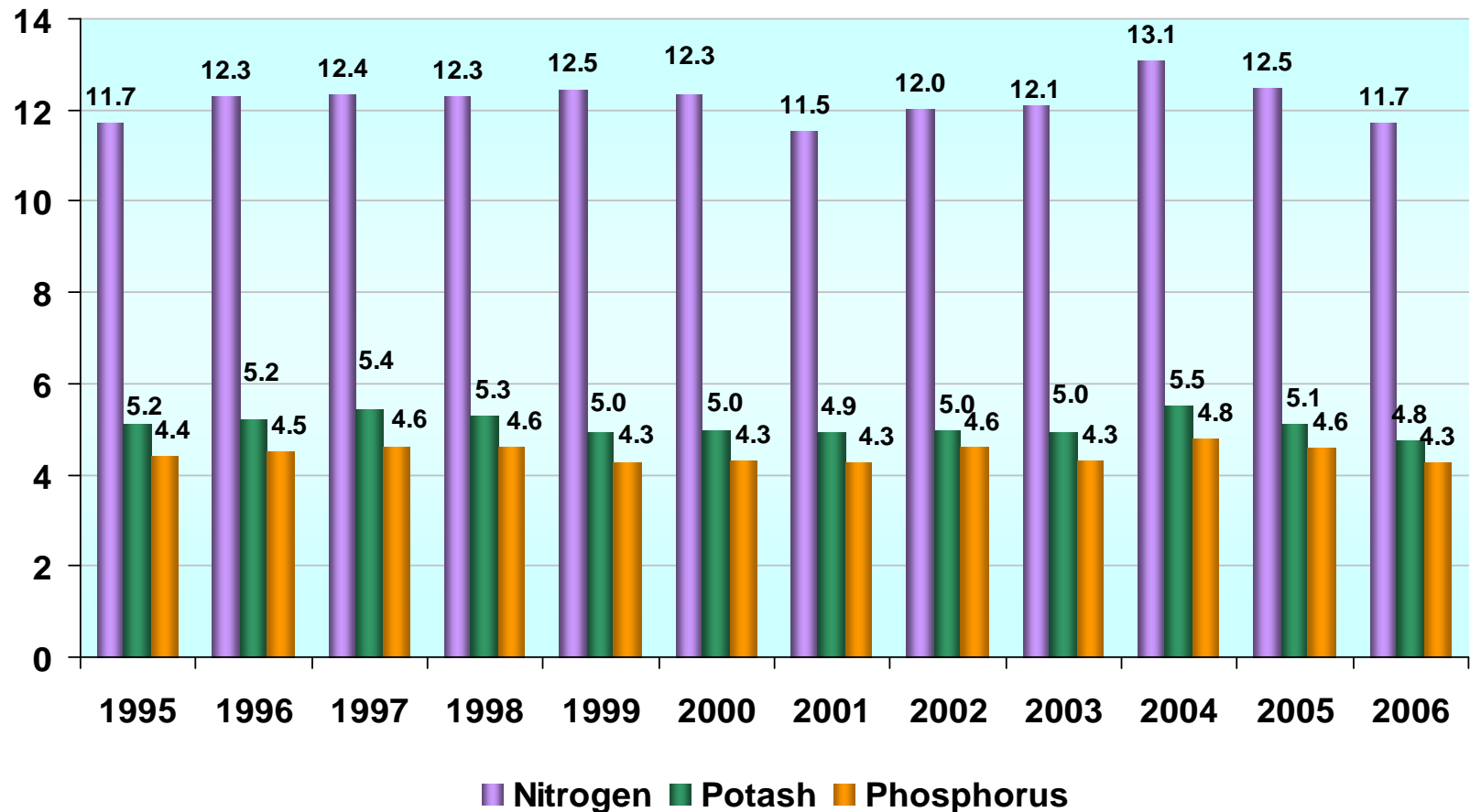


# The Good Old Days



# U.S. Fertilizer Consumption

*Million Short Tons of Nutrient*



*IFA Data Bank – Fertilizer Year*





# Peter Drucker

1919 - 2005

“Goods and services are increasingly global, even if your market is purely regional, purely local. Your potential competition overnight can be from anyplace in the world. Someone has a nice niche in a regional market in Dayton, Ohio. Overnight, somebody from Denmark takes over the market.”

1 January 2000 - WSJ

# The Avalanche

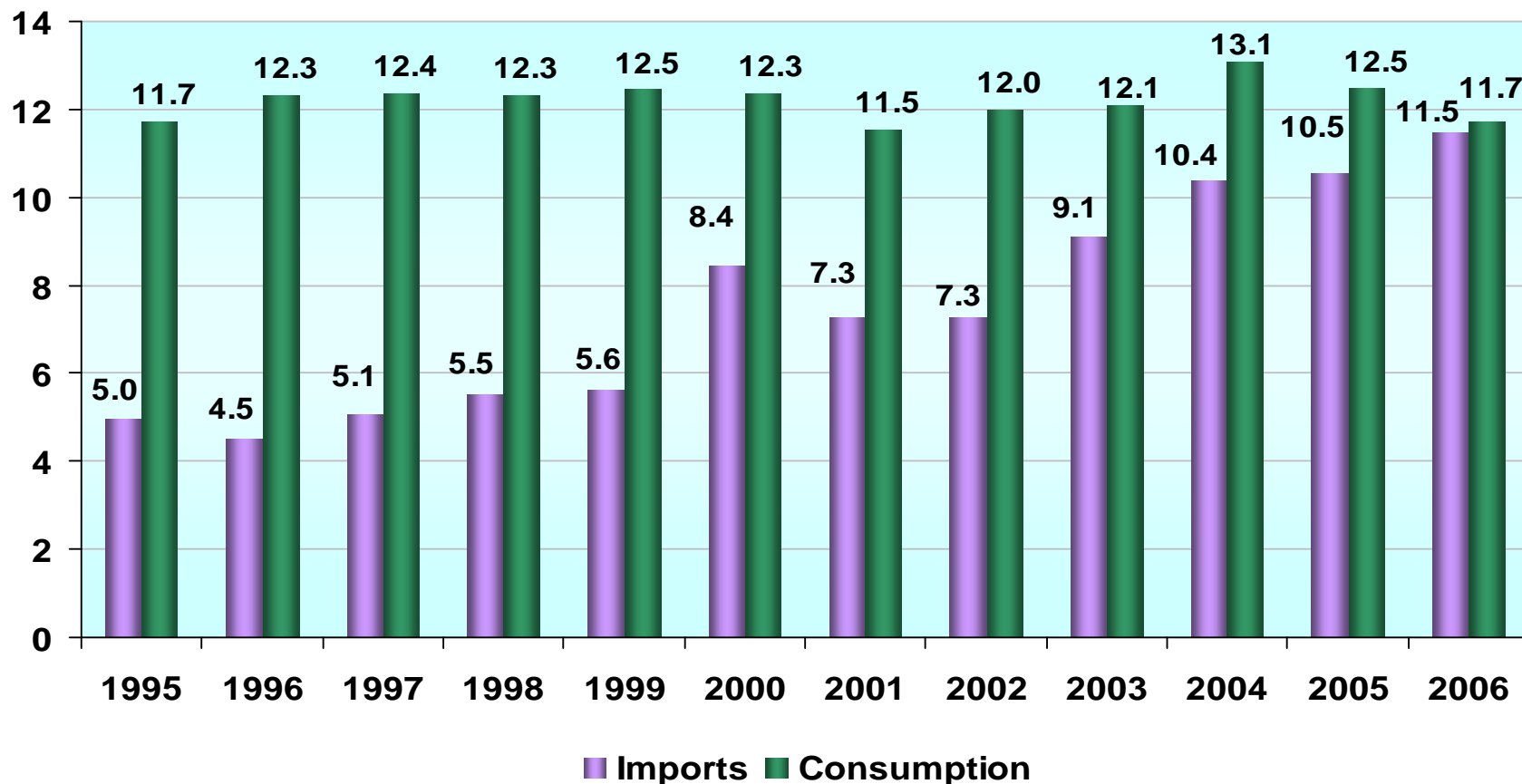
“Who would have thought five years ago that 50% of the U.S.’s Nitrogen production would be shut down today?”

Senior U.S. Fertilizer Executive - Spring 2005



# U.S. Nitrogen Imports vs. Consumption

*Million Short Tons of Nutrient*



*TFI Import/Export Data  
IFA Data Bank – Fertilizer Year*

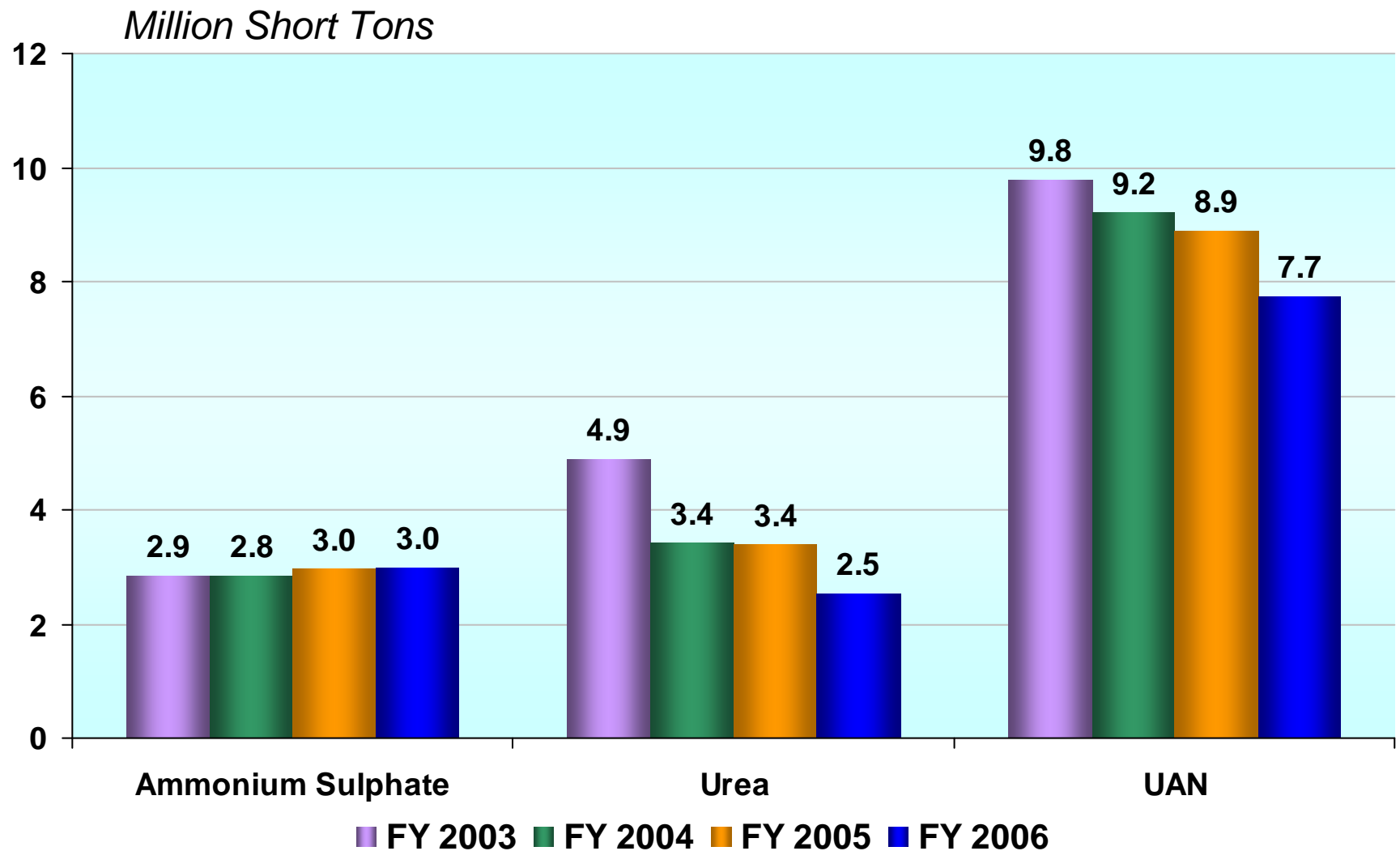
# A Peddler's Perspective



- Major Supply Disruption
- New Trading Patterns
- Dramatic Impact On Distribution
- New Ag Retail Challenges



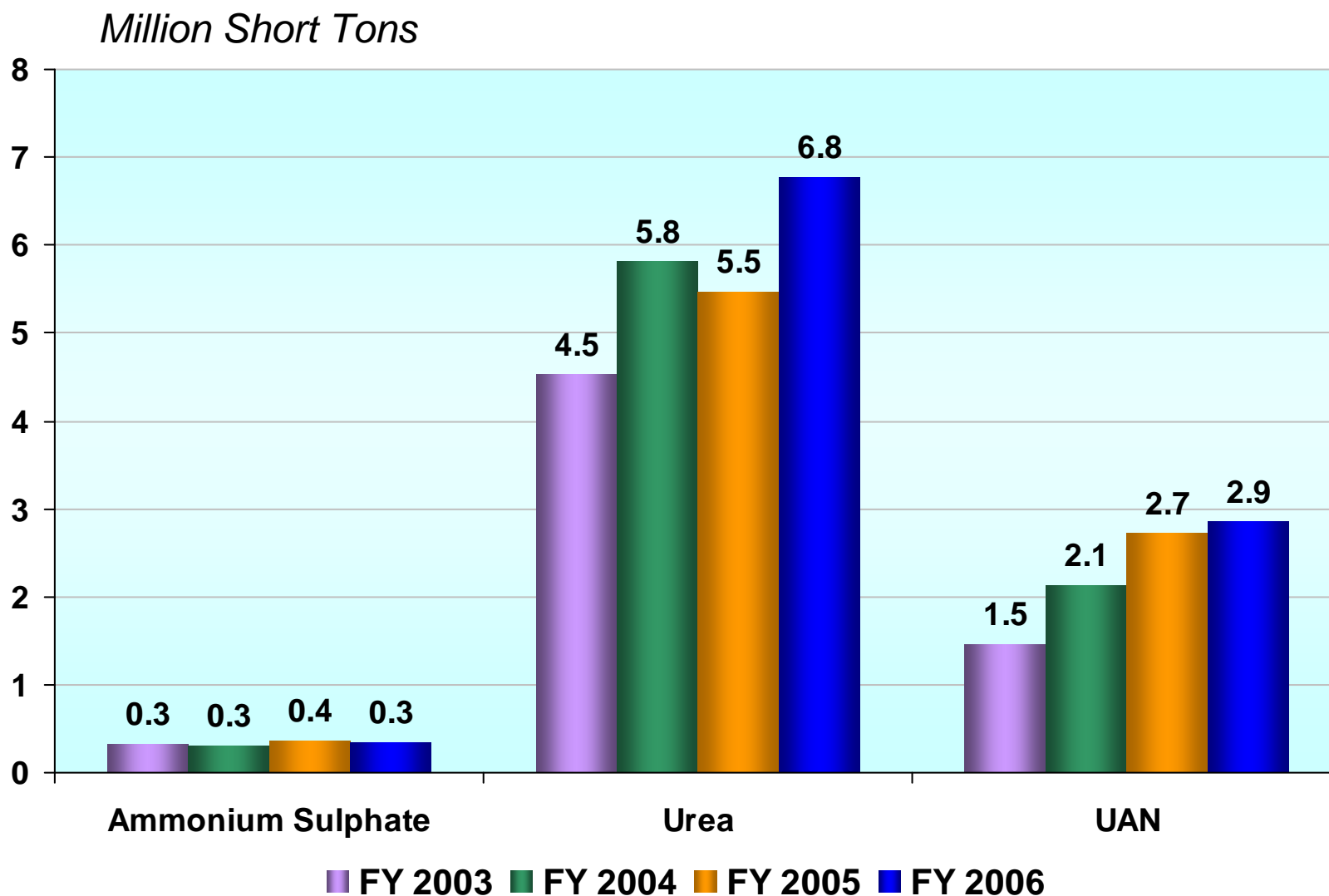
# U.S. Fertilizer Production



*The Fertilizer Institute – Fertilizer Record*



# U.S. Fertilizer Imports



*The Fertilizer Institute – Fertilizer Record*

# Gone and Mostly Forgotten



- Agway
- Arcadian
- Borden
- Chevron
- Coastal Chem
- Farmland
- FirstMiss
- Freeport
- IMC Global
- Kalium
- LaRoche
- Mississippi Chemical
- Mobil
- Mulberry Phosphates
- Nu-West Industries
- Occidental Chemical
- Royster Clark
- Texasgulf
- Unocal
- US Chem
- Viridian
- Vigoro



*TFI Winter Meeting 1995*



# Say What?



- Abu Qir
- Achema
- Acron
- Agrolinz Melamin
- Amonil
- Asmidal
- Asean Bintulu
- Cherepovets
- Cherkassy
- Eurochem
- Fertilizantes Nitrogenados
- Grodno
- Novomoskovsk Azot
- PIC
- Profertil S.A.
- Pulawy
- QAFECO
- SABIC
- Sichuan Chemical
- Togliatti

# Nitrogen Trade - 1995





# Nitrogen 2006



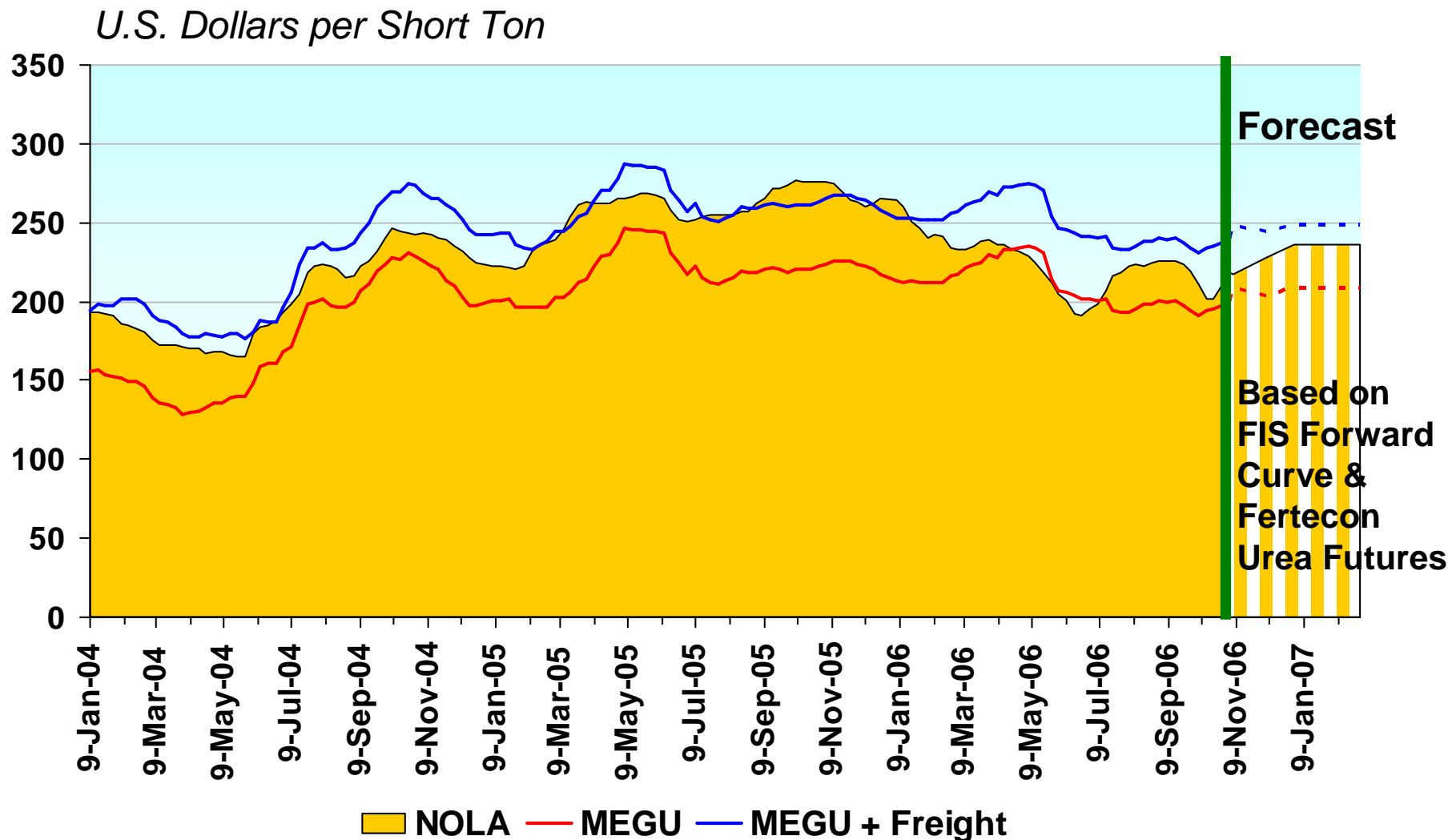
# The New Fertilizer Terrain



- World Markets Are Driving Domestic North American Prices.
- Emerging Nations Are Dominating Production.
- Supply Lines Are Dramatically Longer.
- Prices Are Much More Volatile.



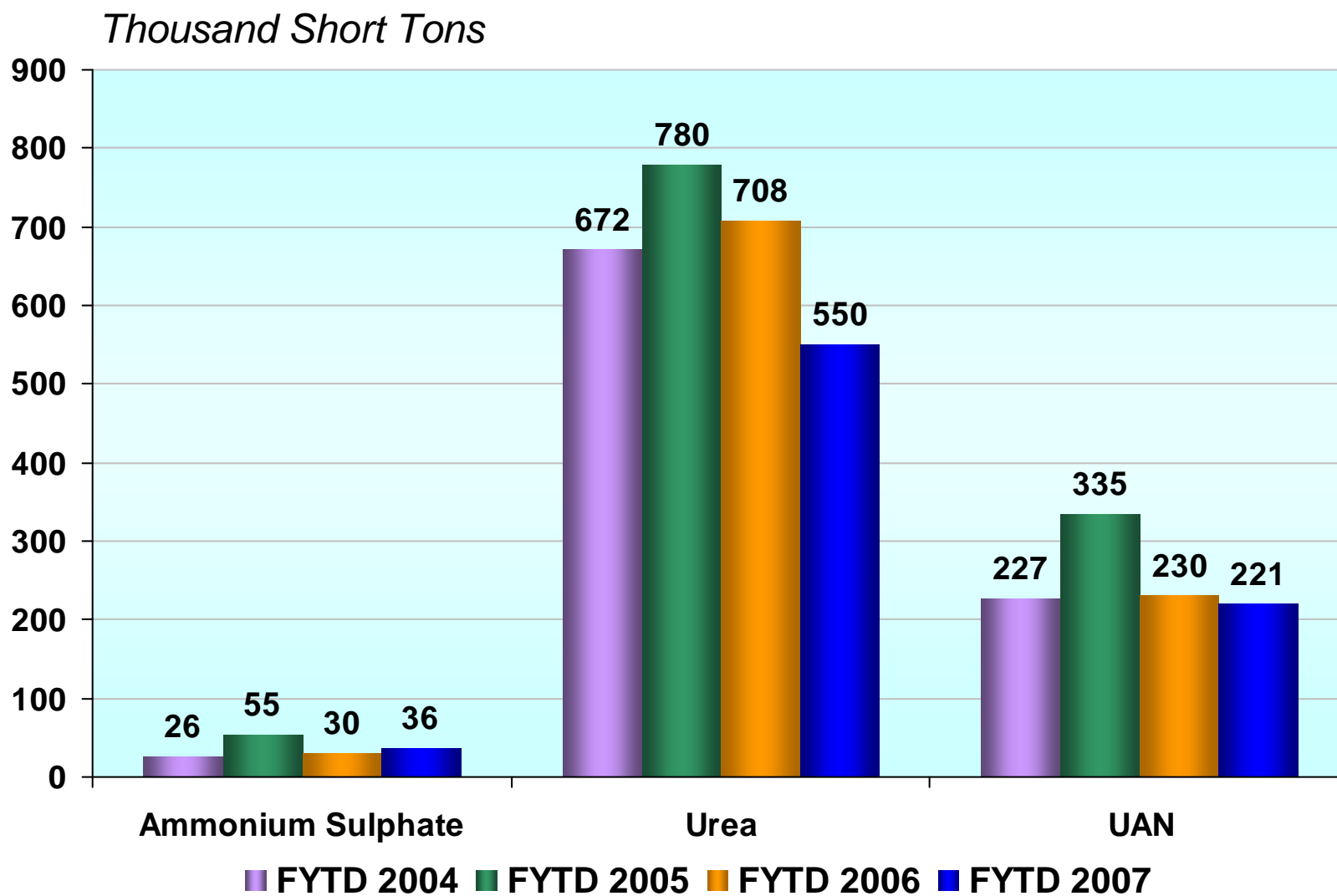
# NOLA vs. MEGU + Freight



*FIS Swaps, Basket Price, and Baltic Exchange*

(Note: From 2006, Freight is assumed to be \$40/MT)

# U.S. Fertilizer Imports



*The Fertilizer Institute – Fertilizer Record*



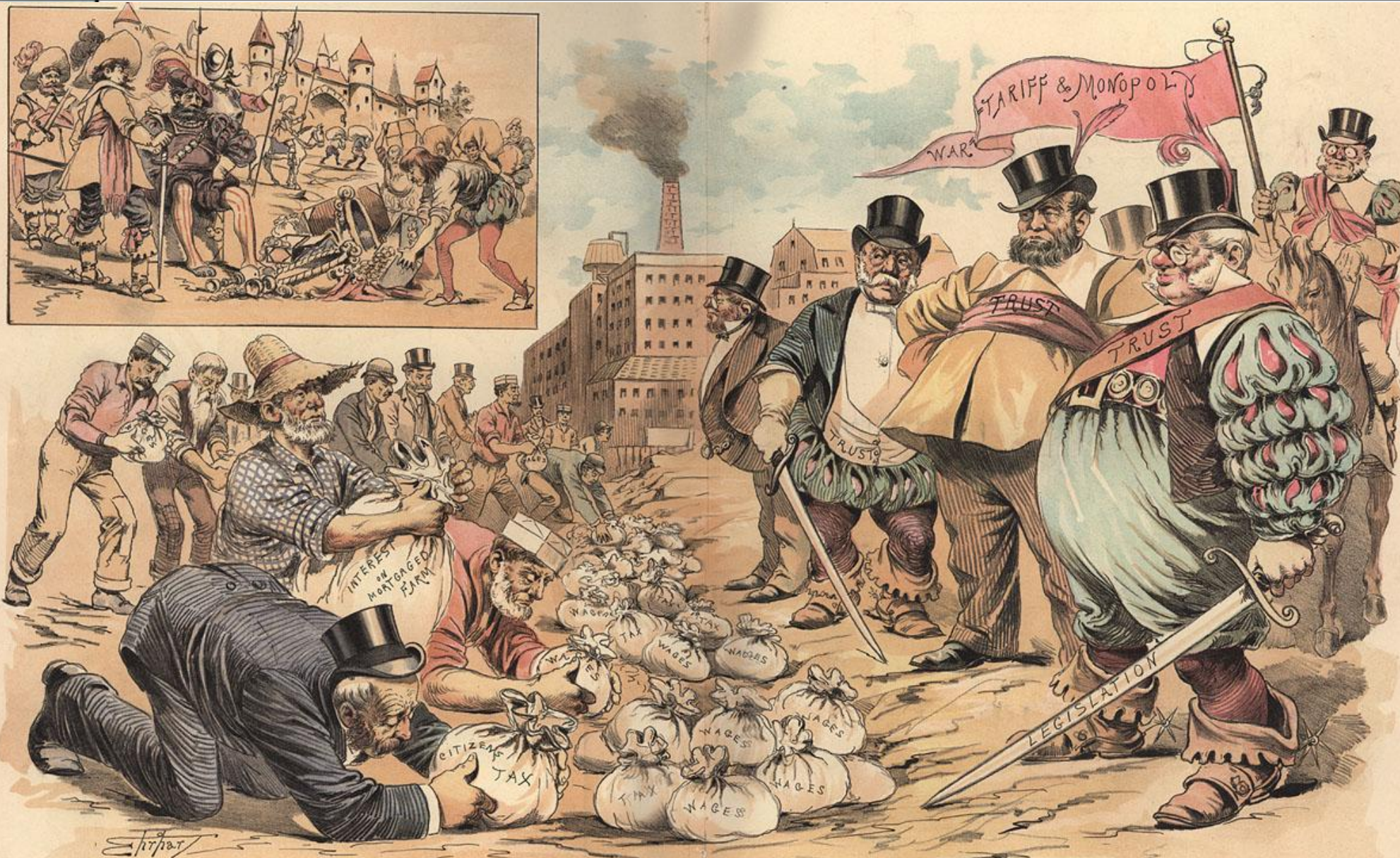
# Transportation Challenges

- Limited Import Infrastructure
- 106 + 44 = 150 Ethanol Plants
- Biodiesel looming
- Limited Barge Capacity
- Indifferent Rail Service





# Rail Negotiations – Circa... 2006



HISTORY REPEATS ITSELF. — THE ROBBER BARONS OF THE MIDDLE AGES, AND THE ROBBER BARONS OF TO-DAY.



# Retail Consolidation

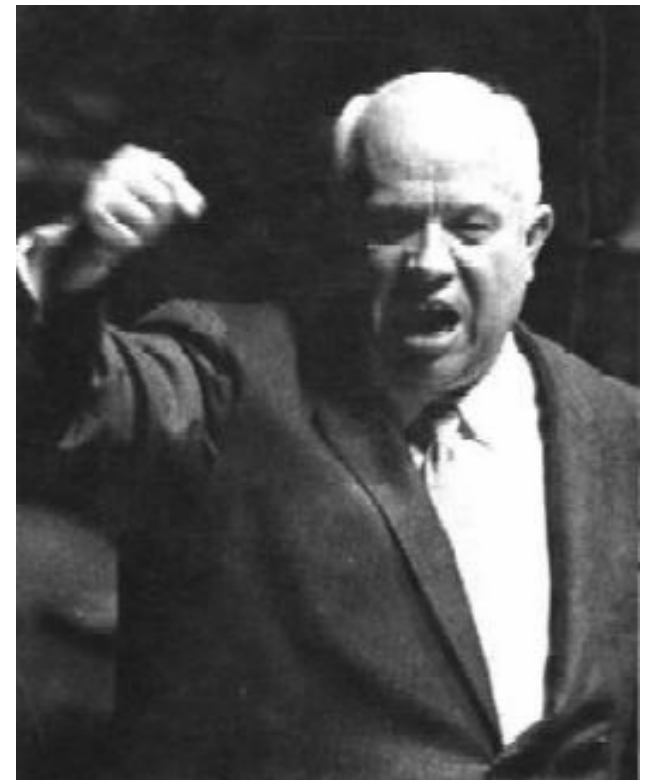


*“There are too many fertilizers retailers in North America. We are going to deal with that.”*

**Senior Fertilizer Executive**

Summer 2000

“We Will Bury You”



**Nikita Khrushchev**

November 1956

## CropLife 100: 2000 Data

<u>Class #</u>	<u>Companies</u>	<u>Locations</u>	<u>% of Total Locations</u>
>\$100 MM	17	5,182	88%
\$50 - 99 MM	10	213	4%
\$25 - 49 MM	19	224	4%
\$15 - 24 MM	26	164	3%
<\$15 MM	28	119	2%
<b>Total</b>	<b>100</b>	<b>5,902</b>	<b>100%</b>

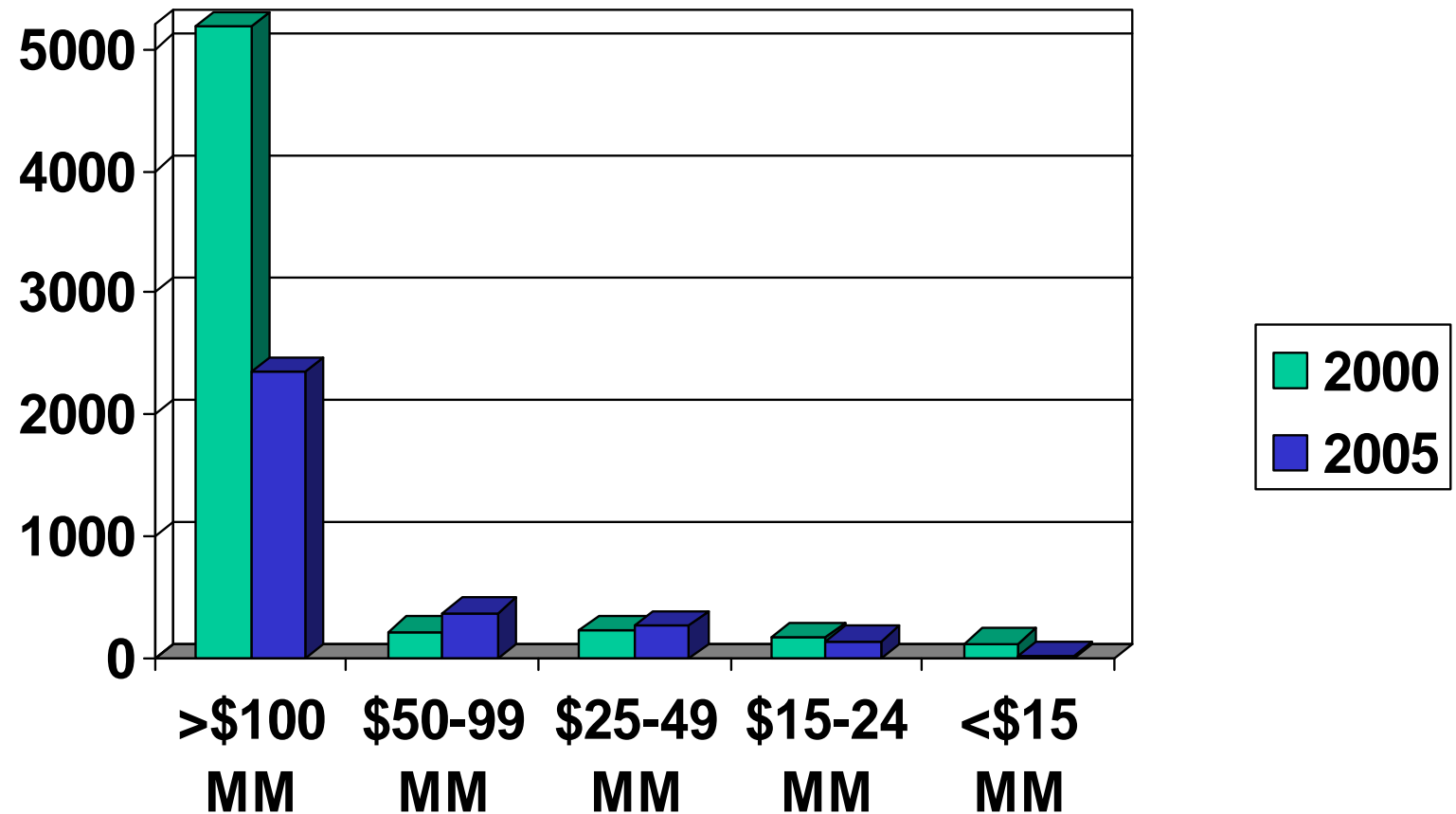
## CropLife 100: 2005 Data

<u>Class #</u>	<u>Companies</u>	<u>Locations</u>	<u>% of Total Locations</u>
>\$100 MM	16	2,351	75%
\$50 - 99 MM	22	373	12%
\$25 - 49 MM	29	264	8%
\$15 - 24 MM	27	139	4%
<\$15 MM	6	20	1%
<b>Total</b>	<b>100</b>	<b>3,147</b>	<b>100%</b>

# CropLife 100



**Locations**



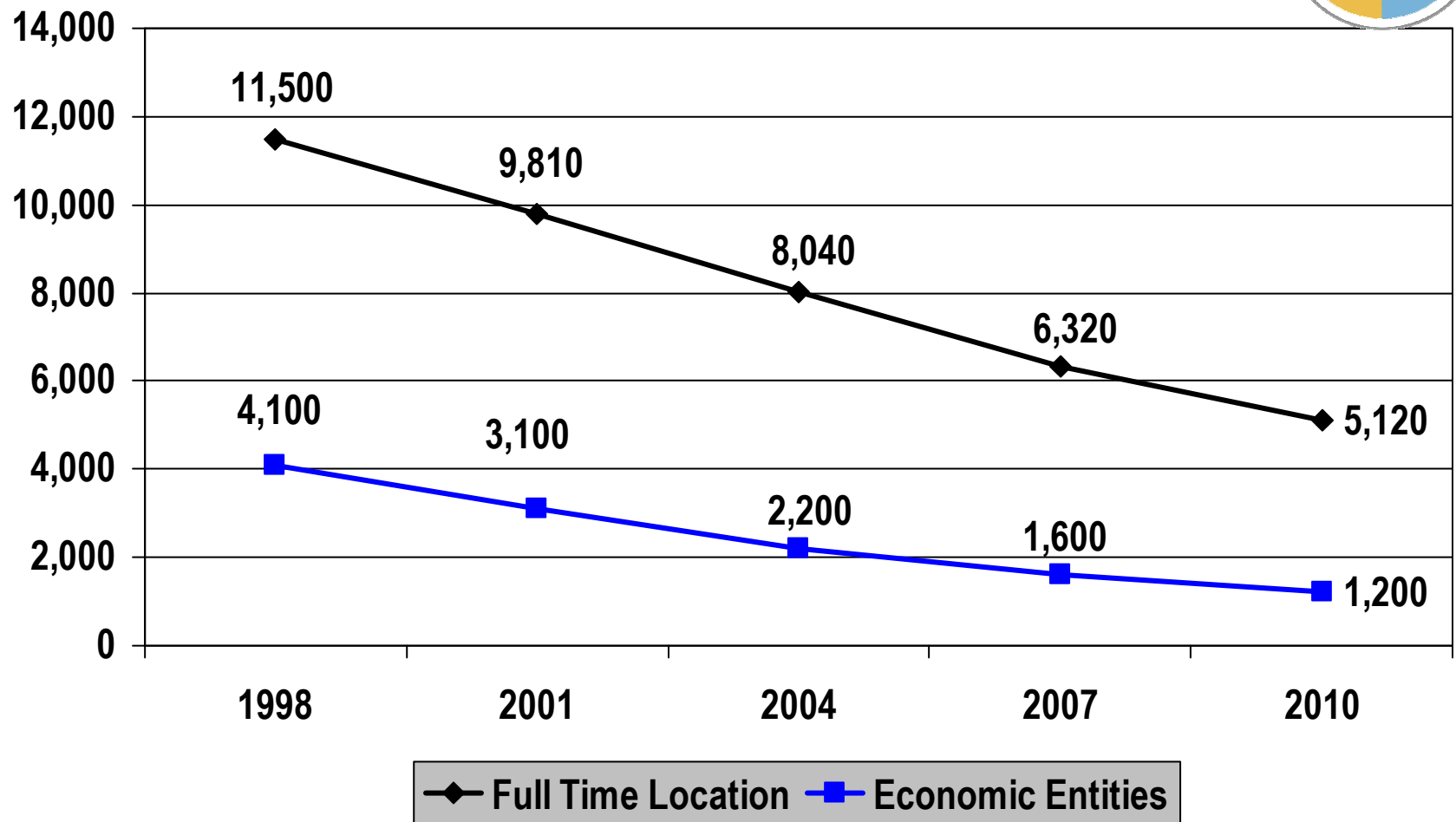


# CropLife Top 10 - Fertilizer - 2005

- 
- Royster-Clark
  - UAP
  - GROWMARK
  - Helena Chemical
  - Wilbur-Ellis
  - Agrilience
  - Western Farm Services
  - Simplot Soilbuilders / J.R. Simplot
  - Southern States Cooperative
  - Crop Production Services

Total Sales - Top 10: \$3.8 Billion  
Share of Total *CropLife* 100 Fertilizer Sales: 65%

# Retail Consolidation



# AG Retail Challenges

- Fertilizer Price Volatility
- Generic Crop Protection
- Genetic Seeds
- Organics - Friend or Foe





# Fertilizer Producers?



# Farm Customer?



# Jason Hill et al – 2006

## National Academy of Science

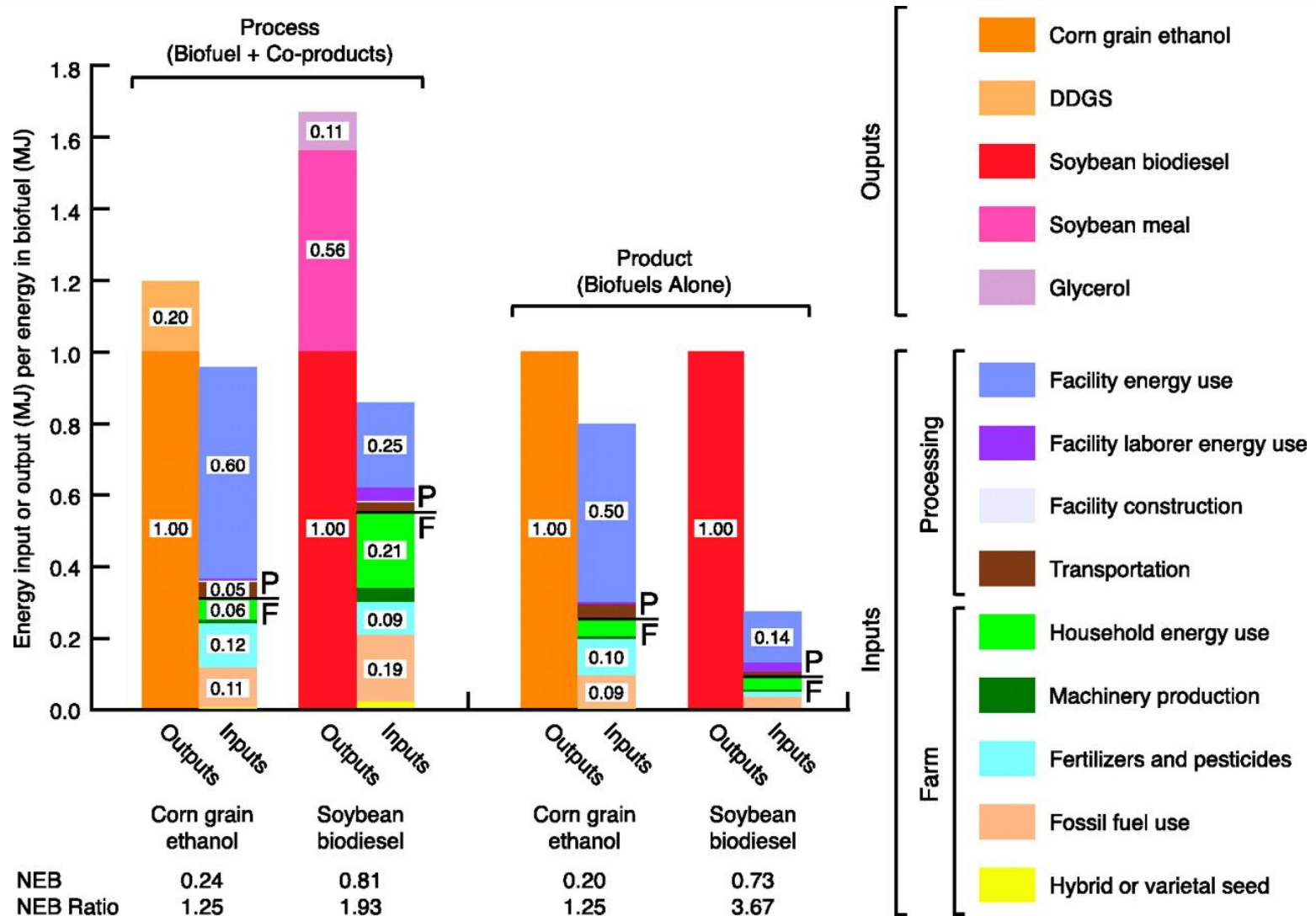


**To be a viable alternative a biofuel should:**

- Provide a net energy gain.
- Have environmental benefits.
- Be economically competitive.
- Be producible in large quantities without reducing food supplies.

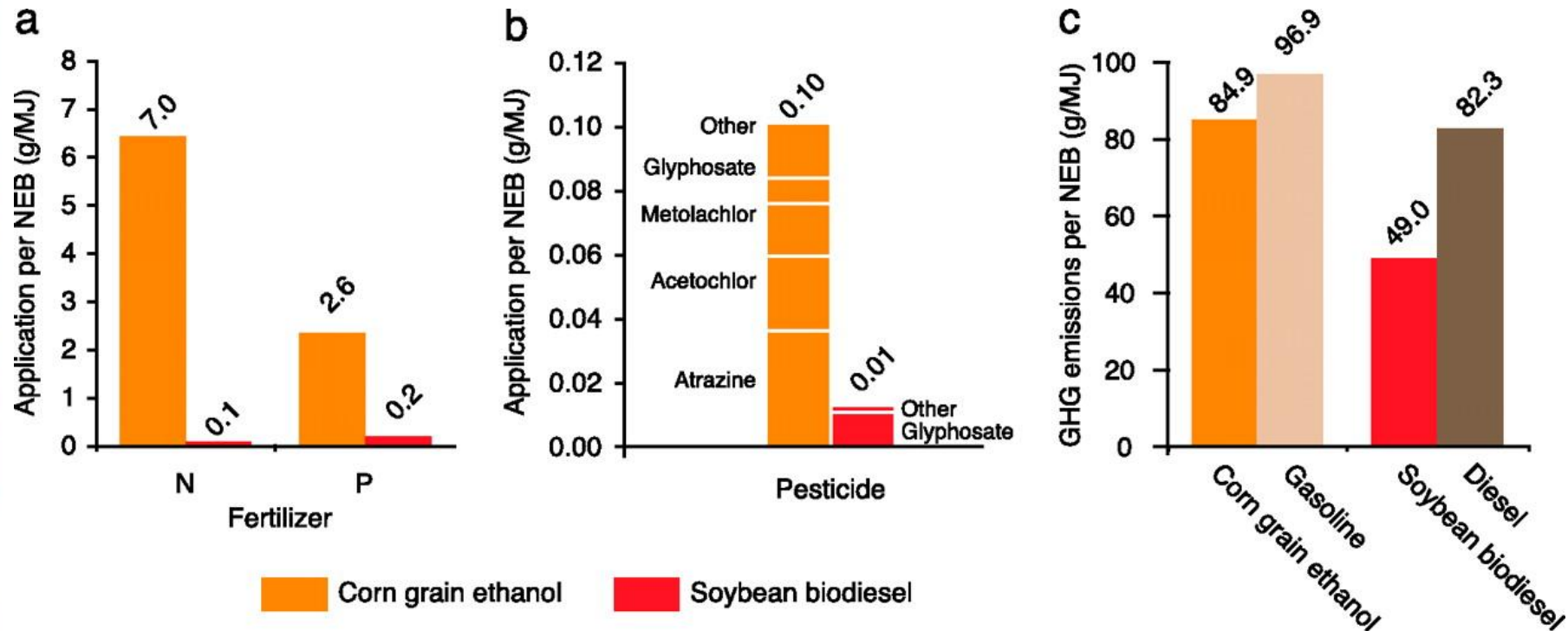


# Net Economic Benefit of Corn Grain Ethanol and Soybean Biodiesel Production




Hill, Jason et al. (2006) Proc. Natl. Acad. Sci. USA 103, 11206-11210

# Environmental Effects From Life Cycles of Corn Grain Ethanol and Soybean Biodiesel



Hill, Jason et al. (2006) Proc. Natl. Acad. Sci. USA 103, 11206-11210

# Fertilizer Products At Risk

- 
- Ammonium Nitrate
    - Legislation
    - Litigation
  - Ammonia
    - Hazmat Transportation
    - Litigation
  - Urea
    - Volatility



# Success Breeds Failure



- History tells us that most of the companies that will be successful in our industry in the future...don't exist today.

# Reinvent Yourself



Ram Charan

Summer 1988

*A successful organization is driven by a core team that constantly reinvents itself.*

# In Summary...







Excellence is always in season.