

An essential partnership, International Grain Trade and Plant Protection.



Pressure has never been greater on agriculture to provide for global food security, food defense and energy security while maintaining high quality, safe products throughout the value chain.

The role of international trade in grain, oilseeds and other agri-bulks is expanding and increasingly complex and in need of sound, predictable official measures.

Plant Quarantine Authorities play a major role in providing for several critical elements in addressing the challenges and opportunities for the Industry.



Discussion

- ***Introduce***
- ***Review Grain and Oilseed Trade***
- ***Future Prospects***
- ***Key Challenges and Influences***
- ***The Essential Partnership***
- ***Expand Working Relationship***

North American Export Grain Association

Committed to supporting an efficient, safe, handling, processing and transportation system for grains and oilseeds and other plant products.

All benefit from a transparent and competitive system accompanied by sound, risk proportionate and predictable plant protection measures.

Private and Publicly Owned Companies and Co-ops Engaged in Bulk Grain, Oilseed Exports. Established in 1912 – Foundation in Commercial Practices, Contracts and Advice to Governments, Non-tariff Trade Barriers Members ship vast majority of \$65 billion+ annual exports of North American bulk grain, oilseeds and primary products



BUNGE

Cargill

CHS

LouisDreyfus
Commodities

CGI
COLUMBIA GRAIN
Marubeni
CORPORATION



ADM
Cargill
Agrex - Mitsubishi
Noble Logistics
CHS



Zen-noh Grain
Toyota Tsusho
Richardson



Gavilon

Rice Co
Cam USA



Pasternak, Baum
Thionville



Assoc. Terminals

CoBank

Port of Corpus Christi

J&S / Dubai

Columbia – Marubeni

Star Trading & Marine

Seaboard Overseas Ltd.

America, Inc

Integrated Commodity Logistics

Toyota
Tsusho

EGT

Star Trading Inc



United Grain



Kalama Export Company LLC
THE RUSSELL MARINE GROUP

Rice Company

GLENCORE
INTERNATIONAL AG

Louis Dreyfus
Bunge
CLD Pacific
Mitsui – United Grain

DeBruce

Itochu

Nidera

Viterra

EGT

TEMCO

WestPlains

Russell Marine

Ghaznavi

SGS

Interstate

Intertek

Glencore

Kalama Export

Blue Water Shipping

Degesch



TEMCO



Cam, USA

J&S Foodstuff Trading

Thionville



Ghaznavi



Interstate

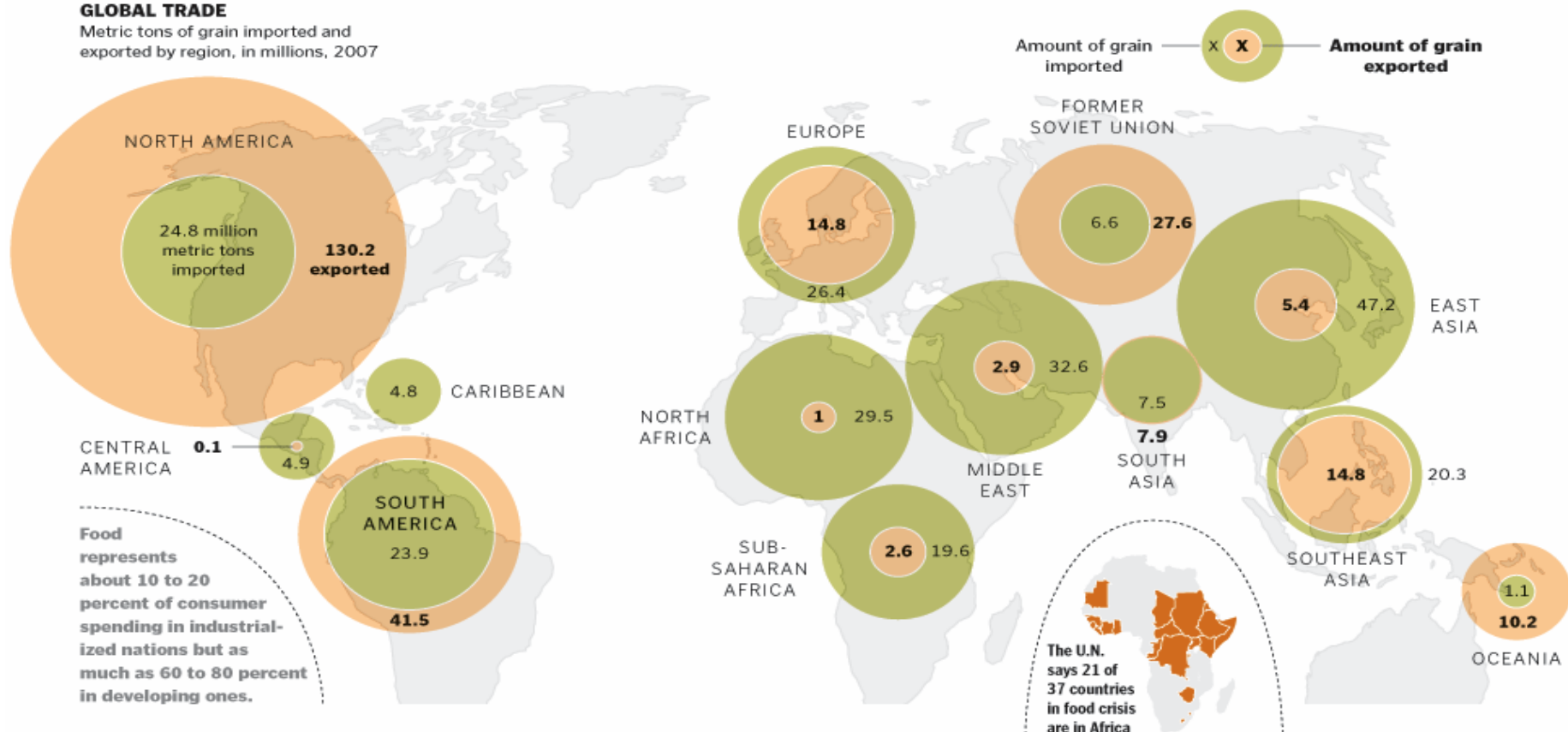


***World Bulk Grain Systems
Fungible, Efficient, Sustainable
and Flexible.***

***Lead to Sound Plant Protection as
well as meeting global food and
energy needs***

GLOBAL TRADE

Metric tons of grain imported and exported by region, in millions, 2007



WORLDWIDE GRAIN PRODUCED VS. GRAIN TRADED, 2007

The amount of grain traded on the global market is a small percentage of the total produced because countries keep most of their crop for domestic needs.

SORGHUM

64.4 million metric tons total
8.9 million traded, 13.8 percent of total produced

WHEAT

607 million metric tons total
106.6 million metric tons traded, 17.9 percent of total

CORN

772 million metric tons total
96 million metric tons traded, 12.4 percent of total

RICE

425.3 million metric tons total
27.5 million metric tons traded, 6.5 percent of total

Trade

Seeding



Harvesting



Transport field to farm storage



Farm Storage





First Point of Commercialization Quality and Safety Management, Storage, and Transfer



Rail loading

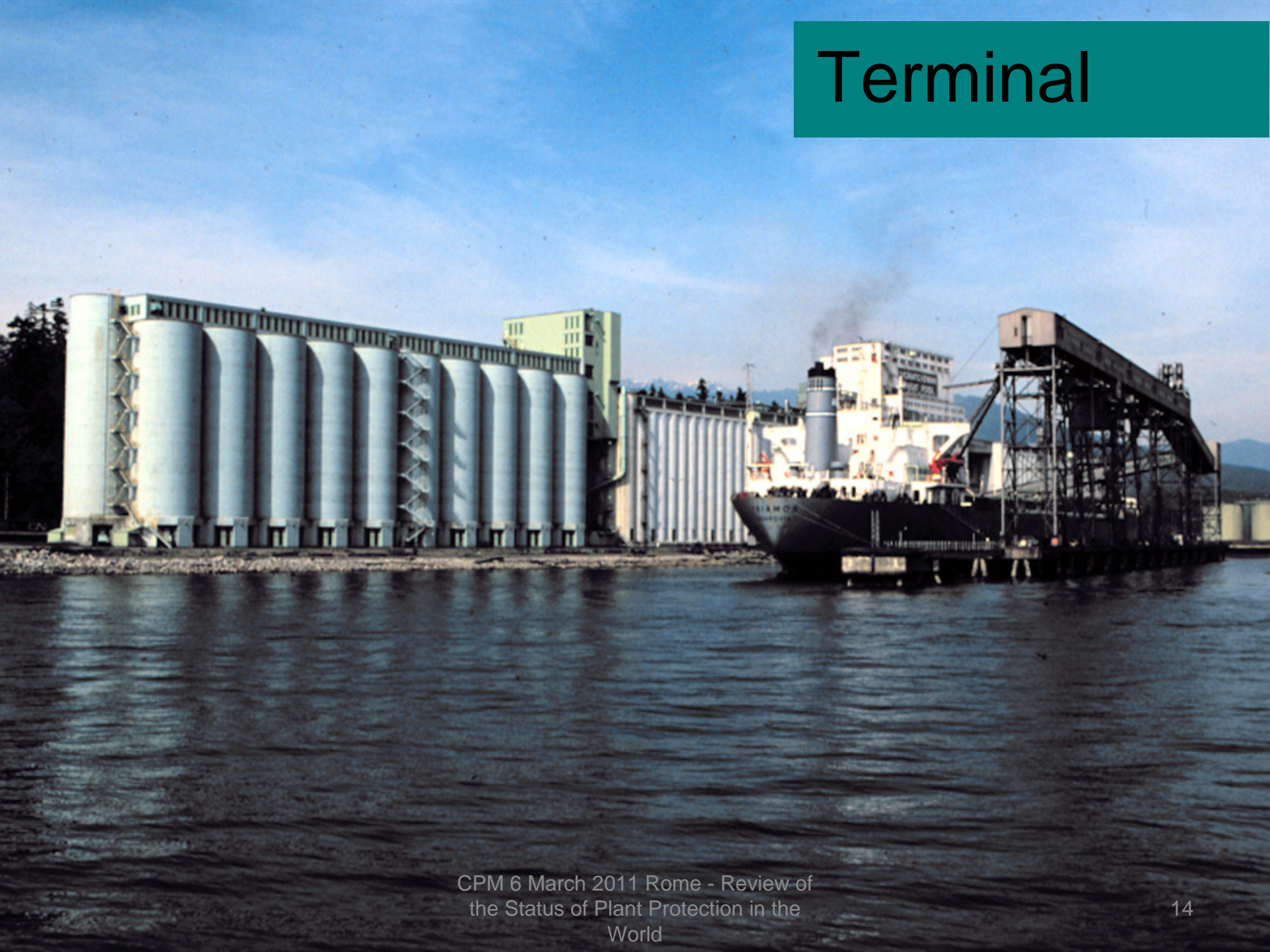
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Barge loading



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Terminal



Storage systems

Enormous bins

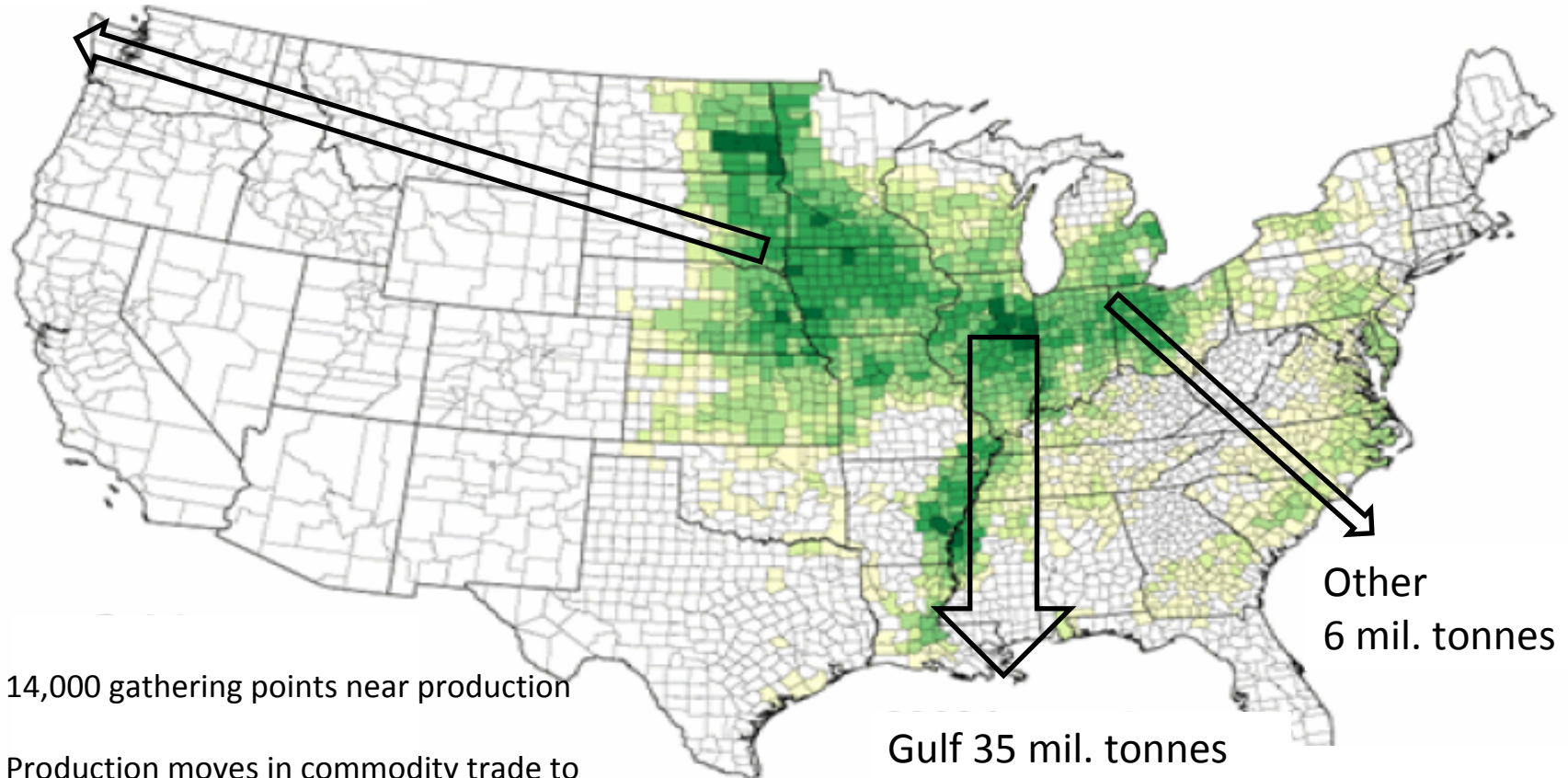


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526, 000 US Soy Farmers, 30+ million Hectares, 34 states produce c. 90+ mil. tonnes

Pacific 12 mil. tonnes

Production by County





Ocean Vessel 25,000 tonnes plus

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Typical US Export Volumes



82 MT to 700 MT bins
Limited segregation

Receiving

20 trucks/hr = 500 MT/hr

Shipping

10 trucks/hr = 250 MT/hr

4 to 8 cars/hr = 440 to 880 MT/hr

Storage Capacities

Corrugated Steel - 550 to 13,500 MT

Concrete - 680 to 2,700 MT

Flat Storage - 1,000 to 164,000 MT

Receiving

Rail - 750-1,200 MT/hr

Barge - 750-2,500 MT

Shipping

Vessel - 1,500 - 3,200 MT/hr

Storage Capacity

Just in Time loading

Receiving

20 to 40 trucks/hr - 500 to 1,000 MT/hr

Shipping Barges - 500 to 1,000 MT/hr

Storage Capacities

Concrete - 1,400 to 2,700 MT

Welded Steel - 13,400 to 27,300 MT

Flat Storage - 41,000 to 164,000 MT

1 Panamax (50 K tons) = 38 barges = 2200 semi trailers
= 2M bushels = 330 trillion soybeans

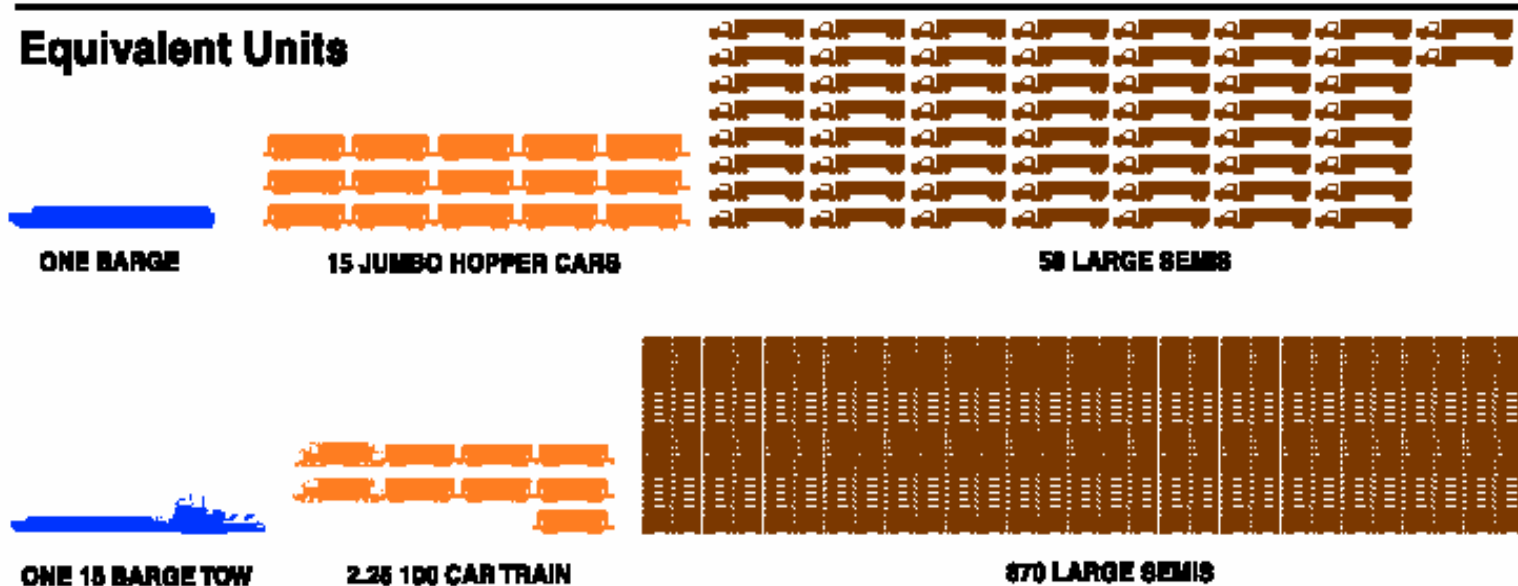
Grain Transport

Source: U.S. Department of Transportation - 800 Lincoln Hwy - Ames, IA 50010 - 815-330-9070

Cargo Capacity



Equivalent Units



1 Panamax (50K tons) = 38 barges = 2200 semi trailers
= 2M bushels = 330 trillion soybeans

Transfer elevator Rotterdam



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Loading railcar, Sealed conveyance is practical measure

Loading barges Rotterdam



Grain Processor



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GLOBAL FOOD DEMAND

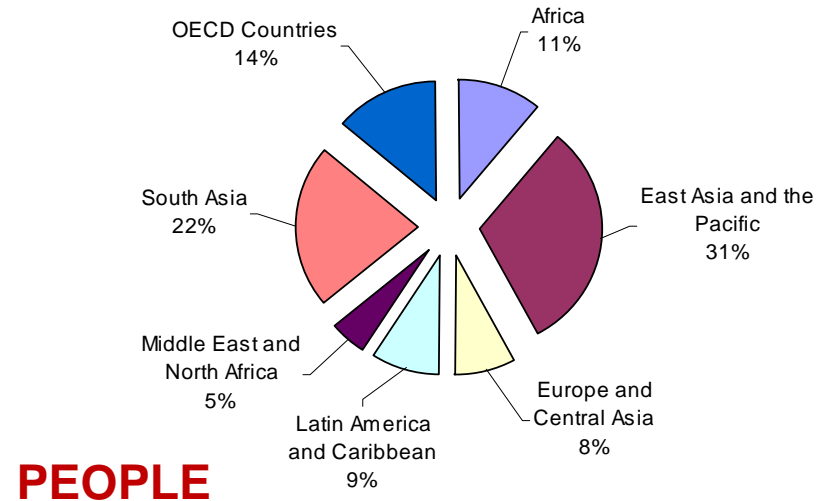
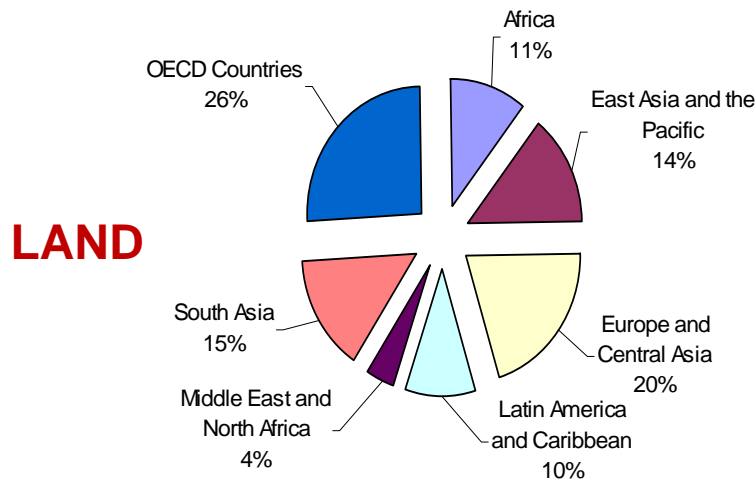
The economies of China, India, Pakistan, Indonesia, Nigeria, Ethiopia, Vietnam, The Middle East, among other countries and regions, have been growing faster than the world average.

Long Term Challenge – Feed people

- 7 billion in 2012
- 8 billion in 2030
- 9 billion in 2050

Will need 70% more food by 2050

More Must move Internationally



With population growth, urbanization and broad-based economic development, many low-income countries' food consumption will outstrip their production capacity, and they will become larger net importers.

Farm Land* per Capita, 2009

<u>Entity</u>	<u>Population (mil.)¹</u>	<u>A./Cap²</u>
World	6,790.0	.57
China	1,336.0	.26
India	1,177.8	.30
U.S.	308.8	1.32
Indonesia	231.4	.21
Brazil	192.5	1.01
Pakistan	168.8	.28
Bangladesh	162.2	.11
Nigeria	154.7	.48
Russia	141.9	2.04
Japan	127.4	.08
Mexico	107.6	.56

¹ Countries with more than 100 million population; 40% of world total.

² Countries with less than 1/3 acre per person tend to be net importers.

* The world is losing about 25 million acres of farm land per year; -.5%.

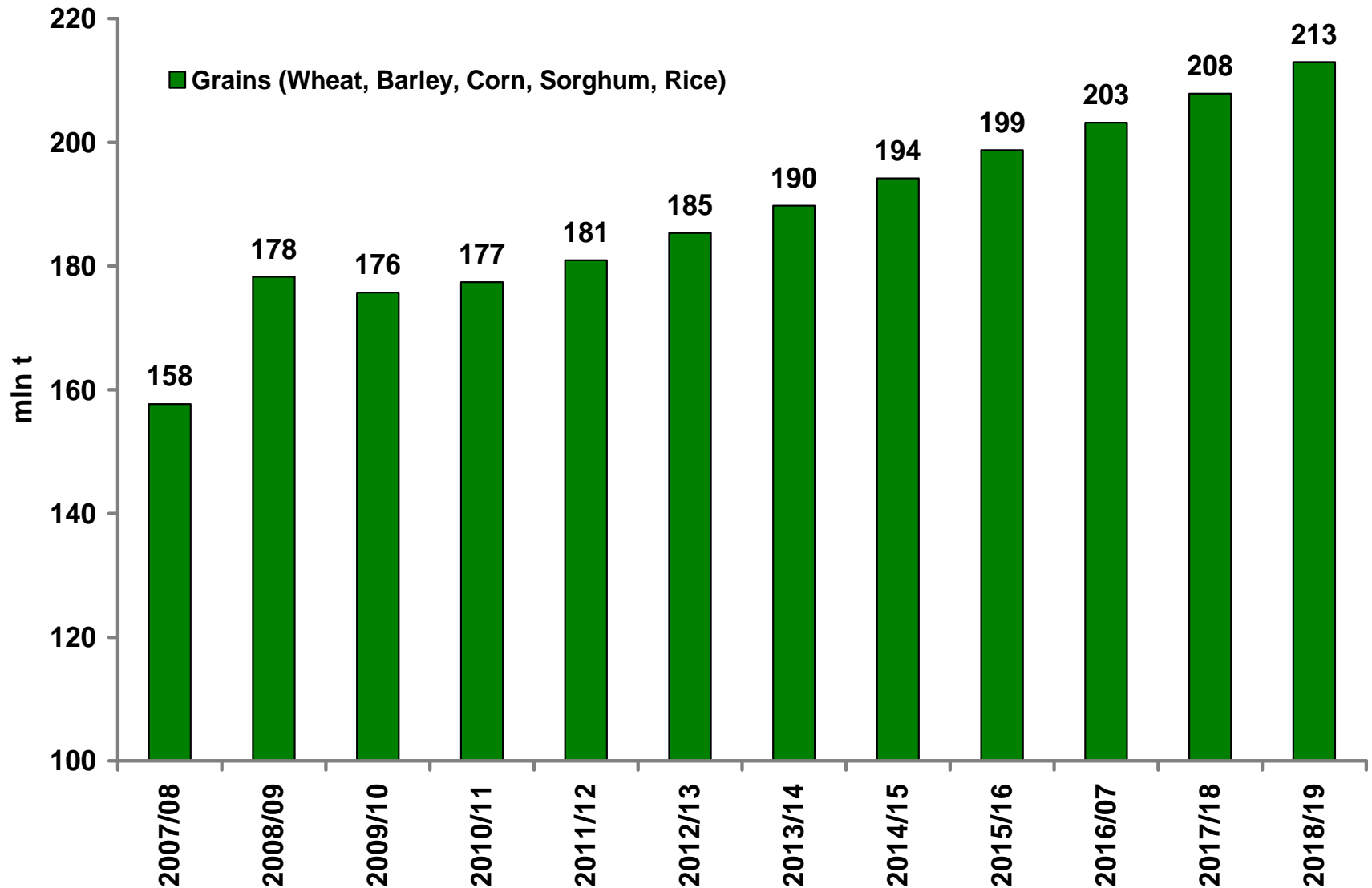
Source: CIA World Fact Book.

Global Grains and Oilseeds Trade and Markets

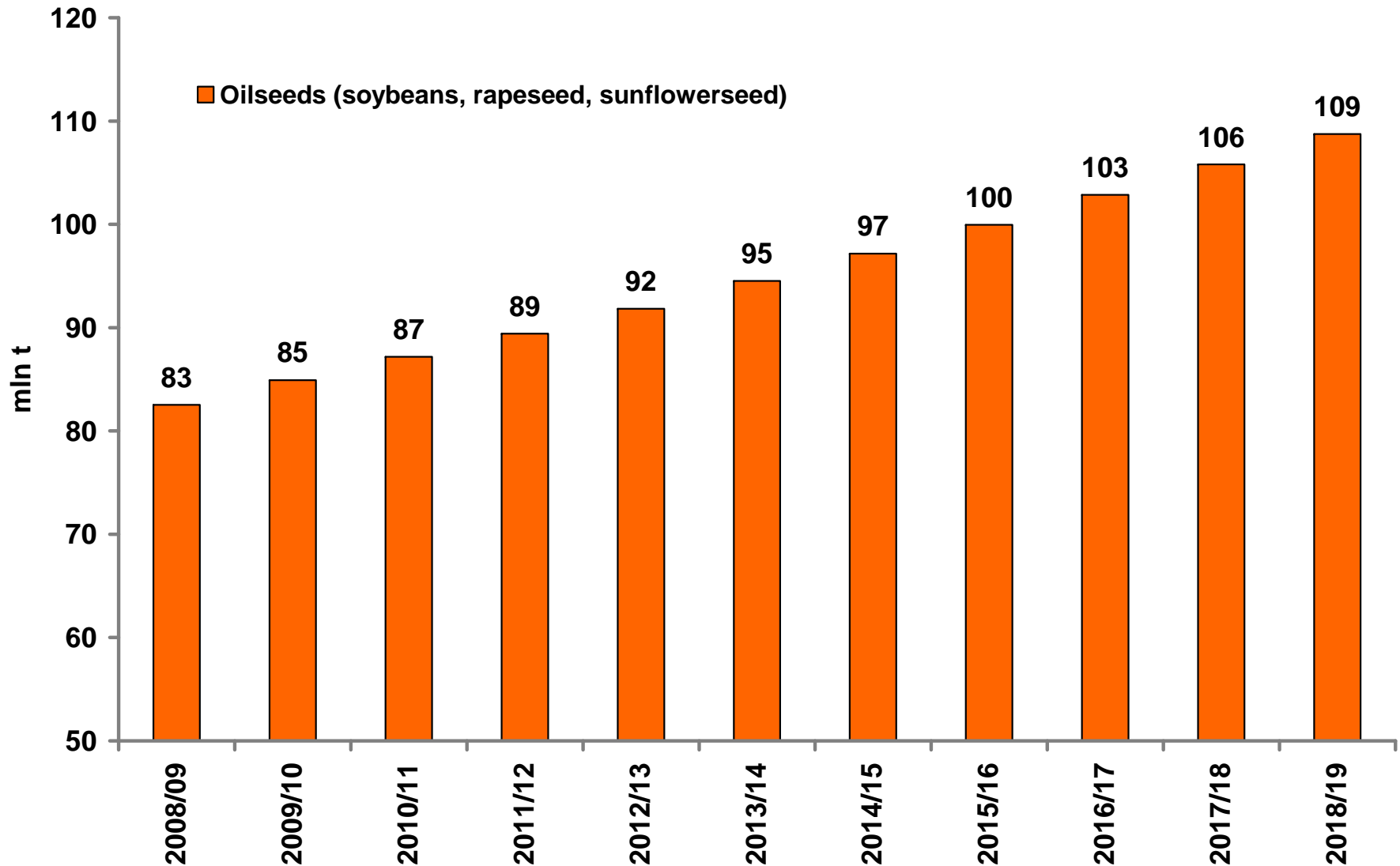
From a long-term perspective:

- Continued growth in global demand for grains and oilseeds will evolve
 - Population growth and urbanization will drive demand
 - Permanent renewable energy requirements will create demand
- With historically low ending stocks:
 - World grain complex is vulnerable to a production shortfall in case of weather events.
 - Geopolitical events are the random factors, but in the case of food security, export restrictions are being implemented.
- "Planning for volatility is critical." (Rabobank, 2009)

World Grain Trade

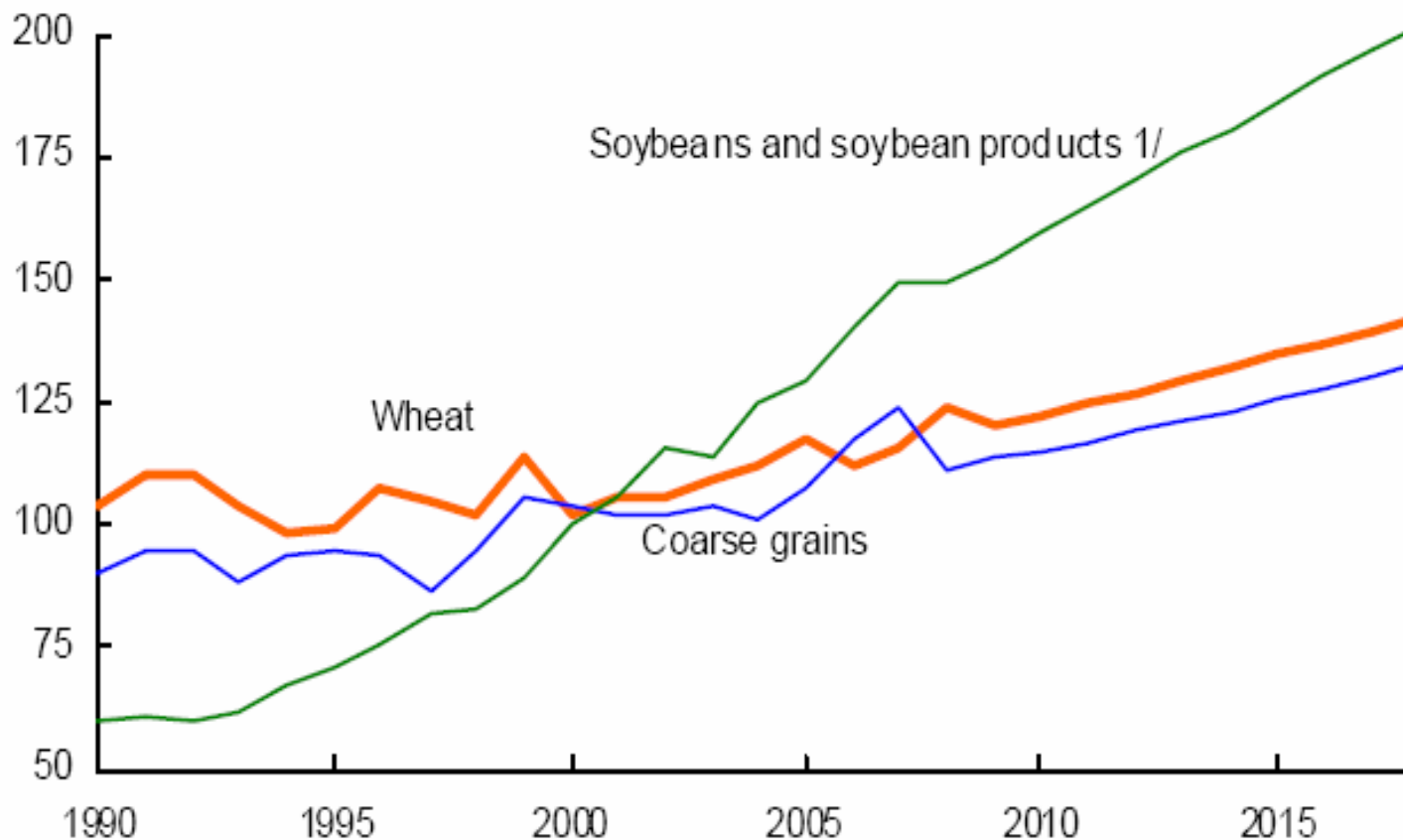


World Oilseed Trade



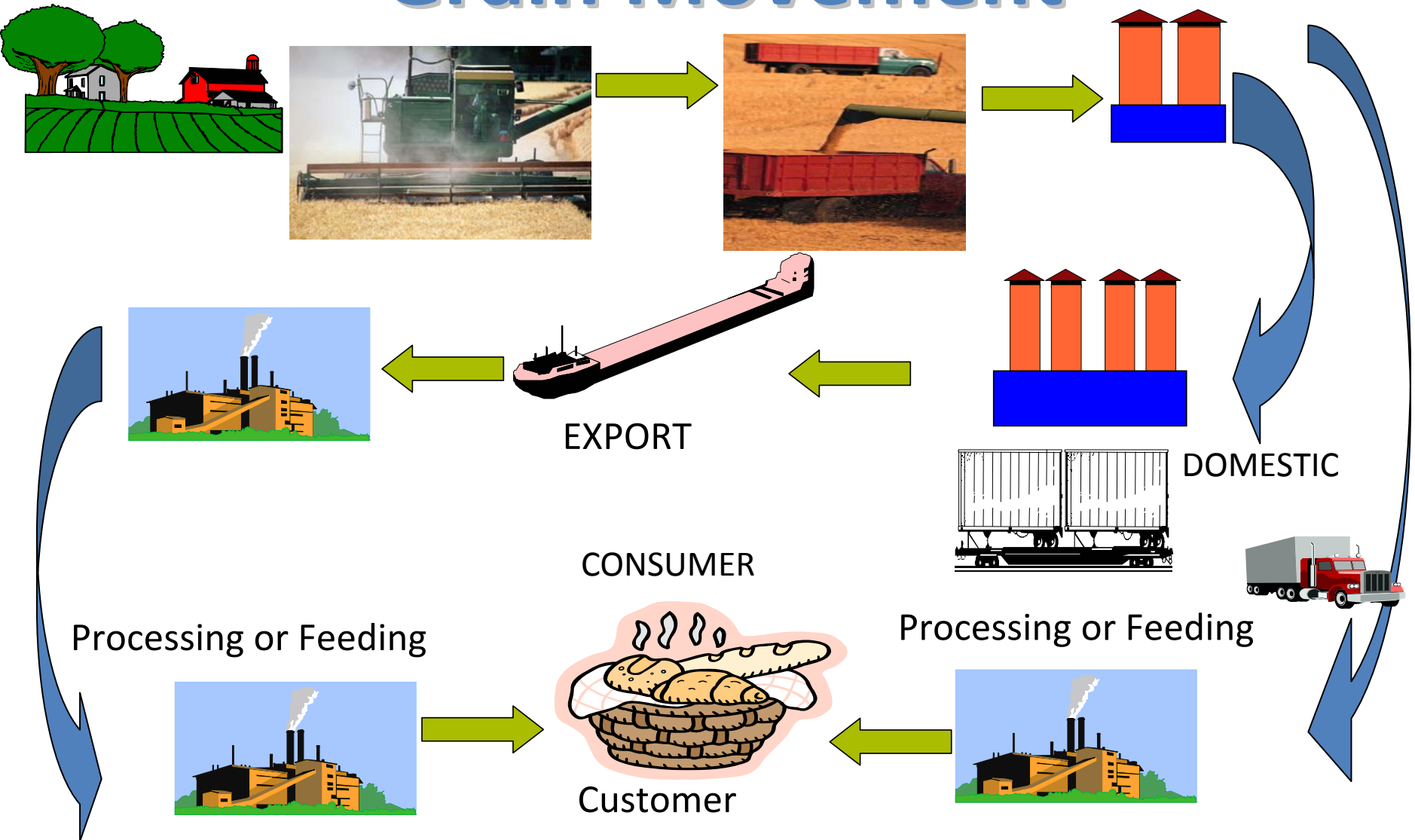
Global trade: Wheat, coarse grains, and soybeans and soybean products

Million metric tons



1/ Soybeans and soybean meal in soybean-equivalent units.

Grain Movement





Commercial Sale Summary

1. Exporter/importer finalize quality specifications 3-6 months before shipment:
 - Exporter/importer will not conclude sale if official (PPQ) as well as quality and safety requirements cannot be met
 - Neither exporter nor importer want surprises at unload
2. Banking institutions play critical role
 - Documentation must be clear, simple and easily understood by international financial community
 - Invoice only document that accompanies all transboundary shipments

Plant Protection Requirements are a Commercial PERFORMANCE TERM throughout International Trade!!!!

Risk Management is incorporated into and has critical impact on :

- DELIVERY time**
- PAYMENT**
- DOCUMENTS – to accompany**
- LOADING TERMS/LOAD RATE GUARANTEES**
- INSPECTION, SAMPLING, ANALYSIS**



World Bulk Grain Systems

The grain industry's challenge = move commodities from areas of surplus to areas of deficit, provide for regulatory compliance , safety and cost efficiency

- ✓ Movement is bulk and comingled.
- ✓ 3-24 months contract to delivery lead time
- ✓ Characterized by high volumes, low cost
- ✓ Impossible to keep varieties totally separate in system
- ✓ Commingling may occur in each link of chain
- ✓ Adventitious materials may occur in all shipments of all commodities.



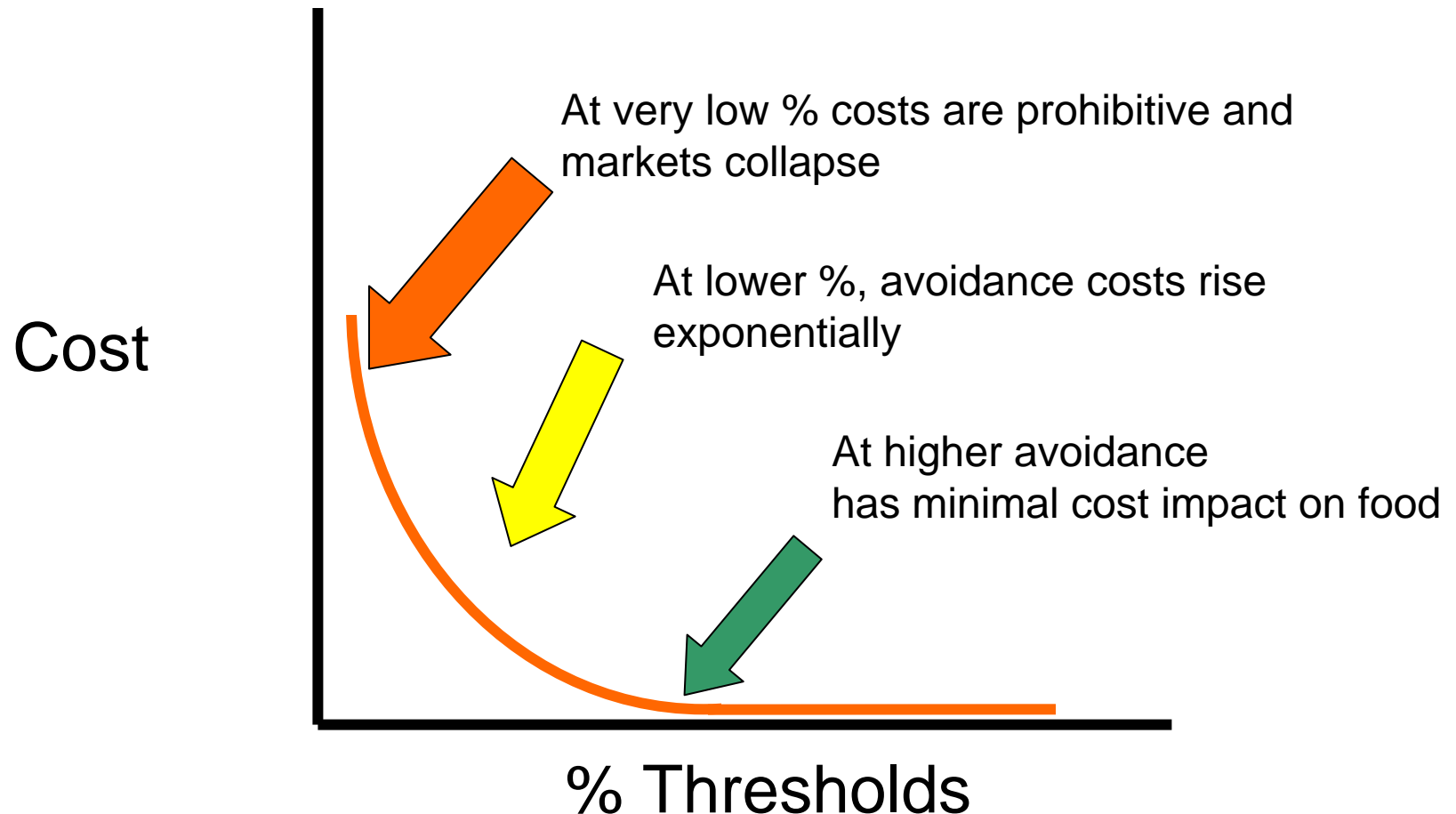
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- Global Impact – Local Results
- Common Interest – Different Objectives
- Trade, Technique and Technology
- Consistency,
- Practicality, Flexibility, Communication
- Sustainable, Efficient Systems



Costs to manage thresholds are not linear



Conclusion 1 : Global Supply Chains often cannot manage to Zero Tolerance

Adventitious Presence will occur in all trans-boundary shipments of all commodities (

- Neither Identity-preservation (IdP) nor Grain Channeling / segregation can manage to *zero tolerance*.
- Inspection and. testing are NOT a solutions, it
- “Limit of detection” thresholds do little to improve destination risks

Conclusion 2: Notified, Practical and Achievable Requirements are Needed

- Consistent and notified requirements enable markets to trade products and provide for proportionate and effective risk mitigation and management
- Appropriate measures allow grain systems to *maximize the value* of the grain product and *minimize cost inefficiencies and handling costs* associated with the supply chain, while meeting plant protection needs.

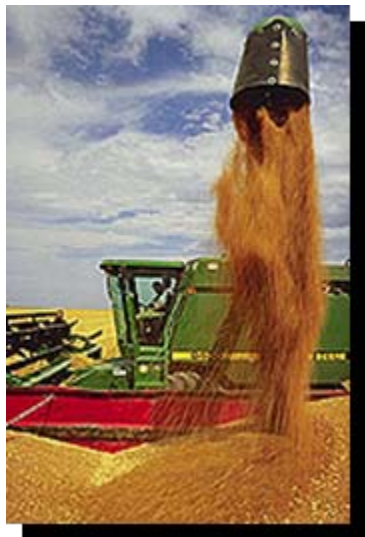
Conclusion 3: Controls and Inspection

- Global supply chains need verifiable, predictable and consistent oversight measures that are often fit for the specific risk management purpose.
- Inspection and detection while meeting specific purposes needs to be effective and consistent along the supply chain.
- Identification and Testing –official as well as commercial- for all concerns (including biotech products) needs standards and standardization
- Sampling consistency and efficacy is critical.
- Method developers need to validate methods and demonstrate they are fit for purpose as the product moves through the food chain.

Conclusion 4 : Sound Commercial Practice

- Contract sanctity of paramount importance.
- Promotes trade between countries – economic growth and food security.
- Promotes the most efficient cost structure for conducting business - sustainability
- Impacts investment decisions – development and food security.
- Promotes market participation and increases competition – Best for all stakeholders

Thank You



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