



# How can trade operate in a reshaping world?

– The geopolitics of Grains and Oilseeds



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Alain Butler, Senior Advisor Soft Commodities  
[alain.butler@bnpparibas.com](mailto:alain.butler@bnpparibas.com)

# How can trade operate in a reshaping world?

## Content

- What influences agricultural trade?
- What directions are the key players taking?
- How to handle the future?

## Approach around case studies of key exporters and importers



Data source: BNP Paribas

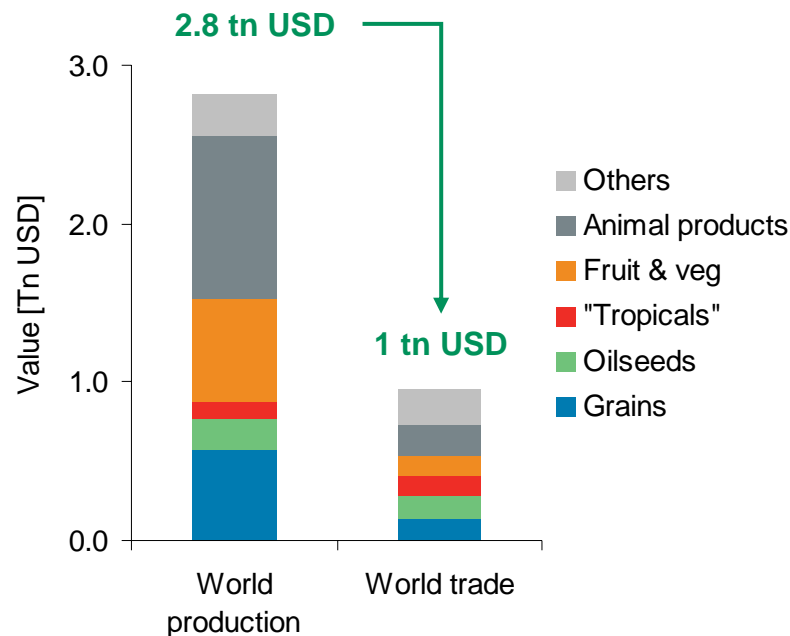


# The trade of agricultural commodities is growing steadily

## 1 Agri-trade landscape – key figures

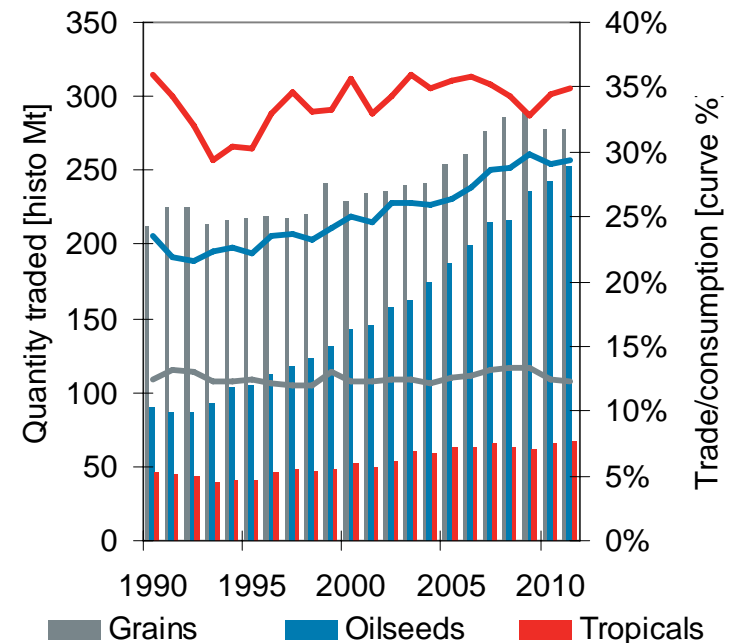
- 1/3 of agricultural products are traded, of which 1/3 in value are grains and oilseeds
- Trade increasingly provides grains consumed, as populations grow faster in net importing regions
- Oilseeds & oil trade grows fast (+3.3% p.a.) to fulfil a greater need for protein and fat

### World agricultural market



Data source: FAOSTAT

### Evolution of agricultural trade



Data source: USDA



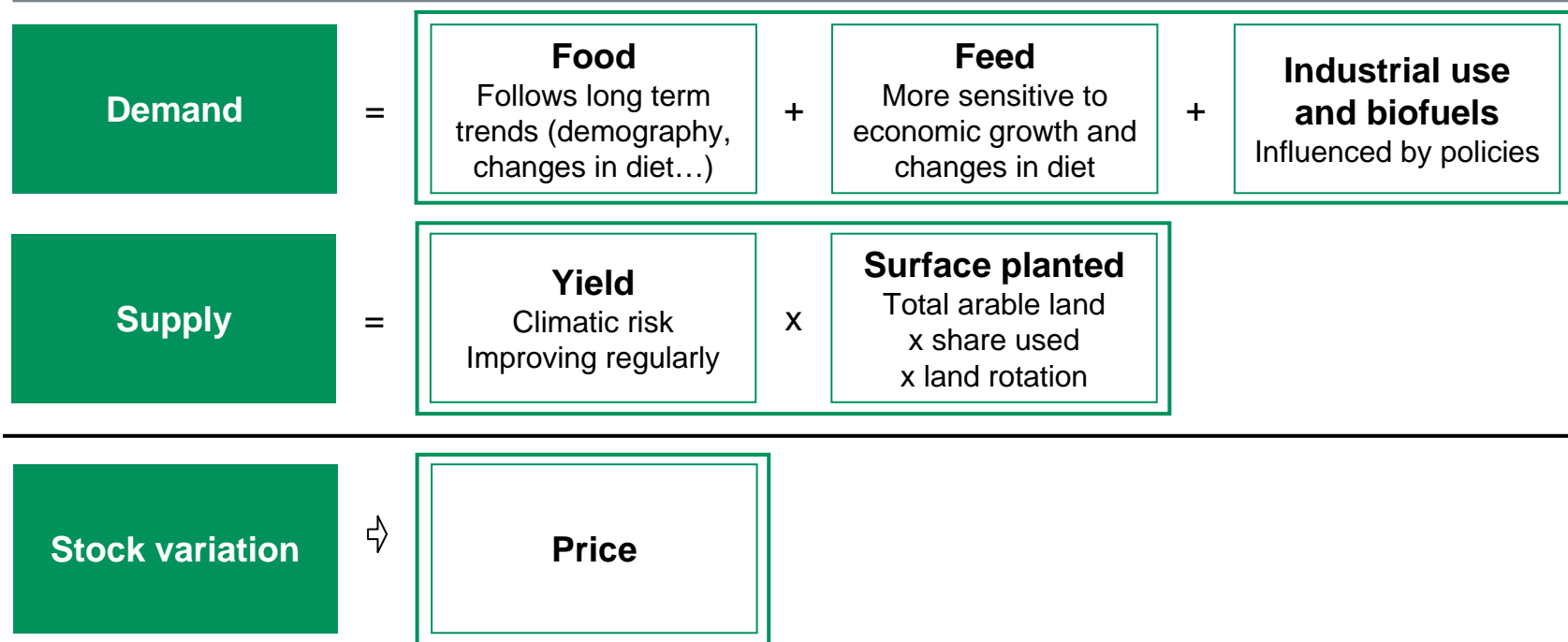
# Agricultural markets are primarily driven by supply/demand

## 1 Agri-trade landscape – market fundamentals

The supply/demand balance is primarily driven by fluctuations of production

- The demand is fairly predictable, with limited elasticity to price
- Production is exposed to weather, and products are storable on quite short cycles
- Prices can thus become volatile when inventories are scarce

### Evolution of agri-commodities supply/demand balance



Data source: BNP Paribas



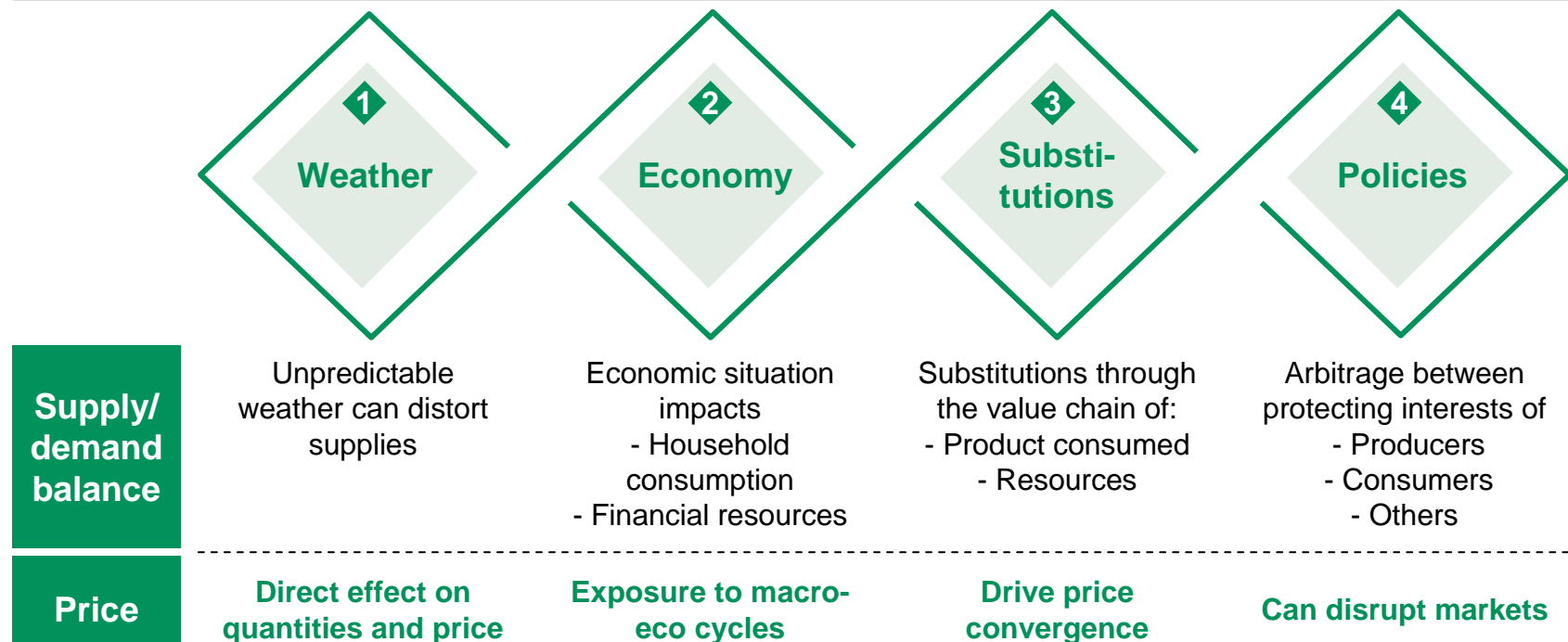
# Supply/demand is influenced, inter alia, by agri-policies

## 1 Agri-trade landscape – market drivers

Unpredictable weather can distort supplies and trigger decisions taken by people

- Substitution between commodities through the value chain contribute to markets convergence
- Government policies can affect local prices and quantities traded internationally

### Main drivers affecting agricultural commodities markets and their impact



Data source: BNP Paribas

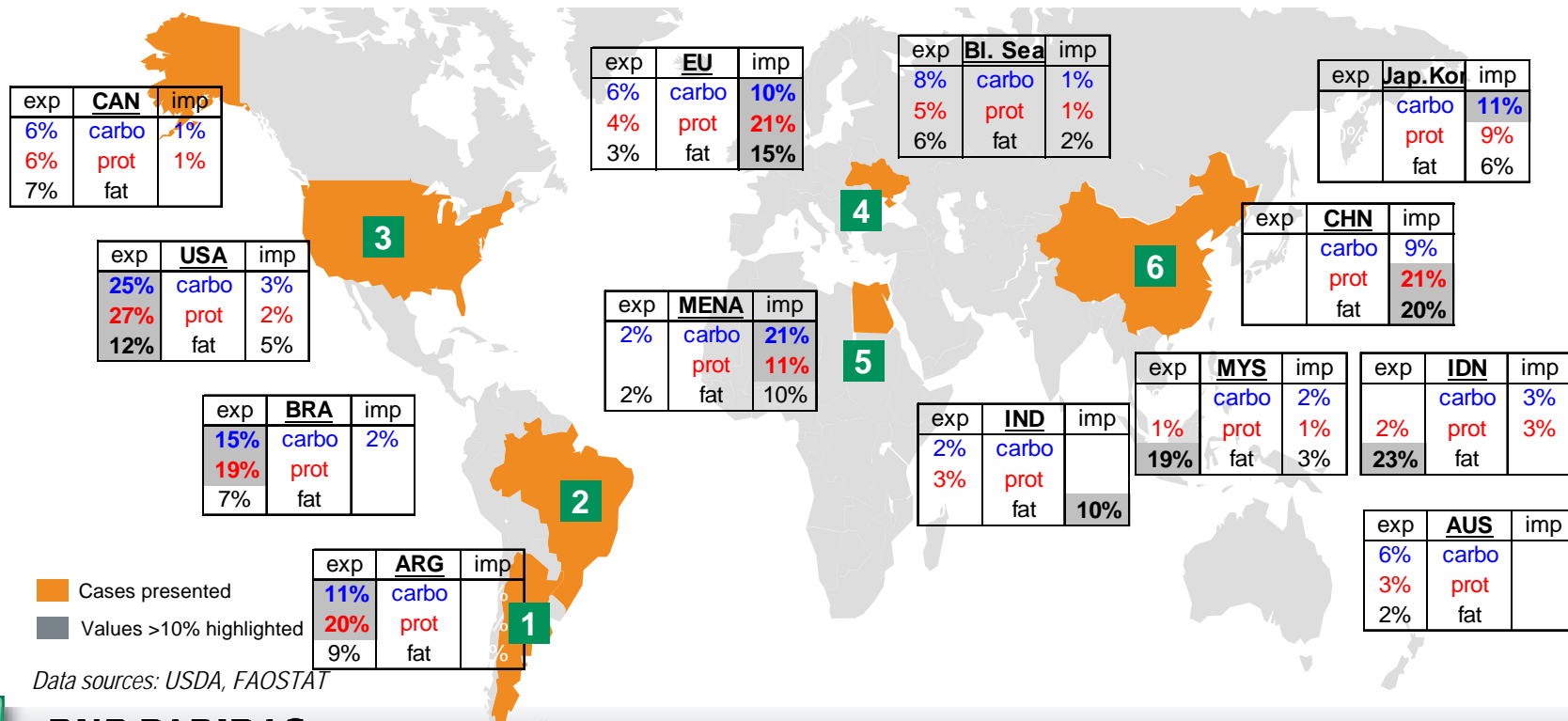


# Disruptions at top exporters can affect the world grain trade

## 2 Cases – major players

- Grains, oilseeds and sugar constitute the bulk of the agri-trade in nutritional terms
- Exporters are more concentrated than importers
  - 5 countries supply together 70% of the world traded protein & fat, 50% carbohydrates
- Major origins: America (protein, carbohydrates), Malaysia & Indonesia (fat)

### Share of the global trade in carbohydrates, protein and fat equivalent

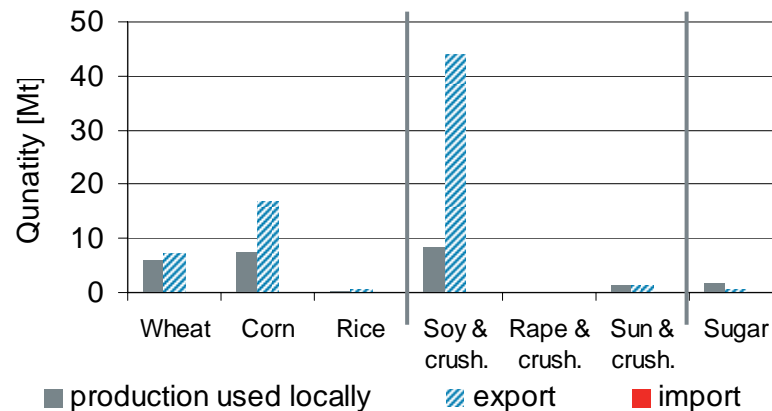


# Argentina leads exports of soy with its crushing setup

## 2 Case – Argentina

- Much arable land, export oriented (0.8 ha/cap vs. 0.2 world average)
- Agri-exports taxes make about 1/3 of state revenue (agriculture = 9% GDP)
- Argentina has a unique inland supply chain in the heart of its soy belt
- Concentration of the world largest crushing plants along the Parana river

### Balance of major crops



### Rank in world exports

- #1:** soybean oil & meal (50%), peanut oil (30%)
- #2:** peanuts, sorghum (30%), sun oil, corn (15-20%)

### View of the “soy river”



Data source: USDA

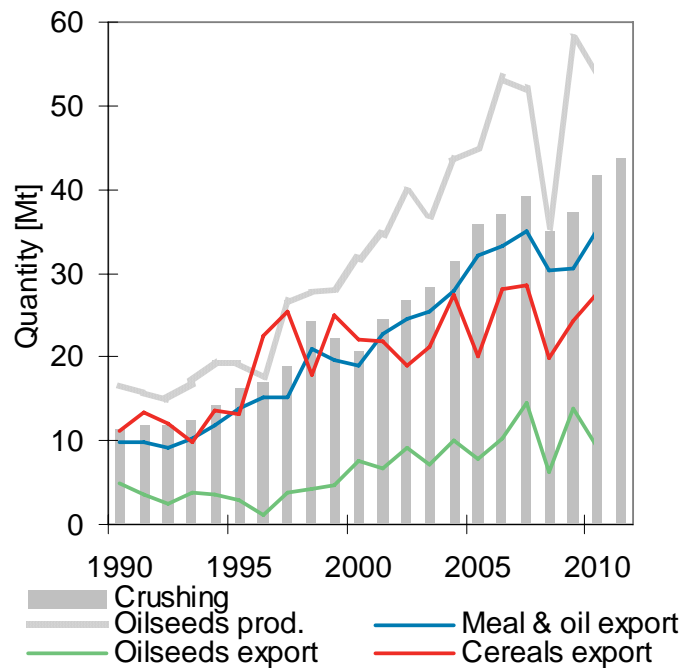


# Argentina optimizes its whole agricultural value chain

## 2 Case – Argentina

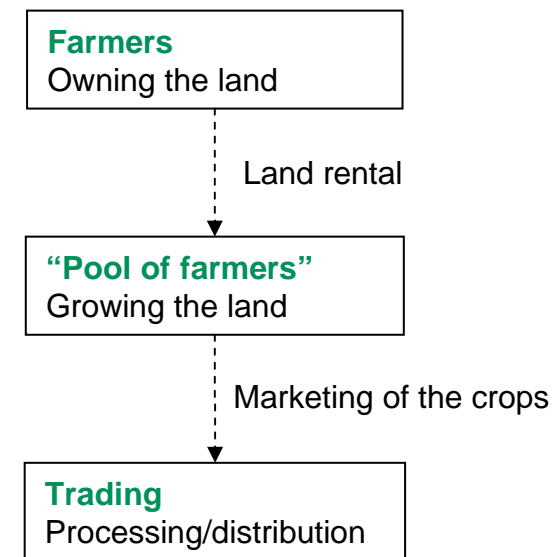
- Oilseeds related exports gain share on cereals (so as corn on wheat)
- 75% of oilseeds are crushed, recently with more processed into biodiesel
- Land is increasingly being grown by professionalized “pool of farmers”
- Some farmers store physically their grains into silo bags

### Oil crushing and exports



Data source: USDA

### Farming model



Data source: BNP Paribas



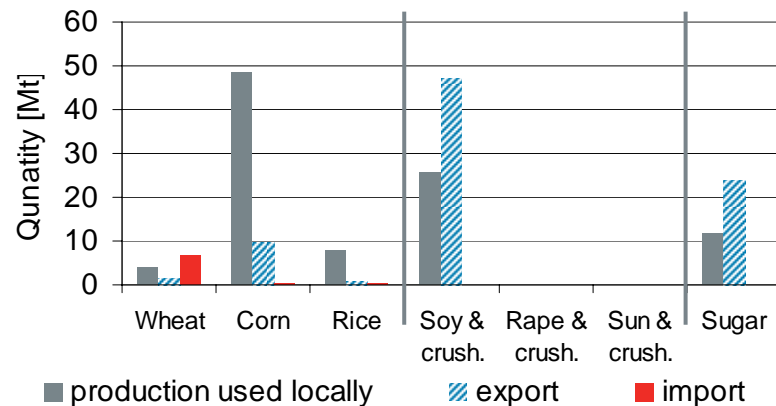
# Brazil performs with a diversified agriculture

## 2 Case – Brazil

- Grains represent only 1/3 of the agri-exports value (of which 90% is soy)
- 60% of grains are used domestically, of which 70% as feed

- Brazil enjoys large scale plantations
- Grains compete for land against other applications, as cattle and “tropicals”
- Logistics is a bottleneck

### Balance of major crops



#### Rank in world exports

**#1:** sugar (45%), coffee (30%), poultry meat (37%), beef meat (20%)

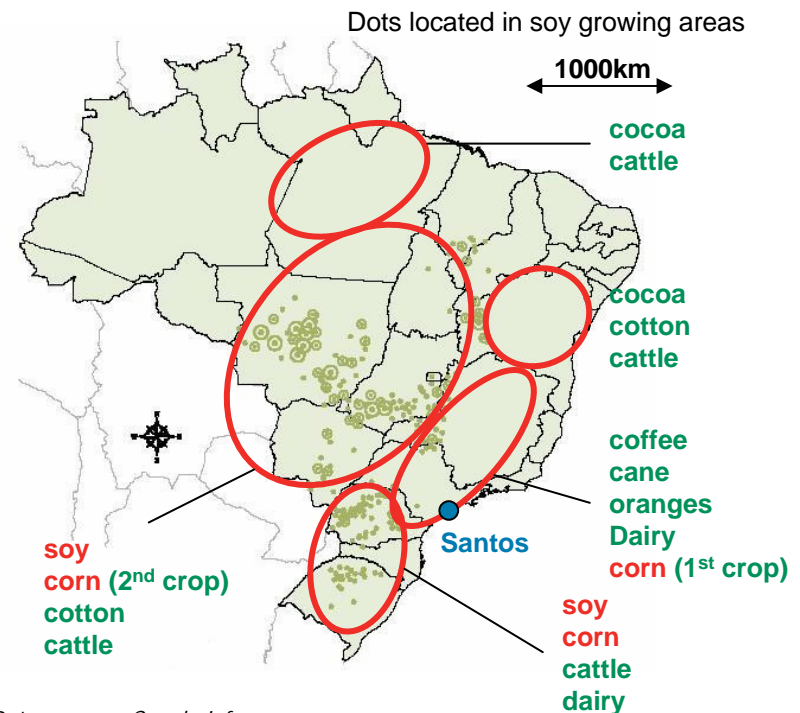
**#2:** soy (33%), soy oil (17%)

#### Rank in world imports

**#2:** wheat (5%)

Data source: USDA

### Location of major crops in Brazil



Data sources: Conab, Informa

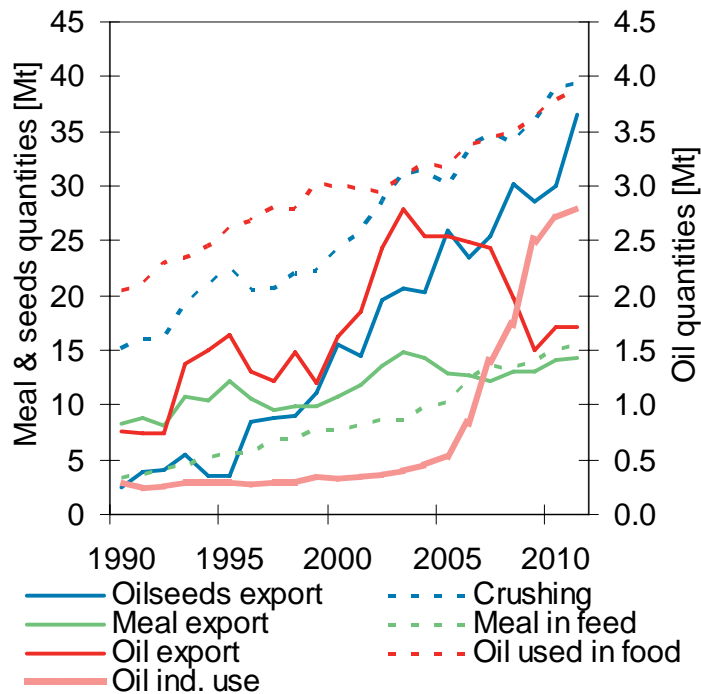


# Brazilian agri-trade is influenced by feed and energy

## 2 Case – Brazil

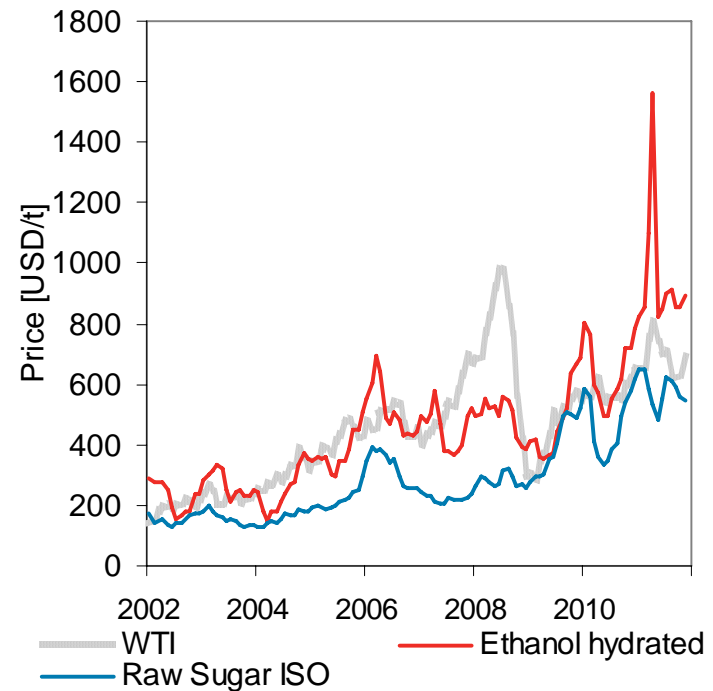
- The soybean production growth is driven by land expansion in “cerrado”
- Crushing first serves domestic needs in oil, feed and biodiesel
- Agriculture prices are increasingly influenced by energy
- The Brazilian model is expanding to Sub-Sahara Africa

### Major agricultural exports



Data source: USDA

### Food and energy prices



Data source: Datastream

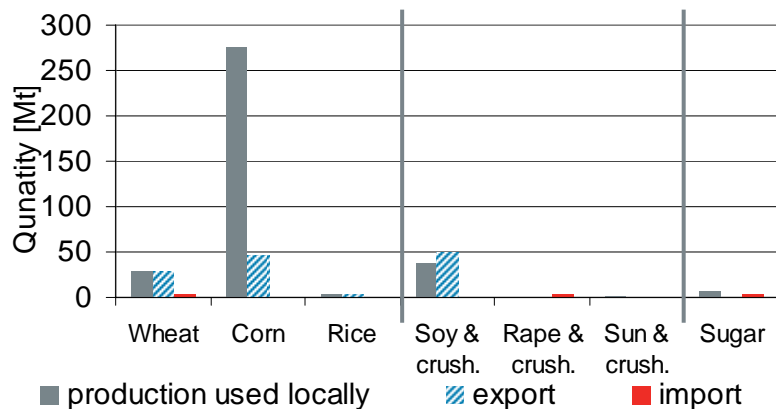


# The USA leads grains exports and has a huge local market

## 2 Case – USA

- The leading global exporter, consumes 3/4 of its grain production domestically
- Corn, soy and wheat occupy 85% of the arable land (corn = 80% by weight)
- The total arable area is decreasing in favor of forests and other usages
- Some years, land can be reallocated between crops (e.g. maize/soy/cotton)

### Balance of major crops



#### Rank in world exports

**#1:** corn (50%), soybeans (45%), cotton (35%), wheat (23%), sorghum (55%), pork meat (33%)

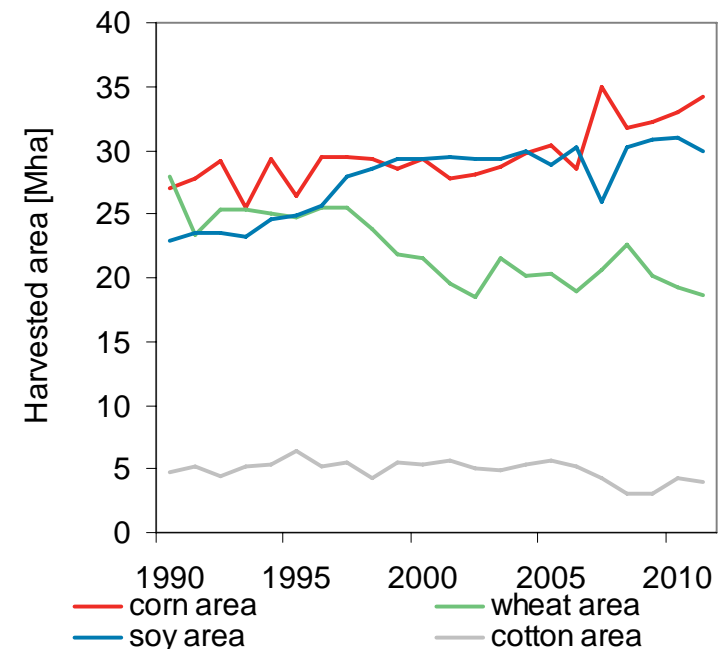
**#2:** poultry meat (35%), skim milk powder (25%)

#### Rank in world imports

**#1:** rape oil (40%), olive oil (50%), coffee (23%), beef (15%), sugar (6%)

Data source: USDA

### Evolution of harvested areas



Data source: USDA

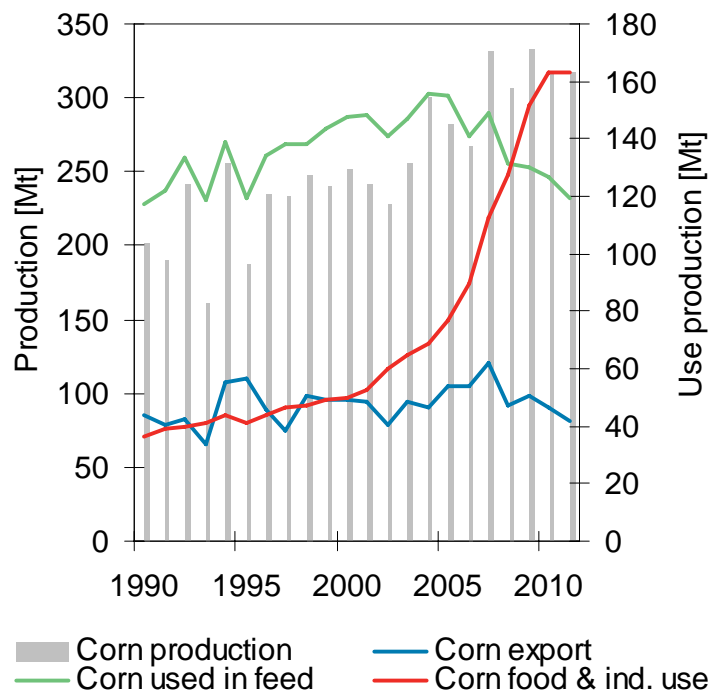


# The USA offers limited prospects to boost grain exports

## 2 Case – USA

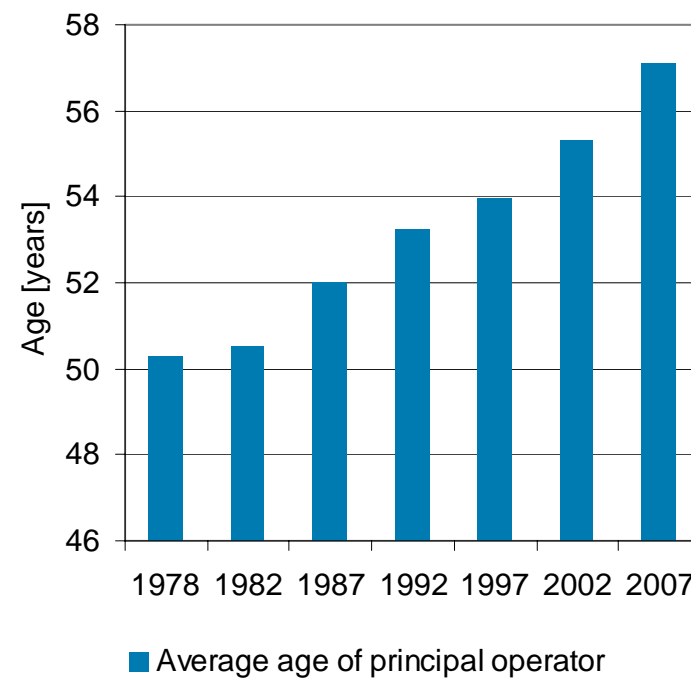
- Gains in cereal yields went into biofuel
- While crushing capacities stabilize, additional soy is exported as beans
- Farming needs to attract a new generation
- Farming has some lobbying power (2% active population, 1.2% of GDP)

### Use of USA corn



Data source: USDA

### Evolution of the age of farmers



Data source: USDA

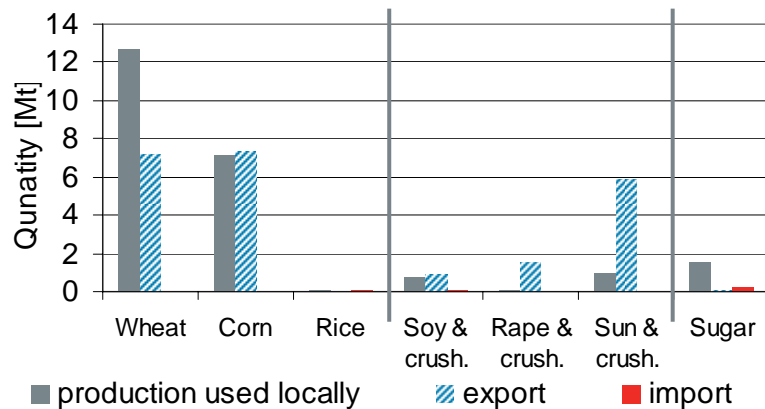


# Ukraine is seen as a potential granary for the world

## 2 Case – Ukraine

- Ukraine exports half of its grains
- The domestic market is hardly growing (population decreasing 0.7% p.a.)
- Favorable climate and black soil (55% of the country is arable land)
- Yields have potential for growth, with capital and technology

### Balance of major crops

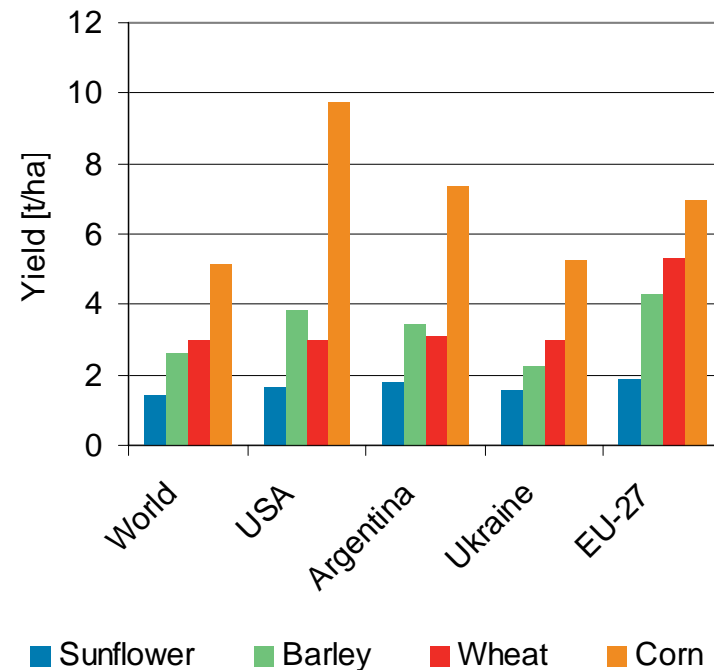


#### Rank in world exports

- #1:** sun oil (55%), sun seed (32%)
- #2:** barley (25%), rapeseed (15%)

Data source: USDA

### Yields of major grains



Data source: USDA

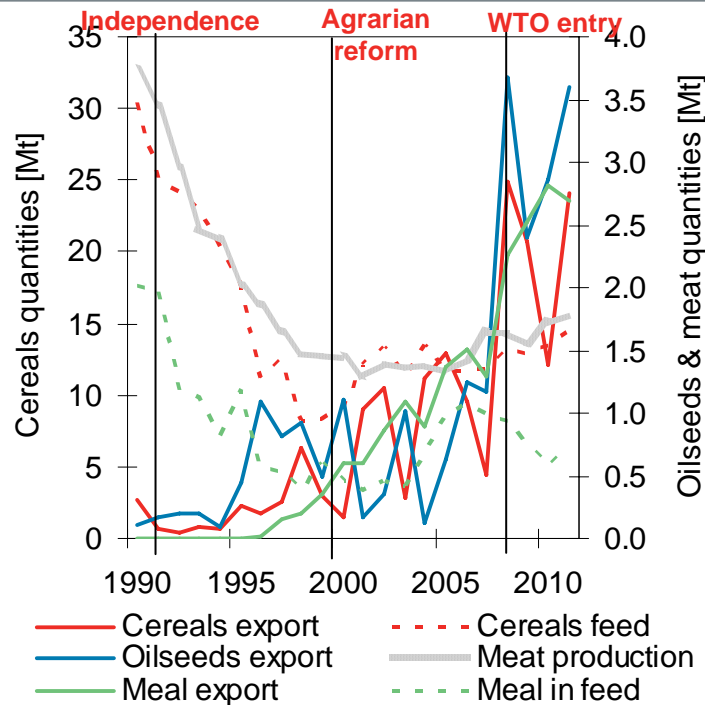


# Evolutions of reforms will drive the future of Ukraine farming

## 2 Case – Ukraine

- Ukraine became a major grain exporter, as meat production collapsed
- Exports can be versatile (climatic and regulatory risks)
- With reforms on land ownership, the country has potential to attract capital and generate farming productivity

### Evolution of grain trade



Data source: USDA

### Capitalization of agri-companies

As private companies have long term contracts with farmers, transfer of equity indirectly allows transfer of land and agricultural assets

> 5bn USD market capitalization

Company	Products	Stock exchange
AgroGeneration	Grains	Paris
Agroton	Crop farming, livestock, food...	Frankfurt
Astarta	Sugar, grains, meat, and dairy	Warsaw
Avangardco	Eggs	London
Creativ Industrial	Oil, margarine, mayonnaise	Berlin
Kernel	Sunoils, grains	Warsaw
Landkom	Oil for biodiesel, wheat	London
MCB Agricole	Grains	Frankfurt
MHP	Chicken	London
Milkiland	Dairy	Warsaw
Mriya	Grains, potatoes, and others	Frankfurt
Sintal	Grains, peas and others	Frankfurt
Ukrros	Sugar, grains	Frankfurt

Data sources: Bloomberg

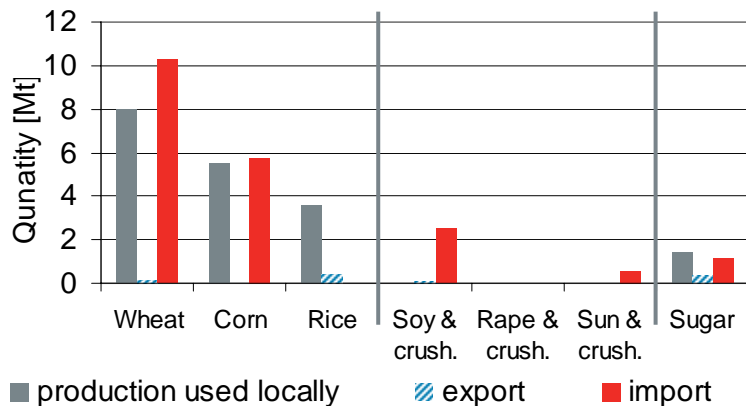


# Egypt is structurally a net importer of agricultural products

## 2 Case – Egypt

- Egypt imports most of its grains needs (50% for cereals, >70% for oilseeds)
- With >90% of desert, arable land concentrates in the irrigated Nile valley
- Farming is important socially (60% rural, 25% active population)
- Consumption and imports are driven by population growth

### Balance of major crops

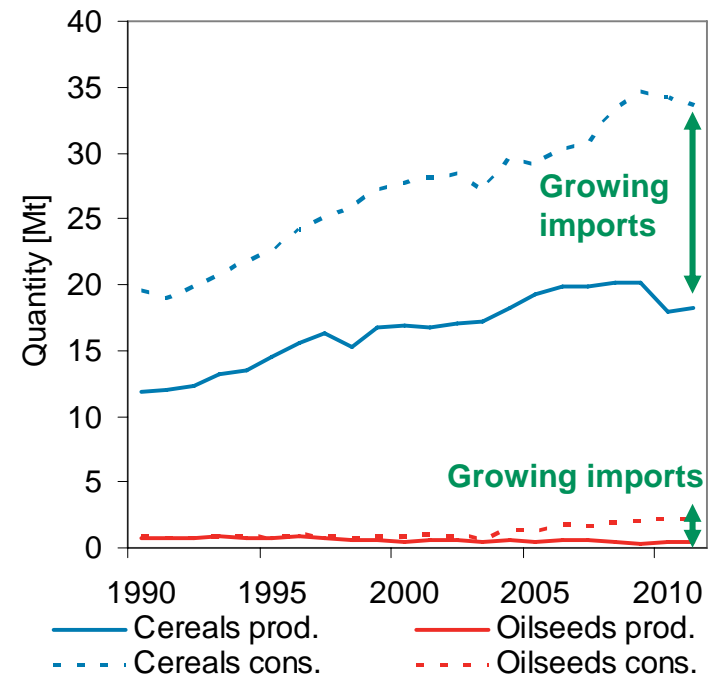


#### Rank in world imports

- #1: wheat (8%)
- #3: sun oil (11%)

Data source: USDA

### Evolution of grains production



Data source: USDA

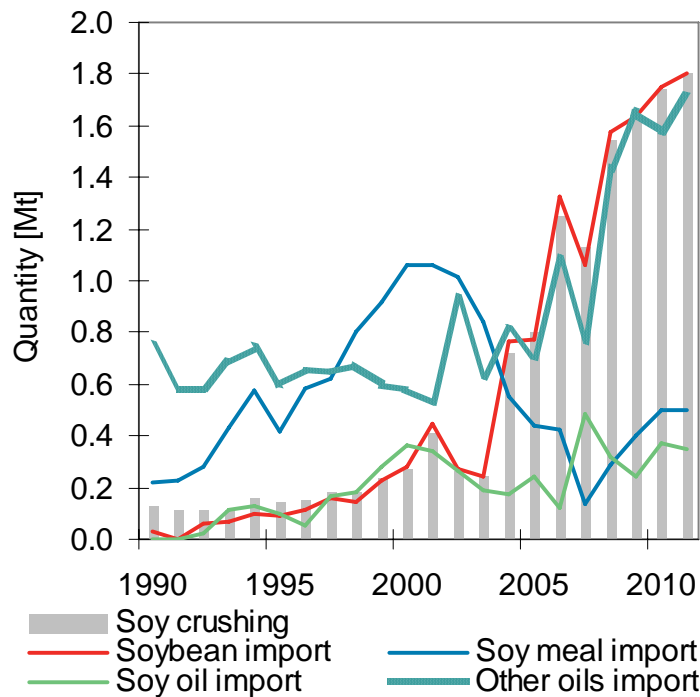


# Egypt has to manage its scarce resources used in farming

## 2 Case – Egypt

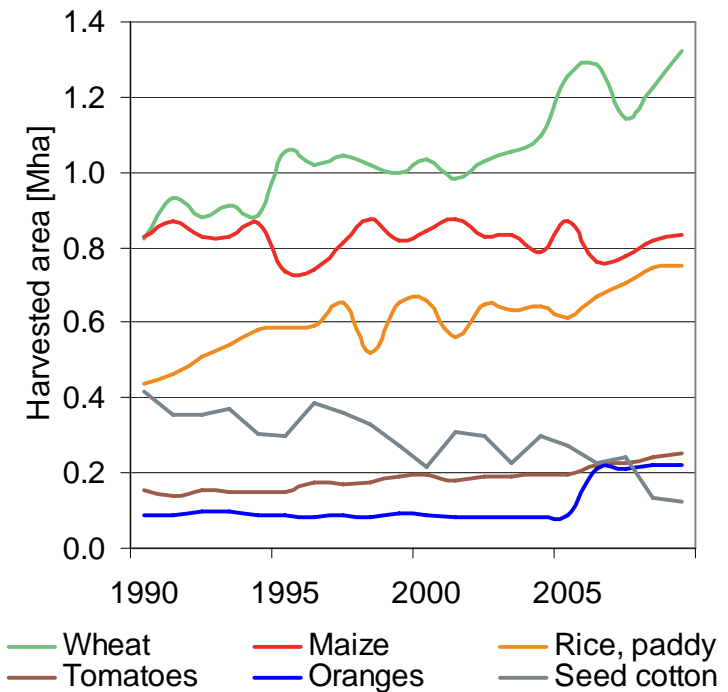
- Egypt built up capacities to import seeds and less crushing products
- Changes in eating habits also affect demand (e.g. oil, poultry vs. beef)
- Egyptian agriculture is diversifying in value added crops (e.g. citrus)
- Water management will lead to some arbitrage (e.g. less cotton, pasta/rice)

### Imports of oilseed products



Data source: USDA

### Evolution of harvested areas



Data source: FAOSTAT

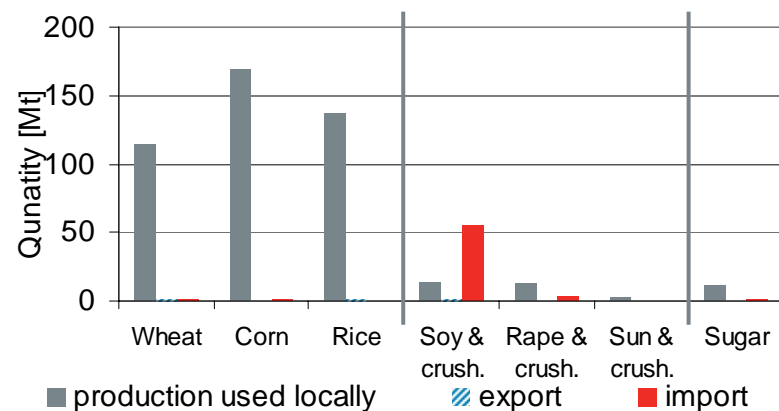


# China targets to remain self-sufficient on cereals

## 2 Case – China

- China remains self-sufficient on cereals
- Change of diet pulls need for protein and fat, supported by soy imports
- Agriculture is key for the nation stability (60% active population)
- Heterogeneous context and potential between regions

### Balance of major crops



#### Rank in world imports

# 1: soy (60%), soy oil (18%), rape oil (26%), fish meal (39%), cotton (35%)

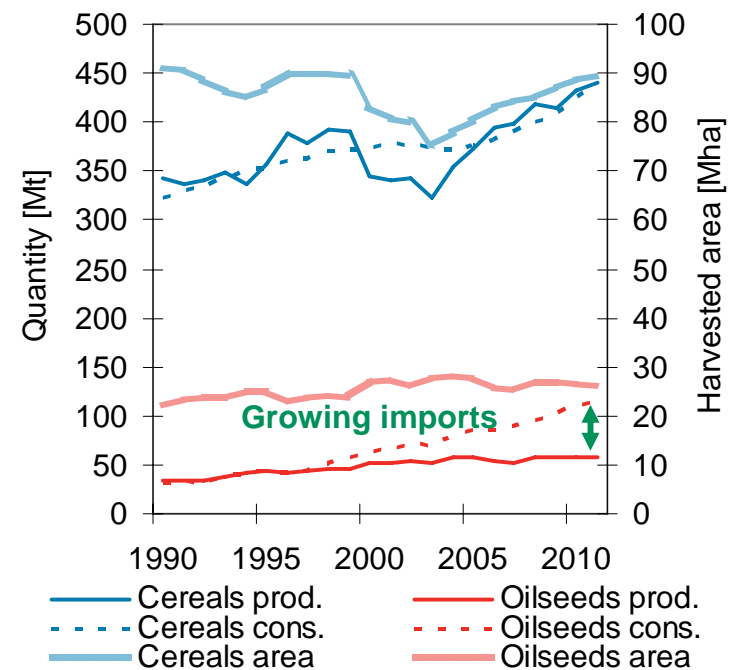
# 2: palm oil (18%), peanut oil (25%)

#### Rank in world exports

# 1: peanut (30%)

Data source: USDA

### Evolution of grains production



Data source: USDA



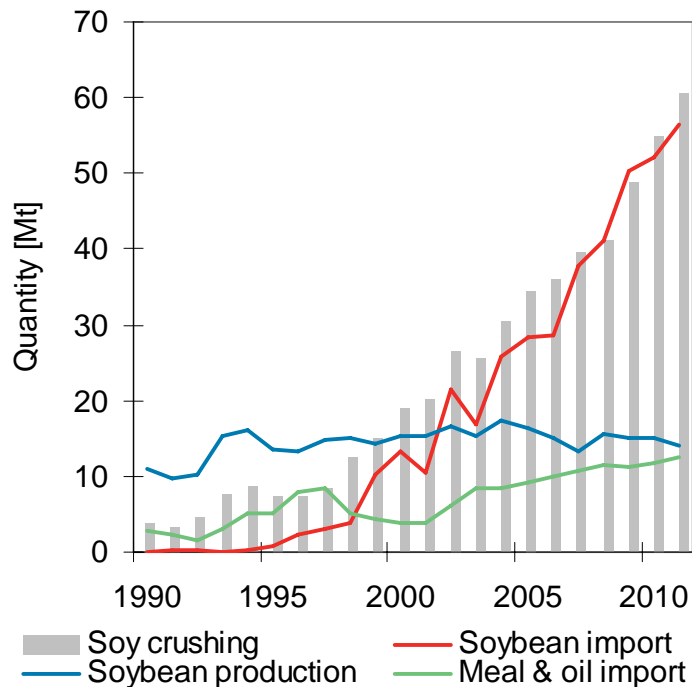
# China foresees agricultural productivity in the years to come

Geopolitics of Grains and Oilseeds

## 2 Case – China

- By developing crushing capacities, China imports whole soybeans
- More land will be reallocated to oilseeds, when cereal yields improve
- Farming will be optimized, while the population urbanizes and ages
- Partnerships overseas will also secure supplies of agri-commodities

### Crushing and import of soy



Data source: USDA

### Agriculture & rural development setup

- Farming rationalization and modernization
  - Specialization of provinces and regions
  - Promote economies of scale, consolidation, land transfer, autonomy
  - Mechanization
  - Technology transfer: crop selection & GMO, fertilizers, water conservation
- Information management
- Distribution services and infrastructures
- Price protection and subsidies system
- Non-agricultural employment platforms, rural industrial development

Data sources: 12th Five year plan, BNP Paribas



# Policies will impact the structure of world trade

## 2 Cases – concerns of key players on agri-trade

Key exporters and importers share some concerns

- Rebalance production and exposure to trade
- Localization of industrial assets and added value
- Evolution of the structure of farming and upstream integration

### Concerns of key exporters

- **State budget balance**: revenues from export taxes or costs of support schemes
- Quantity and **use of surplus** on domestic (e.g. feed, energy) and export markets
- **Add value** with downstream “processing” in meat and biofuels
- Impact on **country trade**, access to foreign currencies and exchange rates
- **Structure of farming** and human resources
- **Environment** and sustainability

### Concerns of key importers

- **Social stability**: balance between profitability of local farming and affordability for consumers
- **Food security** (food producing crops vs. cash crops)
- Import commoditized grains and **process** them locally (crushing capacities)
- Define **sourcing policies** (access to foreign land, regular tenders...) to secure supplies
- Adapt **productivity in farming** to demographic evolution
- **Sustainable development** in advanced economies

Data source: BNP Paribas

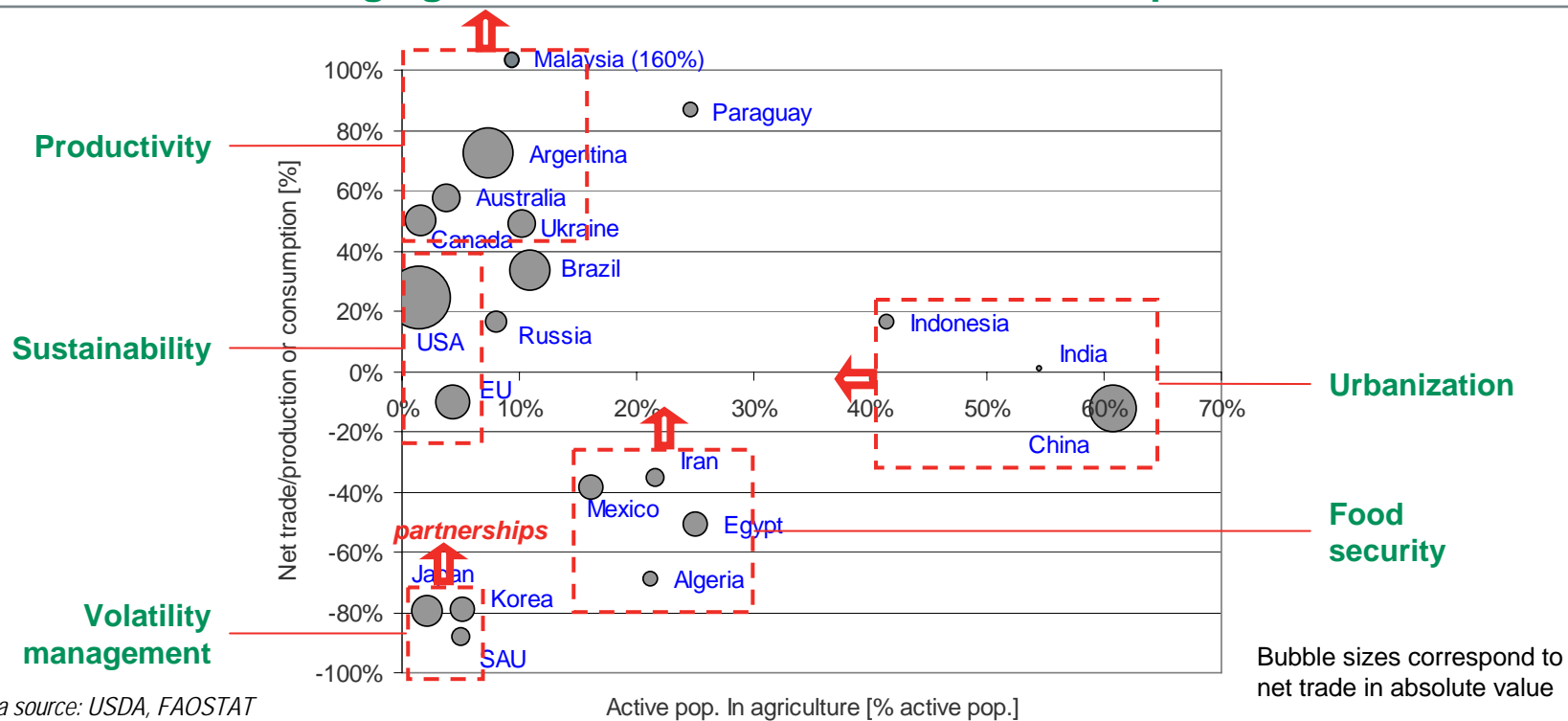


# Countries will evolve along their own track

## 3 Future – directions taken

- Depending on their major concerns and the political weight of stakeholders, each state will put emphasis on different issues and evolve accordingly
- Relating to the maturity of the economy states will focus on urbanization, farming productivity and sustainable development

## Main drivers affecting agri-commodities markets and their impact

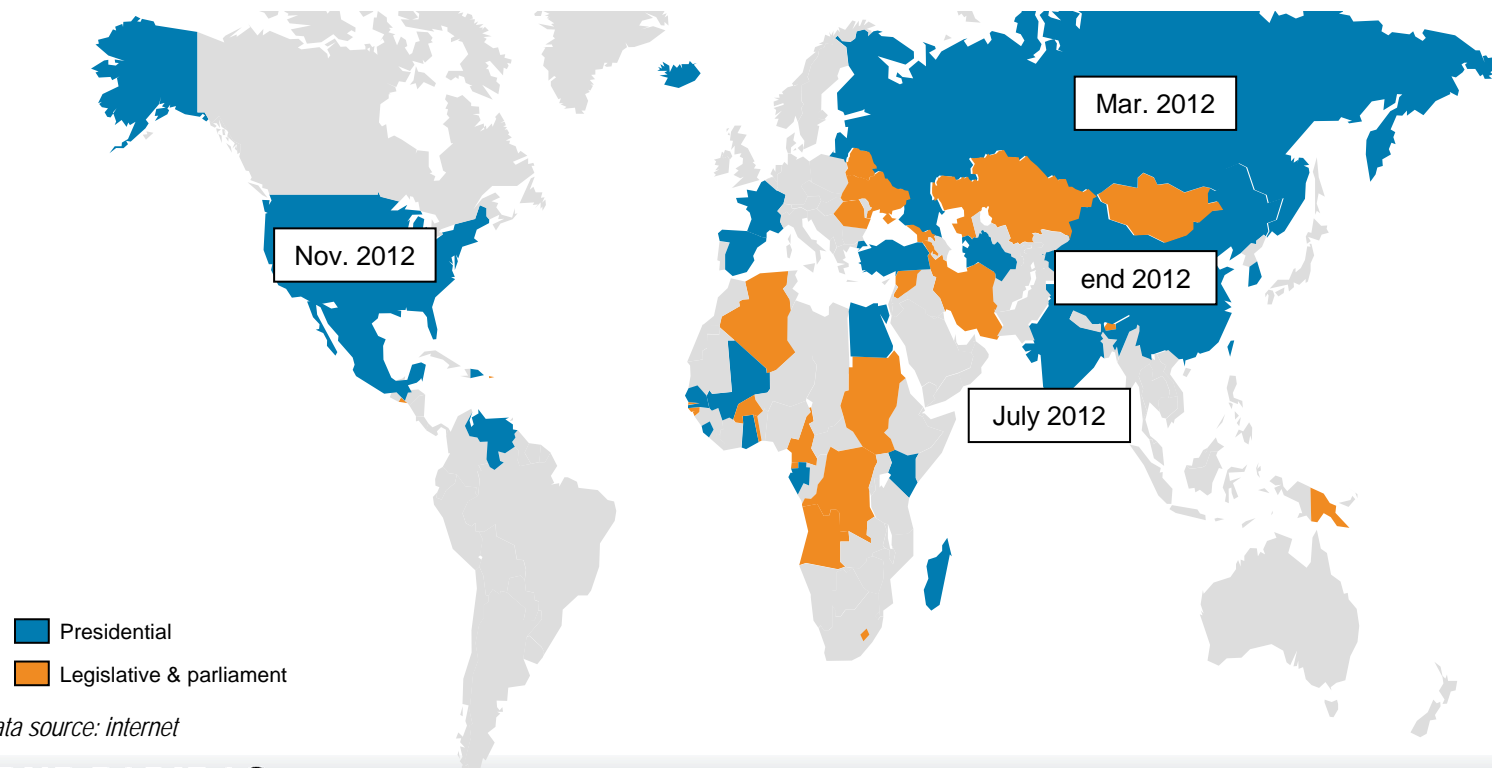


# 2012 could be exposed to political changes

## 3 Future – decisions to come

- Political events in 2012 at numerous countries involved in agri-trade will certainly trigger decisions from governments
- As a reminder, the 2012 calendar includes the 2012 USA Farm Bill and the preparation of the 2013 EU Common Agricultural Policy (CAP)

## Major political events in 2012



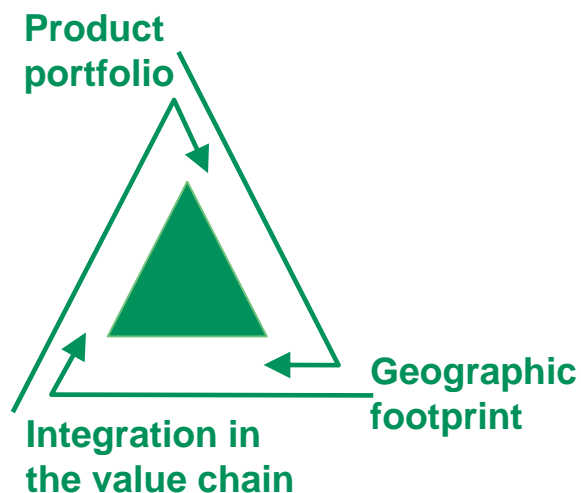
# Success in trade will rely on combined factors

## 3 Future – considerations for the future

The trade will have to integrate factors along economies of scale in a reshaping world

- Risk control: volatility, diversification (products, geographic vs. climatic/political risks)
- Strategic upstream and downstream integration
- Sustainability and access to water & land resources

### Considerations when trading agri-commodities



#### Product portfolio

- Complementarity and substitution
- Degree of processing (incl. biofuels)

→ *Relocation of processing and added value*

#### Geographic footprint

- Origin and destination of products
- Localization of logistics and industrial assets

→ *Reshuffling of origination and destinations*

#### Integration in the value chain

- Access to land and relation with upstream farming
- Service offered to clients (logistics, financial...)

→ *Greater integration through partnerships*

Data source: BNP Paribas



**THANK YOU**



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