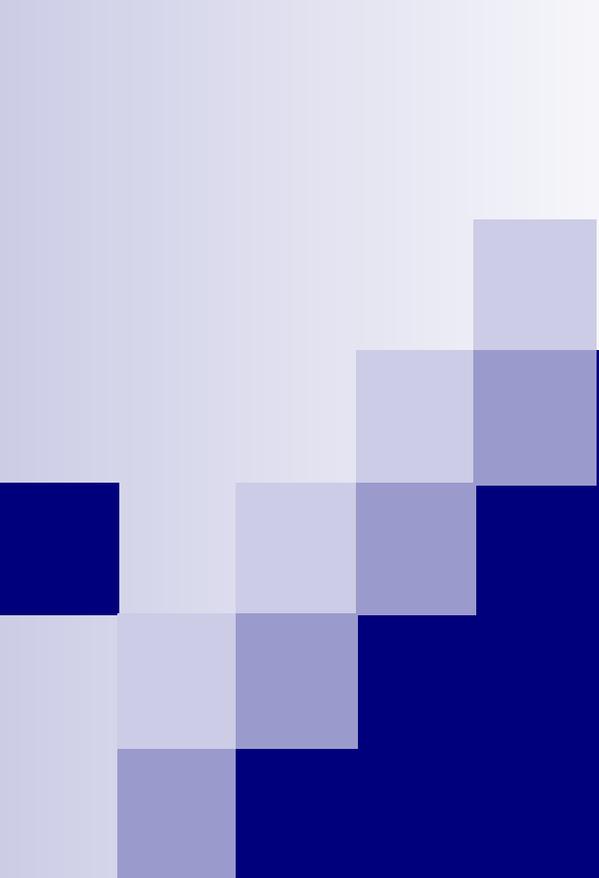


# The globalization of food markets

Impact on food quality and safety



# 1. Some facts and figures

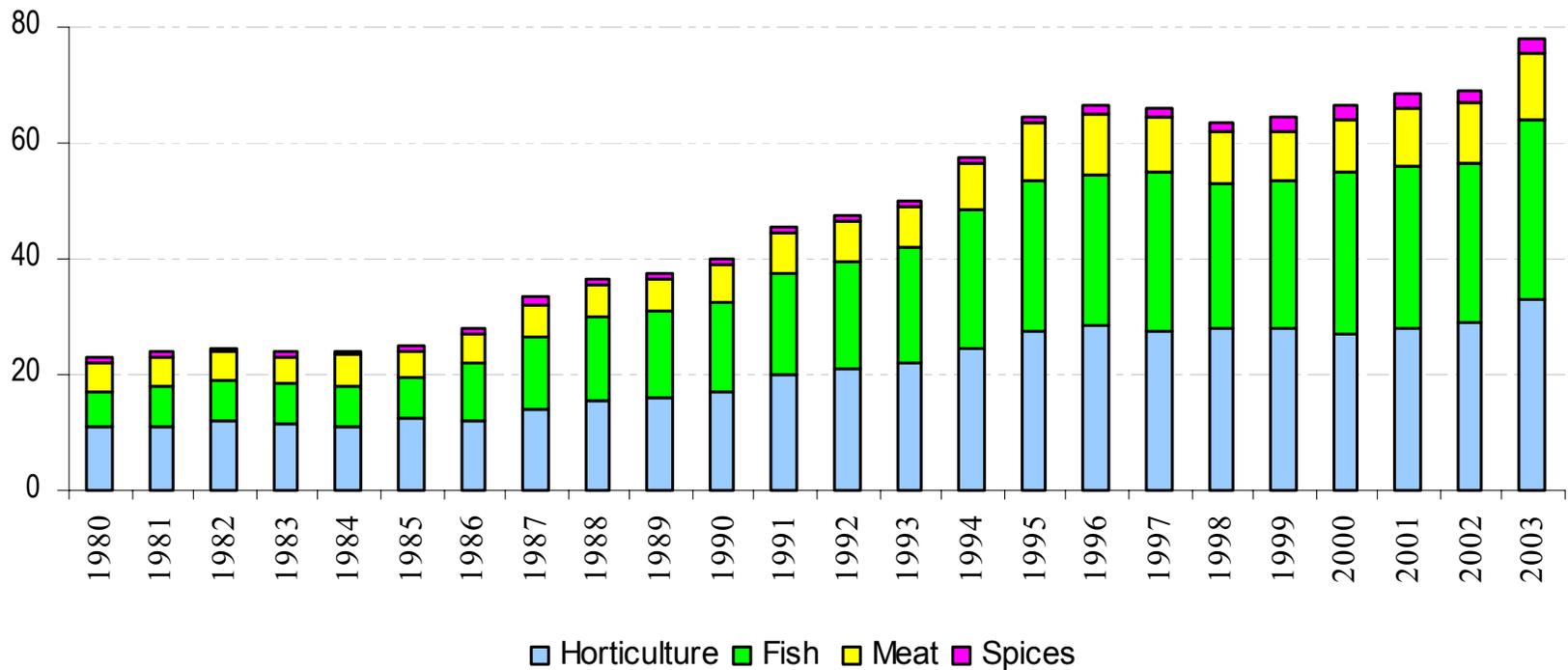
# Agricultural Trade (2004)

		Percent change		
		2000 - 2004	2003	2004
	<b>Value (US\$ billions)</b>			
<b>Agricultural products</b>	<b>783</b>	<b>9</b>	<b>16</b>	<b>15</b>
<b>Food</b>	<b>627</b>	<b>10</b>	<b>17</b>	<b>14</b>
<b>Fish</b>	<b>70</b>	<b>7</b>	<b>11</b>	<b>14</b>
<b>Other food products</b>	<b>557</b>	<b>10</b>	<b>17</b>	<b>14</b>
<b>Raw materials</b>	<b>156</b>	<b>7</b>	<b>15</b>	<b>18</b>

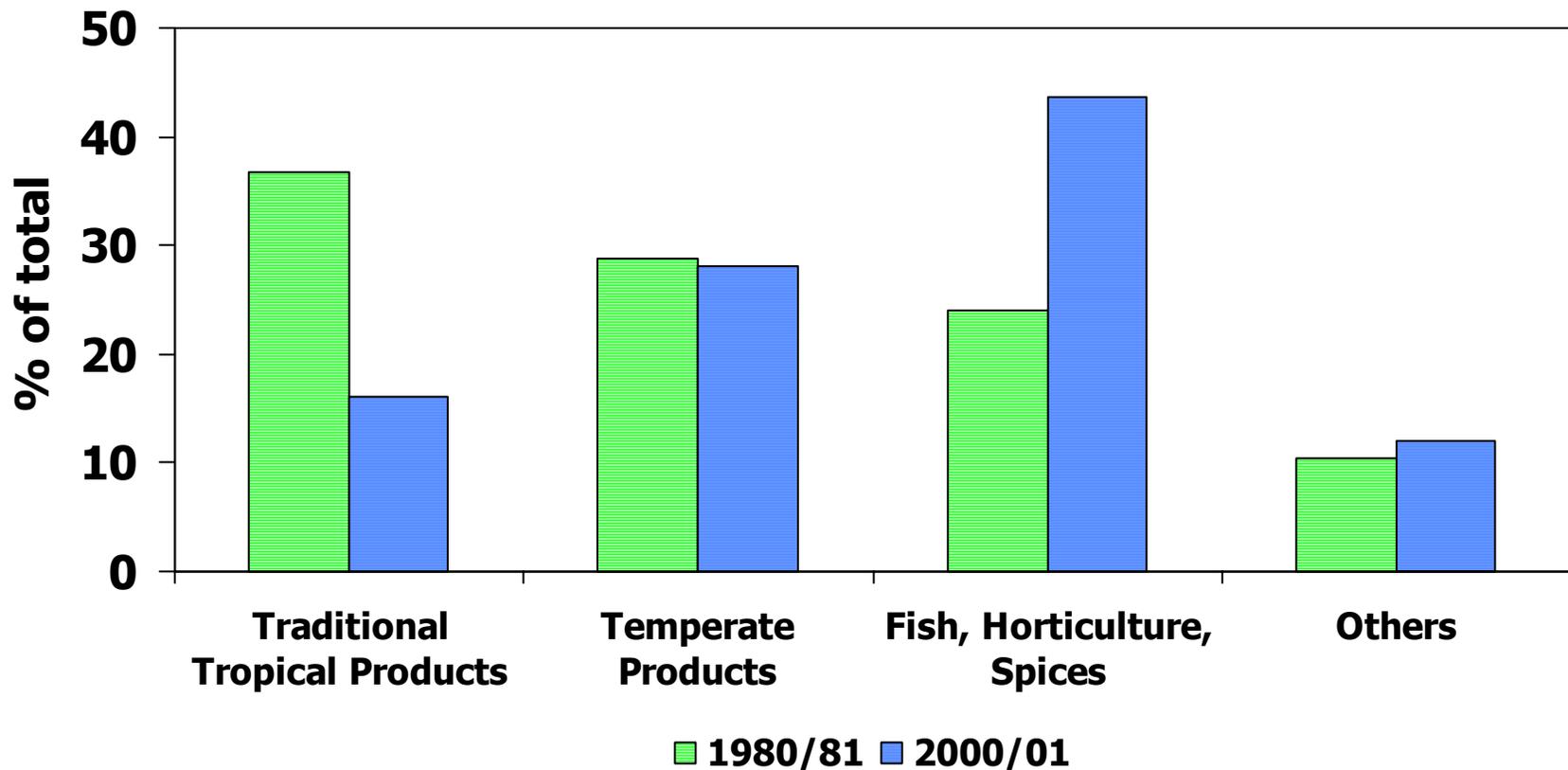
# Leading exporters & importers

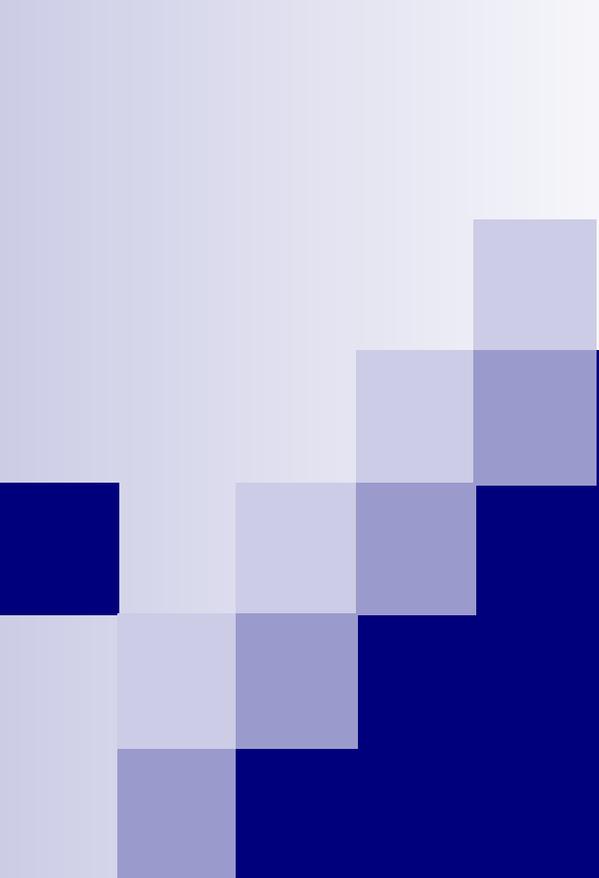
	Exports	Imports
European Union	78.41	108.67
United States	79.57	88.11
Japan	~5	65.43
China	24.12	42.28
Canada	40.10	19.37
Brazil	30.85	(US\$ billion in all cases)
Australia	22.10	
Argentina	17.08	

# Developing country exports of high-value products (US\$ billion)



# Changing pattern of developing country exports





## 2. Food quality and safety

Main trends

# Changes in consumer preferences

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- Genuine concern about safety
- Tendency to prefer:
  - Organic (biological) foods
  - Fair trade products
  - Sustainable production
  - Environmental-friendly production
  - GMO-free

# Changes in marketing practices

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- Consolidation of food companies
  - Consolidation of brand-names
- Growth (and power) of supermarkets
  - Growth of supermarket house-brands
- Centralized purchasing

# Changes in EU legislation

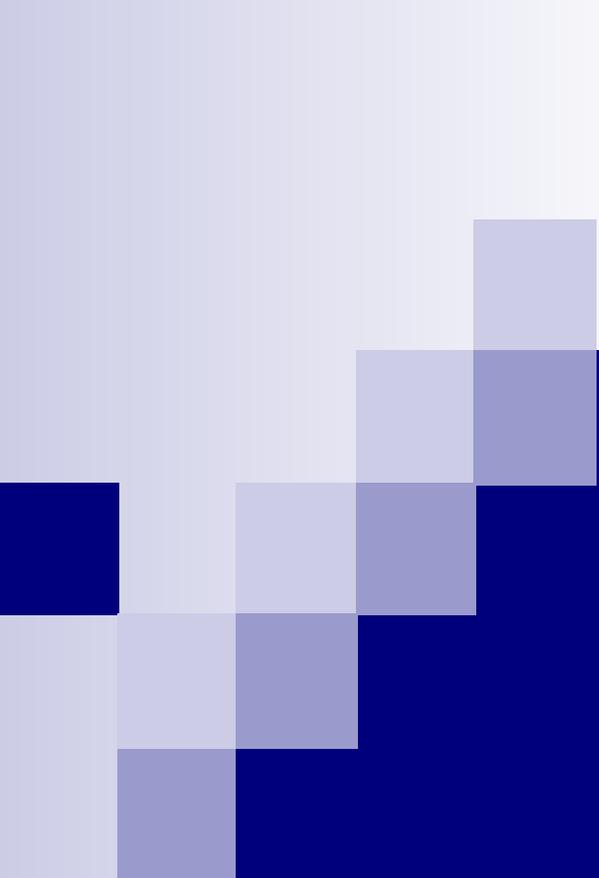
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- Response to BSE and dioxin
- Responsibility for food safety
  - Food businesses
  - Suppliers to food businesses
  - From production to consumption
- Based on HACCP principles
- Includes traceability requirements

# International changes

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- WTO obligations (1995)
  - Agreement on the application of sanitary and phytosanitary measures (SPS)
  - Agreement on technical barriers to trade (TBT)
- Cartagena protocol on biosafety (2003)
- Potential responses to bioterrorism



# 3. International standards

Codex

OIE

ISO

Private-sector standards

# Codex Alimentarius

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- Food standards, guidelines and codes
- Protecting consumer's health
  - Additives, contaminants, residues
  - Foods from biotechnology
  - HACCP principles for food safety
- Fair practices in food trade
  - Quality, composition and labelling
- Inspection, testing and certification systems

# Codex Alimentarius

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- Reference point for WTO
  - SPS matters for food safety
  - TBT matters, especially labelling
- Quoted extensively in EU and other legislation
- Used extensively in developing countries
- Highly influential

# OIE: World Organization for Animal Health

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- Animal health and animal welfare standards
  - Terrestrial animals (including birds and bees)
  - Aquatic animals
- Zoönotic diseases – diseases transmitted from animals to humans
- Food safety issues derived from animal production (e.g. BSE, tuberculosis, brucellosis)

# ISO: International Organization for Standardization

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- ISO 9000 series for quality management
- ISO 14000 series for environmental management
- ISO 17000 series for conformity assessment
- **ISO 22000 series for food safety management**

# Private-sector standards

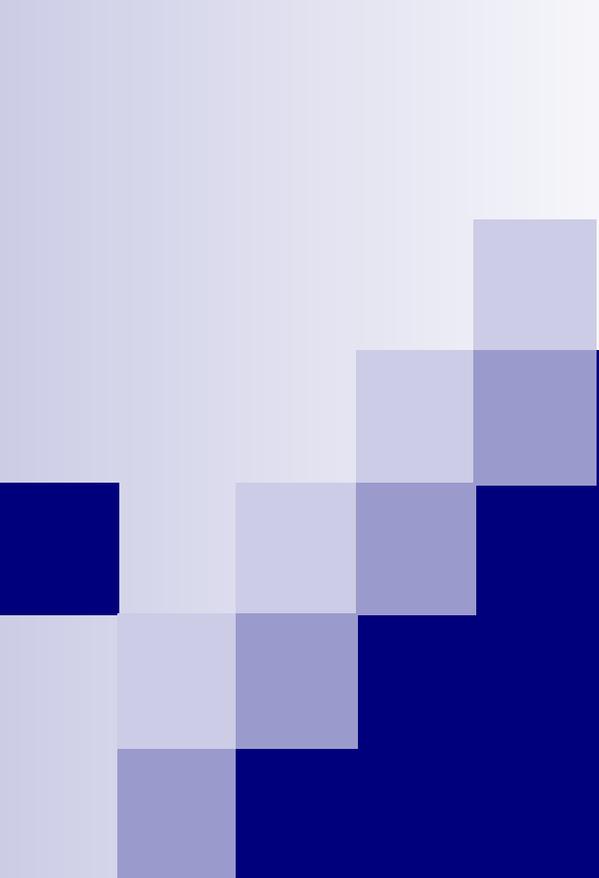
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- Euro-retailer Produce Working Group (EurepGAP)
  - Horticultural produce
  - Aquaculture
  - Coffee
- British Retail Consortium
- SQF 2000
- Food Safety Initiative

# Voluntary standards

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- Organic (biological)
  - IFOAM standards
- Social Accountability Initiative
  - SA8000 standards
- Fair Trade Labelling
- Rainforest Alliance
- COLEACP Harmonized Framework (horticulture)



## 4. Current issues in global food safety

# Avian influenza

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- Primarily an animal disease
- May be transmitted to humans
  - Infrequent
  - Requires close contact with infected birds
  - Human-to-human transmission rare
- Not transmitted through foods
  - Poultry meat
  - Eggs and egg-products

# GM food

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- GM crops now grown commercially in 17 countries, including Spain
- Dominant crops are soybean, maize, cotton and oil-seed rape
- Most legislation requires pre-market approval, labelling and monitoring
- Other issues include adventitious presence and co-existence

# Pathogen-reduction

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- Reduction of food-borne illness caused by microbiological contamination
  - E. coli, Salmonella, Campylobacter, Listeria, etc.
- HACCP is the preferred approach  
(in place of end-product specifications)
- Reduction has been shown in epidemiological studies in Europe and US

# Risk analysis

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- Scientific basis for standard-setting
- Three components
  - Risk assessment
  - Risk management
  - Risk communication
- Open and transparent process
- Basis for Codex and OIE standards and the WTO/SPS Agreement

# Defining the roles of the public and private sectors

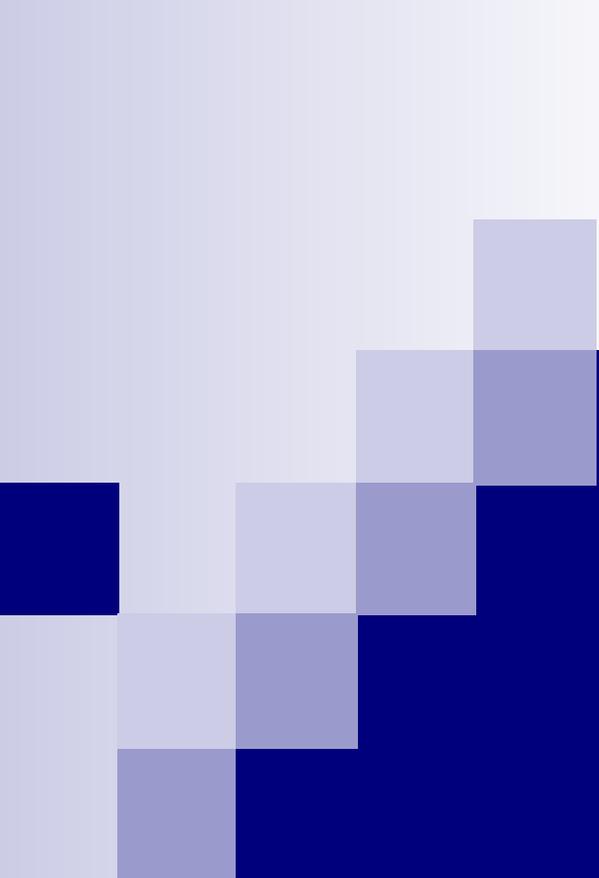
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- Food safety and quality (mixed system)
  - Government sets standards
  - Private sector manages the standards
  - Private sector demonstrates compliance
  - Government audits and inspects as necessary
- Animal health and plant health
  - Government sets and manages standards
  - Private sector complies

# Role of trading partners

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- At government level:
  - Establish equivalence of measures and systems
  - Enter into Memoranda of Understanding
  - Participate in standards-setting and dispute settlement in Codex and WTO
- At private level:
  - Enter into contractual agreements based on systems management standards (e.g. ISO, EurepGAP)
  - Apply third-party conformity assessment and auditing



## 5. Food quality and safety in a global market

Are we better off?

# Impact of the WTO Agreements

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- Sound legal basis for consumer protection
- More clarity in setting and applying standards and other measures
- Irrelevant and arbitrary measures abolished
- Resources shifted to more effective measures

## **Result:**

- More effective regulation

# Impact of equivalence

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- The capability of different systems and measures to meet the same objectives
- Eliminates duplication and improves use of collective resources
- Exchange of expertise and information

## **Result:**

- Enhanced assurance of conformity

# Impact of risk analysis

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- Better understanding of food hazards
- Better management of potential risks
- Closer involvement of all interested parties
- Better communication of outcomes

## **Result:**

- Safer food

# Impact of private standards

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- Better guarantees of conformity with standards
- Better control throughout the food chain
  
- Expensive to operate
- Not transportable from system to system

## **Result:**

- Good for consumers
- Not so good for producers

# Impact of globalization

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- Greater variety of foods available
- Improved market possibilities
- Flexibility of resource management
- Cheaper supply costs
- Improved control systems

*but*

- Frequent surprises (Sudan and Para red)
- Increased system costs (~1 %)

Thank you

