

Trade in Food and Agriculture: Trends and Patterns

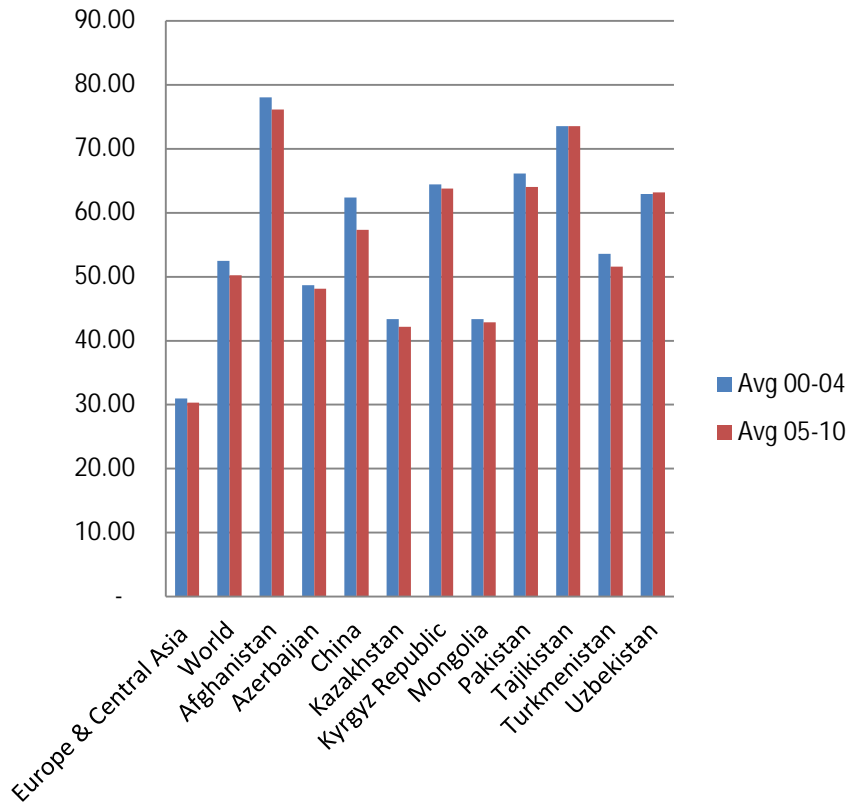
Soamiely Andriamanananjara

Agriculture is an important sector for most CAREC economies

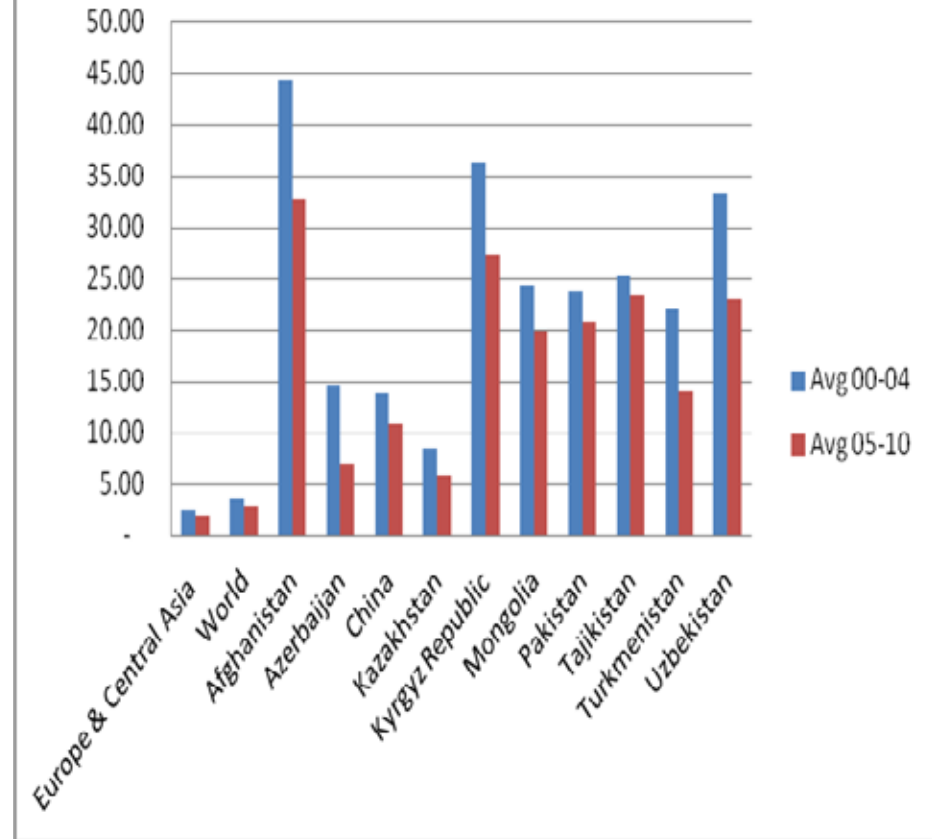
	Rural population (% of total population)	Employment in agriculture (% of total employment)
Afghanistan	77.02	
Azerbaijan	48.39	39.58
China	59.63	45.98
Kazakhstan	42.74	32.72
Kyrgyz Republic	64.09	42.28
Mongolia	43.11	41.82
Pakistan	64.99	44.30
Tajikistan	73.55	55.50
Turkmenistan	52.51	
Uzbekistan	63.08	
<i>Europe & Central Asia</i>	<i>30.64</i>	<i>10.90</i>
<i>World</i>	<i>51.25</i>	<i>33.78</i>

... important but declining

Rural population (% of total population)

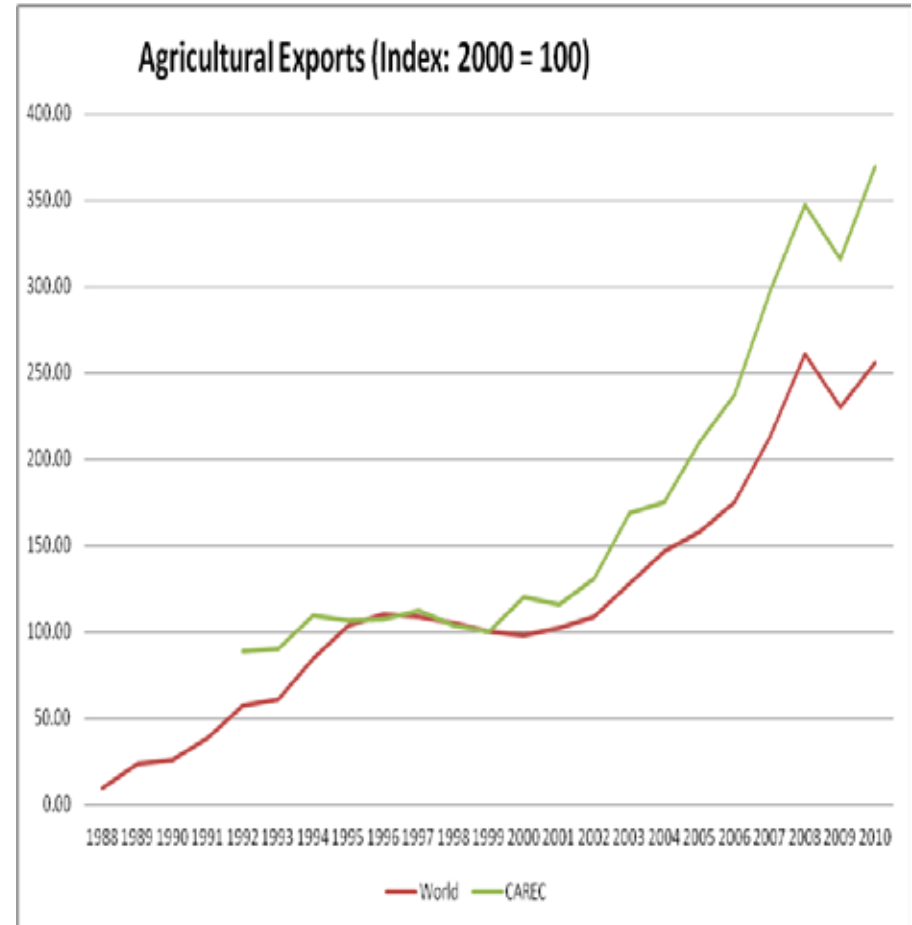
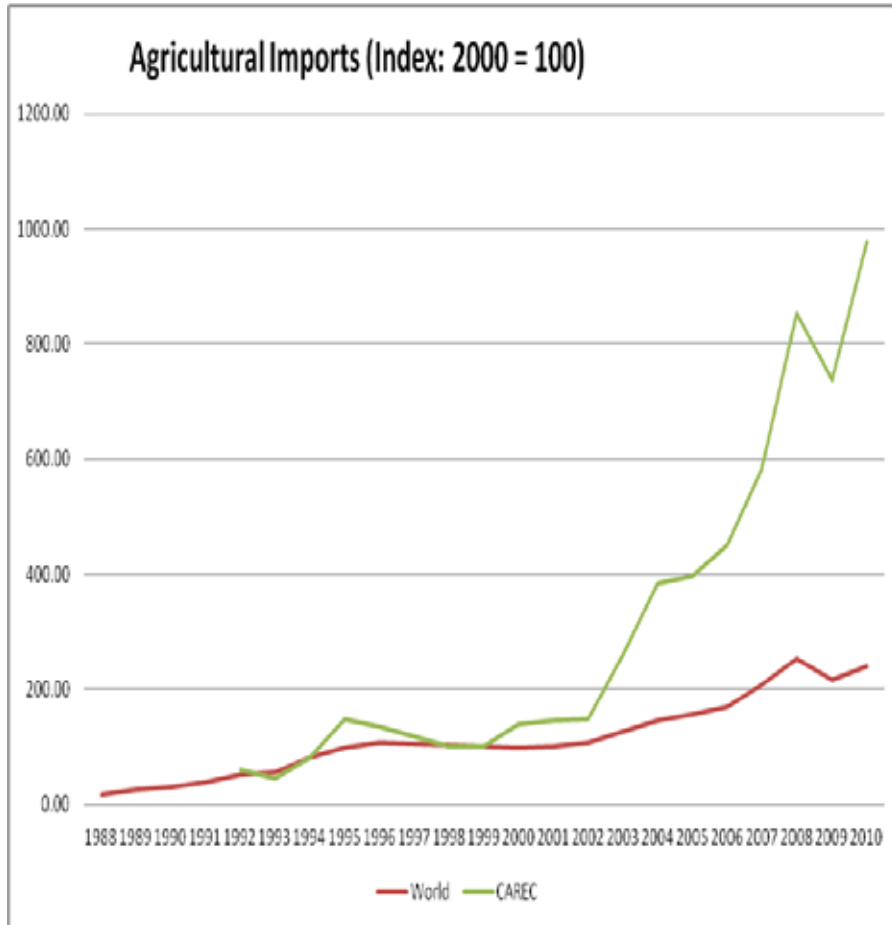


Agriculture, value added (% of GDP)



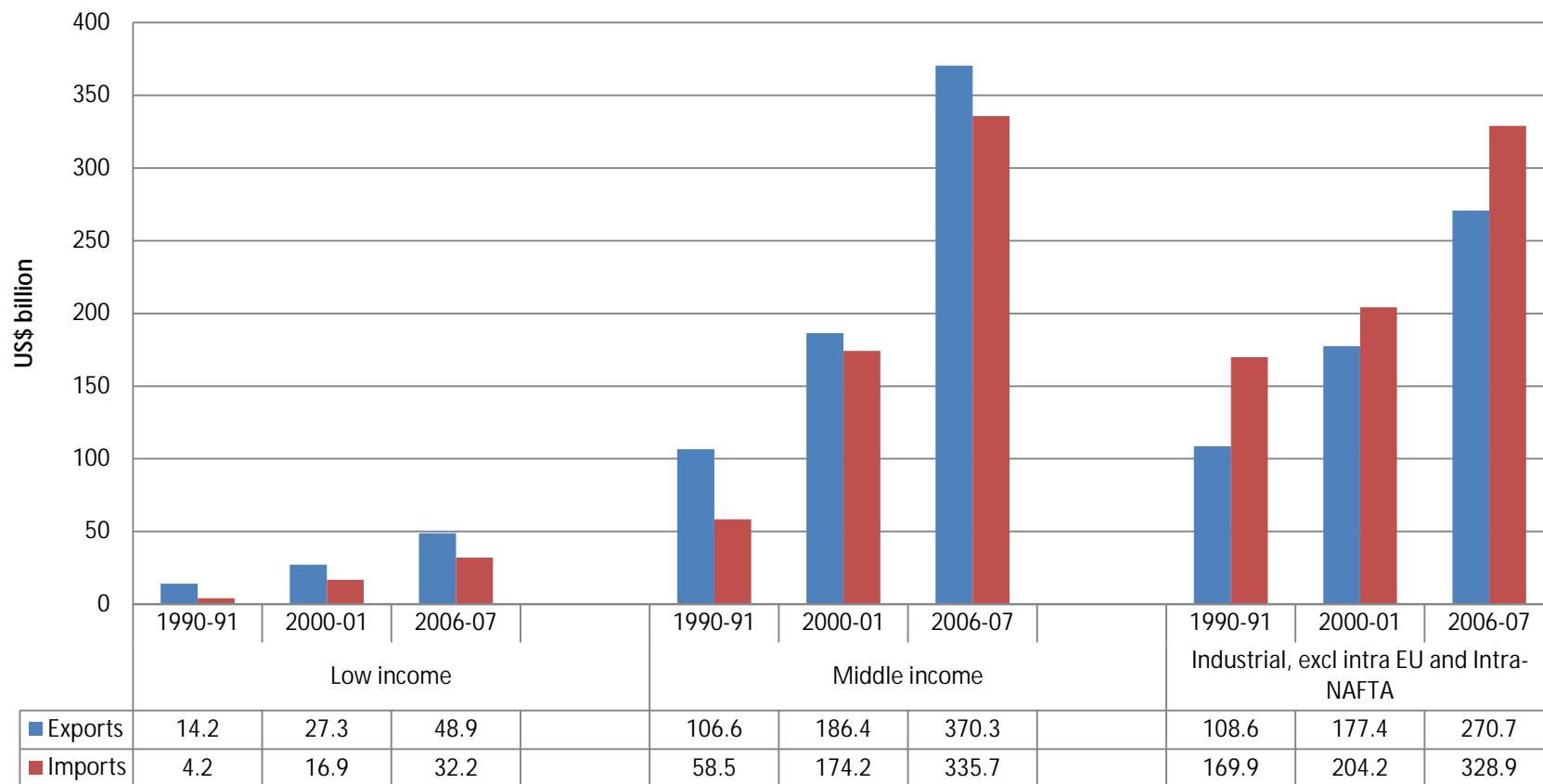
TRENDS IN AGRICULTURAL TRADE

Agricultural trade has been steadily increasing over the past two decades. Growth rates were higher in CAREC Countries ...



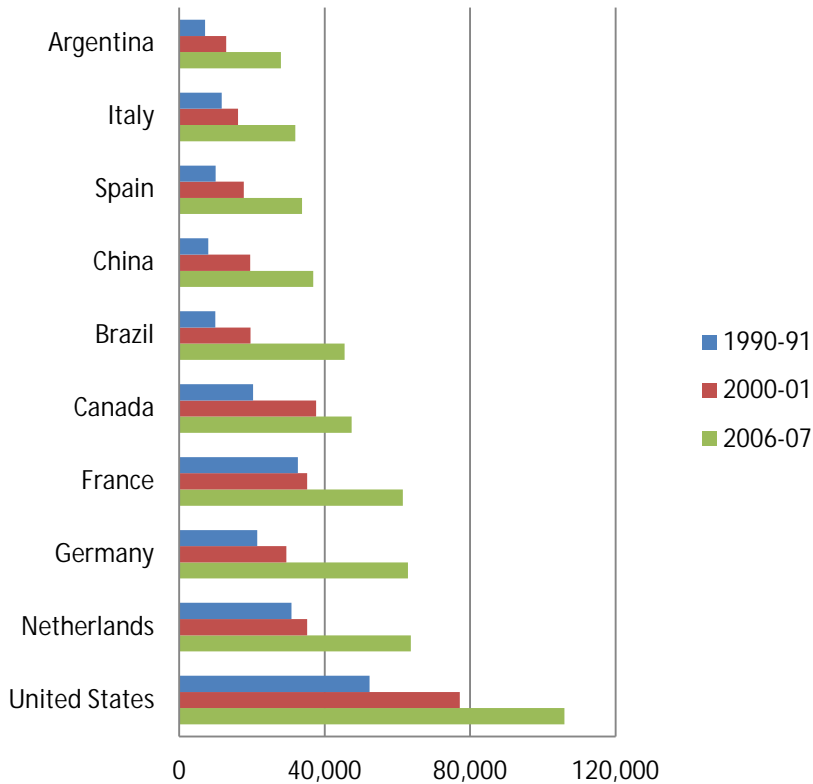
Agricultural Trade growth has been driven by middle-income countries

Global trade flows (excl. intra EU and NAFTA flows)

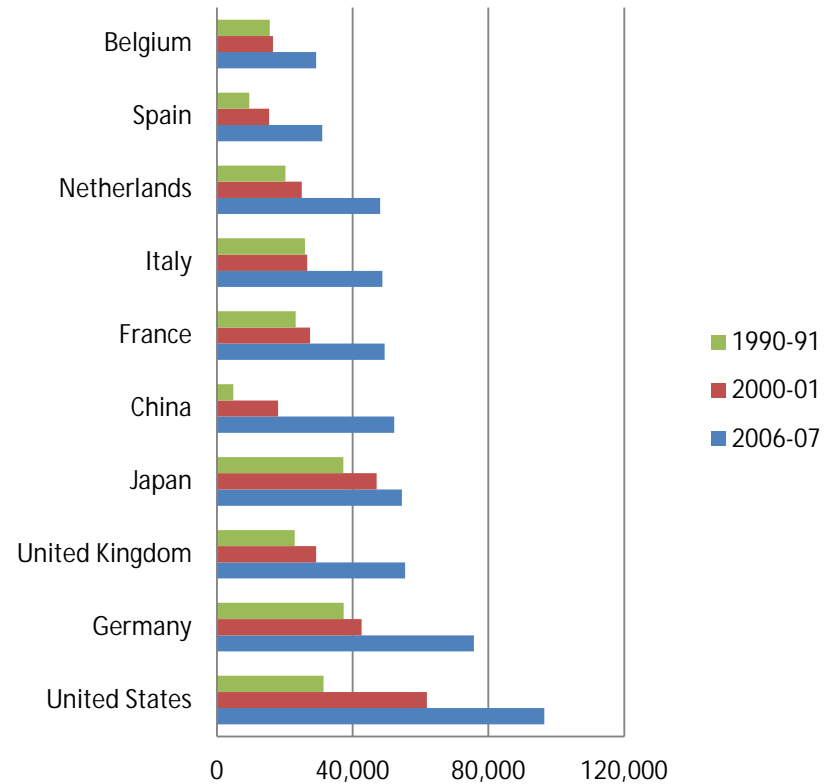


Top Traders

Top 10 Agricultural Exporters (US\$ million)

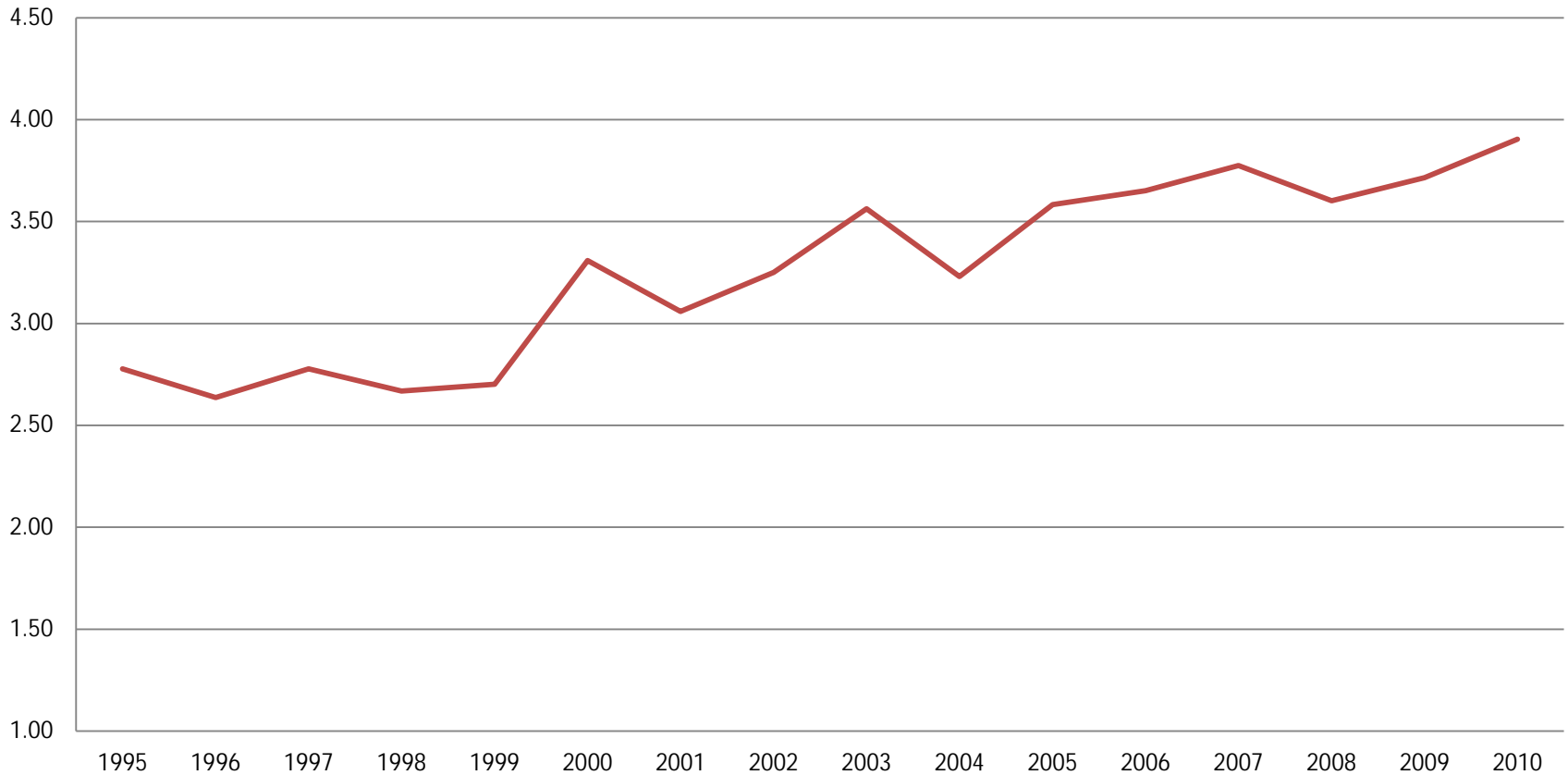


Top 10 Agricultural Importers (US\$ million)

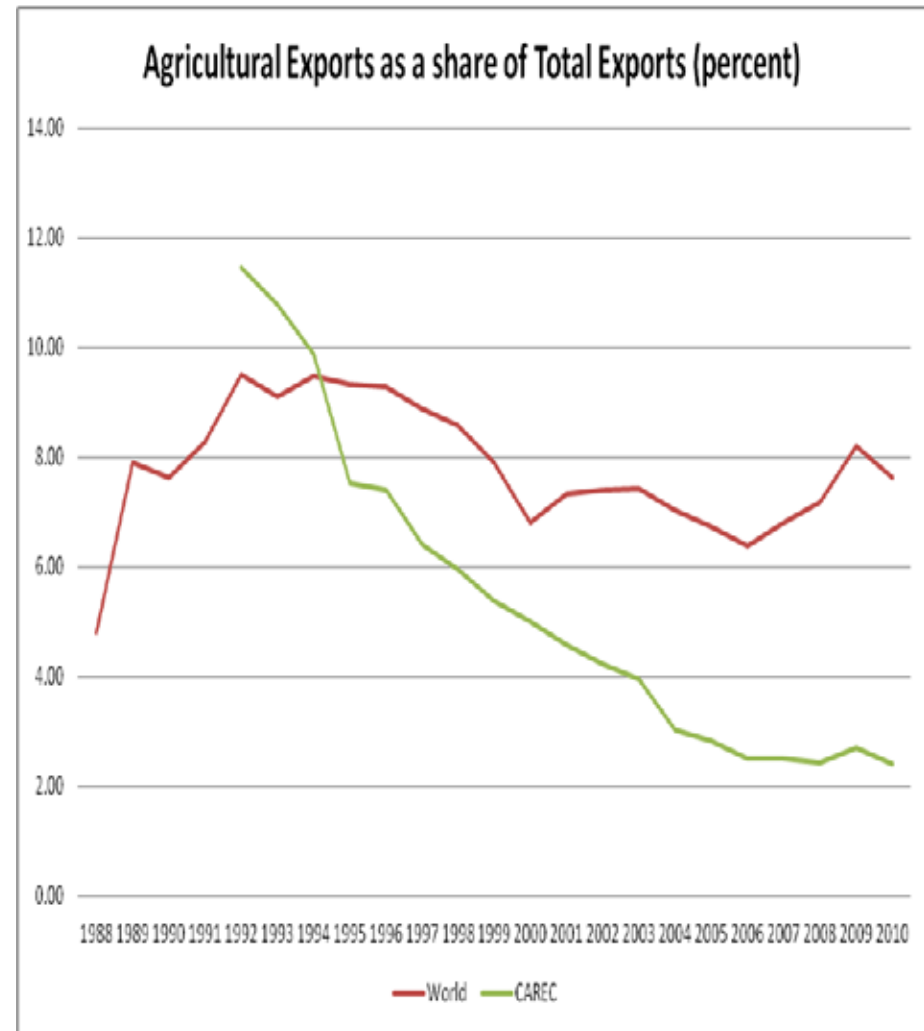
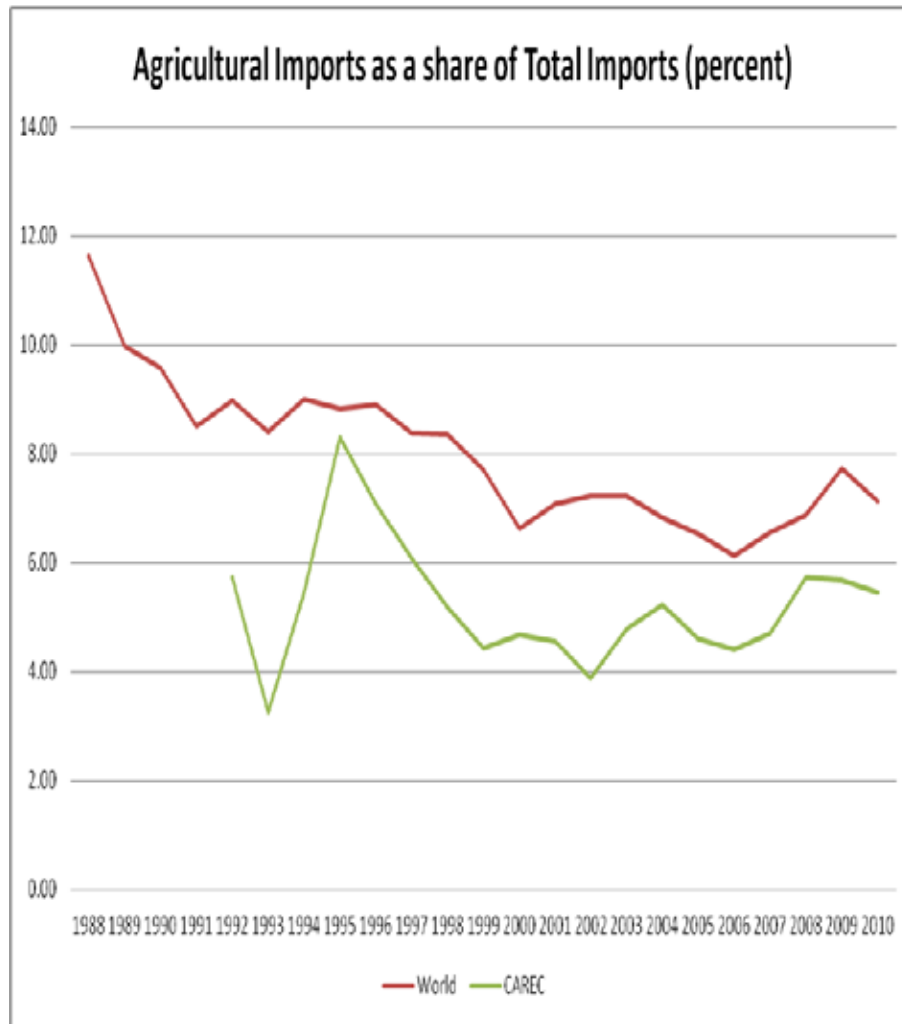


CAREC still small player in global agricultural market, but market share is increasing.

CAREC Share of Global Agricultural Export Market (percent)



Importance of agriculture in total merchandise trade has been going down, especially for CAREC Countries

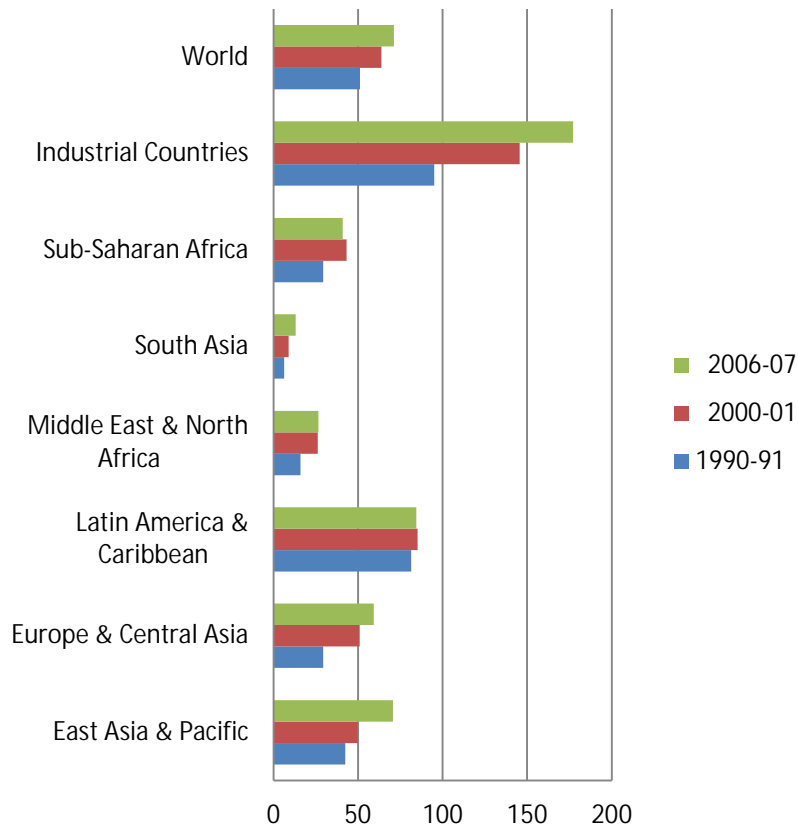


CAREC countries tend to trade less intensively in agriculture, relative to the importance of agriculture in the GDP

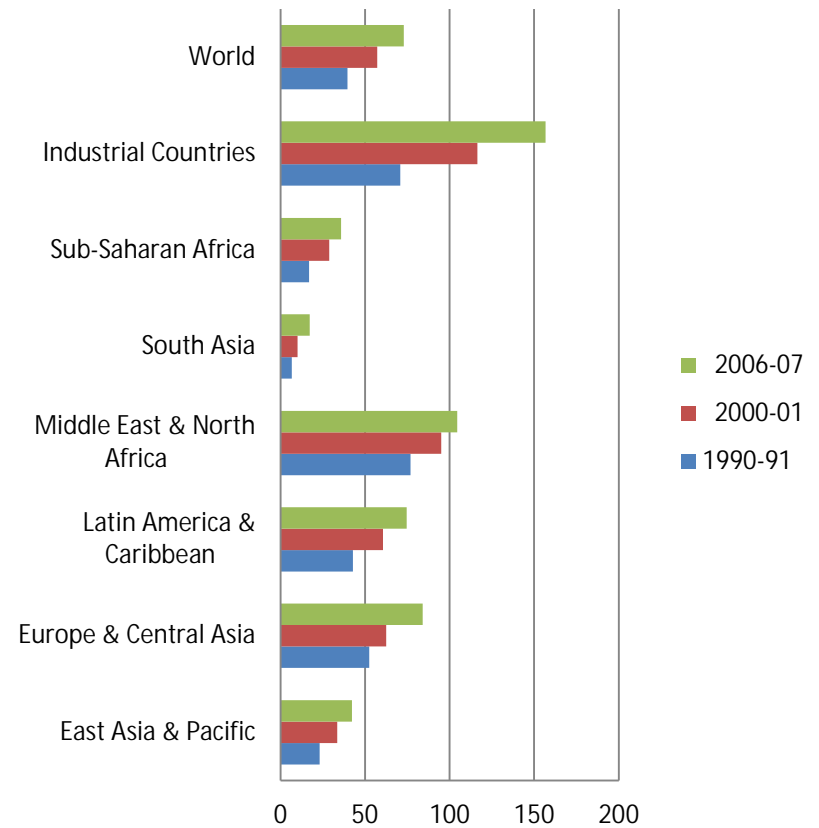
	Agriculture Exports (% of Total Exports)	Agriculture, value added (% of GDP)
Afghanistan	56.87	36.51
Azerbaijan	5.25	10.59
China	3.95	12.23
Kazakhstan	5.06	7.13
Kyrgyz Republic	18.85	31.52
Mongolia	11.54	21.95
Pakistan	14.41	22.21
Tajikistan		24.24
Turkmenistan	14.74	17.73
Uzbekistan		27.72
<i>World</i>	7.27	3.19

Trade Intensities

Agric Exports/ Agric-GDP (%)



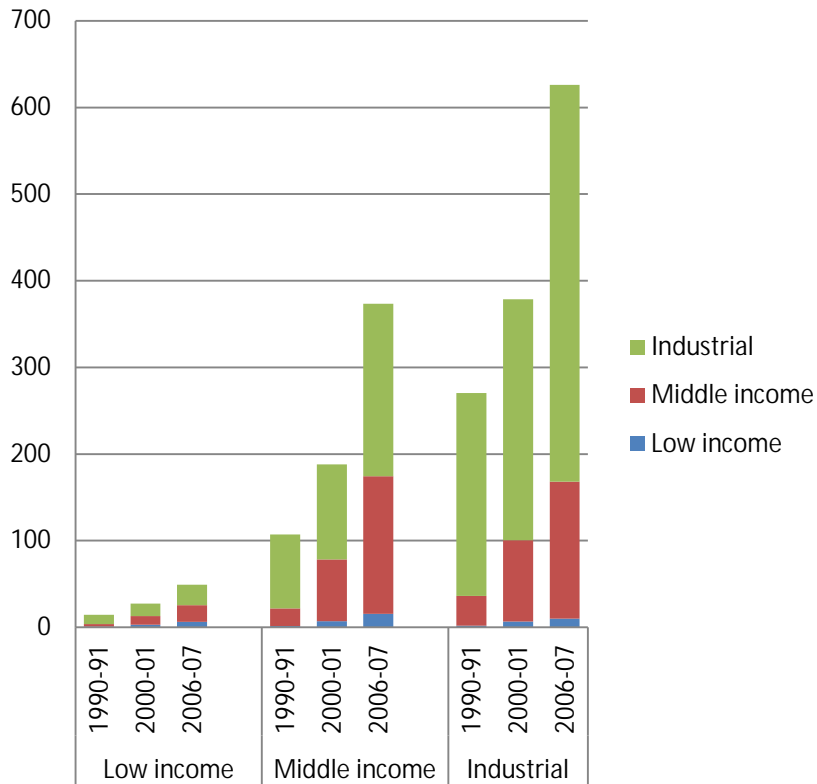
Agric Imports/ Agric-GDP (%)



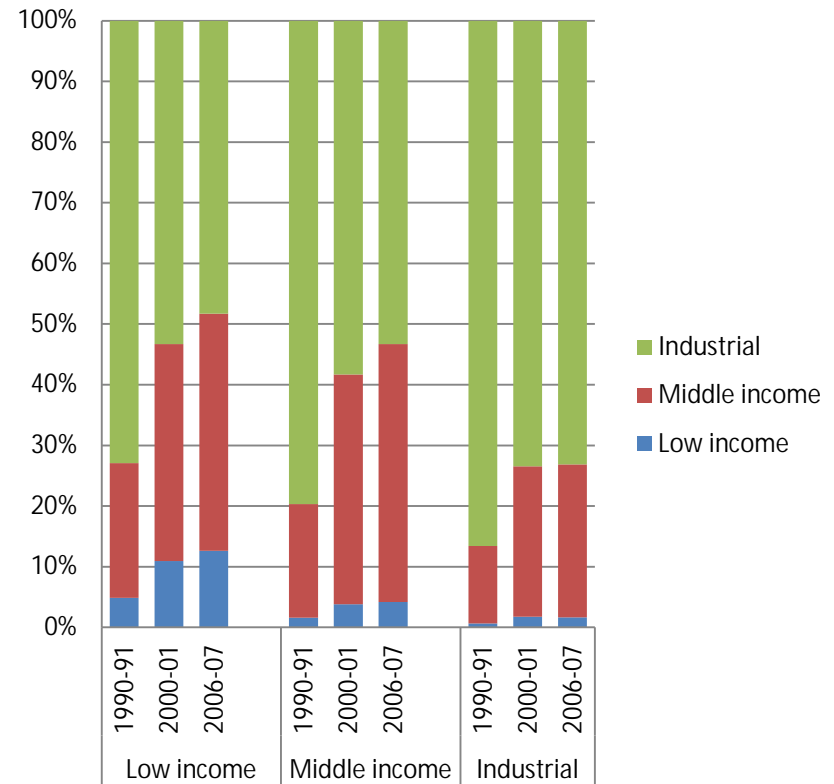
DIRECTION OF AGRICULTURAL TRADE

Middle income countries become more important.

Global Agriculture Export Flows (US\$ billion)



Global Agriculture Export Flows (percent)



With whom do CAREC members trade?

Destination of Agricultural Exports	CAREC	China	EU	India	MENA	Russia	USA
Afghanistan	33.08	0.32	2.05	34.29	10.42	10.67	2.44
Azerbaijan	5.13	0.10	8.32	0.06	2.44	70.21	0.20
China	1.43	0.00	13.36	1.38	2.61	3.09	8.57
Kazakhstan	42.19	0.94	11.23	0.65	11.62	20.12	0.13
Kyrgyz Republic	32.65	6.01	9.16	0.10	2.00	40.63	0.13
Mongolia	66.78	66.04	5.96	0.09	0.85	20.57	0.55
Pakistan	16.20	1.36	11.72	2.63	9.50	0.67	1.95
Turkmenistan	5.74	2.62	9.16	0.11	11.75	4.74	2.13
CAREC	4.85	0.32	13.00	1.49	3.55	4.86	7.50

CHANGING PATTERNS IN AGRICULTURAL TRADE

Changing patterns of agricultural trade

The structure of agri-food exports has changed considerably during the past 20 years

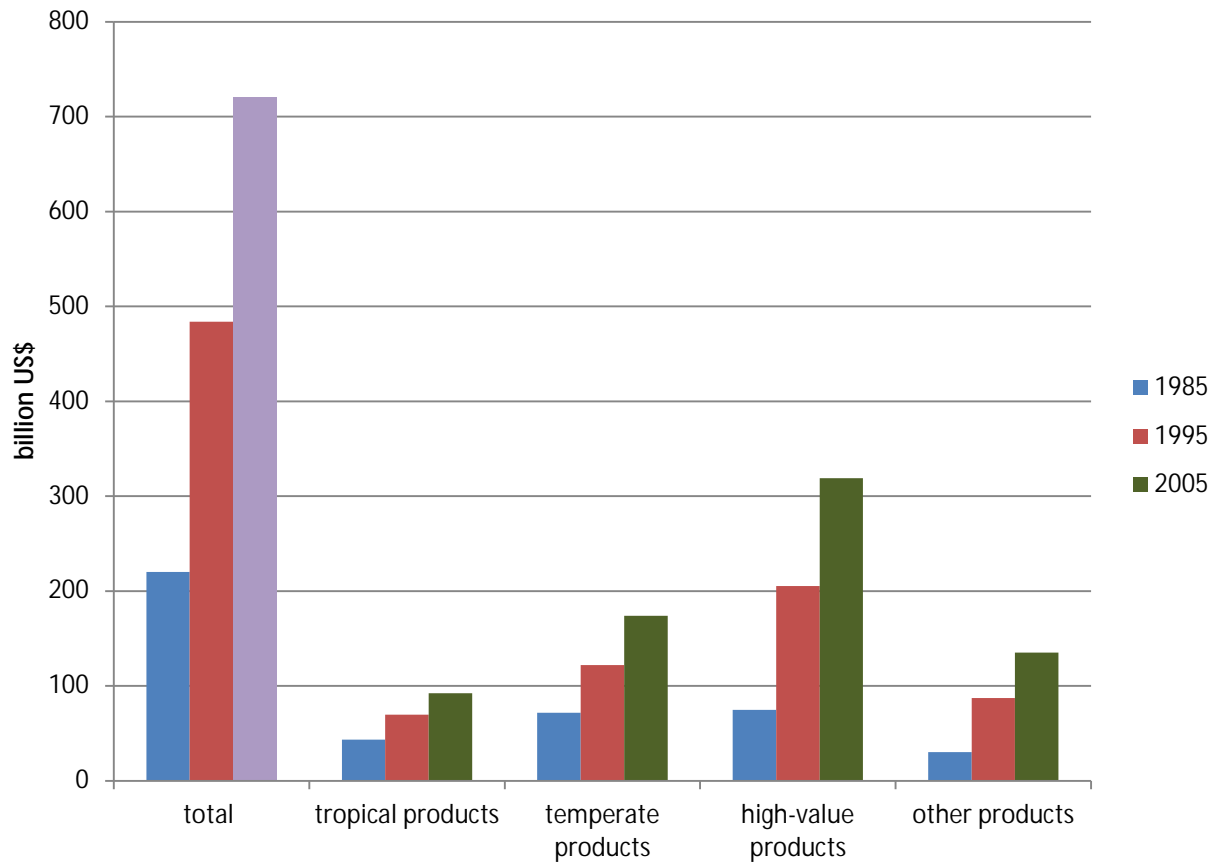
- There has been a shift from traditional agricultural export commodities towards non-traditional exports
- There has been an increase in the exports of fresh food products
- There has been an increase in exports of processed products
- Ø Increase of **high-value exports**

Shift away from bulk commodities and toward higher valued commodities

- Liberalized trade policies in rich countries, and Structural changes in developing countries
- Liberalization of the investment regime and efforts to attract FDI in the agro-food industry (in food-processing, export and retail)
- saturation of demand for bulk commodities in many countries.
- improvements in global transportation and communication systems (speed delivery times and allowing products to be shipped in cold storage)-- increase in often highly perishable fruits and vegetables.
- Changing consumer preferences due to increasing incomes, changing dietary habits, increased health awareness:
 - Increased consumer demand for fresh food, for processed and convenience prepared food
 - Consumer interest in product variety and year-round availability of fresh food-- changing demand patterns towards increased consumption of off-season fruits and vegetables in high-income countries

Changing patterns of agricultural trade

Changing structure of world agricultural trade



Tropical products: coffee, cocoa, tea, nuts and spices, textile fibres, sugar and confectionary

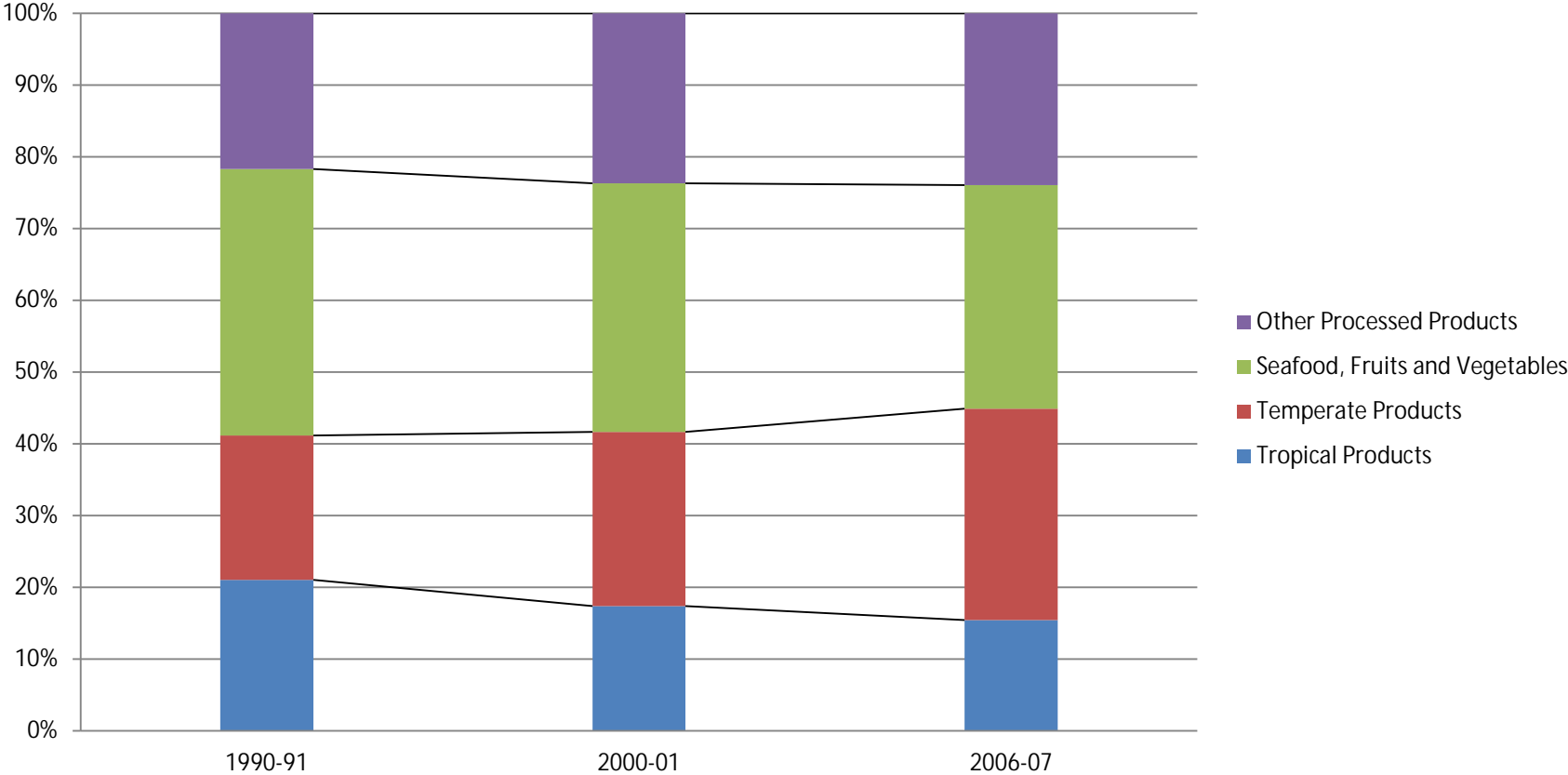
Temperate products: cereals, animal feed and edible oils

High-value products: fruits, vegetables, fish, seafood, meat and meat products, milk and dairy products

Other products: tobacco and cigarettes, beverages, rubber, and other processed food product

Source: calculated from FAOSTAT, 2009

Developing Country Exports (percent)



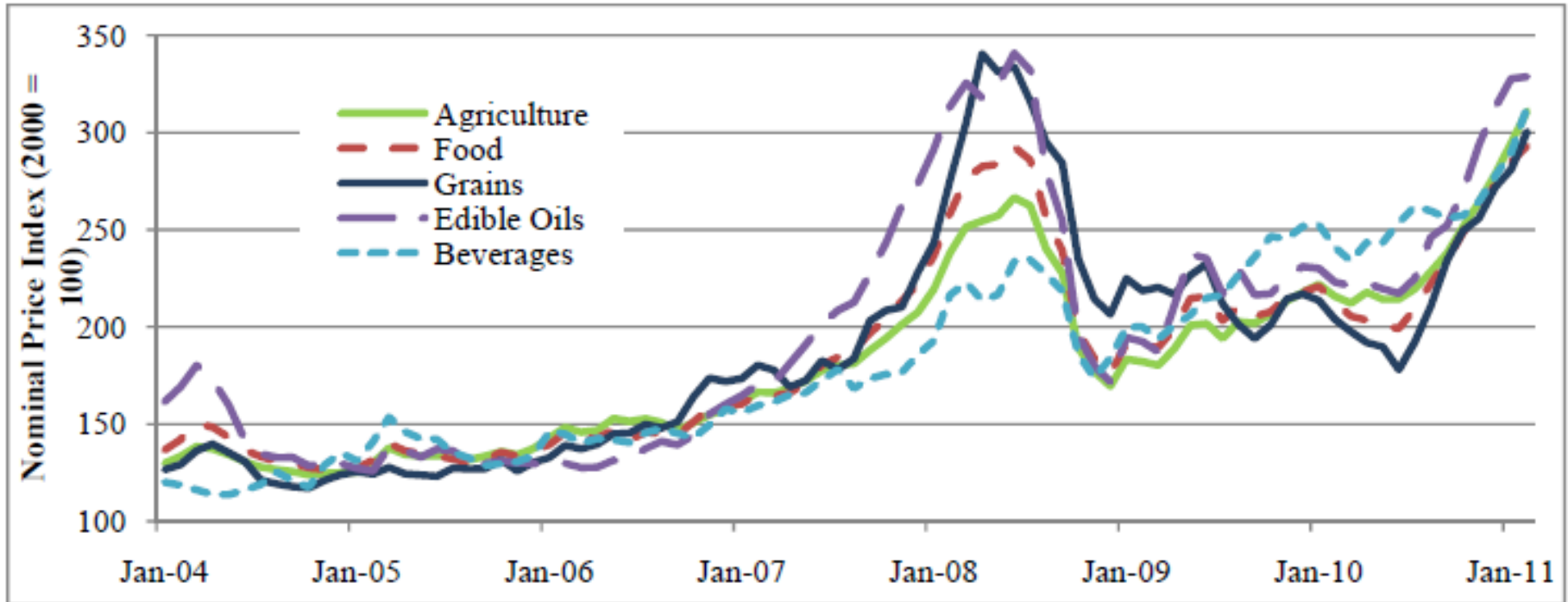
What do CAREC countries trade?

	Exports	Value (1000 \$)		Exports	Value (1000 \$)
Afghanistan	Raisins	53359	Mongolia	Hair Fine	33806
	Almonds Shelled	35476		Horse meat	12246
	Almonds, with shell	23966		Chocolate Prsnes	8000
	Pistachios	19902		Hair Carded/ Combed	6394
Azerbaijan	Sugar Refined	102052	Pakistan	Rice Milled	1771470
	Oil Hydrogenated	54422		Alcohol Non Food	161043
	Hazelnuts Shelled	52437		Oil Hydrogenated	127117
	Fruit Fresh Nes	46079		Rice Broken	114628
China	Food Prep Nes	1950630	Tajikistan	Cotton lint	70989
	Fruit Prp Nes	1128947		Fruit Dried Nes	39559
	Garlic	1086316		Tomatoes	37000
	Paste of Tomatoes	812363		Onions, dry	15161
Kazakhstan	Wheat	632854	Turkmenistan	Cotton lint	83164
	Flour of Wheat	574526		Cottonseed	6750
	Cotton lint	83172		Cotton Waste	2356
	Barley	39055		Cotton Linter	2000
Kyrgyz Republic	Cherries	35379	Uzbekistan	Cotton lint	259671
	Grapes	32433		Grapes	48534
	Beans, dry	30659		Fruit Fresh Nes	35164
	Cotton lint	21504		Raisins	23283

PRICE VOLATILITY

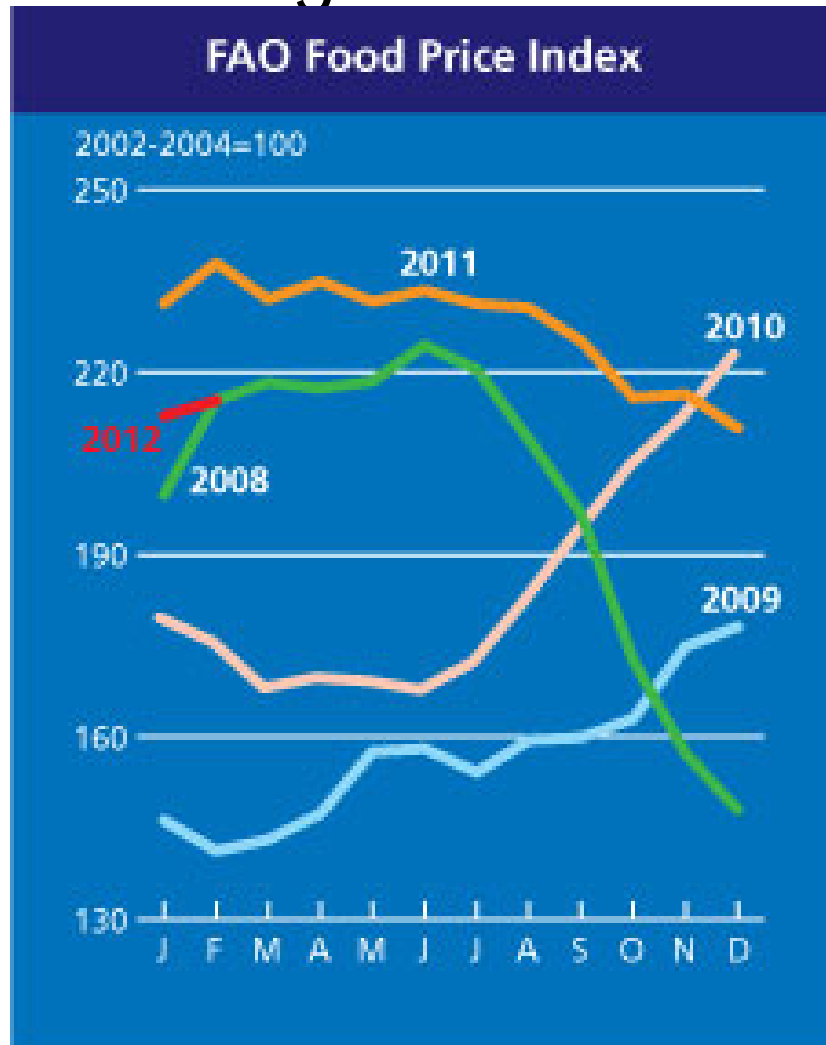
Global Food Price Index

Figure 1: Food commodity price spikes since 2004



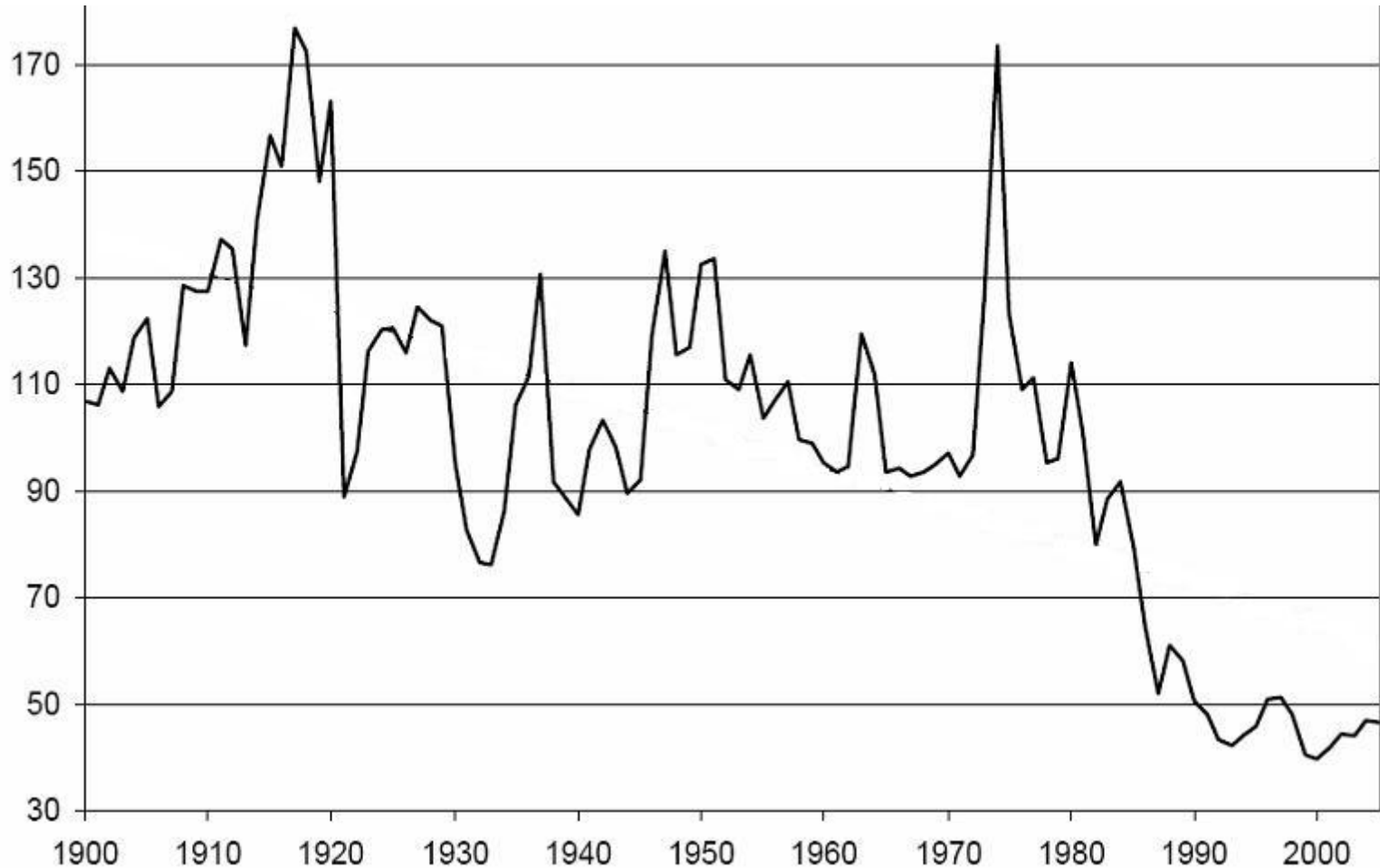
Source: World Bank.

Soaring Food Prices



From a longer/real term perspective

Index of real international food prices, 1900 to 2005 (1977-79 = 100)



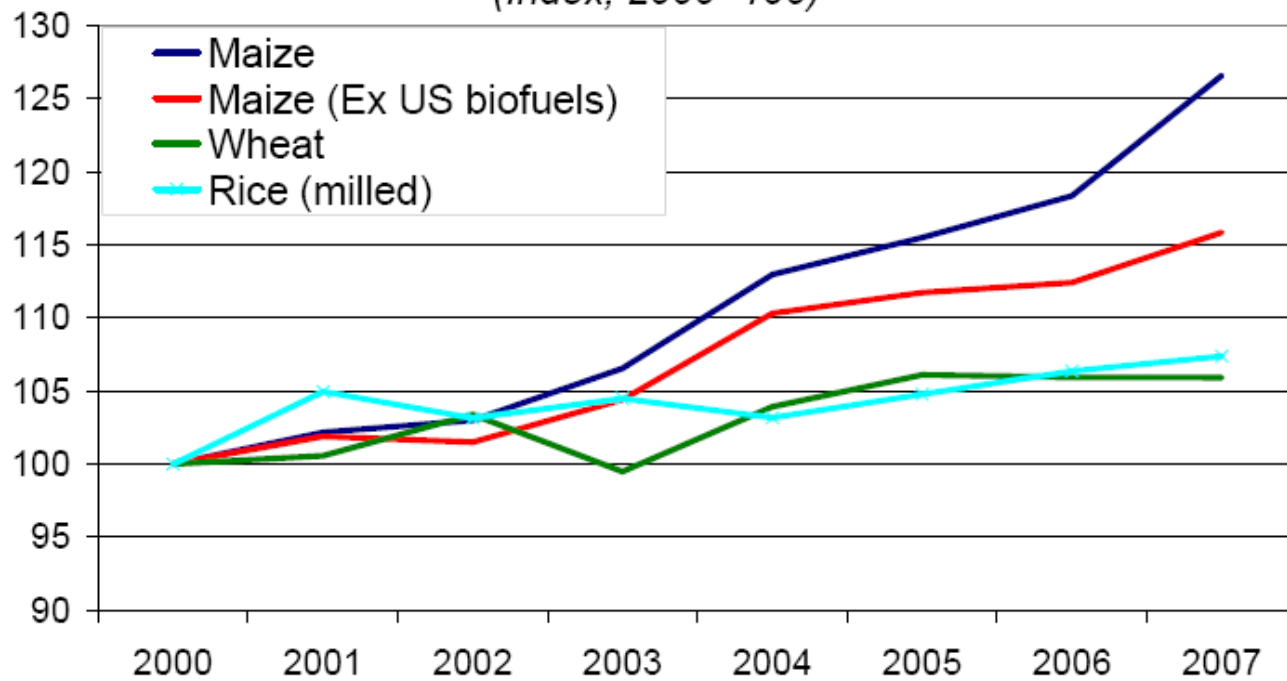
Source: K. Anderson (2006), "Reducing Distortions to Agricultural Incentives: Progress, Pitfalls and Prospects." <www.worldbank.org/agdistortions>. Data shown are an index of export prices in US dollars for all major traded agricultural products, deflated by the MUV index which is the unit value of manufactures exported from France, Germany, Japan, UK and US, with weights based on those countries' exports to developing countries.

Drivers of Price Volatility

- Declining dollar
- Rising income and changing consumption habits in Asia
- Weather-related production shortfalls in Australia, U.S., EU, Canada, Russia and Ukraine
- Rising energy prices
 - Raises costs of production & fertilizer prices
 - Biofuel policies potentially important
- Secondary effects low stocks and induced export barriers/tariff reductions

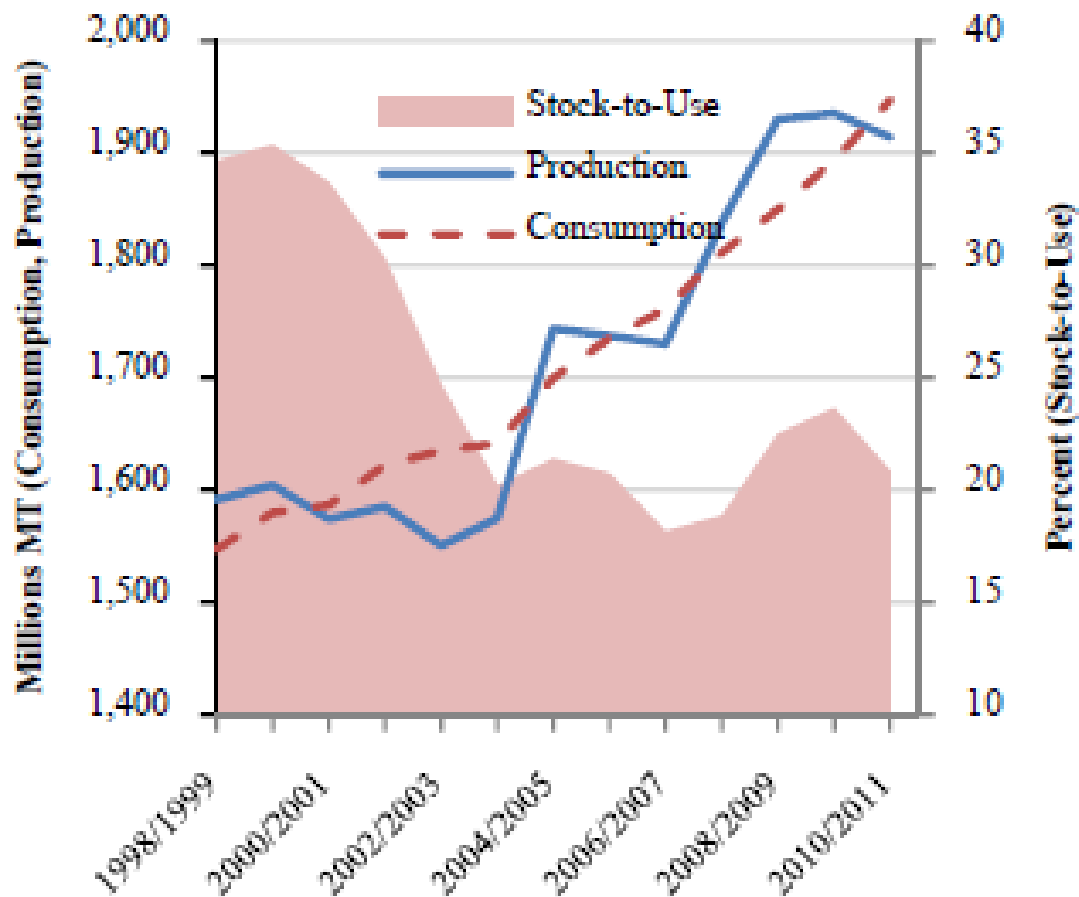
Figure 11. Global Grain Consumption

(Index, 2000=100)



Source: DECPG calculations based on USDA data.

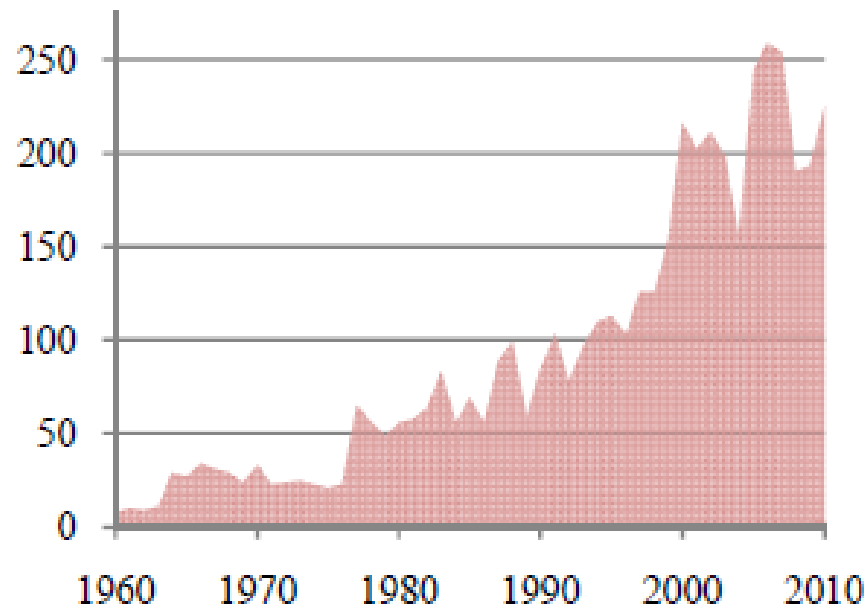
Figure 2: Higher world grain consumption, variable supply, and stock draw downs have contributed to the consecutive grain price spikes



Weather related shocks

Figure 4: Significant rise in reported droughts, floods, and extreme temperature

Number of reported occurrences of droughts, floods, and extreme temperature

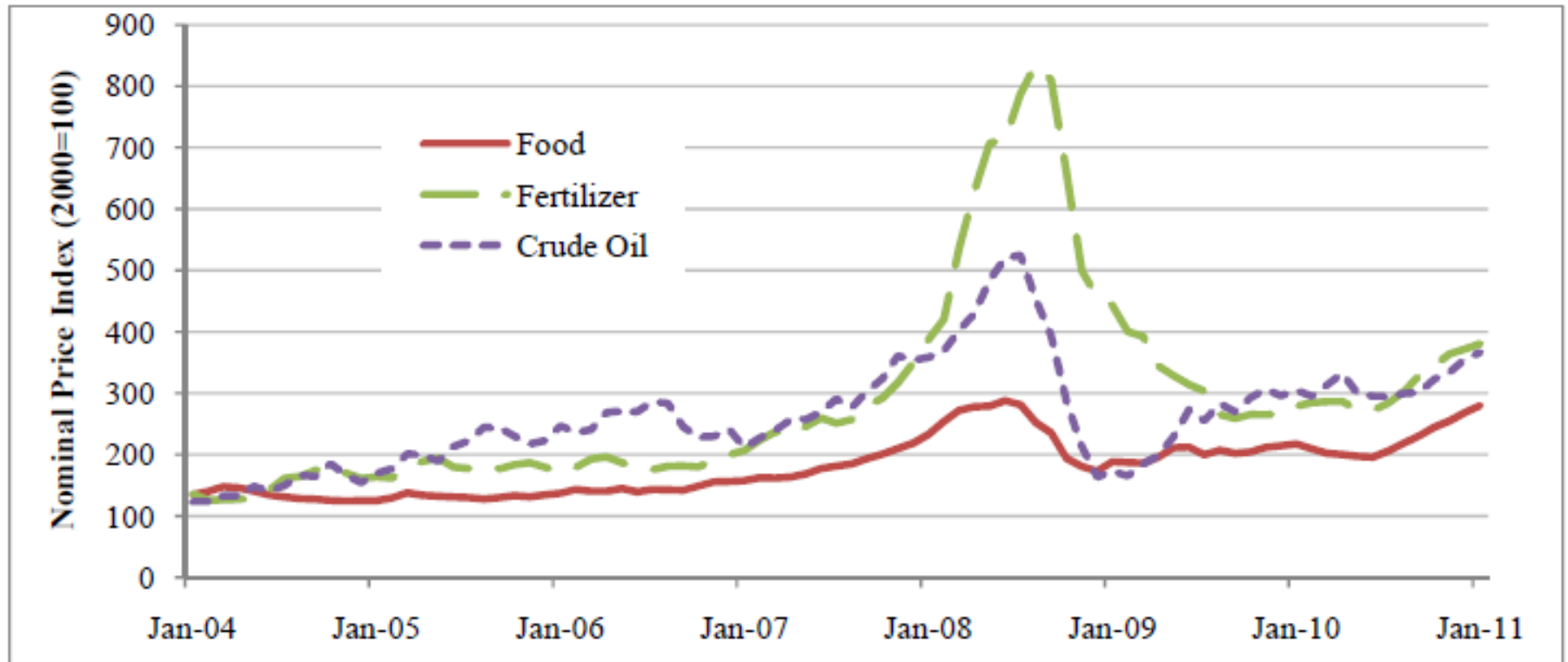


Note: The share of actual events that are reported per year has significantly increased in recent years, but the growth rate may over-state the actual increase, reflecting both better reporting and increased occurrences.

Source: www.emdat.be.

Energy and Food Prices

Figure 3: Fertilizer prices spike along with crude oil prices



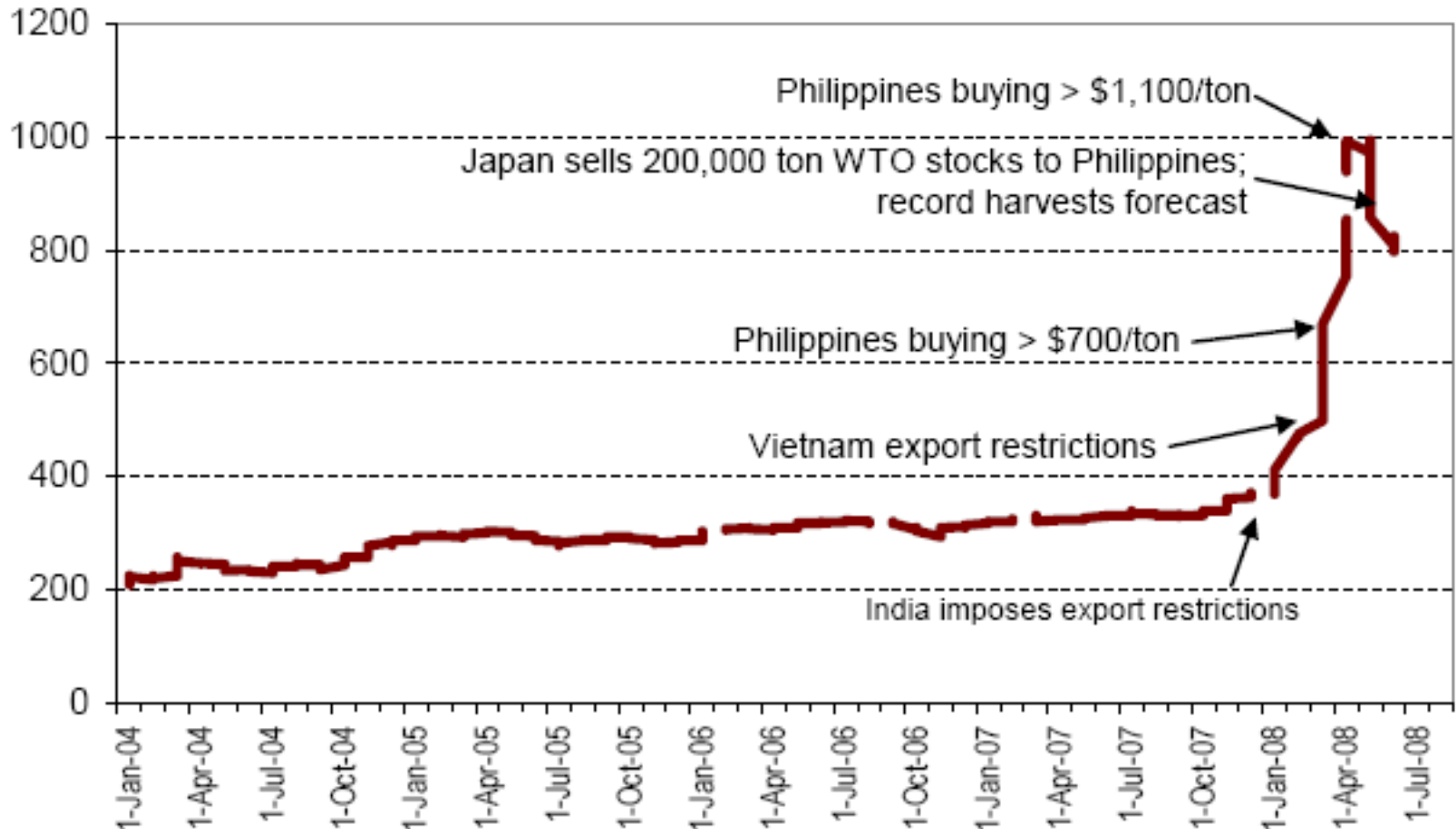
Source: World Bank.

Contribution of high energy prices

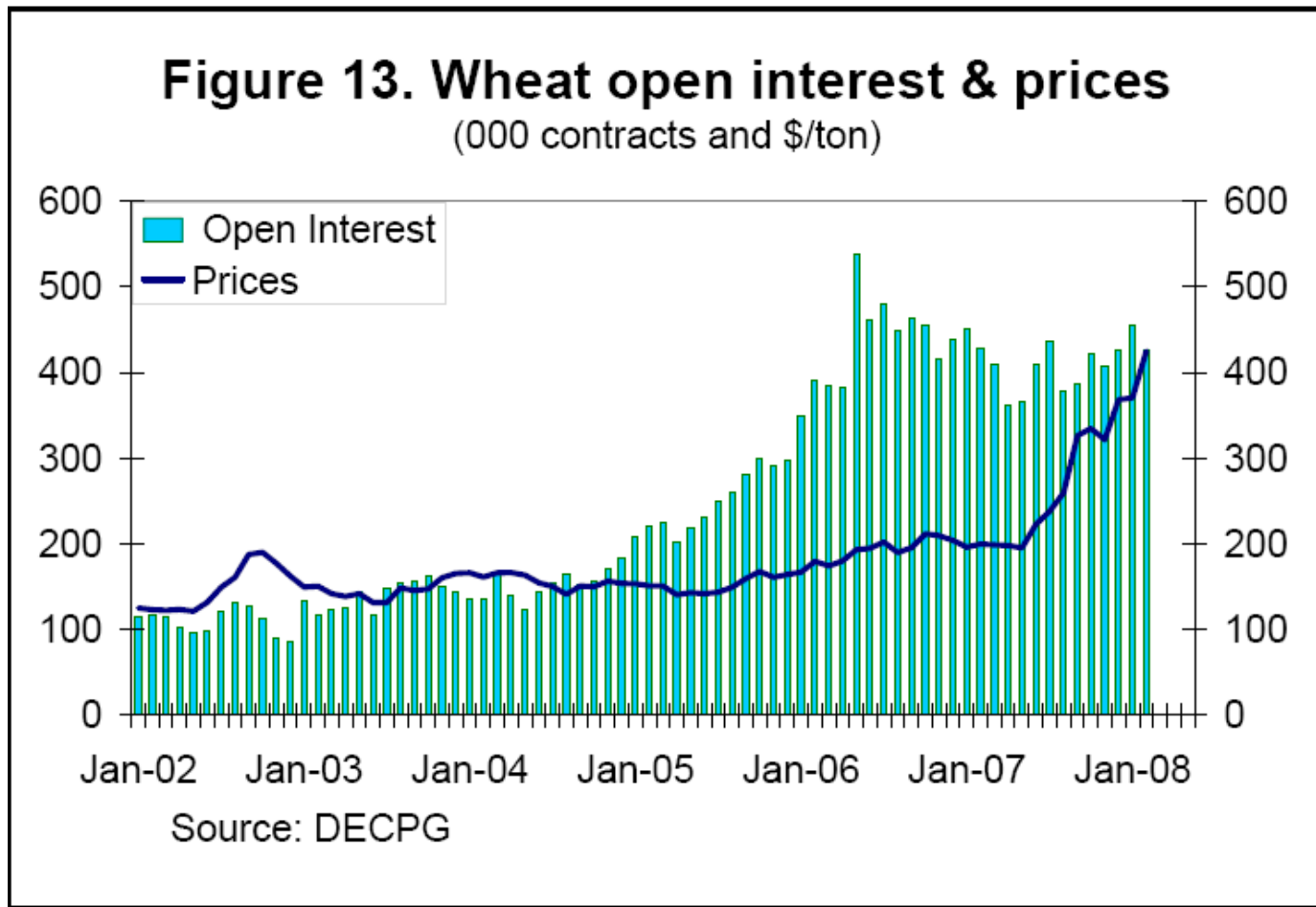
- Direct (supply side):
 - Higher production costs: Fertilizer, chemicals, fuel, lubricants and electricity
 - Higher transportation costs
- Indirect (demand side):
 - Biofuel and biodiesel incentives
 - à (direct) raise demand for food commodities
 - à (indirect) large land use changes which reduced supplies of wheat and crops that compete with food commodities used for biofuels
- Common Factors
 - Growth (more demand, industrial production)
 - Macro factors (exchange rates, interest rates, fiscal expansion)
 - Investment fund activity (relatively new phenomenon)

Export barriers: Collective action problems

Rice Price (Thai 100B) 2004-08 US \$/mt



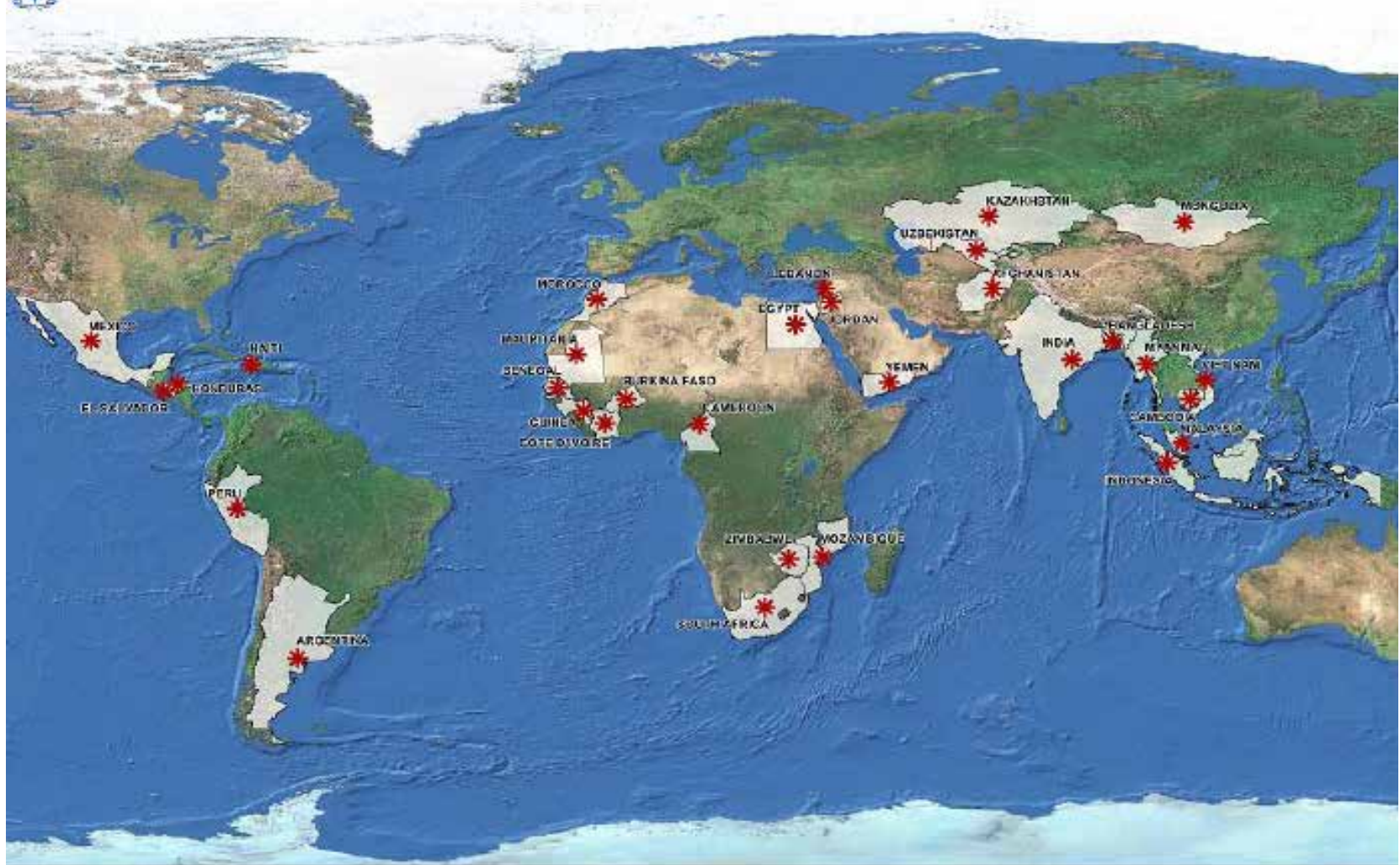
...and speculators (?)



Food crisis serious enough to cause riots



Reported Protests Over Rising Food Prices (as of 24.04.08)



Policy Responses

- **Politically difficult challenges**
 - Urban consumers in poor countries are likely to be concerned
 - And safety net programs are likely difficult to implement
- Many countries have resorted to general measures
 - Export taxes on exports, tariff reductions or import subsidies if an importer

Thank You

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