



The Rise in Food and Agricultural Prices: Implications for Morocco

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Overview

- 1. The new world food and agriculture equation**
- 2. High food prices: Impacts on the poor**
- 3. Actions needed now: Technology and policy change**

Changes in food and agriculture equation

Production

Land

Water

Inputs & Transport costs

Workforce

Climate change

Agrarian structure

Technology

Demand

Income growth

Poverty and inequality

Consumer behavior

Bioenergy

Biomass (CO₂)

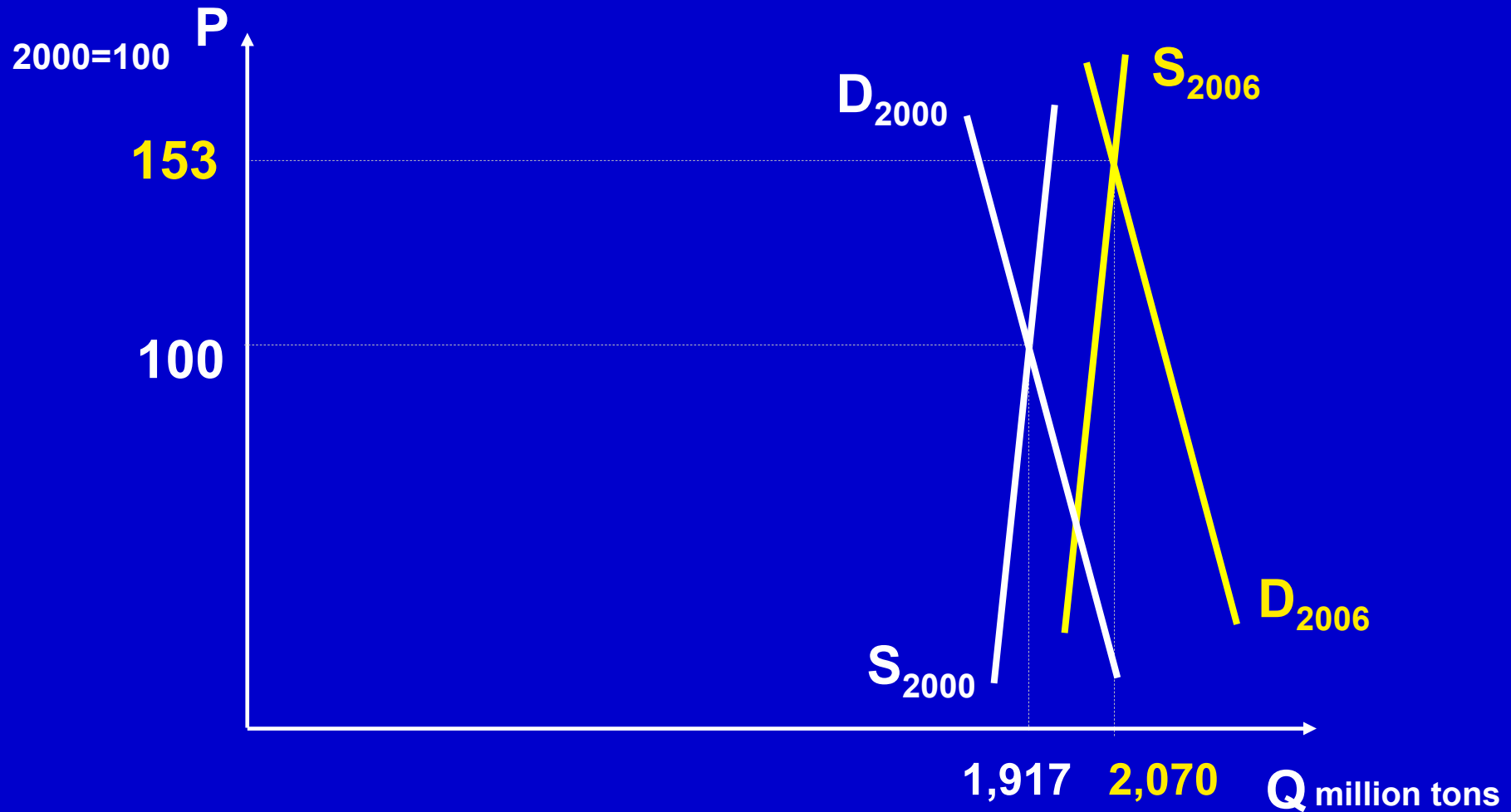
Trade and Markets

-Globalization

-Information & Standards

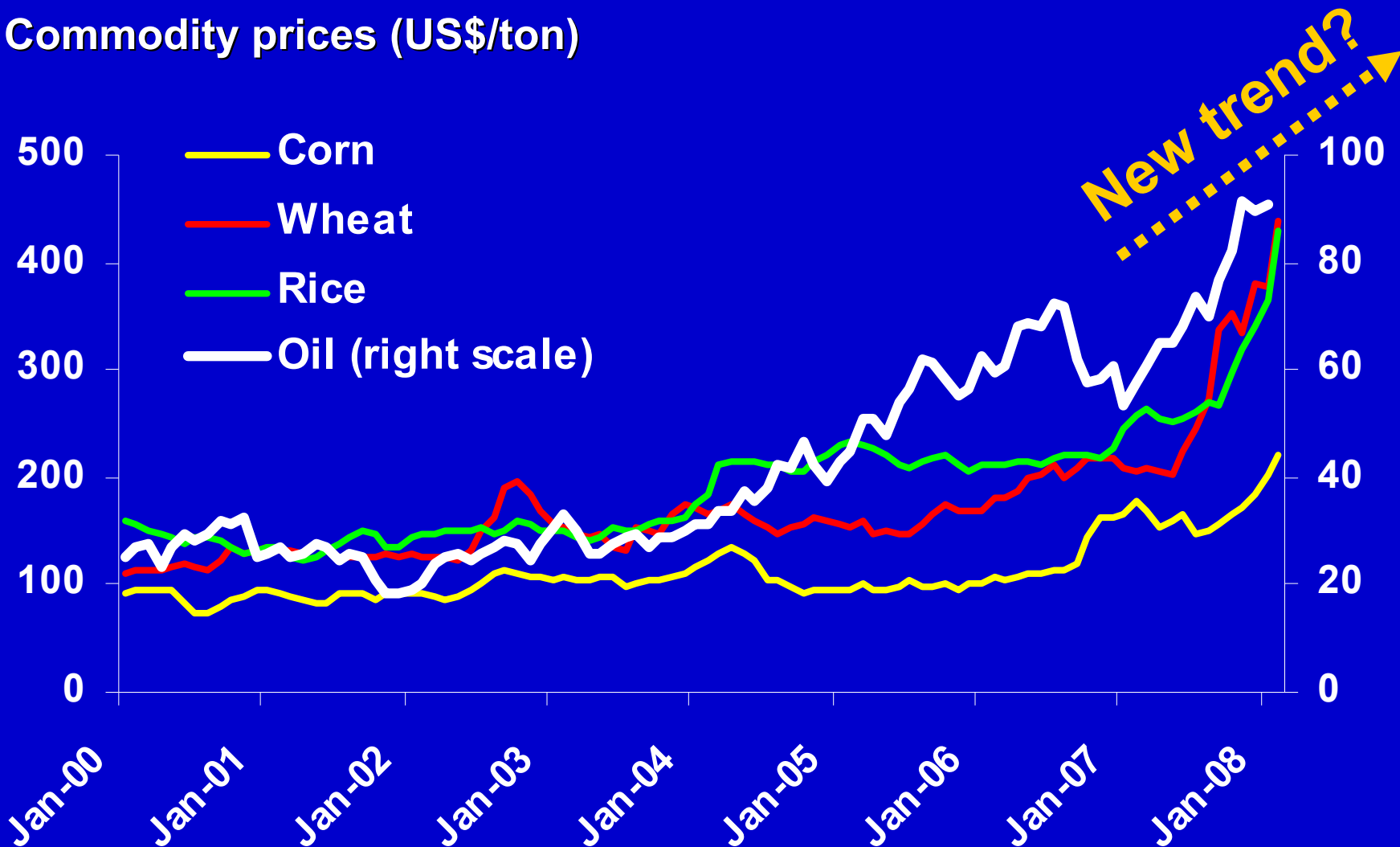
-Supermarkets

Small quantity changes have large effects for cereals 2000 - 2006

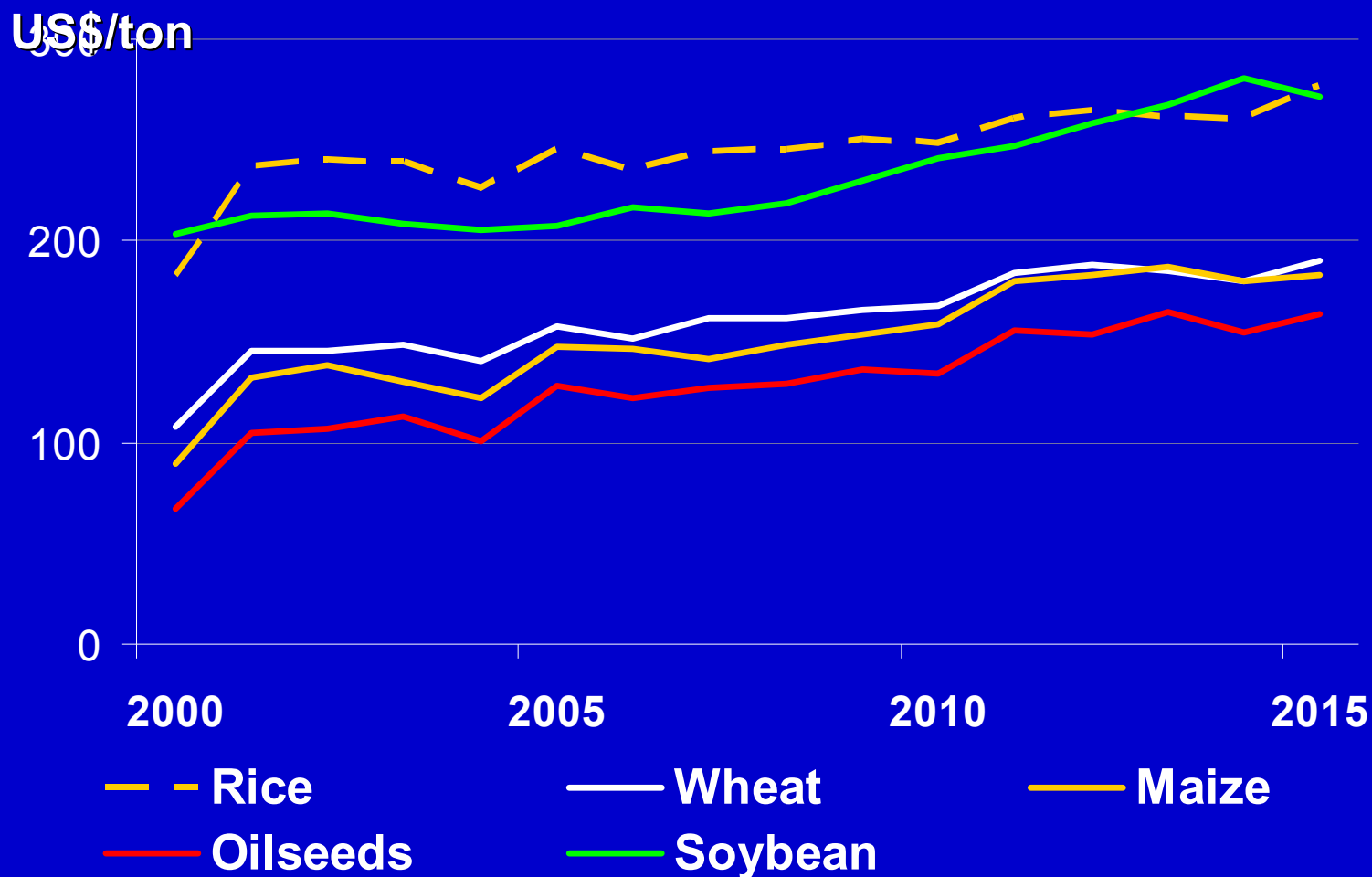


The new situation: Surge in prices

Commodity prices (US\$/ton)



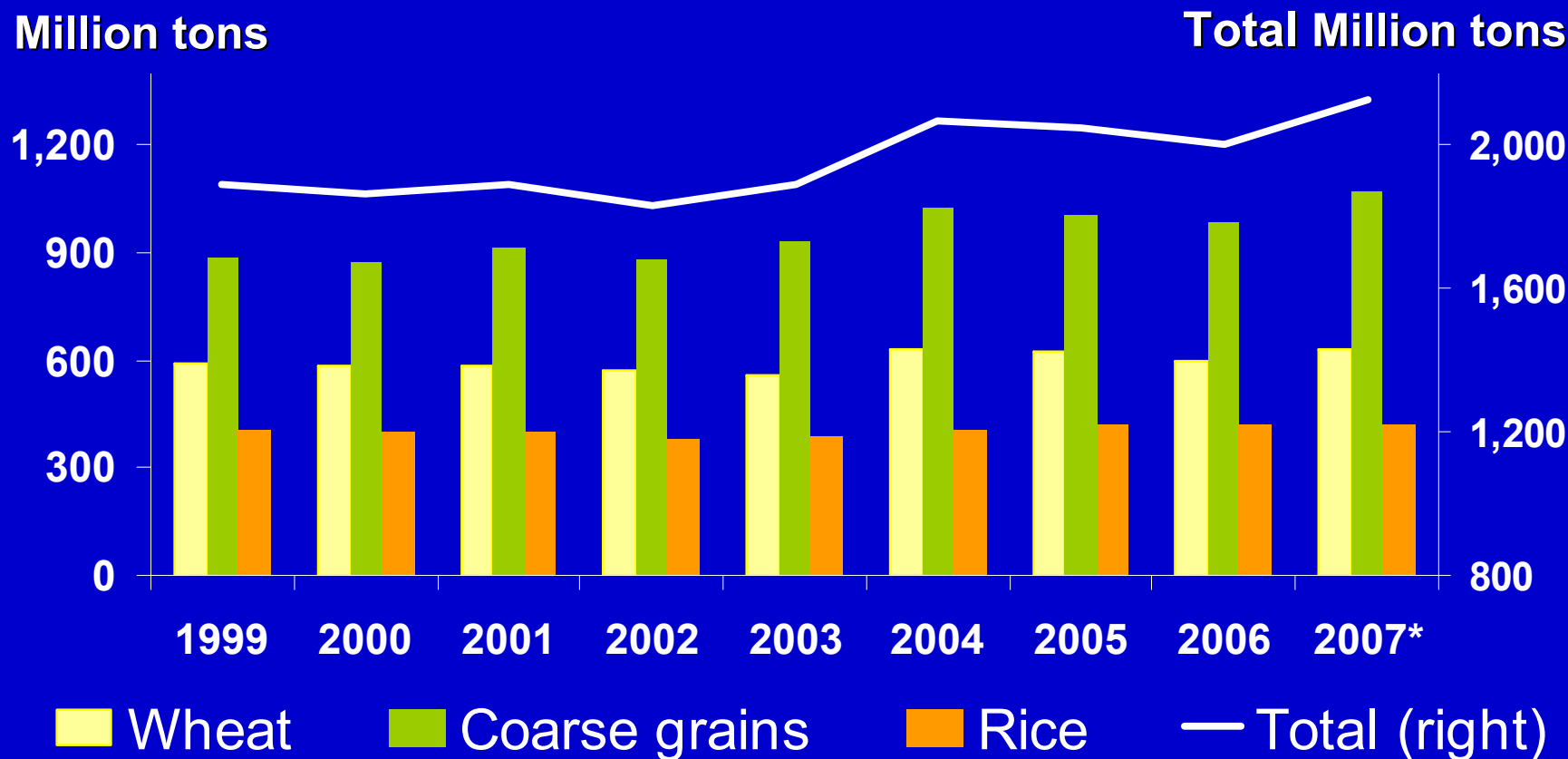
IFPRI's modeling of cereals price changes (2000-05 and 2006-15)



Rising consumption

- Income growth (2004-06 per annum)
 - 9% in Asia, 6% in Africa, **5% in Morocco**
 - 2% in industrialized countries
- Since 2000, global cereal use for:
 - Food ▲ 4%, feed ▲ 7%
 - Industrial purposes ▲ 25%

World cereal production: Not growing enough



Source: Data from FAO 2003, 2005-07.

* Forecast.

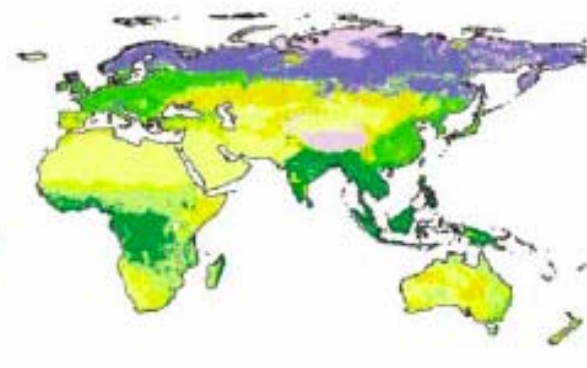
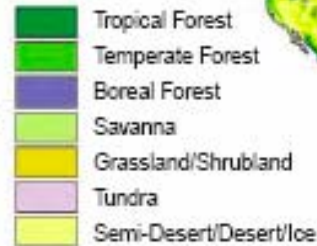
Competition for land

Field and pastures: ~40%

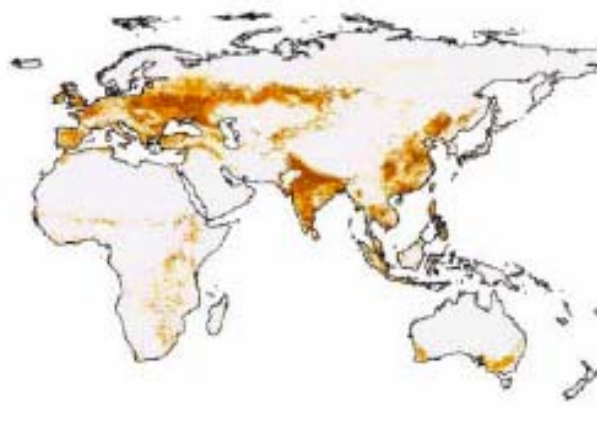
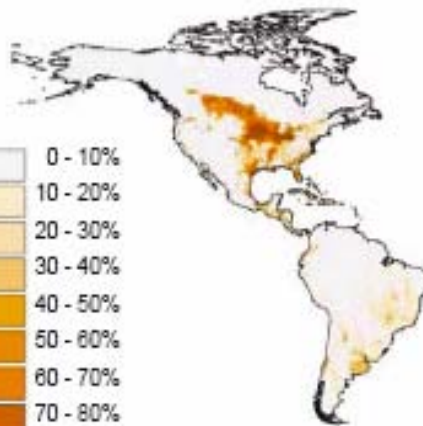
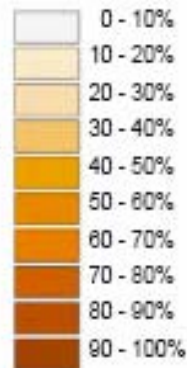
Forests: ca. 10 million km²
(~ 20%)

Cities, roads: 2%

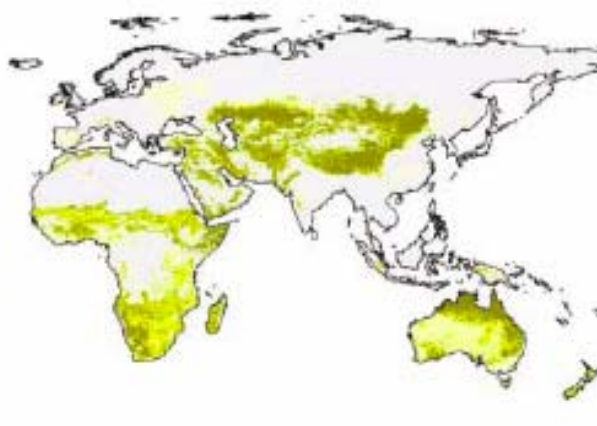
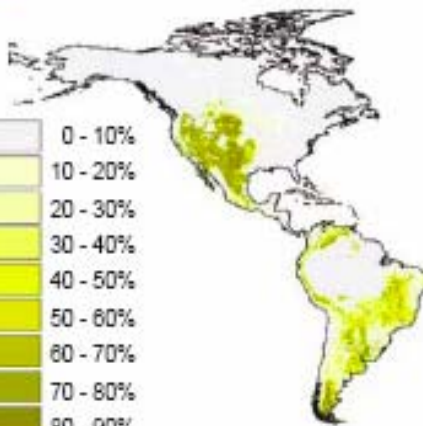
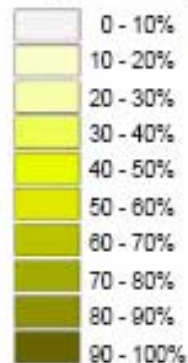
Natural Vegetation



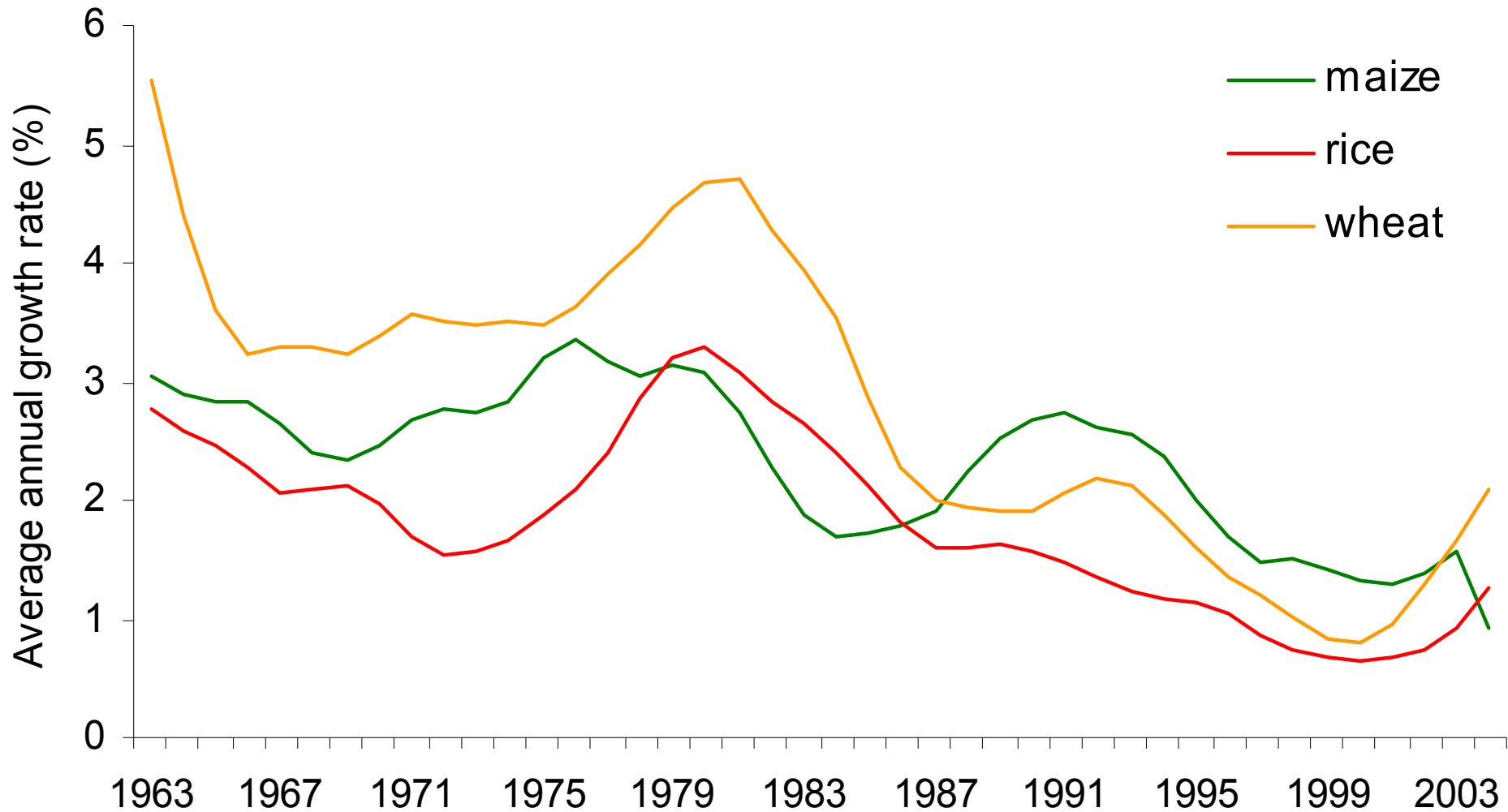
Croplands



Pastures and Rangelands

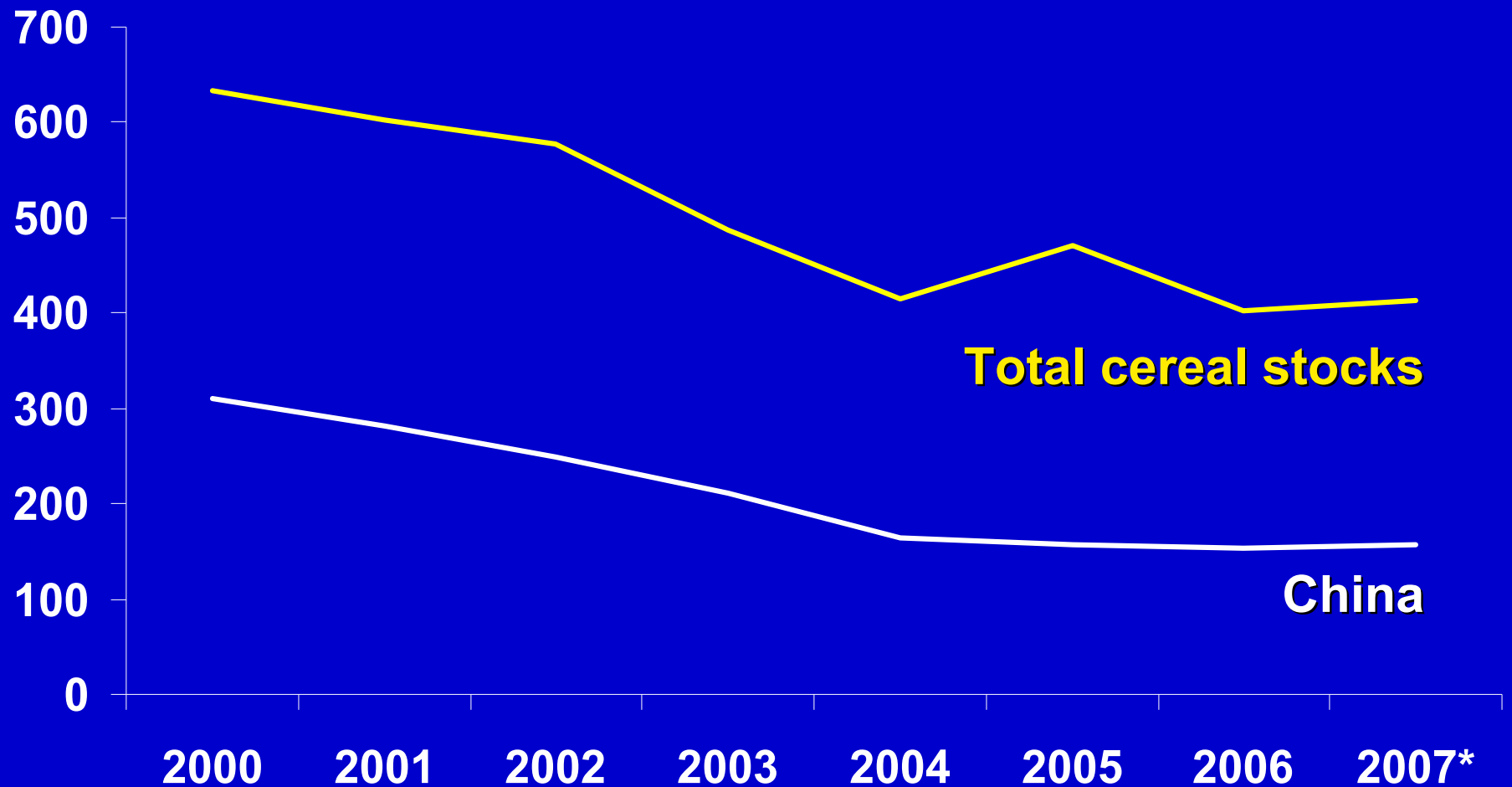


Productivity growth is declining



Cereals: The world eats more than it produces

Million tons



Source: Data from FAO 2003, 2005-07.

* Forecast.

IFPRI biofuel scenarios by 2020

Scenario	Biofuel expansion	Price changes (% by 2020)
1	Actual plans & assumed expansions	corn: +26 sugar: +12 oilseeds: +18
2	Doubling of Scenario 1 expansion	corn: +72 sugar: +27 oilseeds: +44

Climate change risks

Expected impact on agricultural output potential
(% change 1961-90 compared to 2070-90)

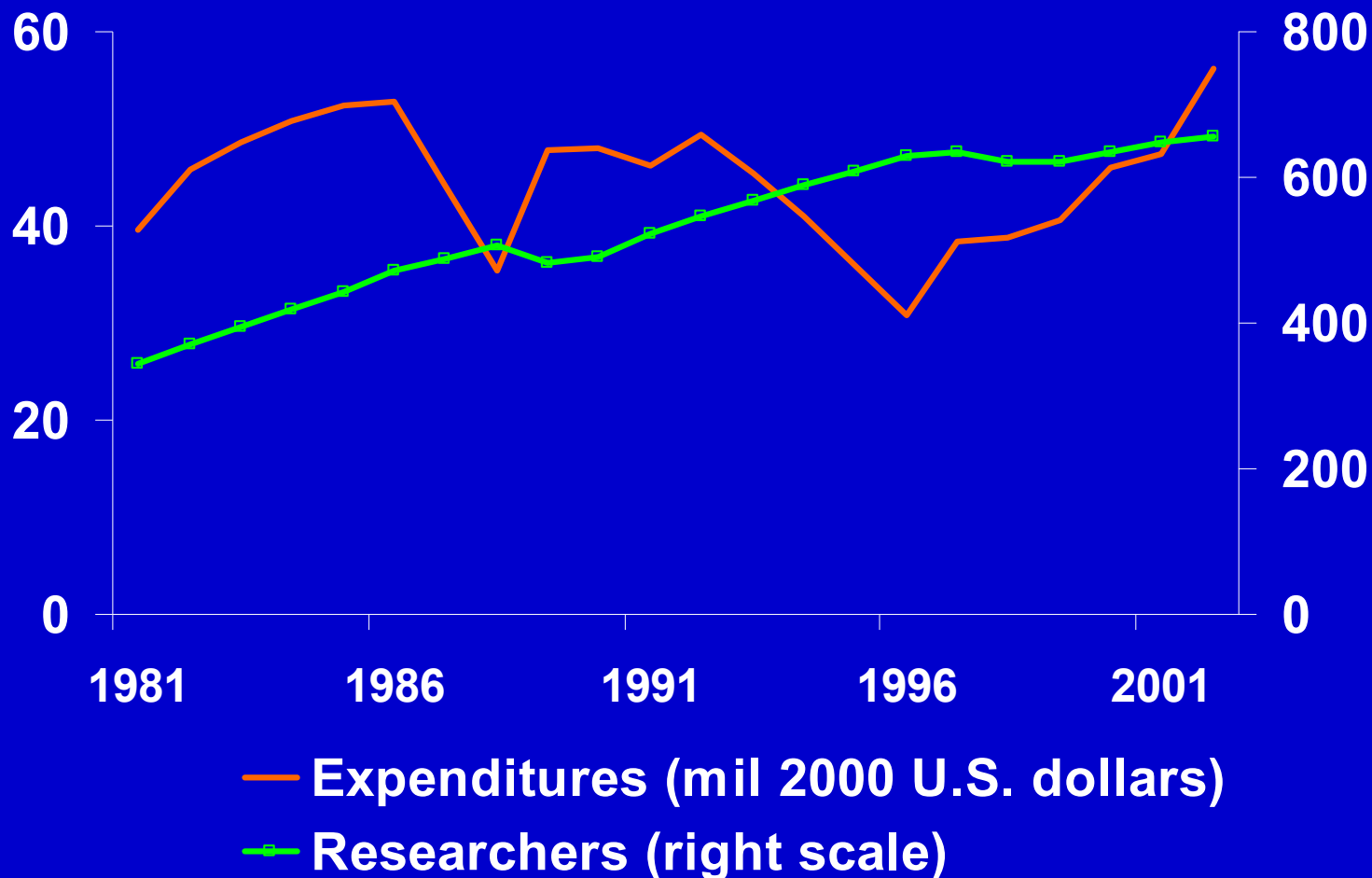
	Without carbon fertilization	With carbon fertilization
World	-15.9	-3.2
Industrial countries	-6.3	7.7
Developing countries	-19.7	-7.7
Middle East/ North Africa	-21.2	-9.4
Morocco	-39.0	-29.9

R&D investment too low

Annual growth rates in public agricultural research spending (% per year)

	1991-2000
China	5.0
MENA	1.9
All developing countries	2.9
All developed countries	-0.6

Morocco: Trends in agricultural R&D



World food equation: Reasons for imbalance

- 1. Income growth**
- 2. Biofuels**
- 3. Lack of technology to respond**
- 4. Low stocks**
- 5. Production shocks**
- 6. High input and transport costs due to energy price**
- 7. Population growth**

Overview

1. The new world food and agriculture equation
2. **High food prices: Impacts on the poor**
3. Actions needed now: Technology and policy change

High prices: increased costs for importers

Net cereal imports, three-year average (2003-05)

Country	1,000s tons
Japan	-24,986
Mexico	-12,576
Egypt	-10,767
Morocco	-4,160
China	-1,331
Ethiopia	-789
India	3,637
Argentina	20,431
United States	76,653

Morocco: Wheat imports = 41% of wheat utilization in 2005-07

Policy responses to rising prices

Import tariffs

- Morocco: wheat from 130 to 2.5%
- Turkey: wheat from 130 to 8%, corn from 130 to 35% , barley from 100 to 0%

Subsidies

- Increased in Saudi Arabia, Egypt

Social protection

- Bahrain: \$100 mil. for the most affected

Are these the policies to choose?

Security synergies and conflicts

Food insecurity ↔ Political security risks

Rising food prices:

- **The poorest suffer silently, the middle class protests and lobbies**
- **Mass protests against rising prices**

Decline in building international agriculture capacity contributes to insecurity

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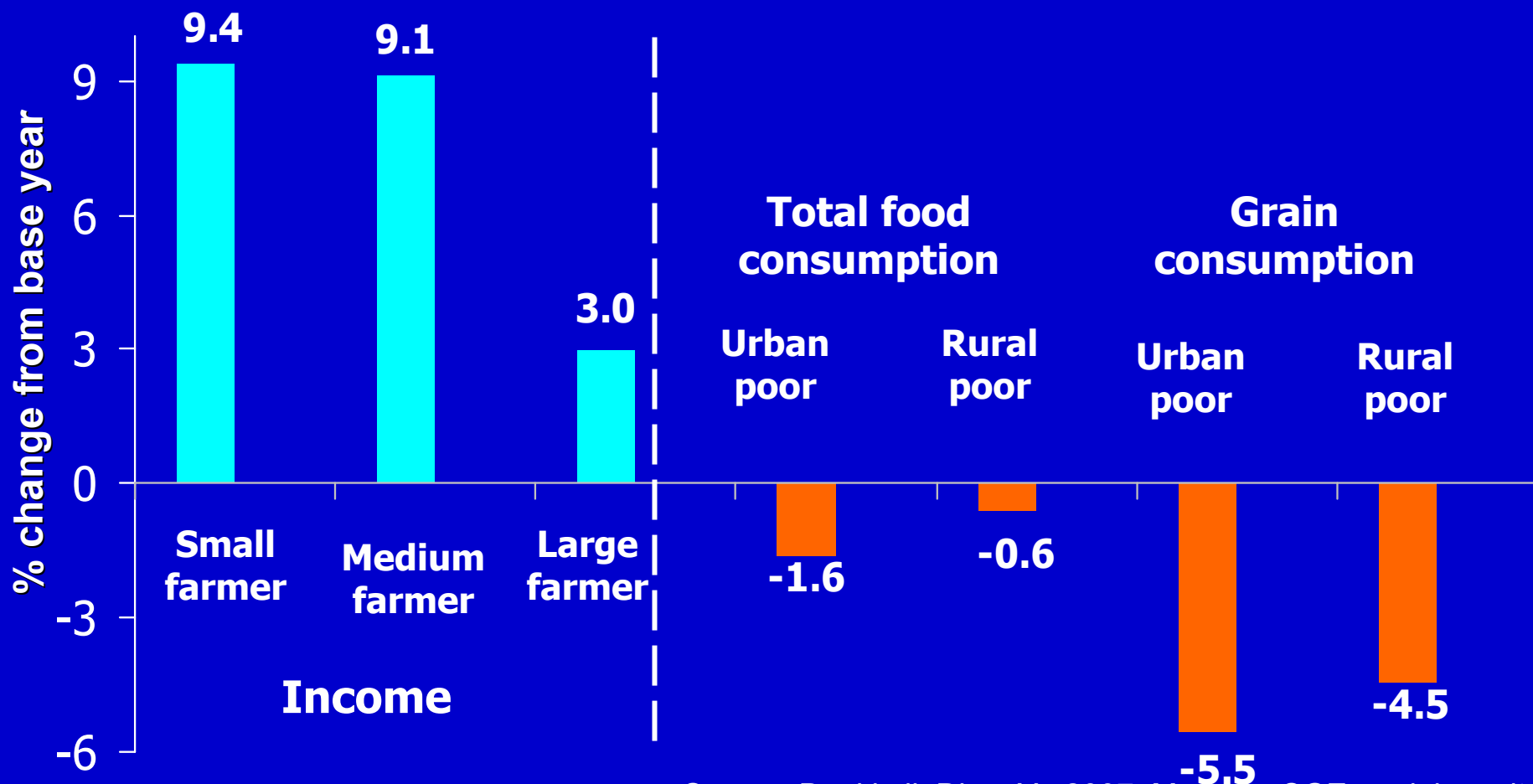
Inflation: driven by what?

Macro-economic considerations

- Is this “general” inflation?
 - >Exchange rate policy
 - >Fiscal policy
- Or is it structural (oil and food price driven confronting lack of production response) ?
 - >Agricultural markets policy
 - >Technology policy
- Or is it both?
 - >Mix of macro and structural policy response
- And is it short term / one step issue?
 - >only the oil-price effect but not the demand effect

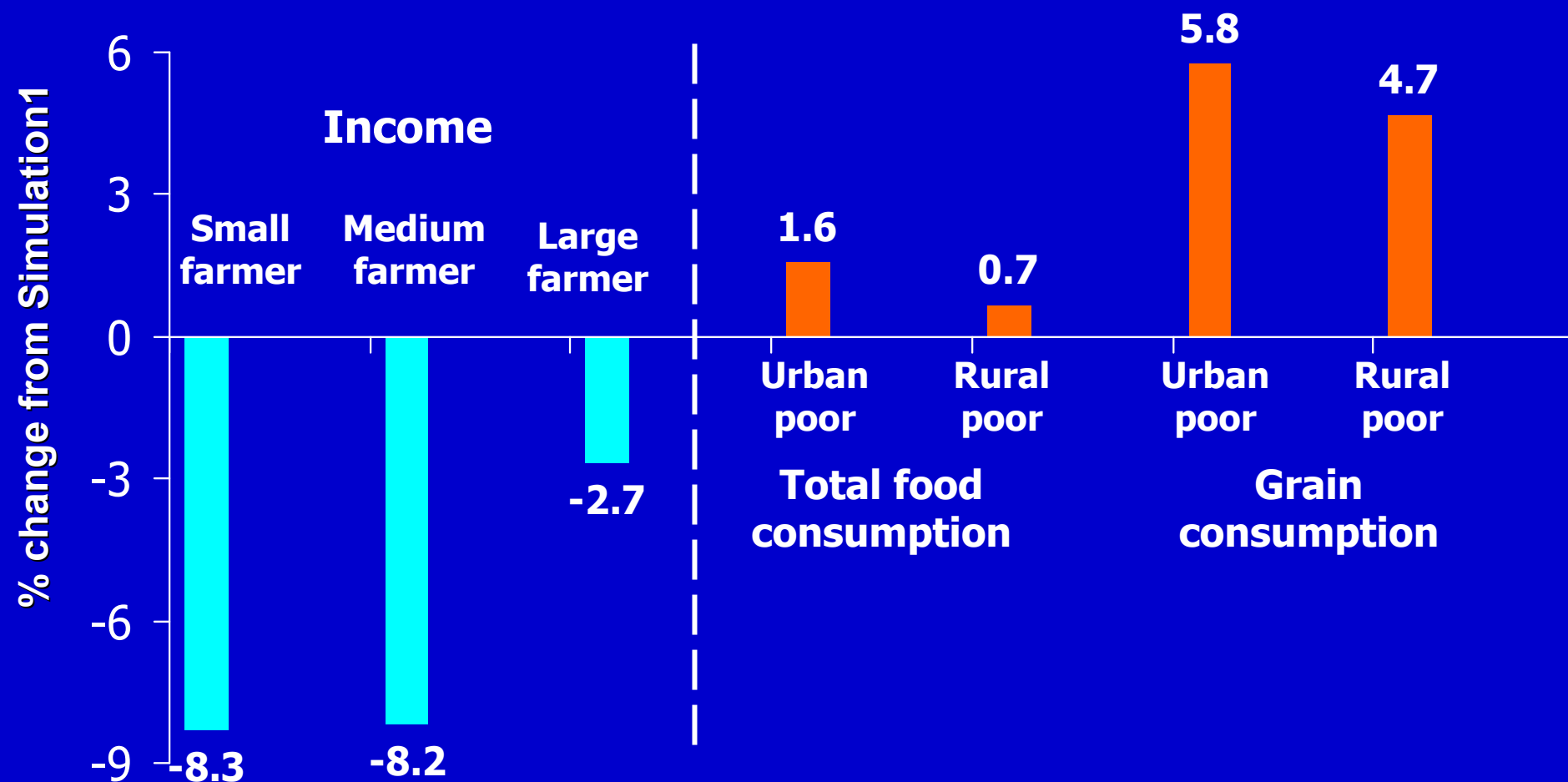
High prices: Hit on the urban and rural poor

Simulation 1: Cereal import price rise 50%, oilseeds 20%
No policy intervention



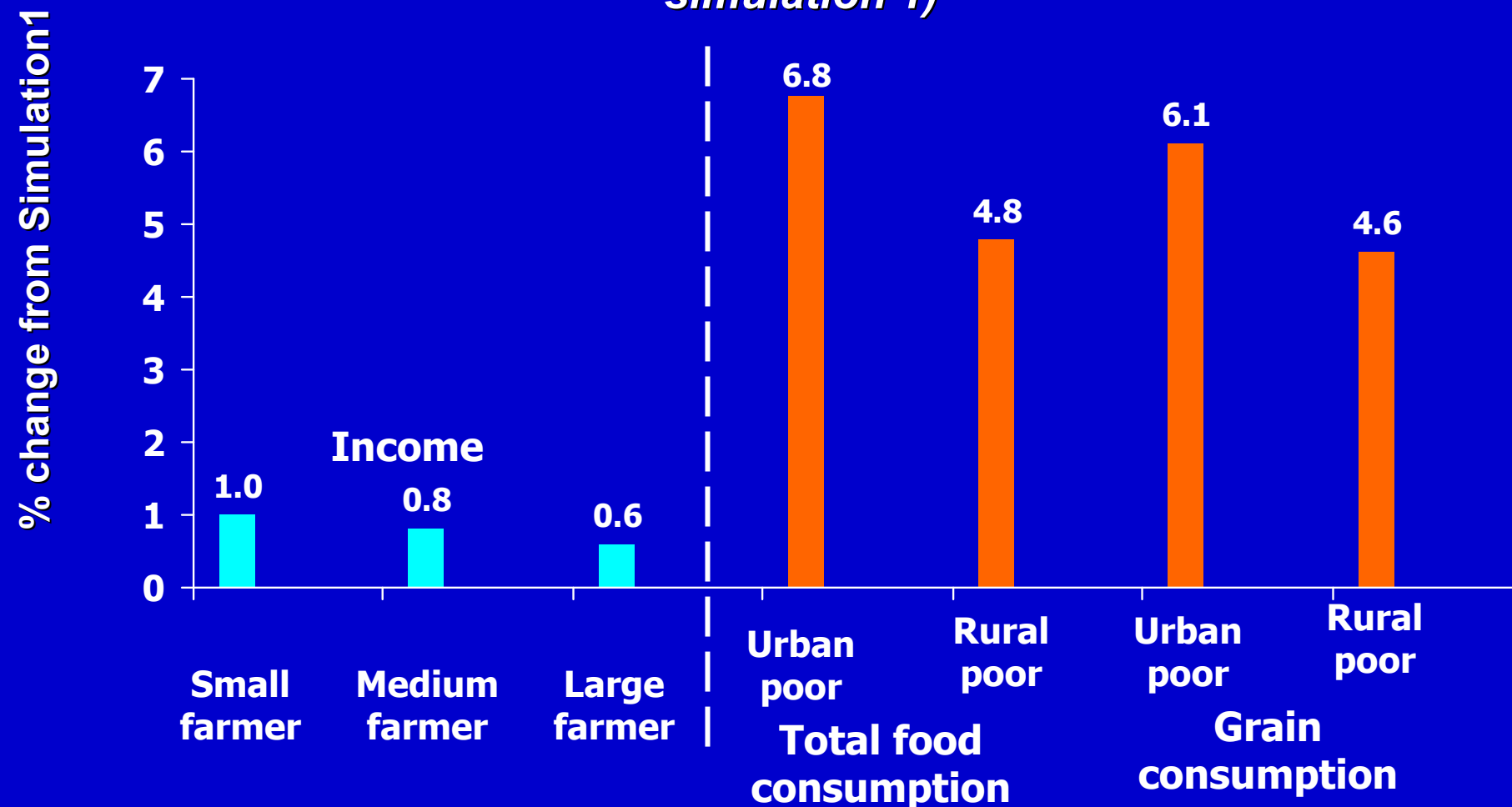
Import price subsidy: Hit on farmers

Simulation 2: Cereal import price rise 50%, oilseeds 20%
Import price subsidy = 7.5% of gov budget (compared to simulation 1)



Direct transfer to the poor

Simulation 3: Cereal import price rise 50%, oilseeds 20%
Transfer to poor consumers = 7.5% of gov budget (compared to simulation 1)



Pro-poor policy actions to adapt and mitigate food price problem

1. Global policies and development aid

1. Eliminate agricultural trade barriers, incl. stop biofuel subsidies
2. expand aid to agriculture, rural services, and science- and technology
3. expand food related development aid, incl. social protection, child nutrition

2. National policies in developing countries

1. Increase investment in agriculture, rural infrastructure and market access for farmers
2. Expand social protection (rural and urban) for the poorest