



WORKSHOP ON AID FOR TRADE AND AGRICULTURE:
MAINSTREAMING AID FOR TRADE AT A THEMATIC LEVEL

Committee on Trade and Development, World Trade Organization

Geneva 17 March 2010

Addressing the Legacy of Underinvestment in Agriculture

“In the 21st century agriculture remains fundamental for poverty reduction, economic growth and environmental sustainability” (World Development Report 2008)

John E. Lamb, Agribusiness Team Leader
Agriculture and Rural Development Department
World Bank, Washington, DC



World Development Report 2008

Agriculture fulfills multiple functions in development



- **Trigger of growth**
- **Source of livelihoods**
- **Provider and user of environmental services**

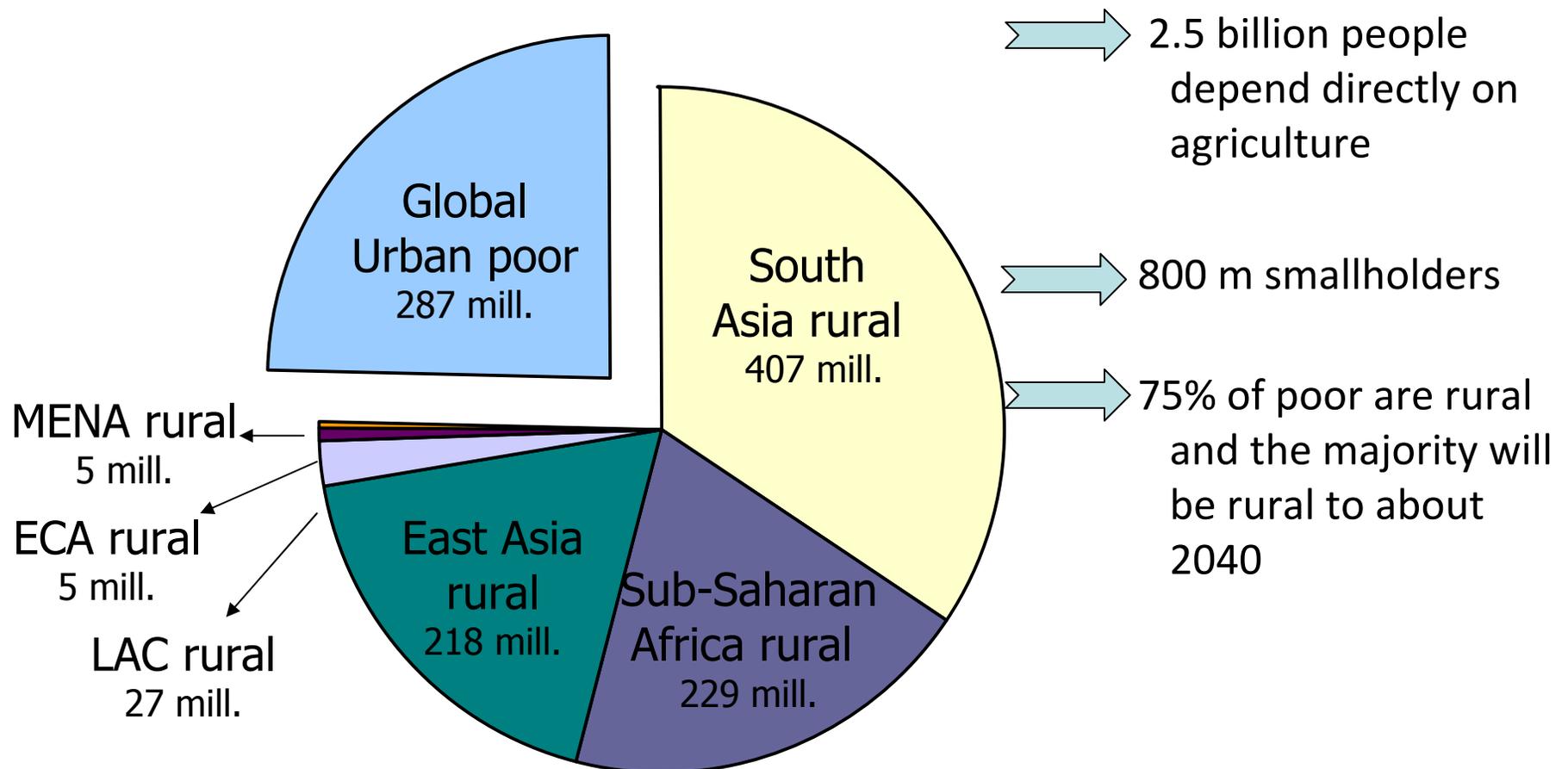




World Development Report 2008

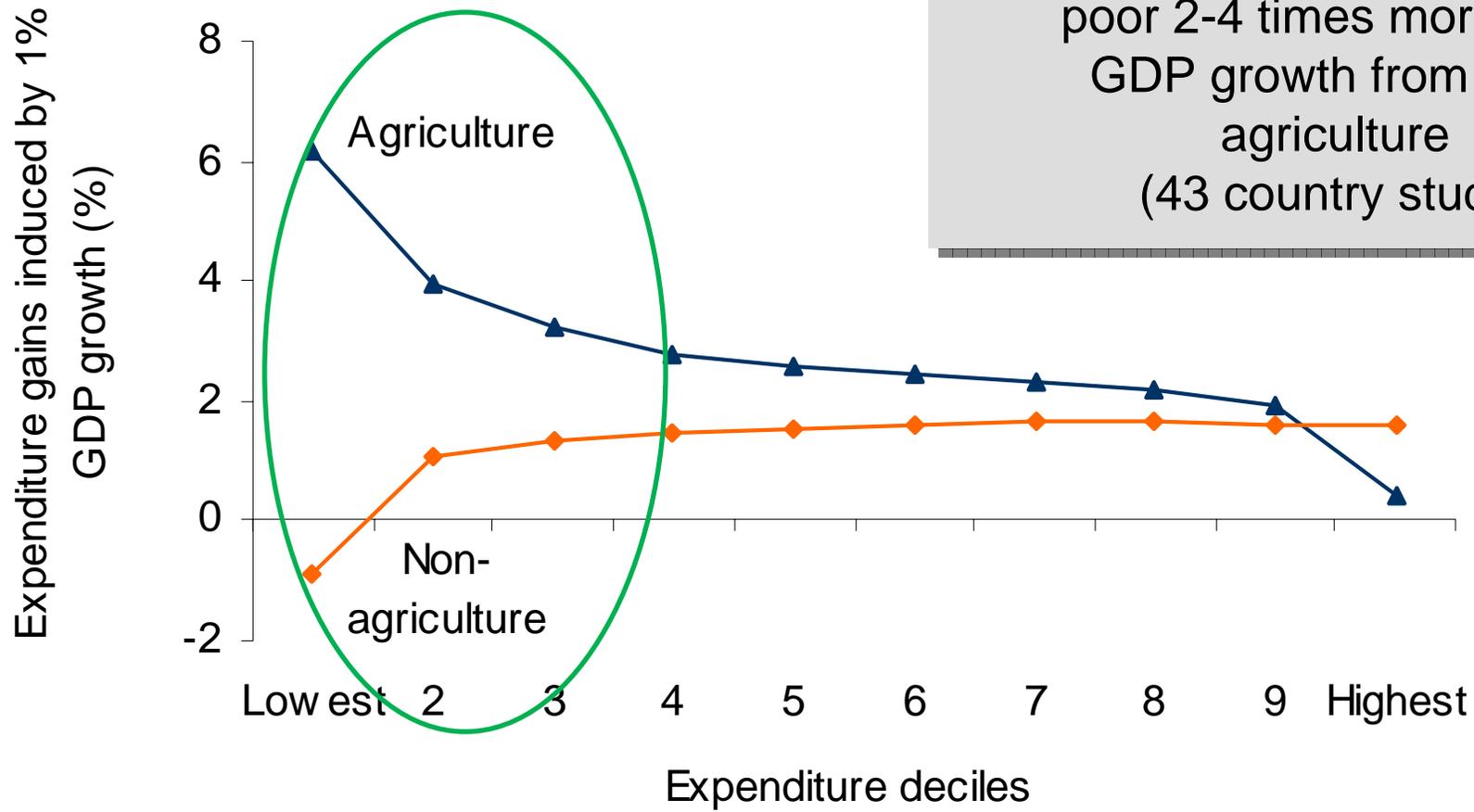
Agriculture matters because poverty and hunger are still rural

N.B. Global extreme poverty (2002) = <\$1.08 a day





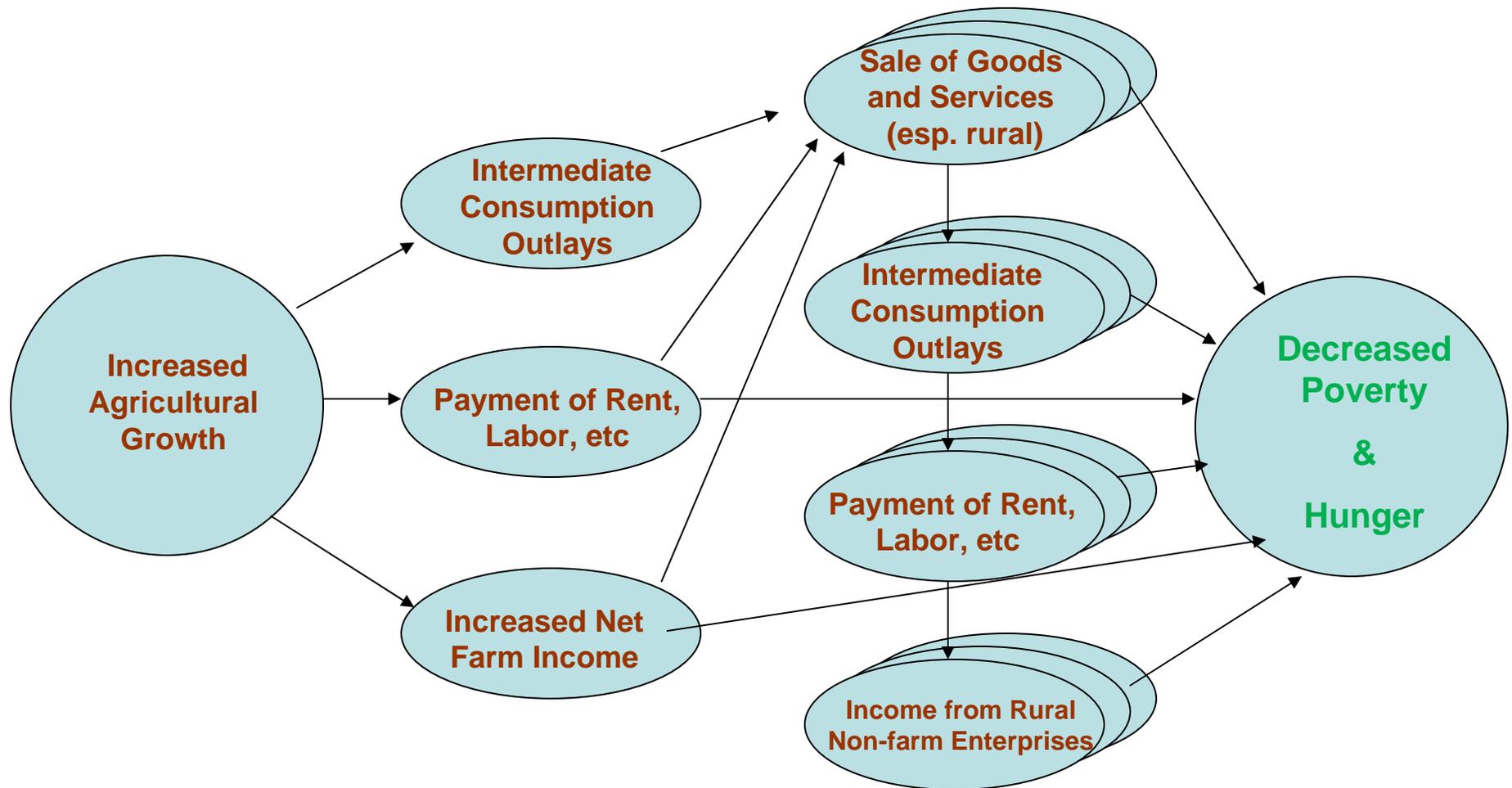
Agriculture remains the best means of impacting rural poverty & hunger



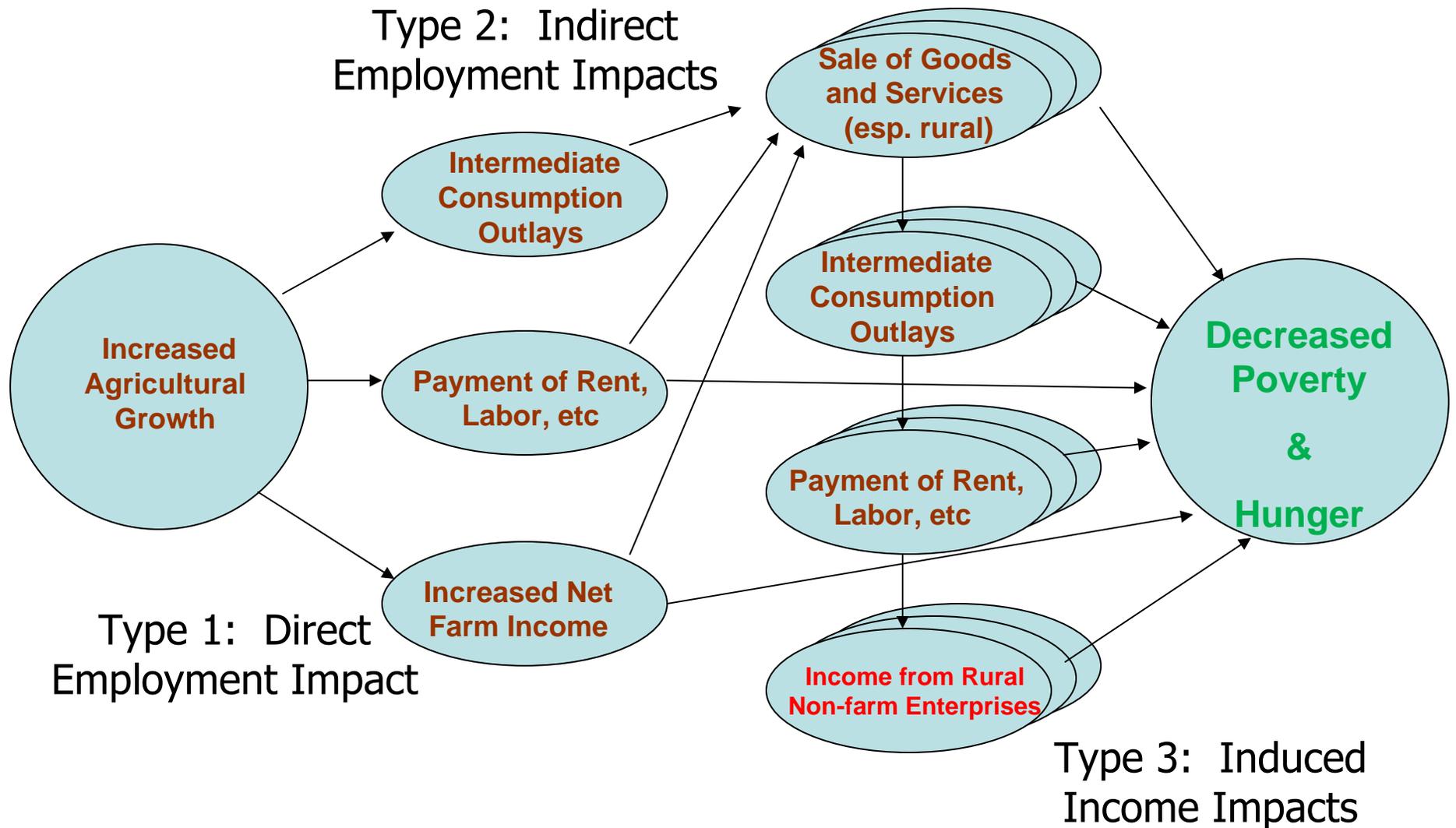
GDP growth from agriculture benefits the income of the poor 2-4 times more than GDP growth from non-agriculture (43 country study)

Why is agriculture so powerful?

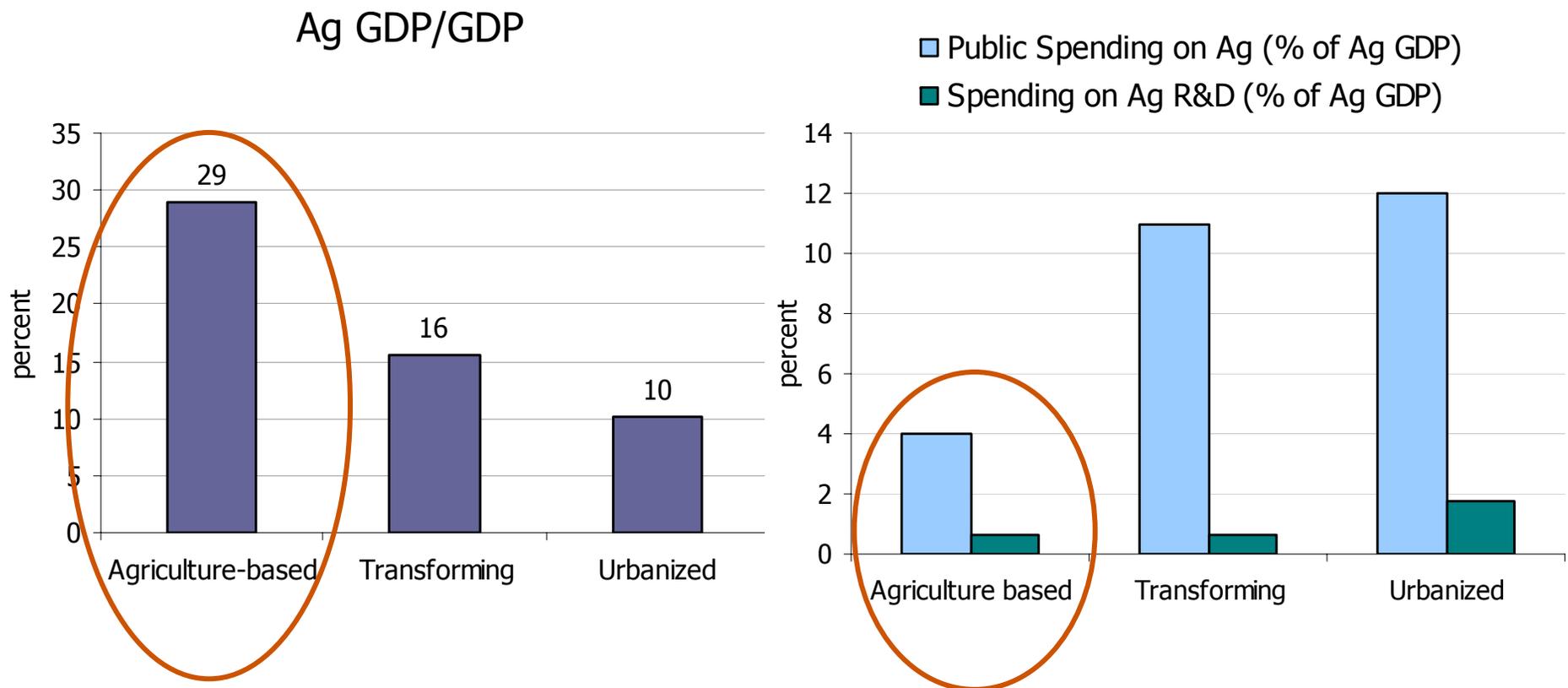
Multiplier effects in the rural economy



Direct and indirect impacts from sale of "tradables" + induced effects from "non-tradables" = 1.8 or more



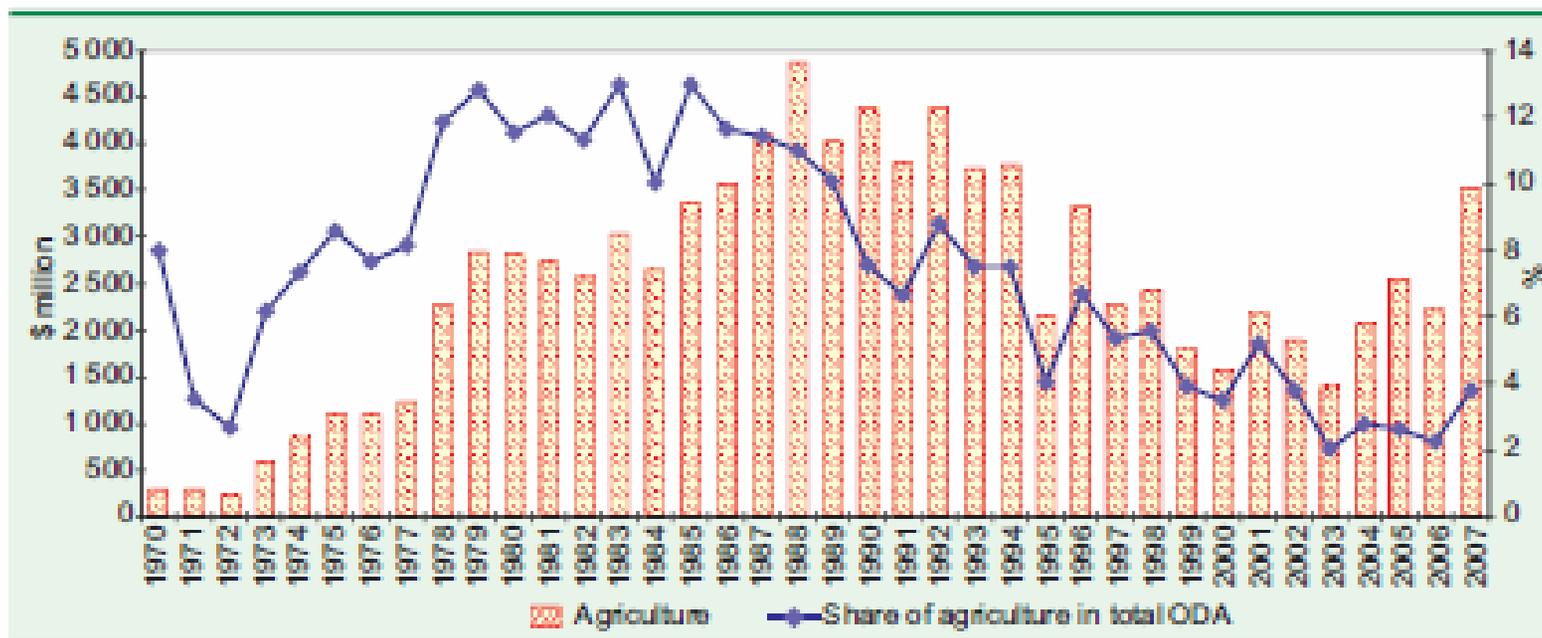
Unfortunately governments in agriculture-based countries have not been investing enough...



..and sometimes the quality of public investment has been an issue

Meanwhile donors reduced their annual agricultural investment in the Nineties....

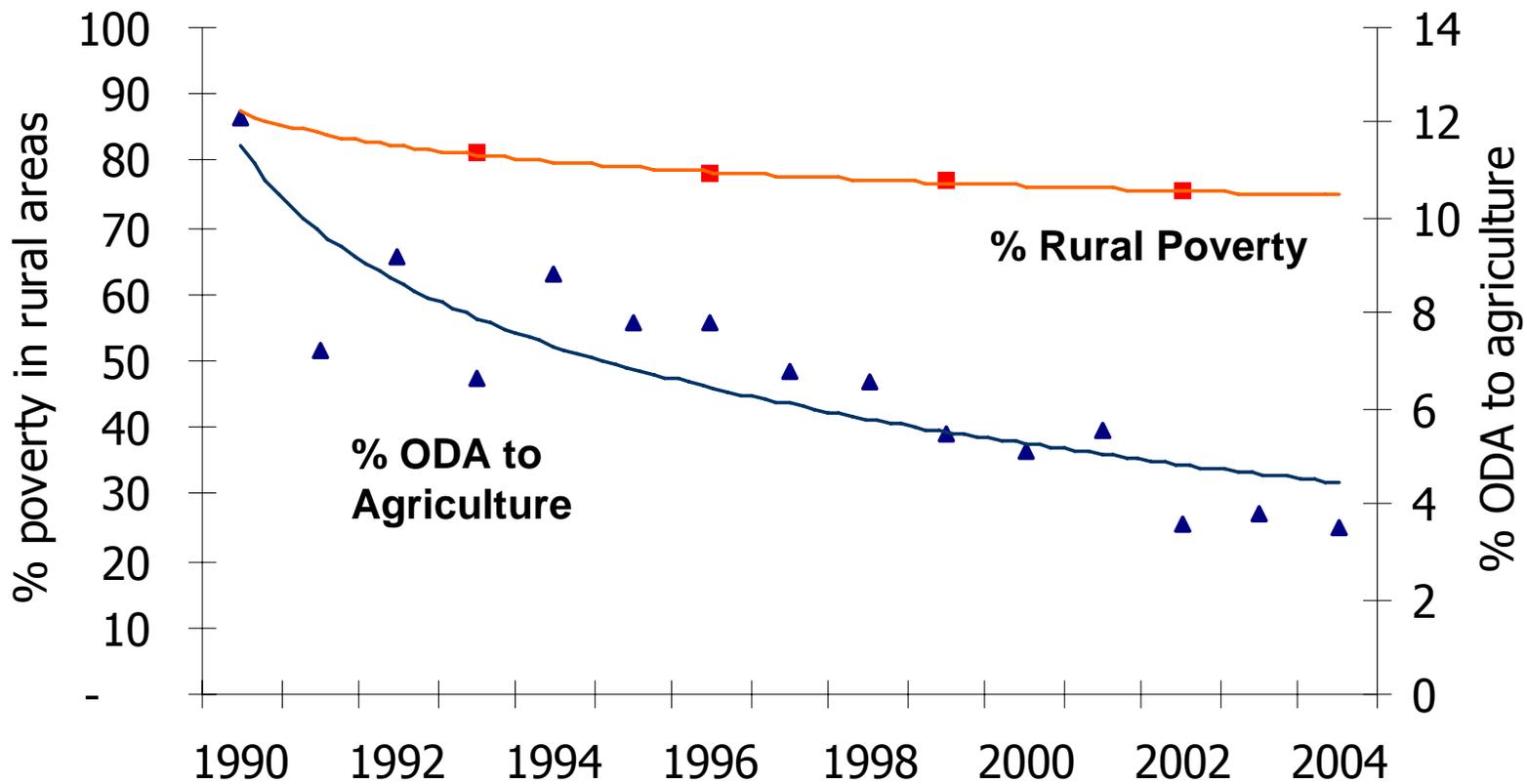
ODA in agriculture: value and share of total ODA, 1970-2007



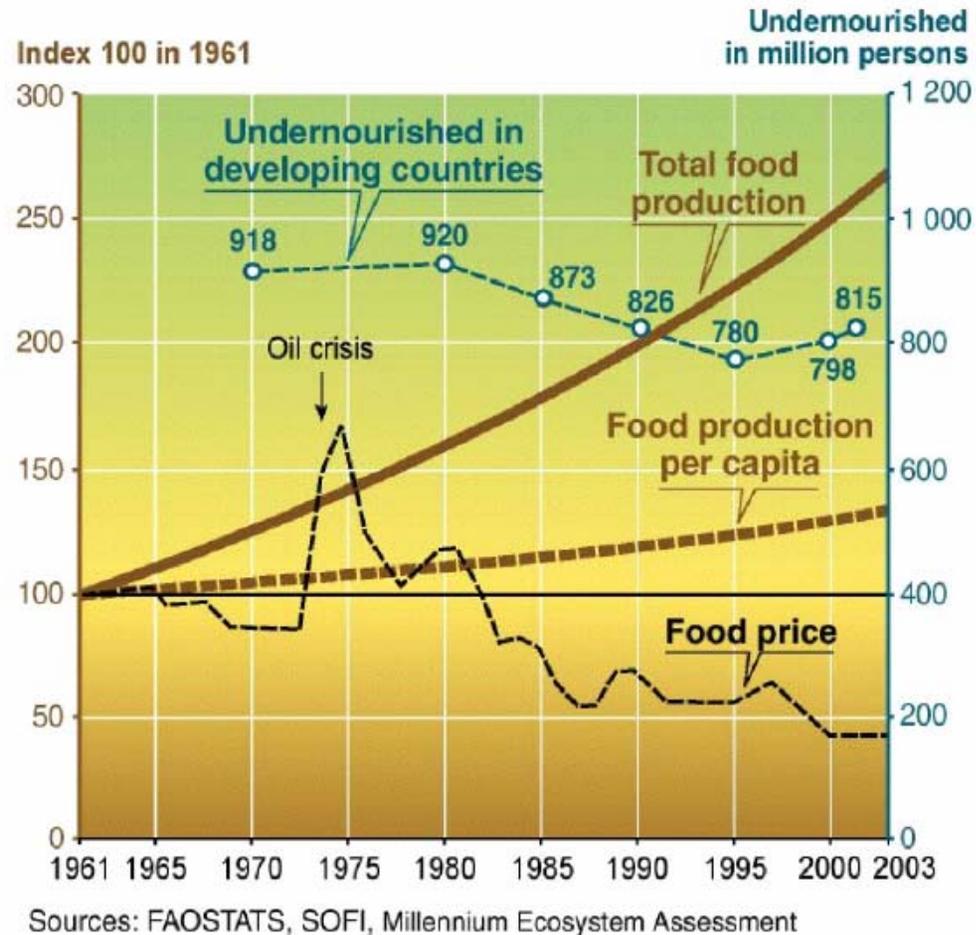
Source: UNCTAD, based on OECD, OECD.Stat Extracts (accessed on 6 May 2009).

Note: Data from 1970 to 1994 include forestry and fishing, which account for roughly one quarter of total agriculture, forestry and fishing.

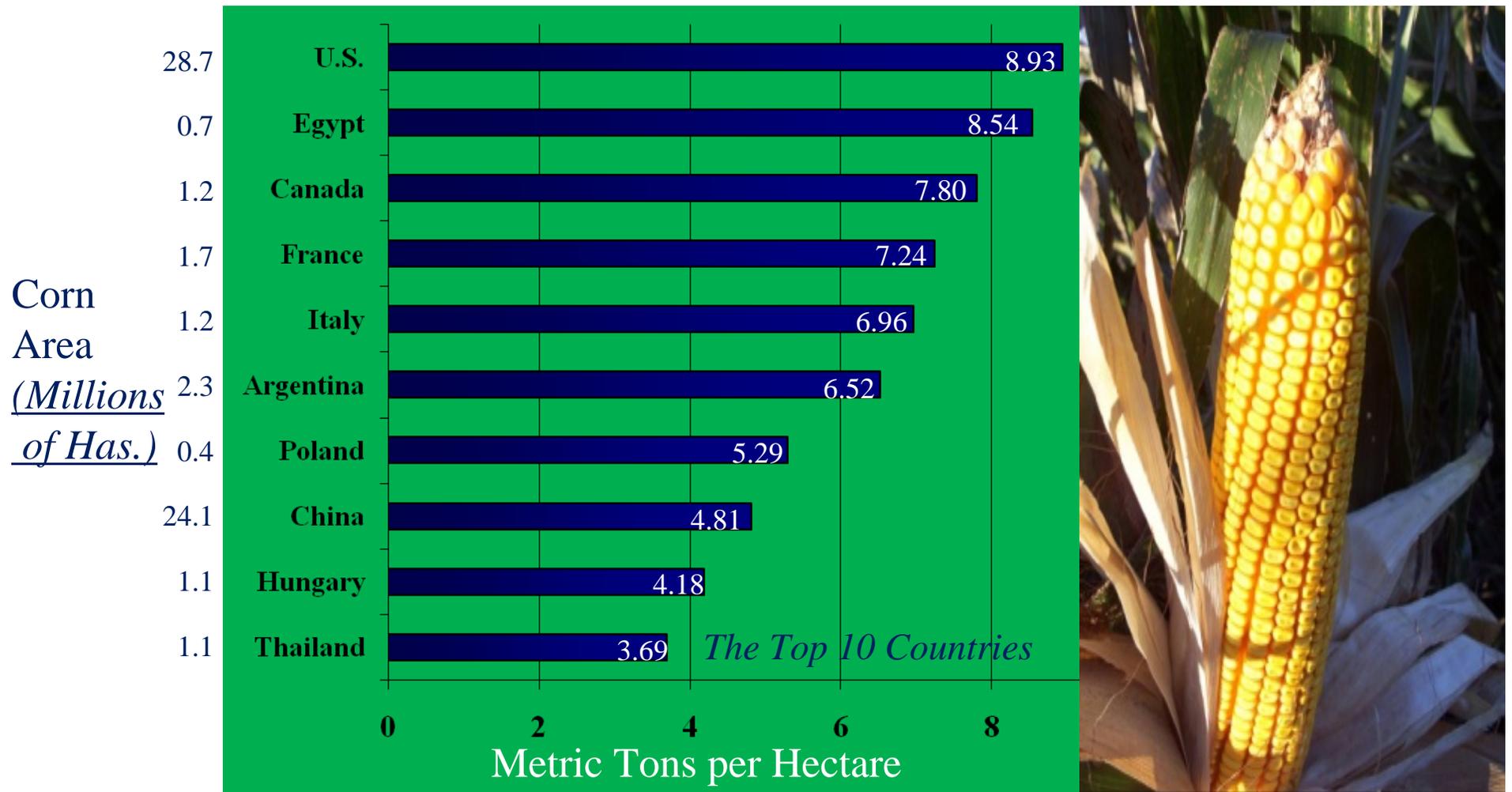
...more quickly than the decline in rural poverty, which meant slower progress on the MDGs



Technological advances and area expansion together fed public sector complacency...

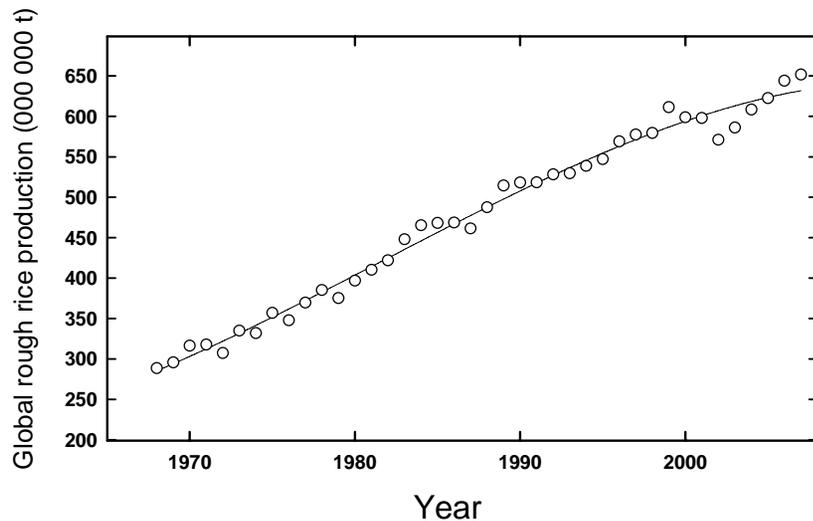


...understandable perhaps for maize, which experienced great increases in output...



Source: Ganesh Kishore, Meeting the Ag Science and Technology Challenges of the 21st Century, Singapore, 2009

..yet we all should have paid more attention to declining rates of yield gain for other cereals...

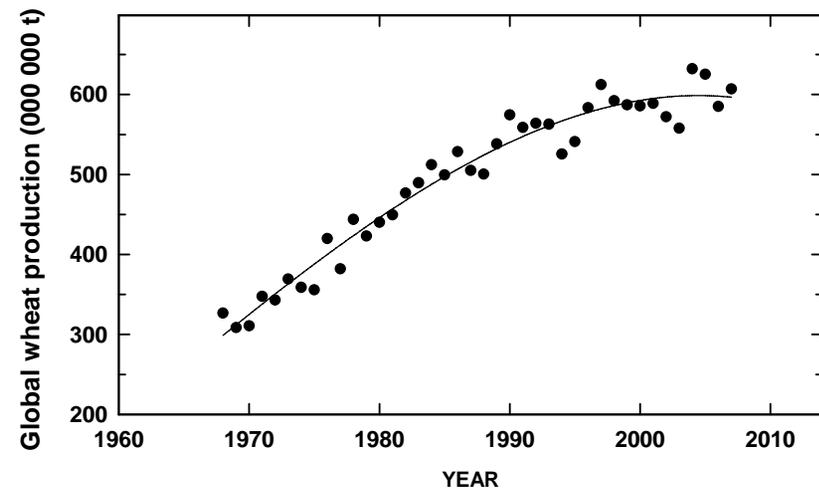


Global Rice Yield Gains

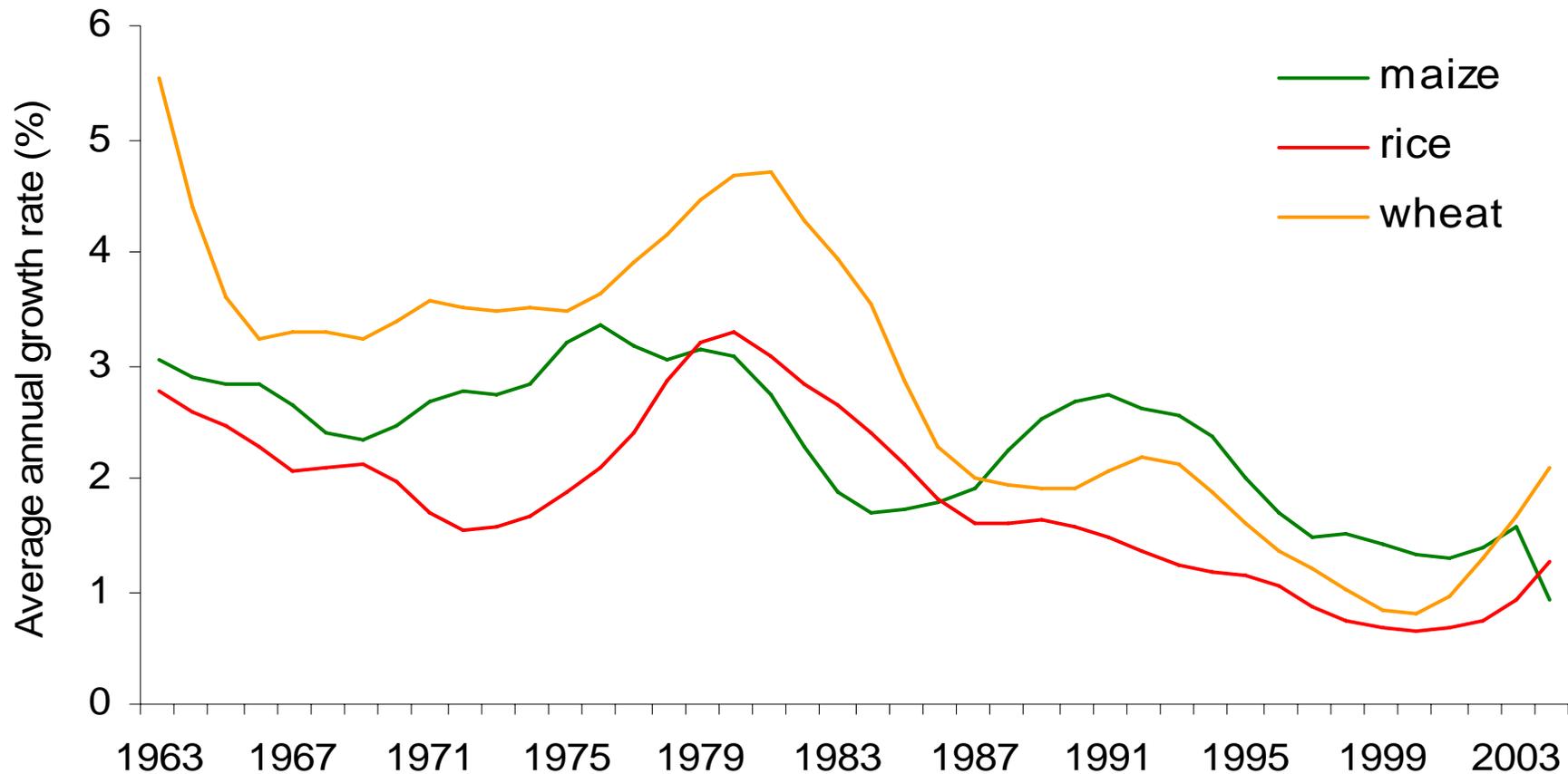
1980s: 3.1% per year
1990s: 1.4% per year
2000s: 0.8% per year

Global Wheat Yield Gains

1980s: 2.9% per year
1990s: 0.9% per year
2000s: 0.4% per year

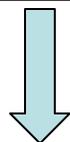


...especially the declining rates of productivity gains for cereals in developing countries



The WBG did recognize the need to revive agriculture, and urged others to do so as well

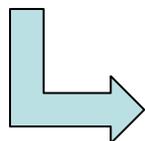
**Sector Strategy:
Reaching The
Rural Poor (2003)**



world development report

2008

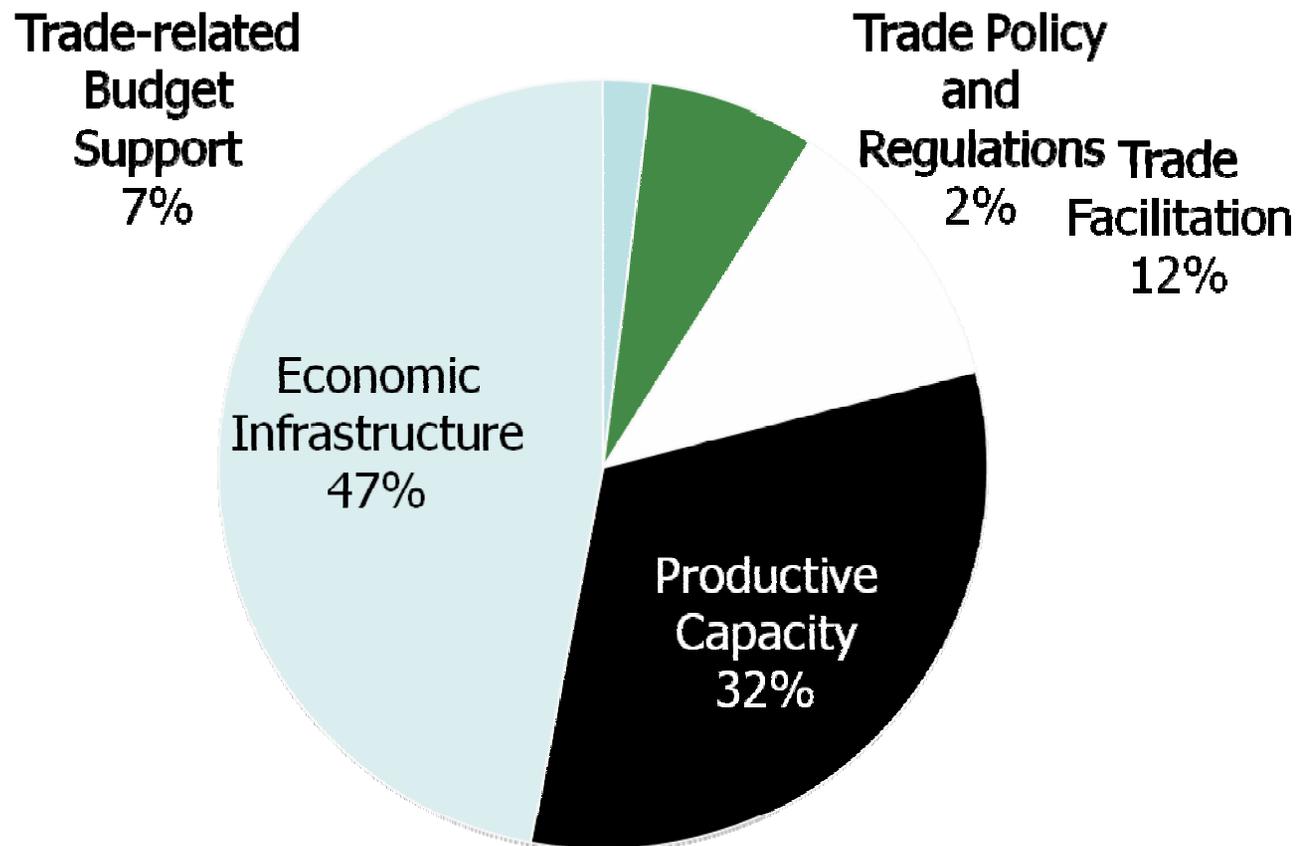
Agriculture for Development



**Agriculture Action Plan
(2010-12) from \$4.1 B
to \$6.2-8.3 B in lending
operations to:**

1. Reduce risk and vulnerability
2. Raise agricultural productivity
3. **Link farmers to markets and strengthen value chains**
4. Facilitate rural non-farm income and **diversification**/exit
5. Render environmental services

WBG also contributes indirectly to (export-oriented) agriculture through its trade portfolio



Aid-for-Trade includes technical support to governments & knowledge management

□ Technical Assistance

- 36 per year in 2008–2009
- e.g., streamlining border crossing and customs administration in Greater Mekong Sub-region

□ Policy Analysis and Advice

- 73 policy notes, country studies, regional studies per year in 2008–2009
- e.g., policy note on agriculture trade in a Ukraine-EU FTA

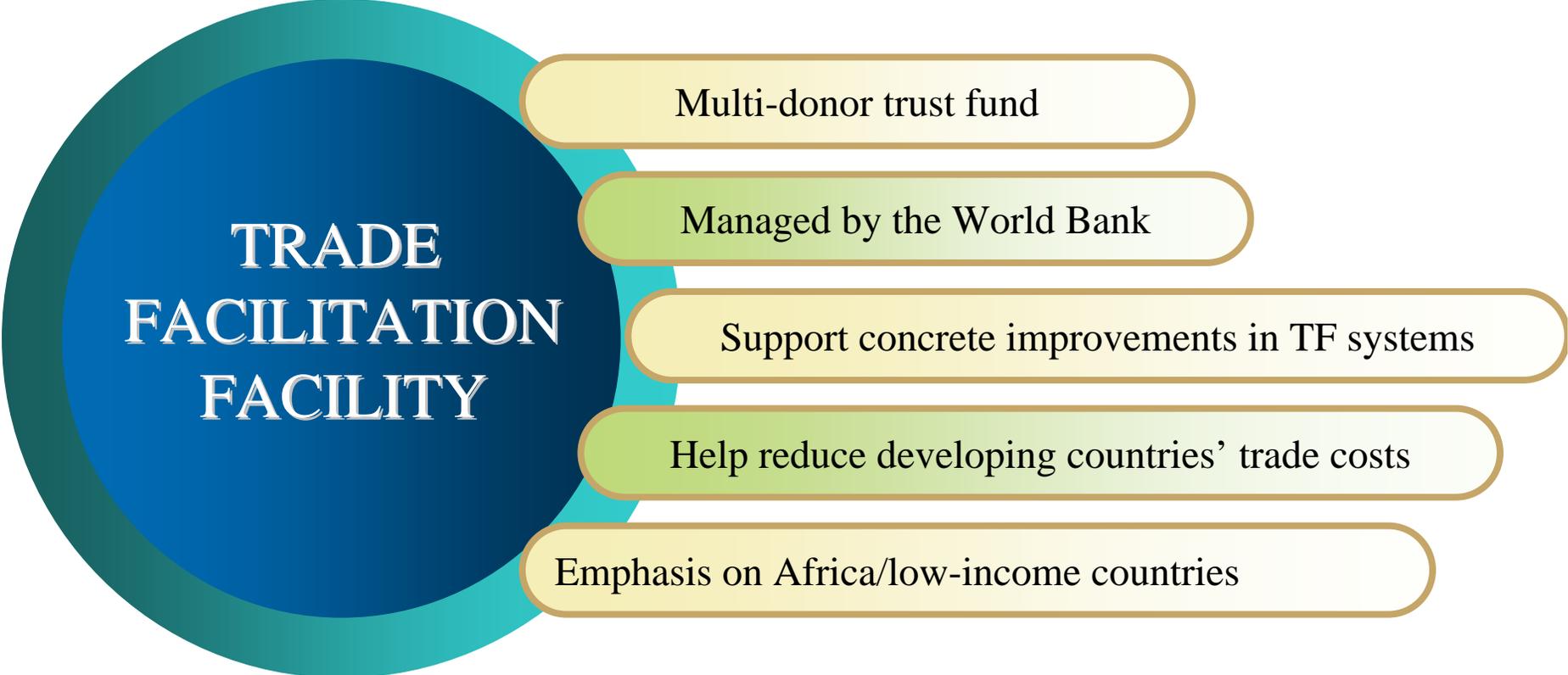
□ Data, Indicators and Research

- Datasets: *Logistics Performance Index, World Trade Indicators, new Doing Business in Agriculture*
- e.g., seven-volume series of research on agriculture incentives and Agriculture Investment Sourcebook

Aid-for-Trade also includes financing that contributes to agricultural development

- ❑ Guarantees to leverage private finance
 - Global Trade Finance Program US\$ 5.5B since 2005 in revolving fund to stimulate trade financial flows to developing countries, involving 174 banks in 77 developing countries
- ❑ Seed financing for external programs
 - Standards and Trade Development Facility
 - Trade Standards Practitioners Network
- ❑ IBRD lending and IDA credits
 - Jilin Province Agricultural Product and Safety (\$142 M)
 - Ukraine Agricultural Competitiveness and Food Safety (\$75 M)
- ❑ AHIF Avian and Human Influenza Facility (\$500 M)

Although cross-sectoral, the Trade Facilitation Facility is especially relevant to agricultural trade



The infographic features a central dark blue circle with the text 'TRADE FACILITATION FACILITY' in white. This circle is surrounded by a teal ring. To the right of the circle, five horizontal, rounded rectangular callouts are stacked vertically, each containing a key feature of the facility. The callouts alternate in color between light yellow and light green.

TRADE FACILITATION FACILITY

Multi-donor trust fund

Managed by the World Bank

Support concrete improvements in TF systems

Help reduce developing countries' trade costs

Emphasis on Africa/low-income countries

TFF focus areas

Border management

Improvement in border management in a broad sense: integration of customs, product standards, tax, rules of origin, etc.

Trade Infrastructure

Improvement in the management of key trade related infrastructure, especially gateways and multimodal facilities

Logistics services

Improvement of the quality/professionalism of private logistics services, through technical/economic regulation and capacity

Regional

Regional trade facilitation including transit systems

Indicators

Performance monitoring and indicators: e.g., data on time, cost, and reliability along corridors

Action plan

Implementation of comprehensive action plan addressing all of the above

WB Aid-for-Trade includes considerable work in the area of SPS capacity-building

- *Country-level SPS assessments:*
 - 5 countries (Zambia, Kenya, Niger, Uganda, Pakistan)
 - 1 region (Commonwealth of Independent States)

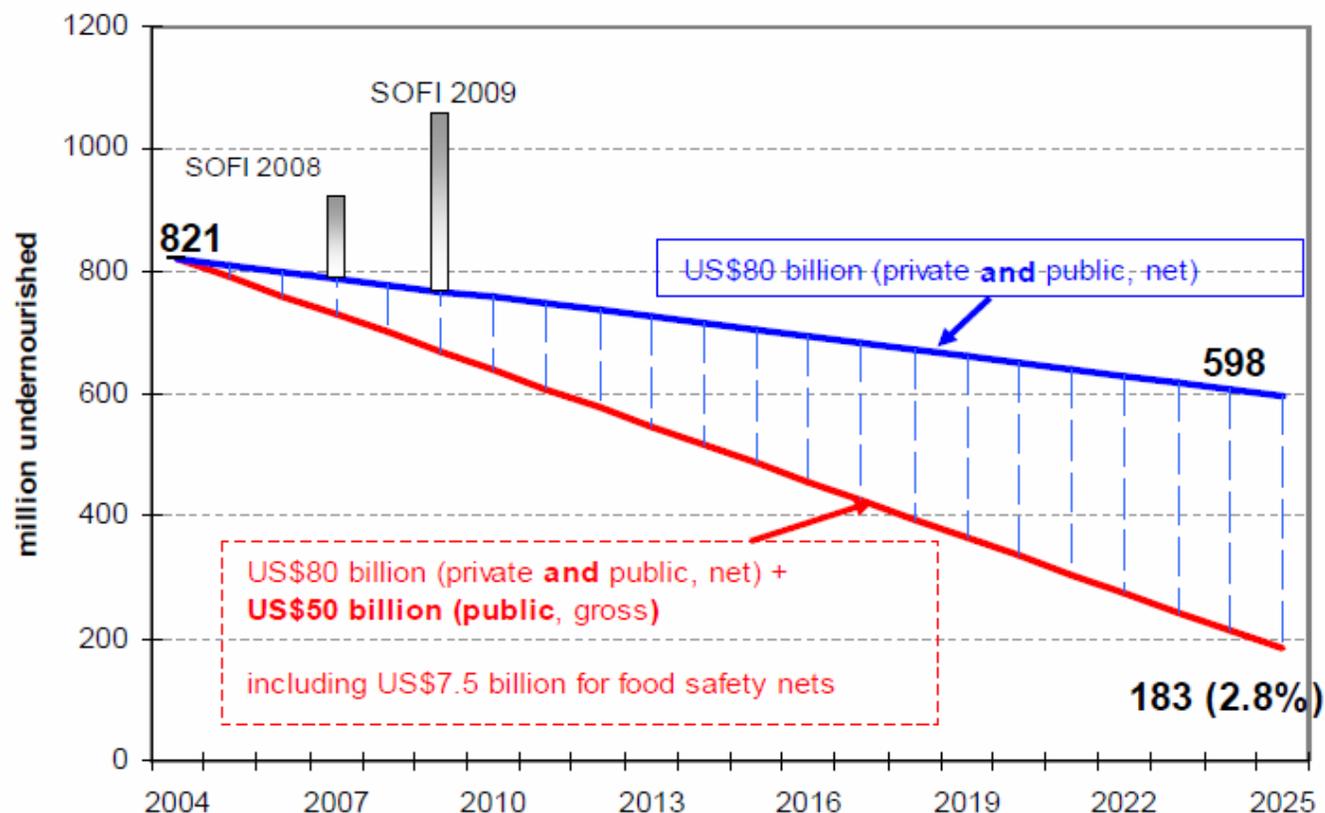
- *SPS Country Action Plans*
 - 5 countries (Vietnam, Laos, Armenia, Moldova, Tanzania)

- *Regional SPS Action Plans*
 - CIS countries

- *Guide to Assessing Investment Needs for National Agricultural Labs*

Despite our collective efforts, the overall funding gap to meet MDG goals is still substantial

ANNUAL Investment Needs (All Developing Countries) to 2025
Baseline and "Zero Hunger" Scenario

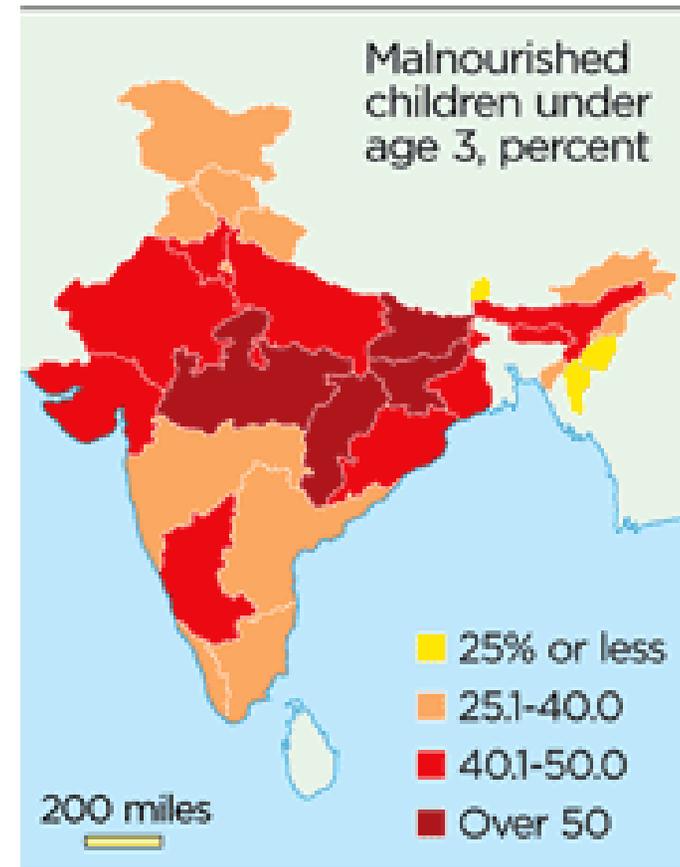


Source: Global Perspectives Study Unit, FAO, 1 October 2009

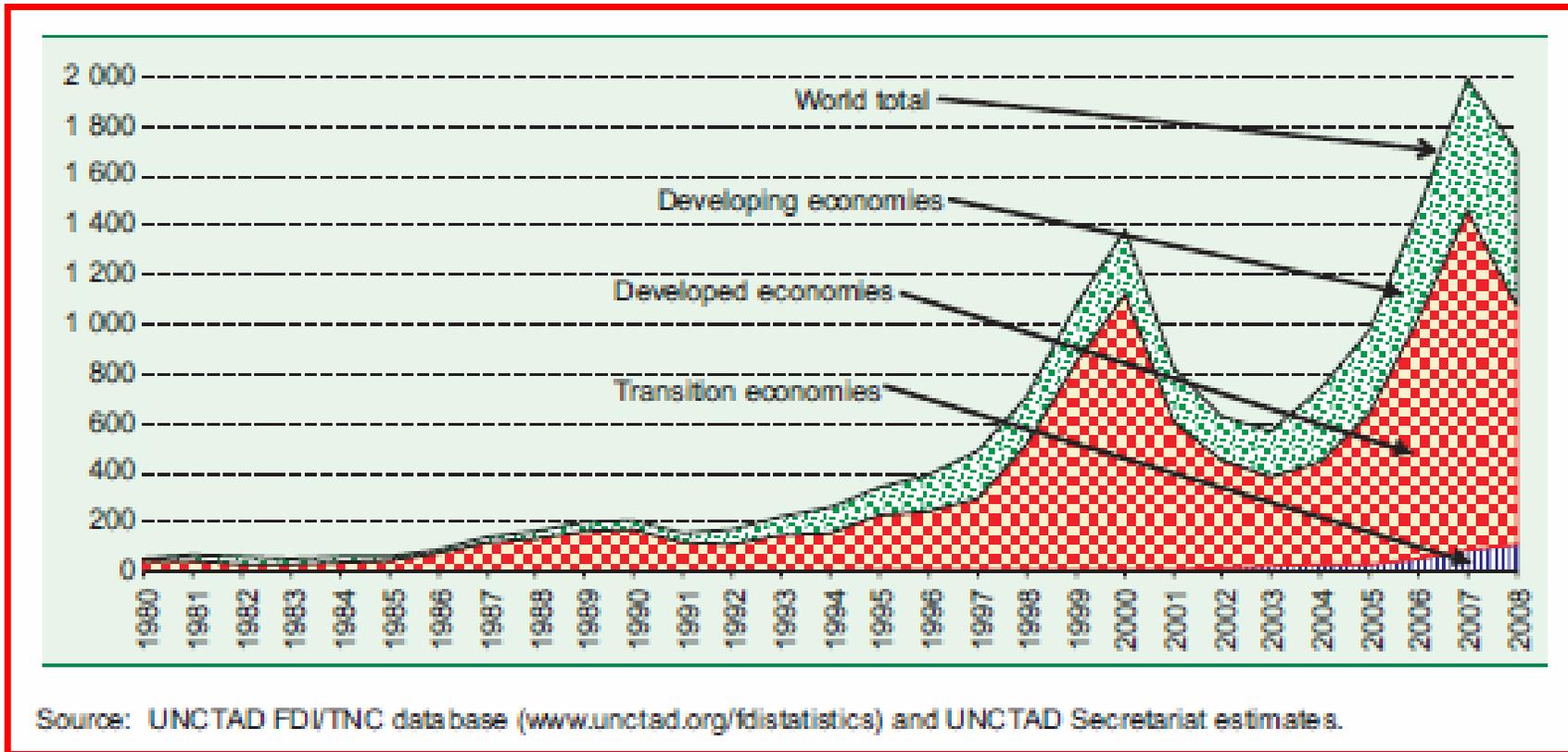
SSA especially needs more investment in agriculture and infrastructure

- An additional \$7-9 billion annually in ag R&D beyond current government allocations
- Another \$0.7 billion annually for irrigation
- Perhaps \$10 billion annually for transport

Hunger rates



What about private investment flows?



FDI did rise sharply from 2003-2007, and the share for developing countries increased gradually

..yet the distribution across regions and even within them varied widely...

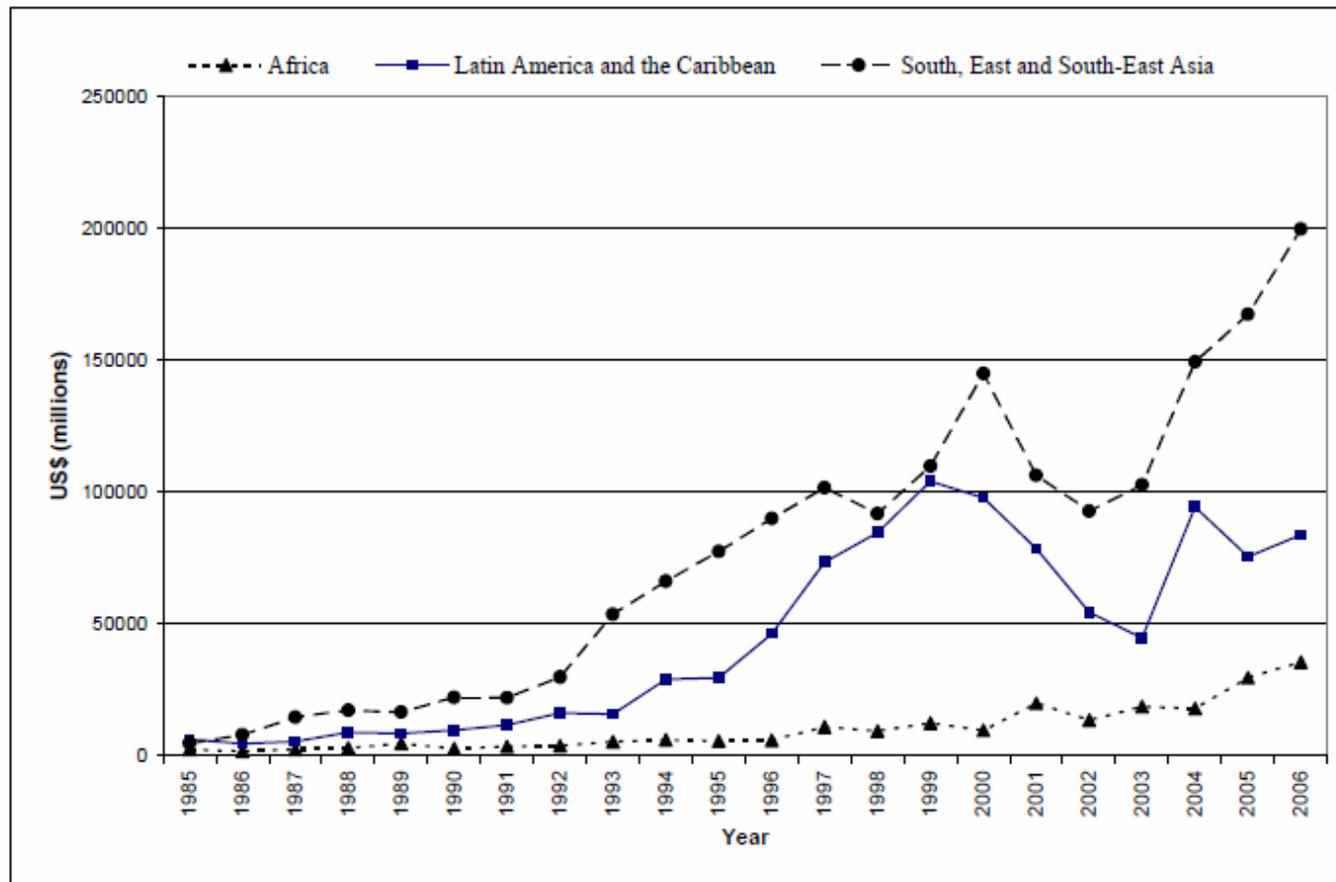
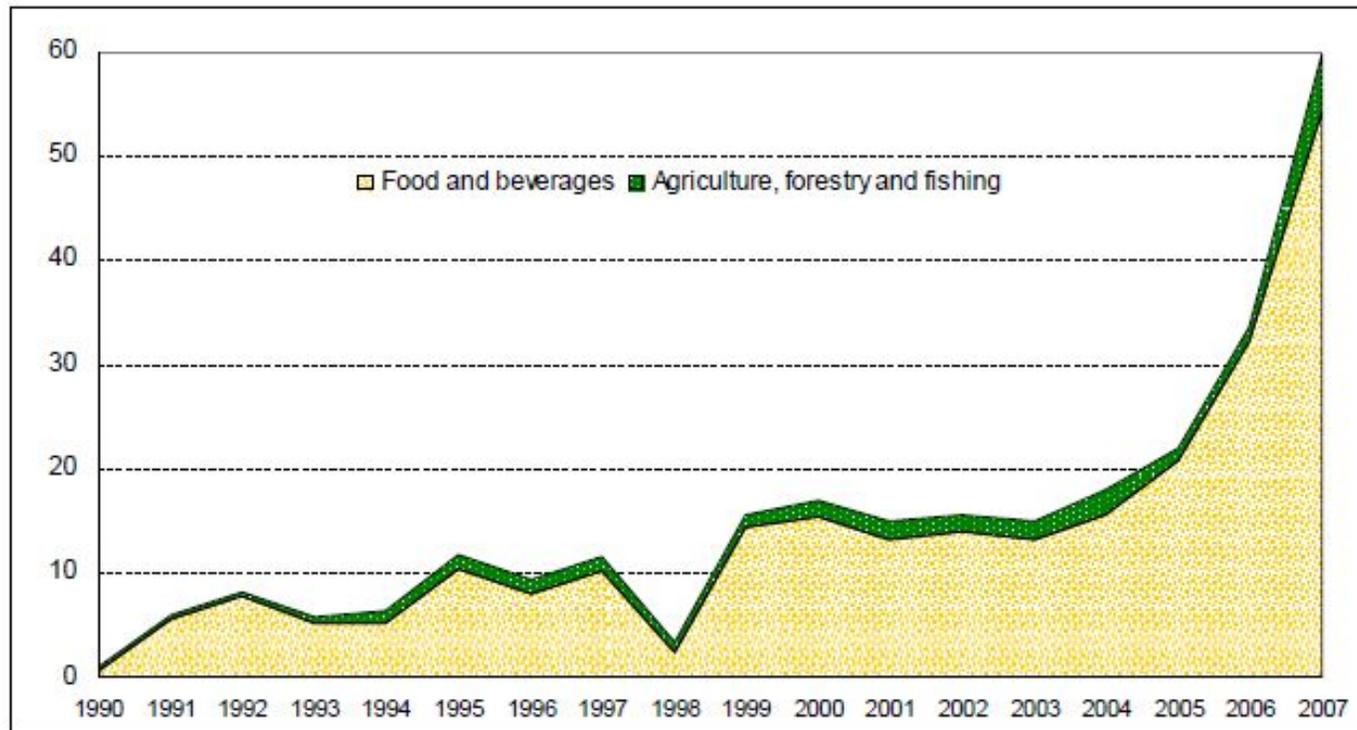


Figure 2: Foreign Direct Investment in Africa and Select Regions

Source: UNCTAD FDI-Online Database

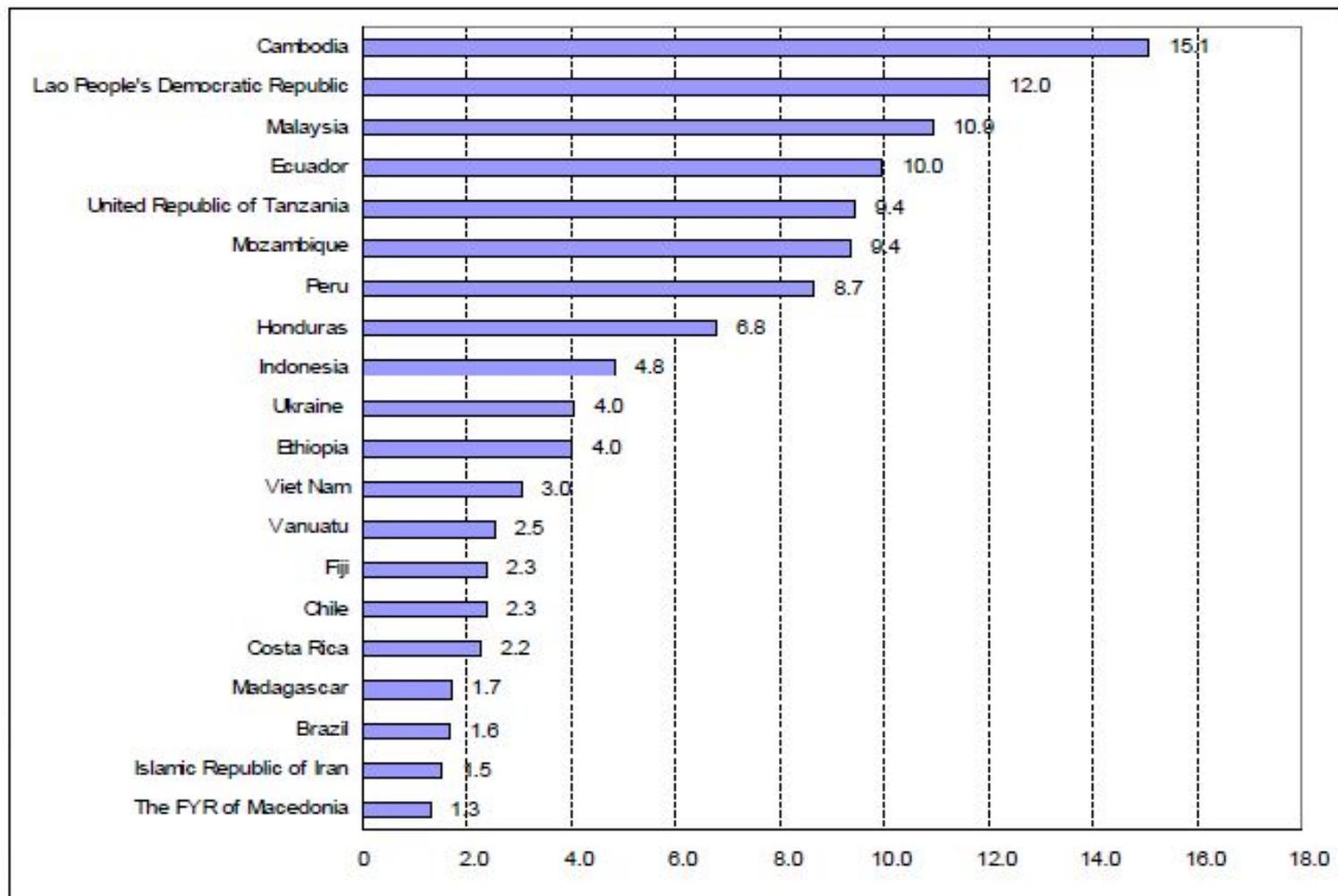
FDI in agriculture and in food and beverages: rising; the latter is larger

1990–2007, billions of dollars

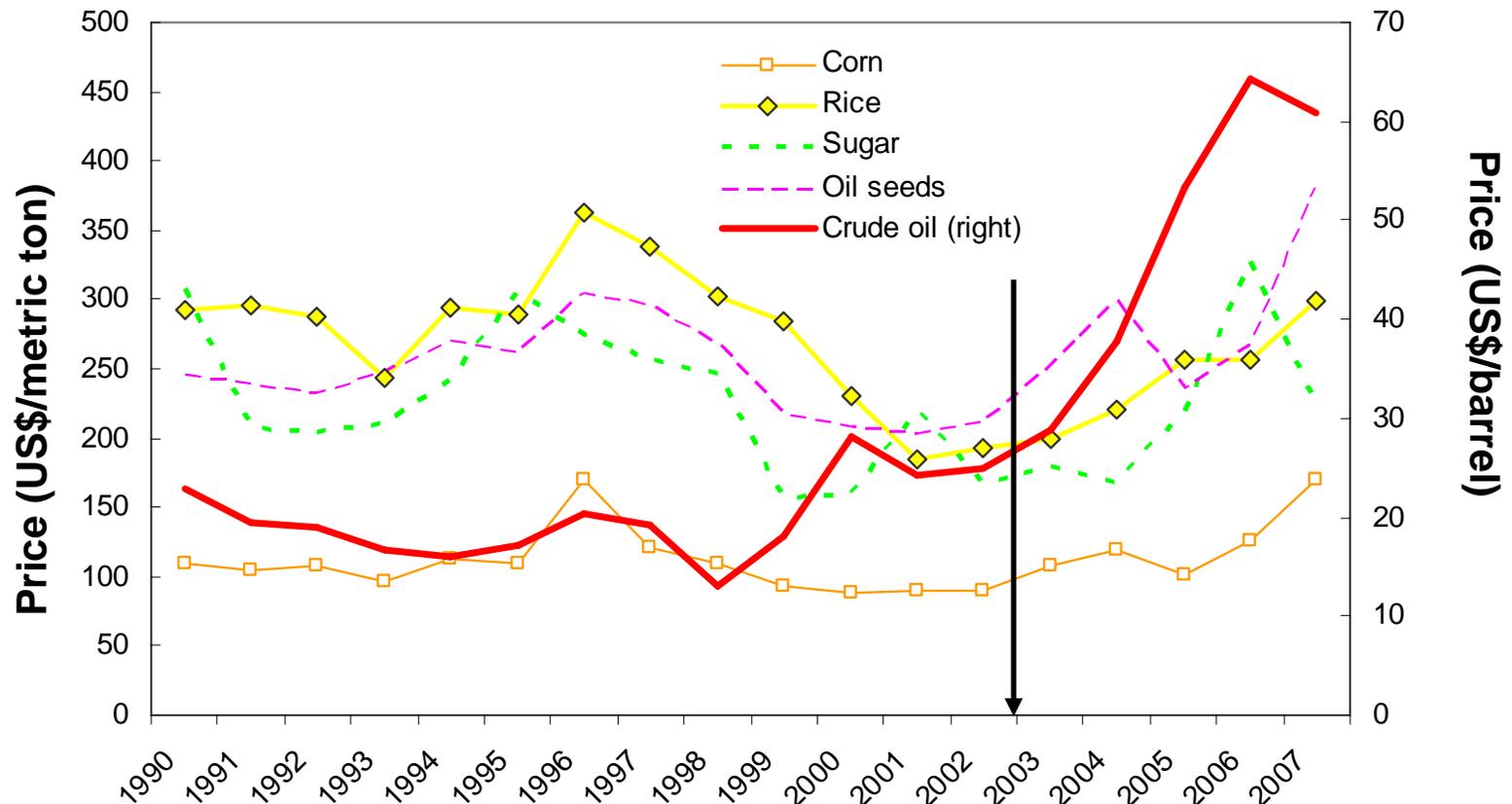


In some developing and transition economies, the share of agriculture in FDI inflows is relatively high

% of 2005–2007 inflows



Since 2003 commodity price increases sparked renewed interest in agro-investment...



Sources: Corn, rice, sugar, and oilseeds for 1990–2005 - OECD 2005; 2006-07 – WB 2007
Crude oil - IMF 2007, all as quoted by Rosegrant, 2008

...which was partly attributable to the rising share of production going to non-food uses...

- ❑ US used 80 million tons of corn (24%) for ethanol in 2007 and around 100 million in 2008 (31%)
- ❑ In effect, 75% of increase in global corn production from 2004-07 went for ethanol in US
- ❑ Biodiesel used about 9 million tons of vegetable oils in 2008 (7% of global supplies)
- ❑ Brazil used about 55% of sugar cane for ethanol, but sugar exports remained adequate to prevent major price increases

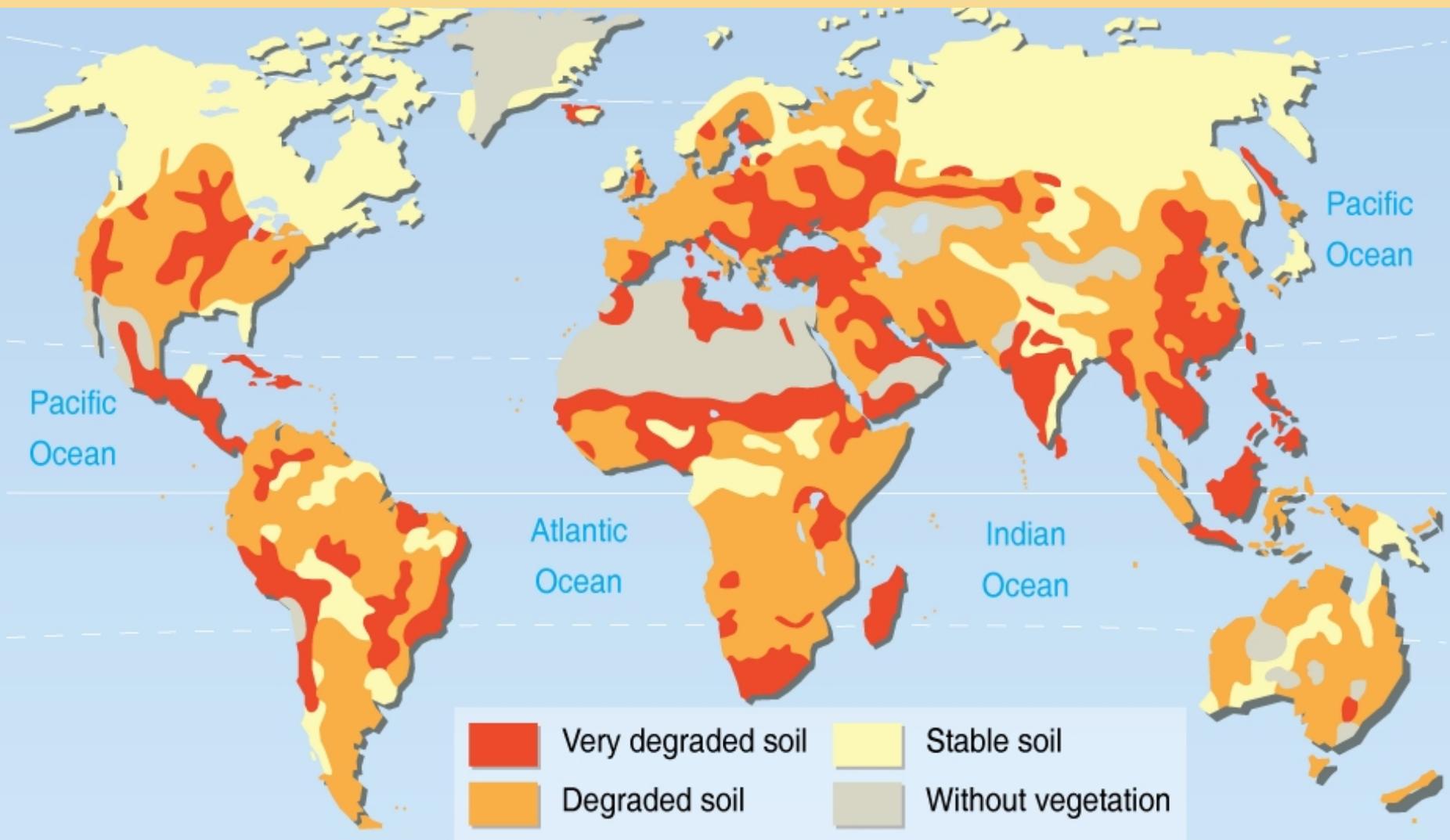
...but also reflected more recognition of natural constraints in terms of growing conditions,...



40% too dry 21% too wet 21% too cold
6% too rough terrain 2% unsuitable soils

Source Robert L. Thompson, presentation at Global Harvest Initiative, 2009

...man-made problems like soil degradation,...



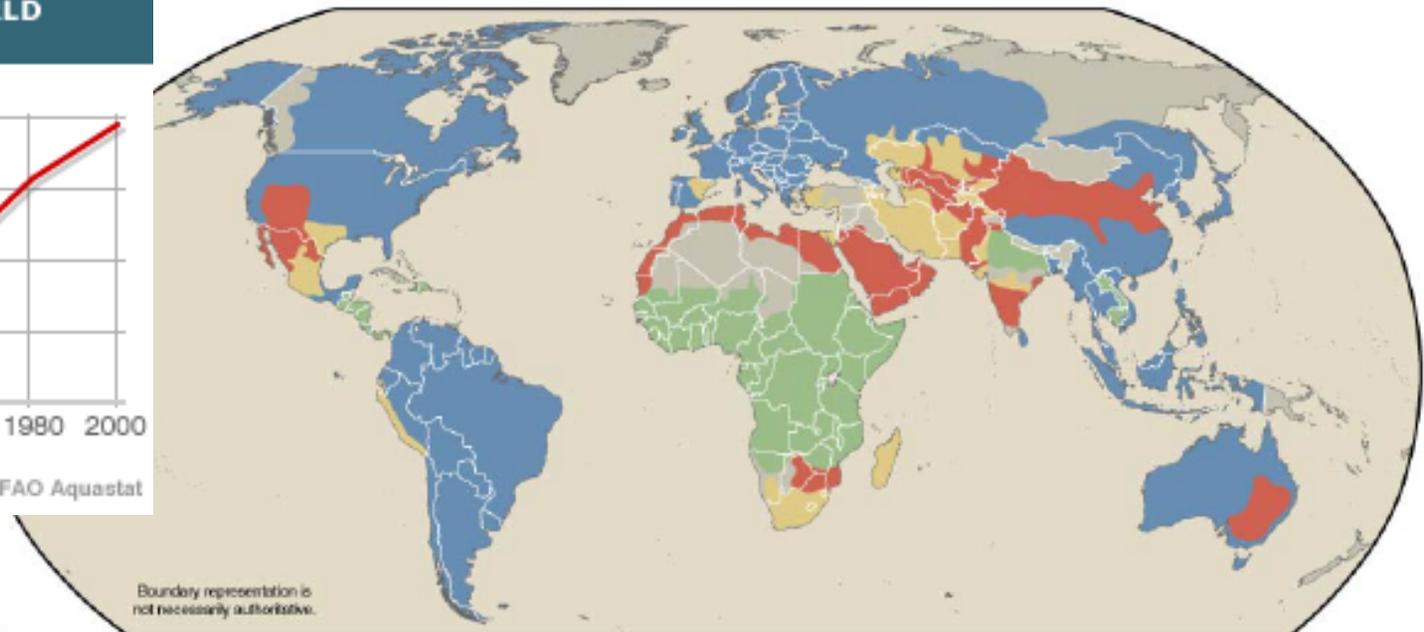
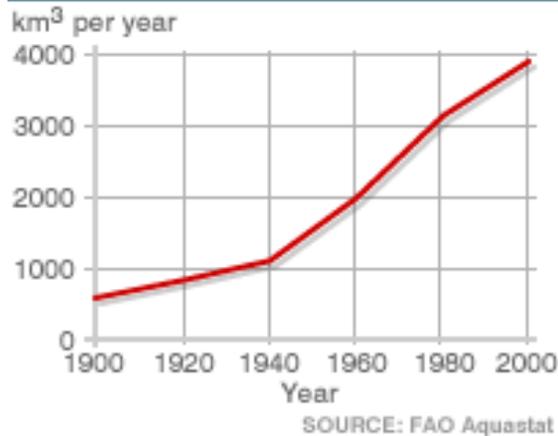
Source: UNEP, International Soil Reference and Information Centre (ISRIC), World Atlas of Desertification, 1997.

Philippe Rekacewicz, UNEP/GRID-Arendal

...and excessive water consumption...

Projected Global Water Scarcity, 2025

ESTIMATED ANNUAL WORLD WATER USE



Boundary representation is not necessarily authoritative.

- Physical water scarcity:** More than 75% of river flows are allocated to agriculture, industries, or domestic purposes. This definition of scarcity — relating water availability to water demand — implies that dry areas are not necessarily water-scarce.
- Approaching physical water scarcity:** More than 60% of river flows are allocated. These basins will experience physical water scarcity in the near future.
- Economic water scarcity:** Water resources are abundant relative to water use, with less than 25% of water from rivers withdrawn for human purposes, but malnutrition exists.
- Little or no water scarcity:** Abundant water resources relative to use. Less than 25% of water from rivers is withdrawn for human purposes.
- Not estimated**

Source: International Water Management Institute.

(since agriculture is the biggest water user)

□ Agricultural uses account for almost 70% of global water withdrawals

□ Irrigation is the largest use within agriculture

□ Water withdrawals for agriculture to grow 11% by 2050

□ The top 5 geographic units account for 60% of the total irrigated land area of 2.77 million km²

- India 558,080
- China 545,960
- USA 223,850
- Pakistan 182,300
- EU 168,050

There is also rising awareness of climate change impacts and the need for adaptation

- Greater weather variability with more extreme events
- Less precipitation and more groundwater depletion in some areas, with longer droughts
- Excess rainfall in other areas, that often lack catchment facilities
- Increased flooding and loss of coastal areas
- Reduction in crop yields and agriculture productivity in some producing areas
- Increased spread/longer cycles of pests/diseases
- Lower livestock productivity due to stress, and higher costs as feed and energy prices rise
- Lower labor productivity as daytime temperatures rise and water becomes scarce

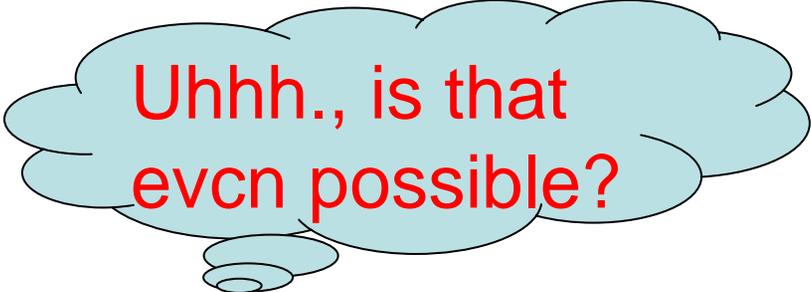
Some argue that the planet may be facing a long-term, perhaps chronic problem...



- By 2050 food demand will rise 70% to feed 9.3 B people (versus 6.7 B)
- We will need to double global cereal output as dietary upgrading occurs
- Yet paradoxically, most hungry people live in countries that already have surplus food production

...the solution to which is not clear

- About 10% of cereal production growth may come from area expansion (from the current level of 3.75 billion hectares)
- Maybe 20% from intensification based on irrigation, cultural practices, multiple cropping, etc
- So the remaining 70% must come from innovation



Uhhh., is that
evcn possible?

One key to the future of agriculture is biotechnology, which has become a major driver of growth



Breeding

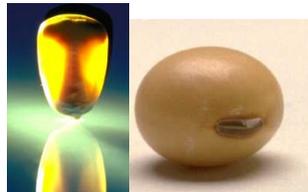
Biotech

Traits



- ↑ productivity (complex)
 - ↑ reliability
 - ↑ quality
 - Integration of native and biotech traits
- Seed - carrier
of genetic information

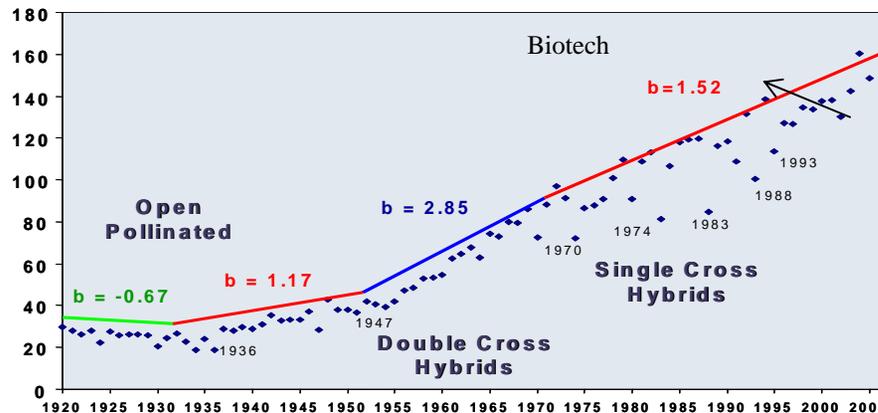
- Pest protection
- Stress alleviation
- Superior nutrient use
- Enhanced nutrient density
- Elevated safety
- Processor friendly



Chemistry

- Pest control
- Nutrition
- Growth regulators

**Corn Yields
U.S. Average Bu/Ac**



Source: DuPont

Nearly 150 M acres not in corn cultivation !

...another key is agro-enterprise investment, which can bring many benefits if done right...

- ✓ Capital deepening and broadening
- ✓ Better production, post-harvest handling, processing technology
- ✓ Better product quality
- ✓ BOP value propositions including food fortification
- ✓ Creation or stimulation of a local market
- ✓ Modern management know-how
- ✓ Investment in collateral businesses
- ✓ Cross-cutting productive infrastructure

...and export-oriented agro-investment can bring still more benefits...

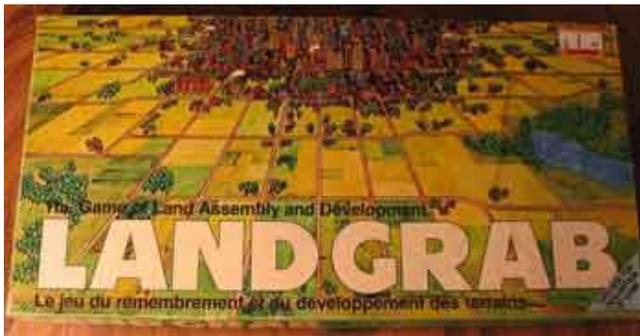
- ✓ Introduction of scale and other economies
- ✓ Better quality assurance systems
- ✓ Adherence to WTO SPS commitments
- ✓ Compliance with private food safety, environmental and social requirements
- ✓ Linkages to larger, more diverse markets, coupled with traceability
- ✓ Value –addition through innovation in products and processes as well as branding
- ✓ Improved social services in rural areas not easily served by government

Yet the recent upsurge in agro-investment in developing countries has been controversial...

**Le « Néocolonialisme Agraire »
Gagne du Terrain dans le Monde**

Le Monde.fr

23 September 2008



**“Conflicts over Natural
Resources will Grow”**

**The
Economist**

13 November 2009



“Farmland Scramble”

19 November 2009

“Is There Such a Thing as Agro-Imperialism?”

The New York Times

16 November 2009

**“The Water Rights Grab: Big Business,
Investors Push for Privatization”**

“Global Warming is Real” blog

13 November 2009

...so it is critical that agro-enterprise stay faithful to its Mission, which is...

To responsibly and sustainably grow, pack, process, and deliver consistently to consumers and other users...

...food, feed, fiber, and biomass in sufficient quantity

...that is safe to consume, compliant with applicable regulations, and in conformity with buyer needs and expectations...

...at prices that are viable over time for both seller and buyer

International agencies are framing an appropriate response to pressures on land....

Government of Japan



Promoting Responsible International Investment in Agriculture

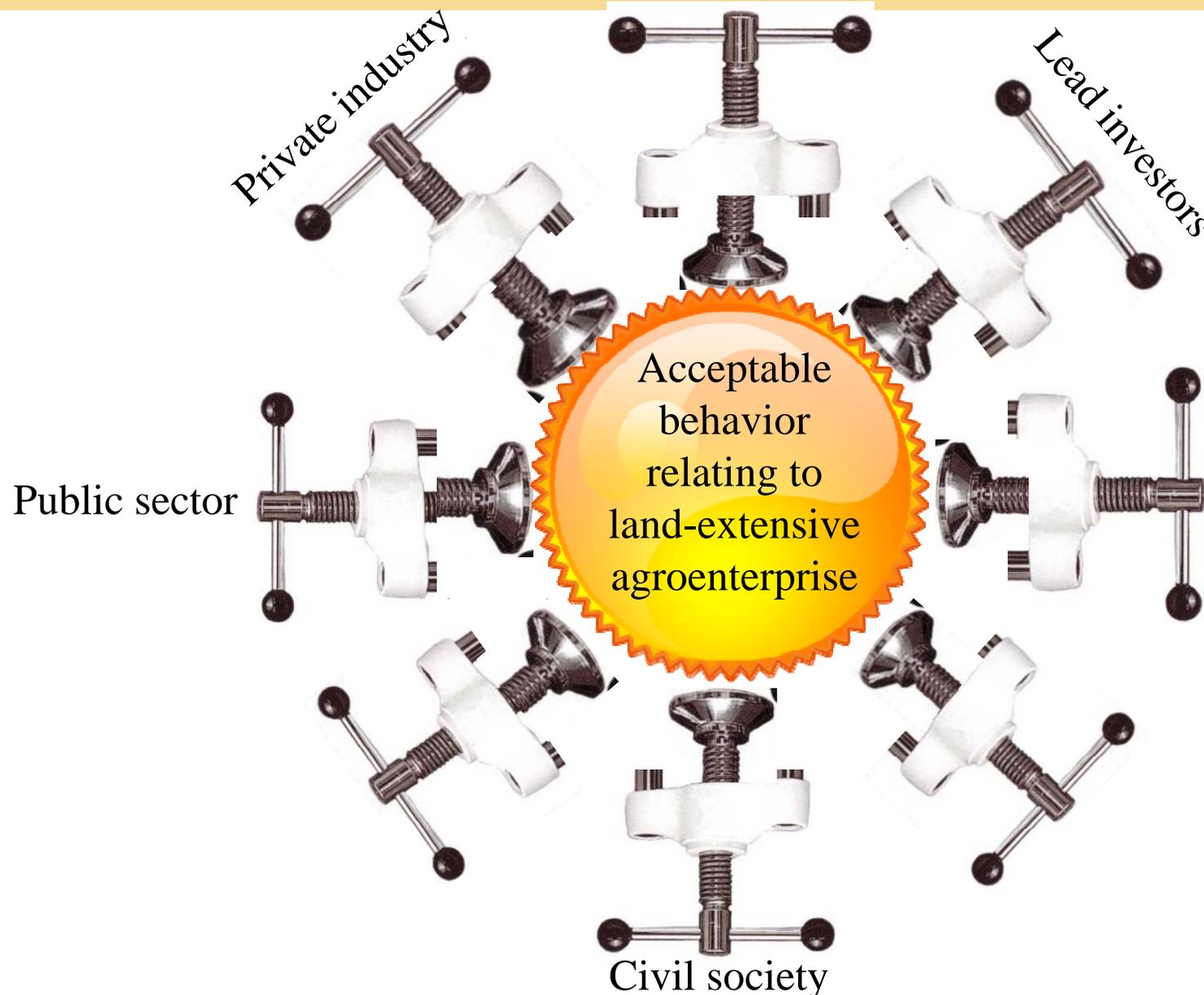
Roundtable concurrent with the 64th United Nations General Assembly

Chair's Summary

...so far seven key principles for Responsible Agro-investment have emerged, centering on ...

1. Land and Resource Rights
2. Food Security
3. Transparency, Good Governance and Enabling Environment
4. Consultation and Participation
5. Economic Viability and Responsible Investor Behavior
6. Social Sustainability
7. Environmental Sustainability

...yet to operationalize these principles a broader consensus is needed...



...that reflects better empirical evidence, so a
WB study is underway in 21 countries

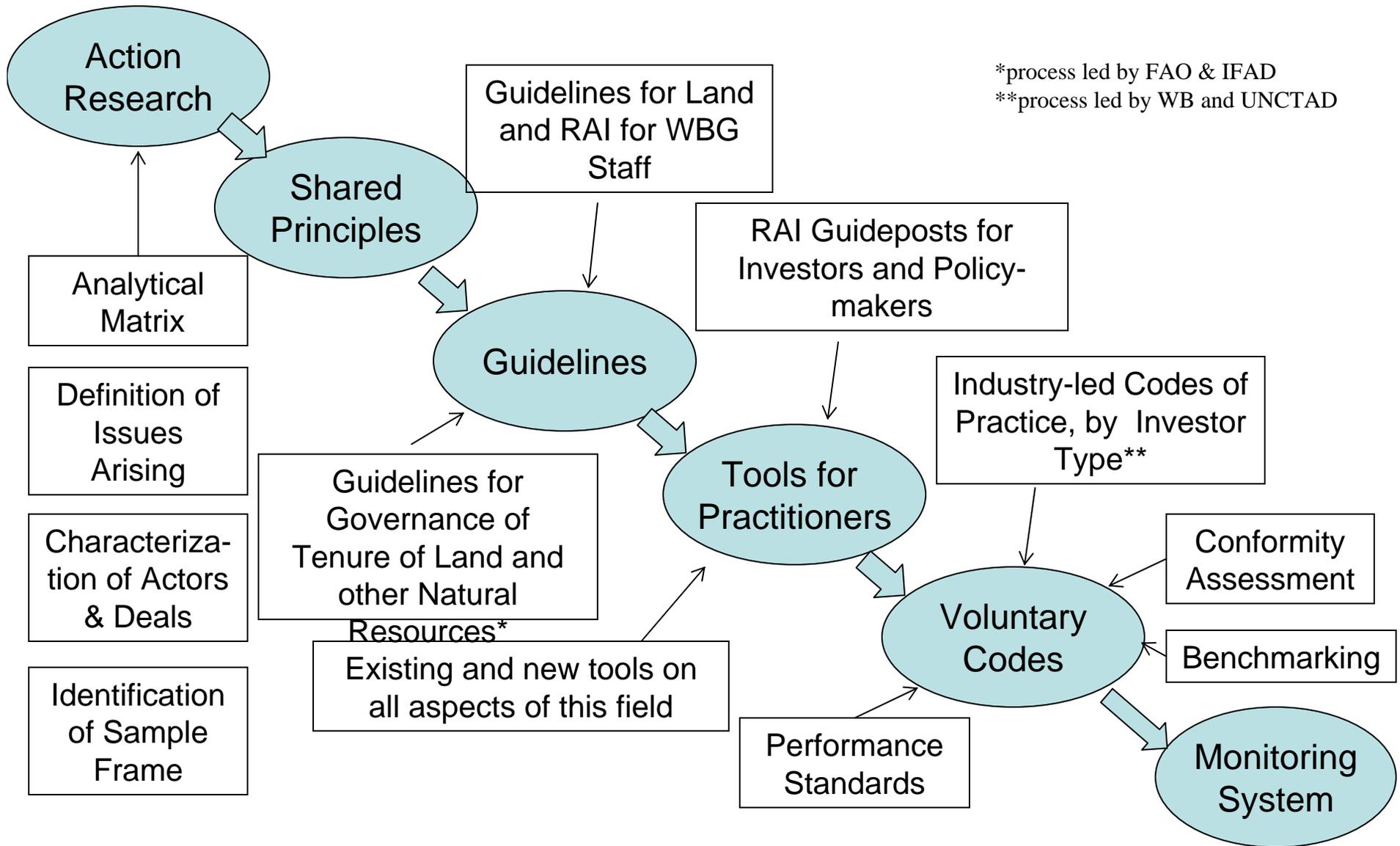
- To identify key drivers and aggregate trends
 - Global demand, agro-ecological potential, land values
 - Aggregate investment determinants
- To assess country level evidence in 2 ways
 - **I: Quantification & Context**
 - Inventory based on official data
 - Policy, legal, institutional framework
 - **II (subset): Actual implementation**
 - Social, environmental impact assessments
- To help address the phenomenon
 - Country level: Link to Bank analytical & operational work
 - Global community: Feed into voluntary guidelines on tenure of land and guidelines on responsible agroinvestment

...the results of which will be presented in late April at
the WBG Annual Land Conference

Also in April a Knowledge Exchange platform for RAI will be introduced that will serve as:

- A **joint repository** for research, analytical work, principles, guidance, etc
- A **one-stop shop** for information that practitioners and stakeholders may need
- A **source** of practical tools on all relevant topics
- A **virtual meeting place** for practitioners
- A **forum** for exchanging views on hot topics, lessons learned, and best practices
- A **conduit** for e-learning
- A **gateway** to other resources

All part of joint process by the development community to promote and facilitate RAI



Draft Homepage for the Responsible Agro-investment Knowledge Platform

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RAI Knowledge Exchange Platform

International Development Institutions Multi-country Development Organizations Development Donor Agencies Specialized Centers *Trading Blocs (FTAs/Customs Unions) Regions Countries

BROWSE BY

International Guidance

For Prospective Investors

For Source Government Policy-makers

For Destination Government Policy-makers

For Destination Government Investment Officers

Resources

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IMAGE PLACEHOLDER

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Trade agreements
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Public Partnerships

Public/Private Partnerships

Sector-wide Programs



Annex 1:
Detailed slides for each RAI Principle

Principle 1: Land Rights

Existing rights to land and natural resources are recognized and respected.

This depends on:

- (i) Proper identification of all rights holders
- (ii) Legal recognition demarcation and registration/recording
- (iii) Direct and informed negotiation with land holders/users
- (iv) Fair and prompt payment for all acquired rights
- (v) Independent avenues for resolving disputes or grievances

Principle 2: Food Security

Investments do not jeopardize food security, but rather strengthen it.

Protecting food security requires that governments and investors:

- (i) Ensure at least equivalent access to food by affected populations
- (ii) Expand opportunities for outgrower/off-farm employment
- (iii) Adopt strategies to prevent food shortages/reduce risks
- (iv) Consider impacts on national food security in design/approval

Principle 3: Transparency

Processes for accessing land and making associated investments are transparent, monitored, and ensure accountability by all stakeholders.

Public and private sector policies, rules, and practices should ensure that:

- (i) All relevant information is publicly available
- (ii) Institutions have capacity to operate efficiently and transparently, practice good governance, & are audited
- (iii) An independent system to monitor progress towards a better investment climate is in place

Principle 4: Consultation

All those materially affected are consulted and agreements from consultations are recorded and enforced.

This requires clarity on:

- (i) Procedural requirements
- (ii) The character of agreements reached in such consultations
- (iii) How the agreements can be enforced

Principle 5: Responsible Investing

Projects are viable economically, respect the rule of law, reflect industry best practice, and result in durable shared value.

All investors (whether private or government-linked) should:

- (i) Comply with laws, international treaties, best practices
- (ii) Adhere to global best practices
- (iii) Aim to increase shareholder value & benefit host area

Governments must also **assess economic viability** in a cost-effective way and **integrate major projects** into broader development strategies.

Principle 6: Social Sustainability

Investments generate desirable social and distributional impacts and do not increase vulnerability.

Social sustainability can be enhanced if governments and investors:

- (i) Identify social issues/risks—and strategies to mitigate these and increase social benefits—during preparation
- (ii) Consider interests of vulnerable groups & women
- (iii) Include provision of local public goods in project design

Principle 7: Environmental Sustainability

Environmental impacts due to a project are quantified and measures taken to encourage sustainable resource use, while minimizing the risk/magnitude of negative impacts and mitigating them.

It is crucial that investors and government collaborate to:

- (i) Conduct independent environmental impact analysis prior to approval
- (ii) Promote increasing productivity on already used areas
- (iii) Use production systems that enhances resource efficiency
- (iv) Ensure that good practices are followed
- (v) Encourage beneficial ecosystem services
- (vi) Address negative impacts via env. management plans.