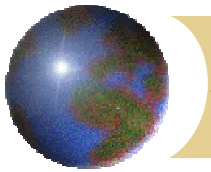


World Development Report 2008:
Agriculture for Development
(Preliminary Findings)

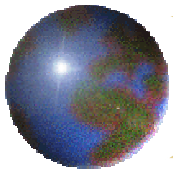
David Rohrbach
Senior Agricultural Economist
World Bank - Malawi
Lusaka, 3 June 2007



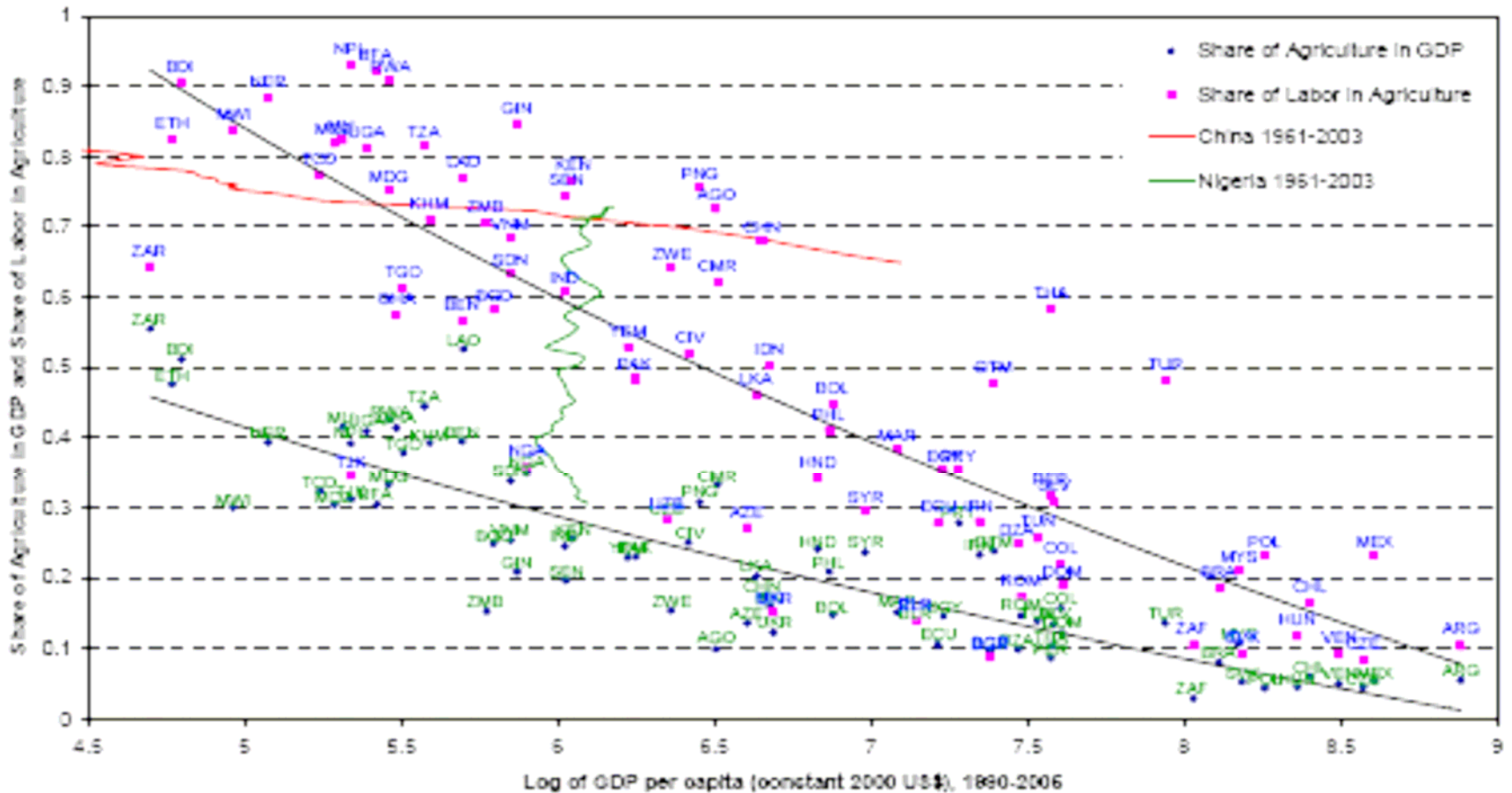
The WDR is the World Bank's Flagship Document

- ❖ Prepared annually on a special theme
 - ❖ *Takes stock of the current and projected status of a selected development problem*
 - ❖ *Key messages backed by evidence*
 - ❖ *Last WDR on agriculture in 1982*

 - ❖ *2007 WDR: Development & the Next Generation*
 - ❖ *2006 WDR: Equity & Development*



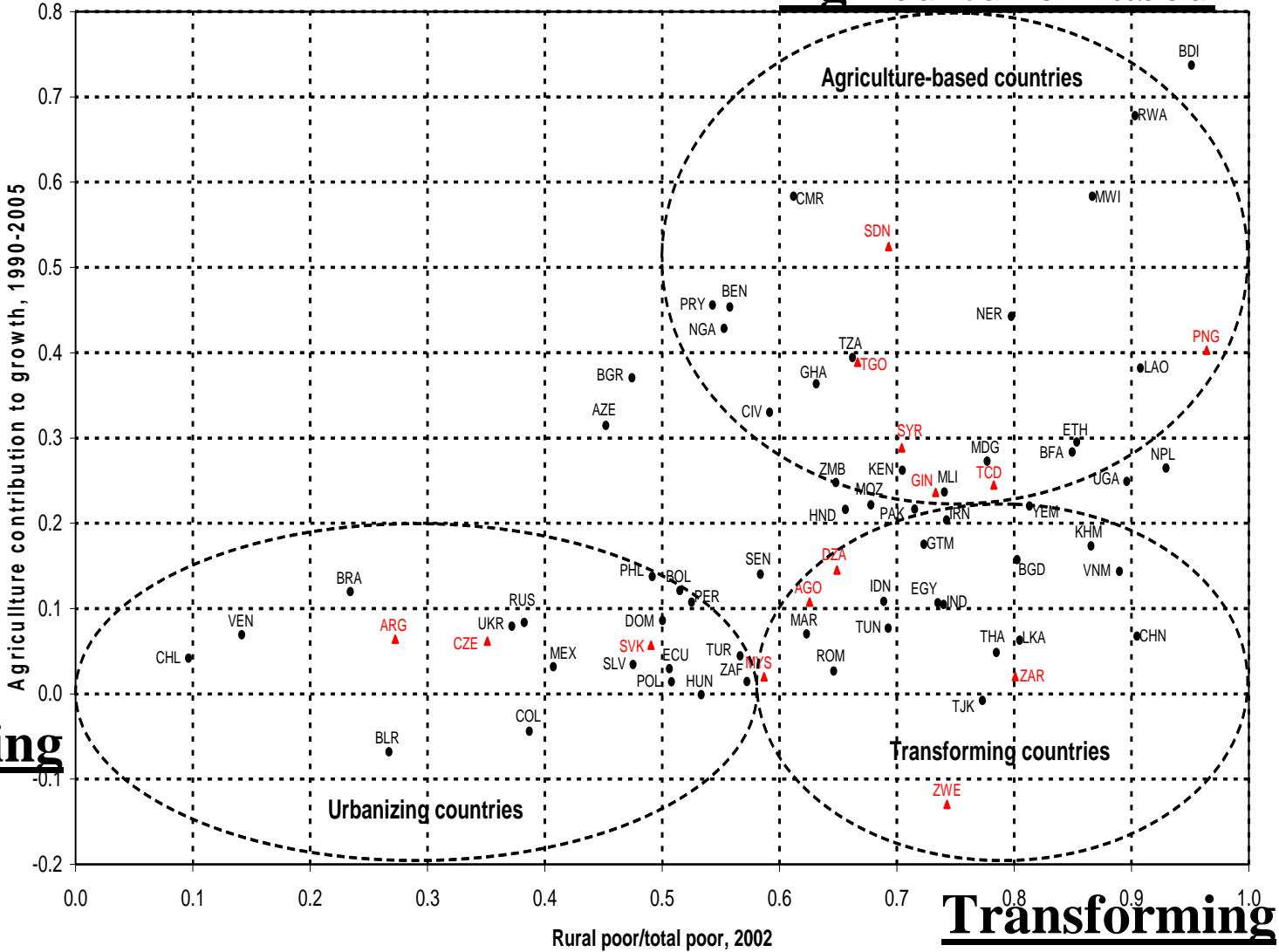
Assessment of Pathways to Development through Agriculture



Agriculture Based

Agriculture Contribution To GDP Growth 1990-2005

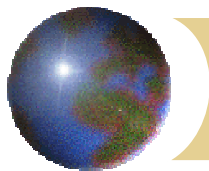
Urbanizing



Data source: World Bank DDP Sep 2006 & Ravallion et al. 2007
 All countries have mean population (90-05) > 5 millions

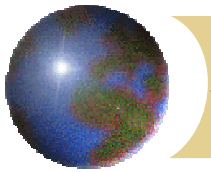
Rural/Total Poor, 2002

Transforming



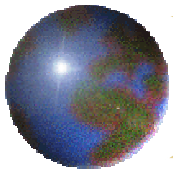
WDR country typology

	Agriculture- based countries	Transforming countries	Urbanizing countries
Population			
Rural (million)	520	2010	250
Share of population in rural areas (%)	71	68	31
Agriculture			
Share of ag in GDP (%)	34	20	11
Share of ag in GDP growth (%)	34	9	8
Agricultural growth	3	3	2
Non-Agricultural growth	3	7	3
Poverty incidence (%)			
Share of rural poor in total poor	78	72	46

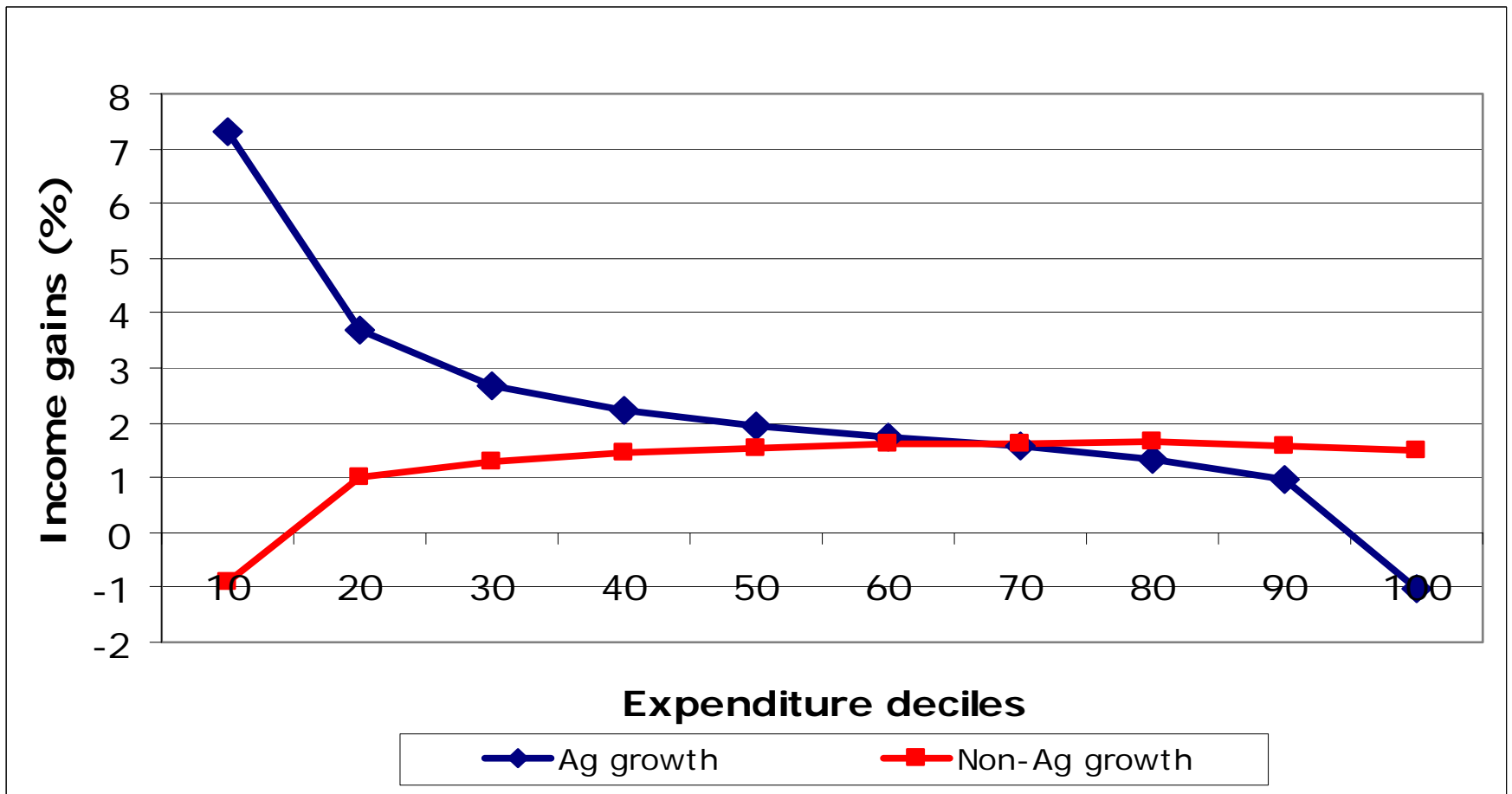


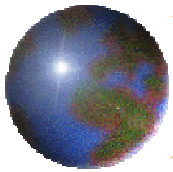
Agricultural Growth is Essential for Poverty Alleviation

- ❖ Global decline in poverty during past 10 years entirely due to falling rural poverty (not migration)
- ❖ Primary determinant of declining rural poverty is agricultural growth

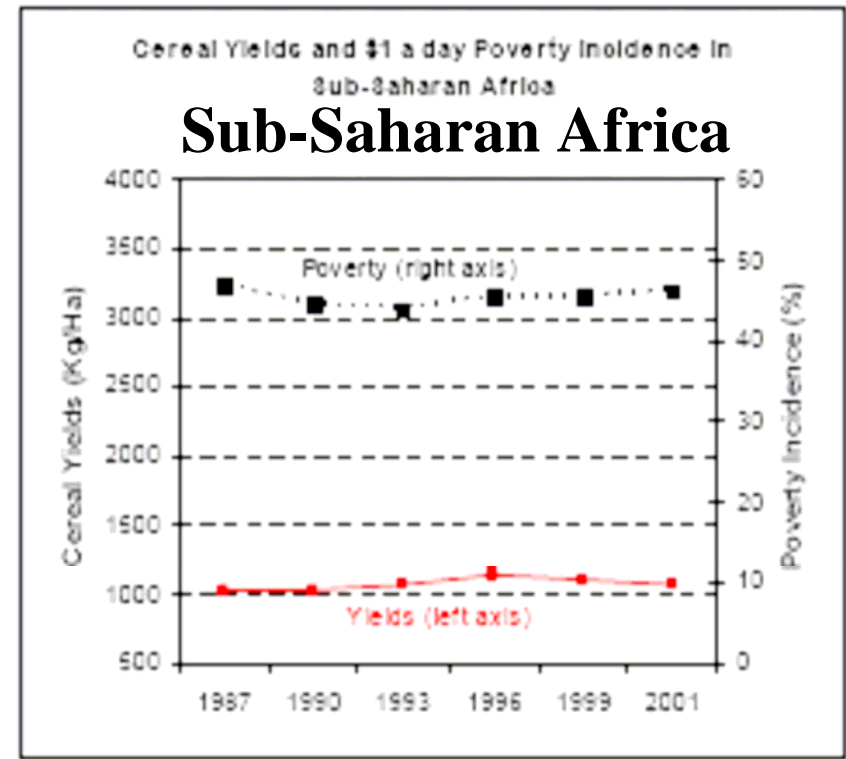
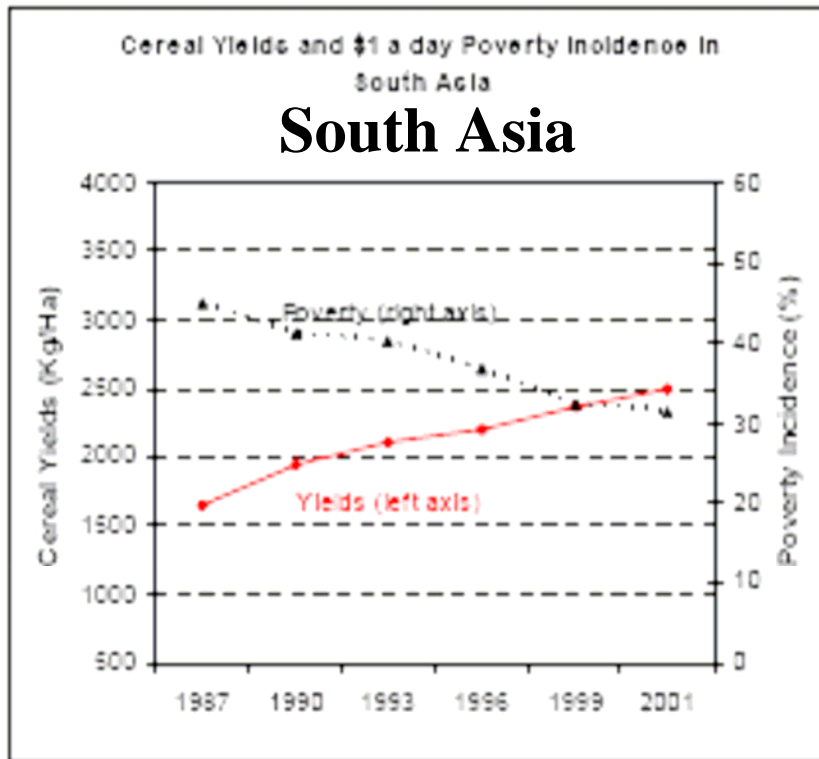


Elasticity of income gains from GDP growth of agric or non-Agric origin, by deciles

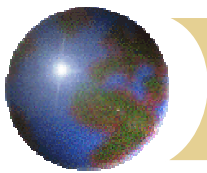




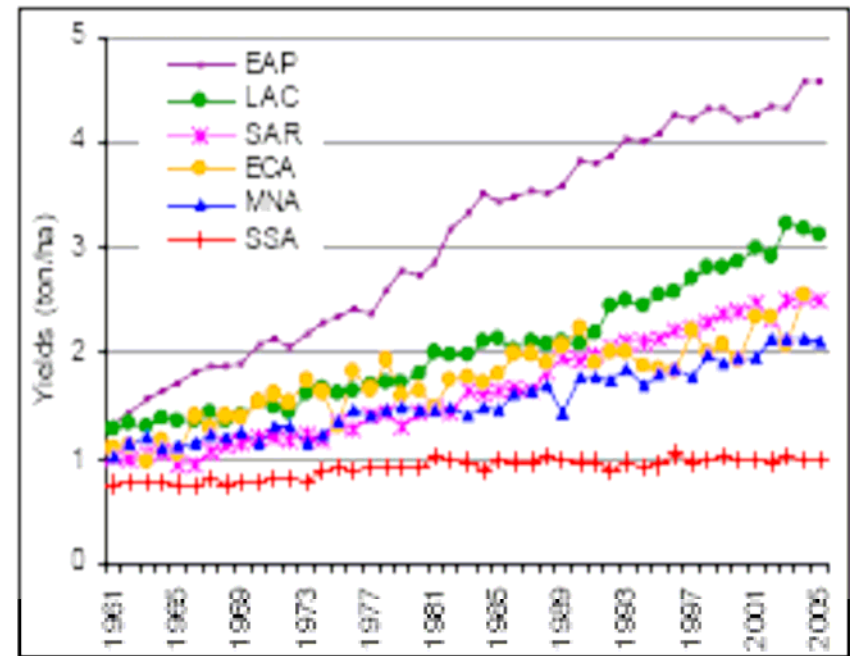
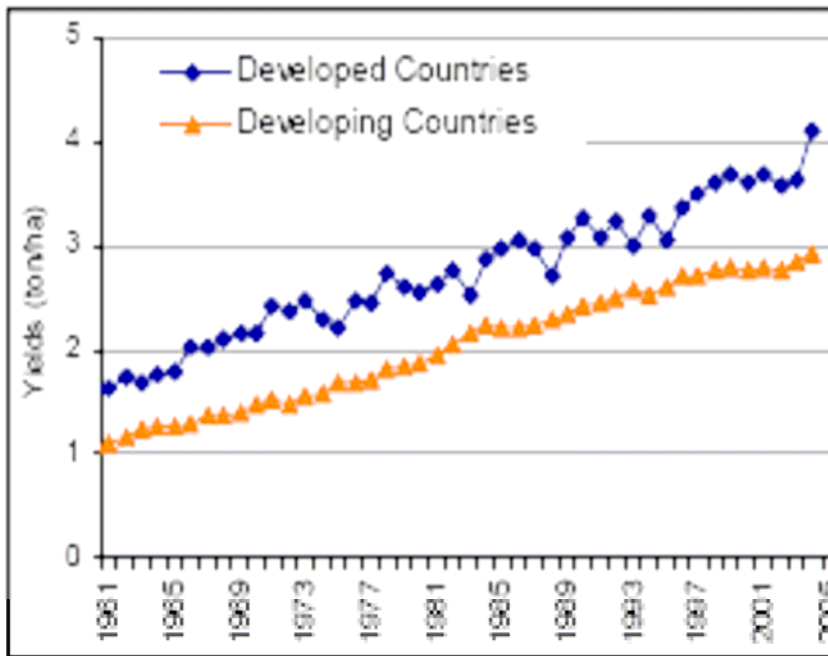
Agricultural Productivity Gains are Essential for Poverty Reduction



Source: Ravallion and Chen (2004) and World Bank (2006).

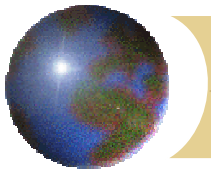


Need to Achieve Higher Rates of Productivity Growth, particularly in Africa



Notes: SSA: Sub Saharan Africa, SAR: South Asia, EAP: East Asia Pacific, MNA: Middle East and North Africa, ECA: Eastern Europe and Central Asia; LAC: Latin America and Caribbean. ECA numbers include USSR until 1991.

Source: FAO (2006a).



WDR 2008: Overall framework

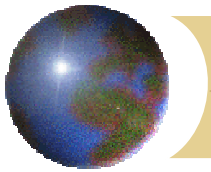
⊕ Dual roles of agriculture

⊕ *Sustainable growth*

- Including sustainable use of natural resources

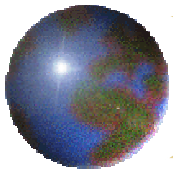
⊕ *Poverty reduction*

- And food security in many settings

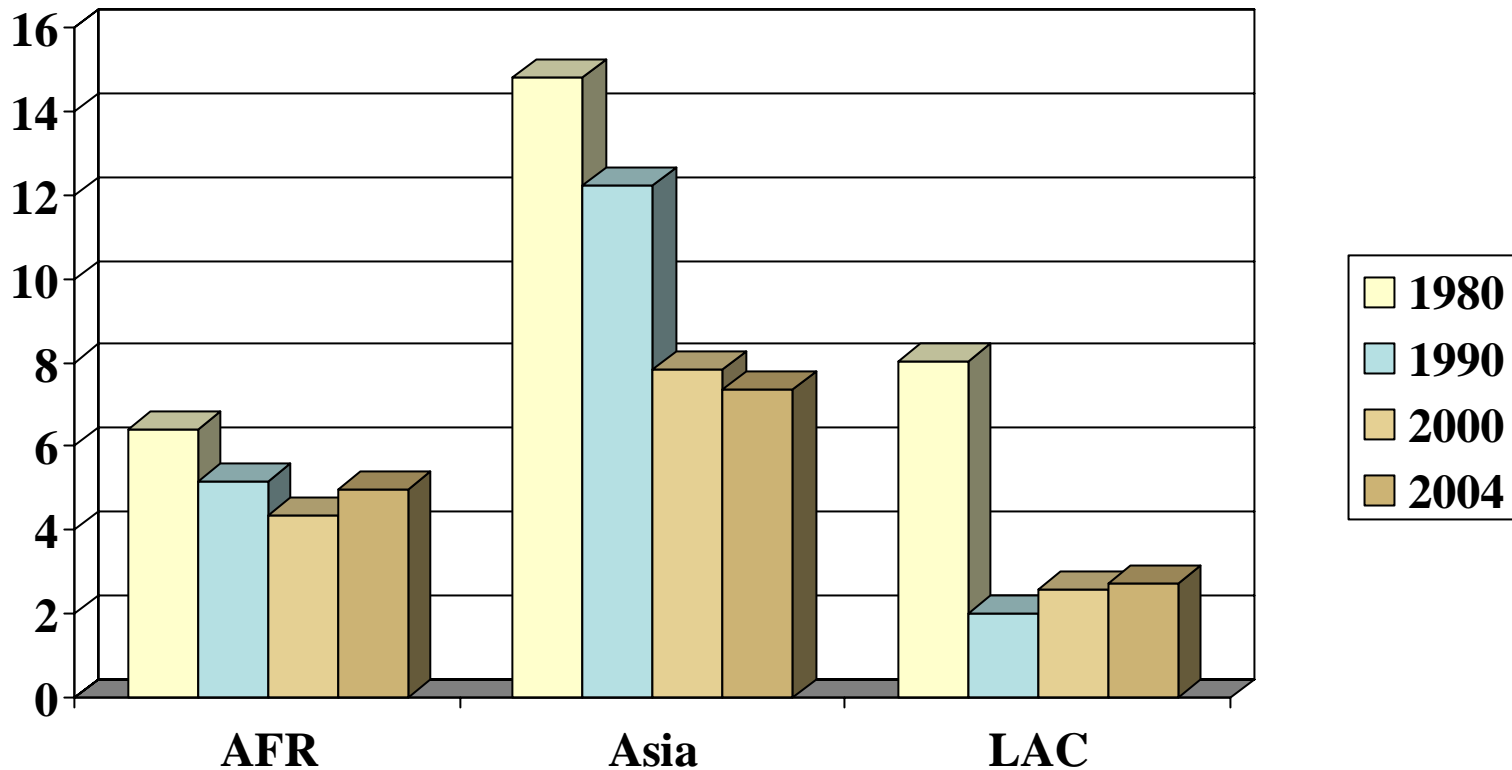


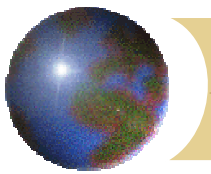
WDR 2008: Overall Messages

- **Under-investment in agriculture severely undermines income growth and poverty alleviation**

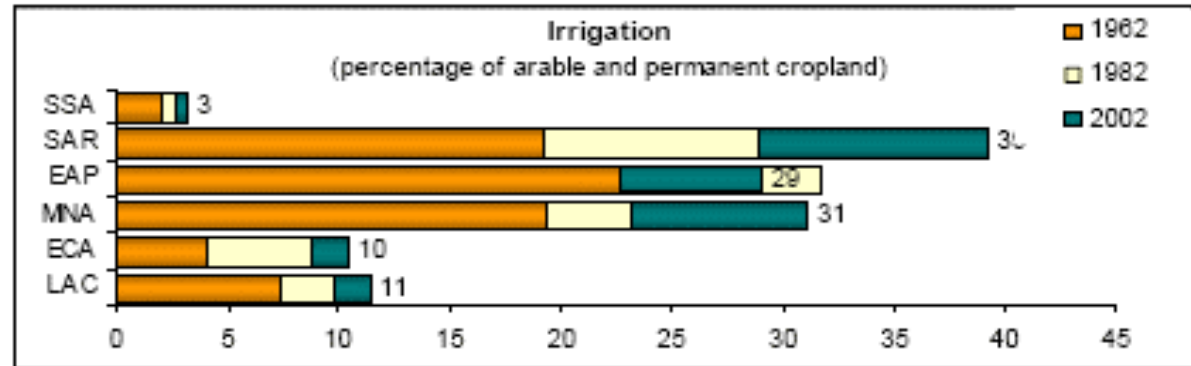


Agriculture's Share of Public Spending (%)

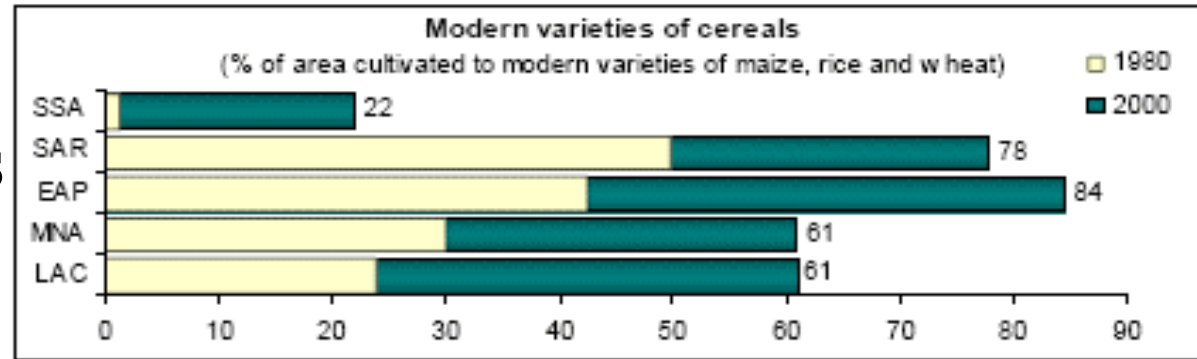




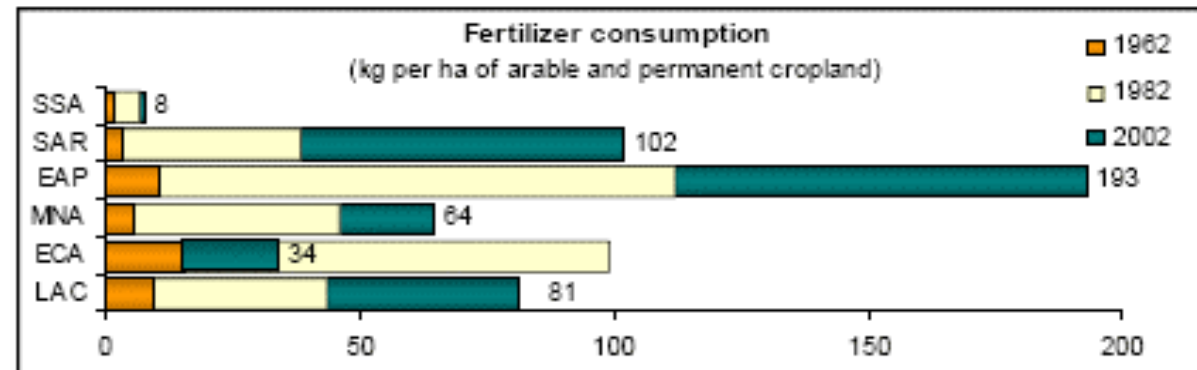
Low
investments in
Irrigation



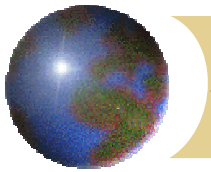
New Varieties



Fertilizer

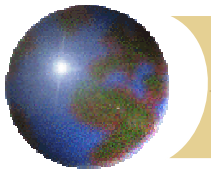


R&D + Human
Capital + Infrastructure



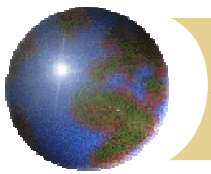
WDR 2008: Overall Message

- ❖ **Invest more – more wisely**
- ❖ **Need to take advantage of new opportunities to use agriculture for development** resulting from emergence of improved market opportunities, government, and civil society

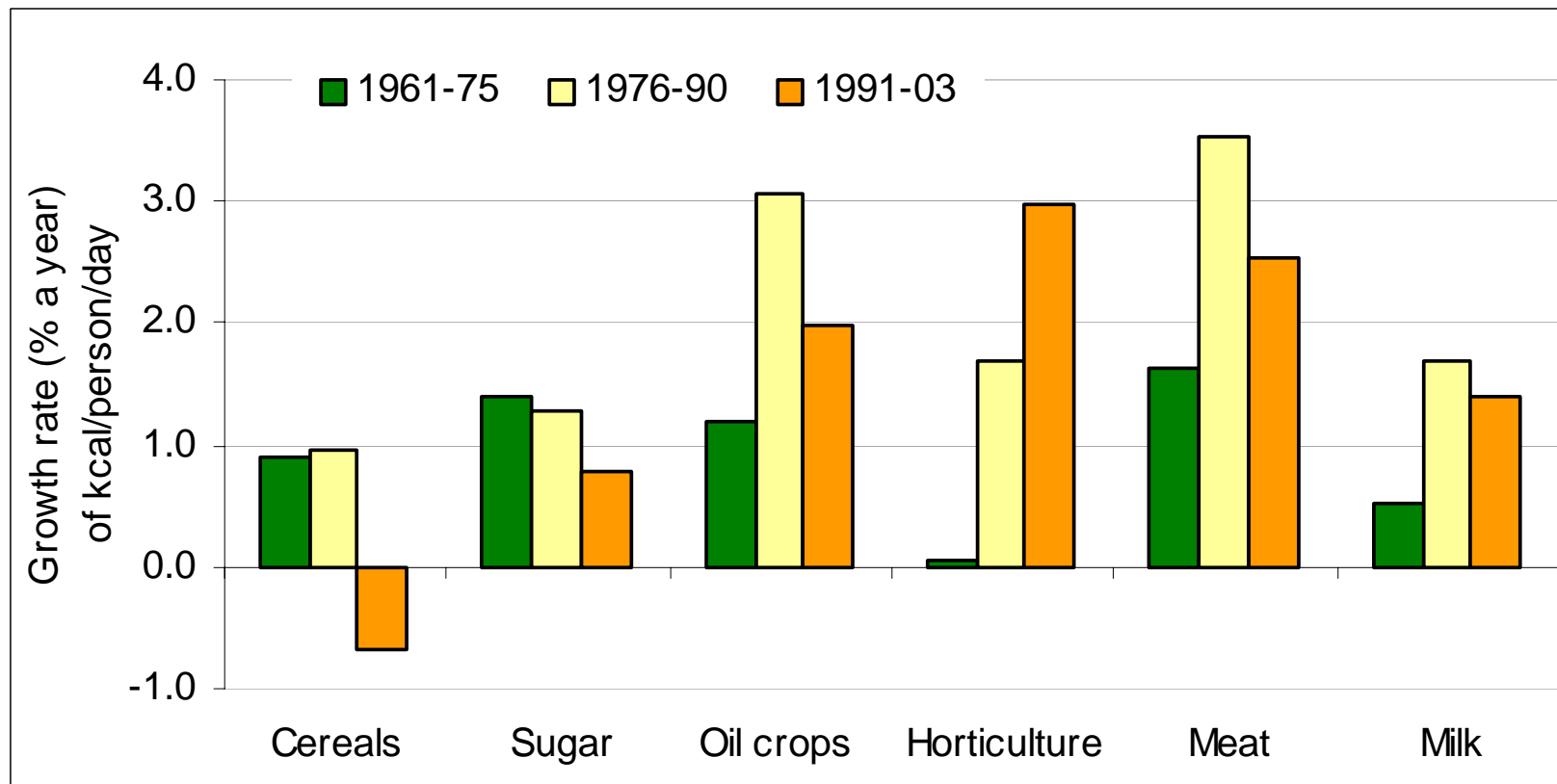


Recognize that Agricultural Markets are Evolving

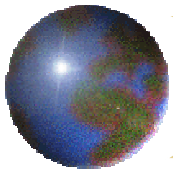
- Need to meet continuing growth in demand for:
 - *Cereals – 50% increase over next 30 years;*
 - *Livestock products – 120% increase over next 30 years*
- High value product markets are fastest growing in domestic consumption: poultry, vegetables...



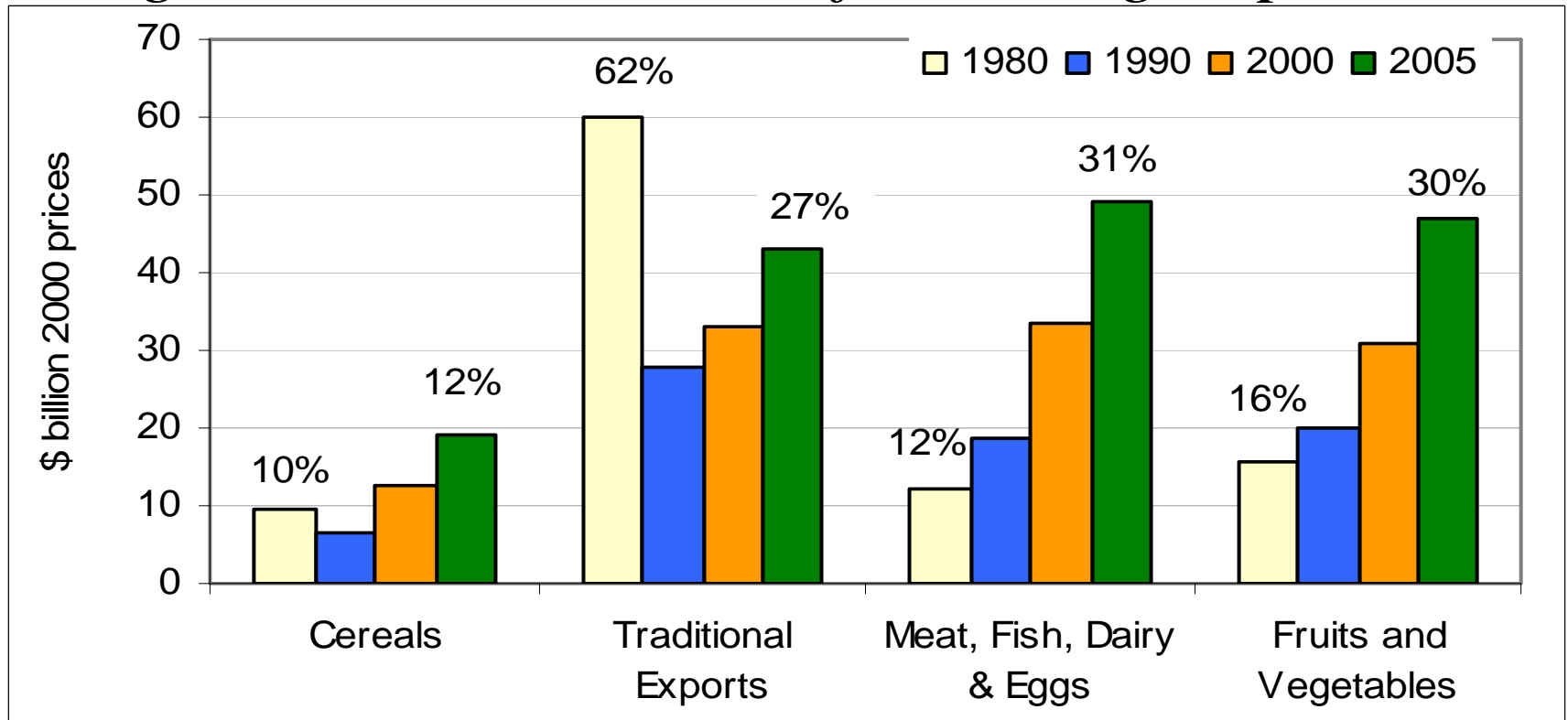
Local diets are incorporating a growing share of Higher Value Products



Source: FAOSTAT (2006)



Developing Country Trade in Non-traditional Agricultural Products of Growing Importance



Notes: Traditional exports include cocoa, tea, coffee, rubber, tobacco, sugar, cotton and spices.

Percent numbers represent the share in total exports

Source: WITS, United Nations Commodity Trade Statistics Database (COMTRADE)

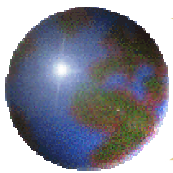
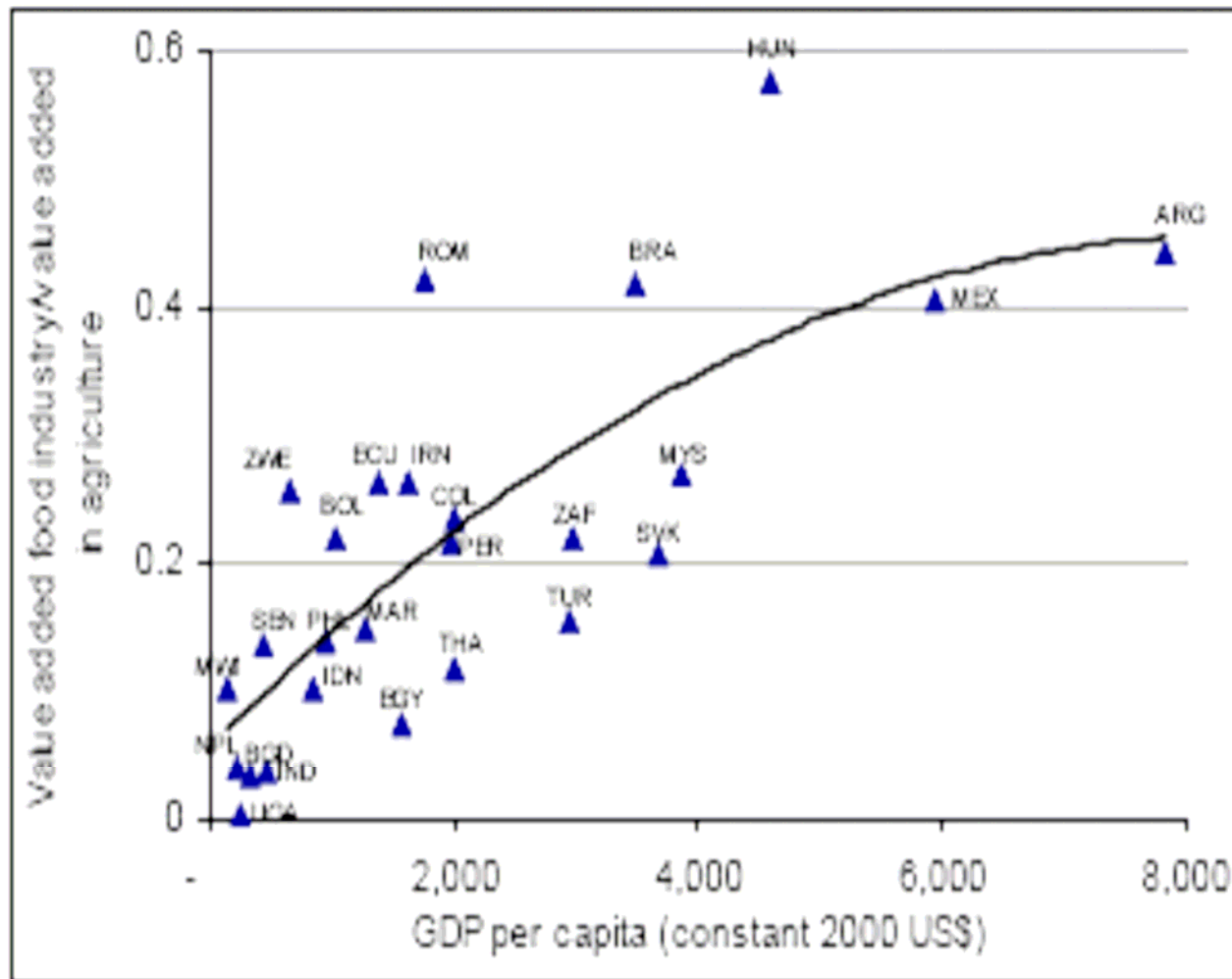
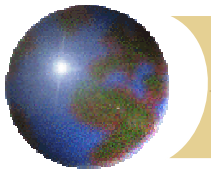


Figure 1.5 The share of food processing in agricultural value added rises with incomes



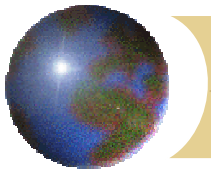
Source: World Bank (2006) and UNIDO.



Improving the Payoffs to Investments in Market Development

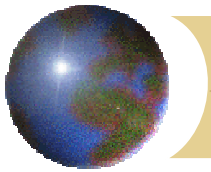
Rural roads +

- Strengthening contract farming – integrated supply chains
- Strengthening farmer organizations
- Market intelligence systems: identify market opportunities
- Improved grading systems
- Warehouse receipt instruments
- Linked loan and savings schemes
- Index-based weather insurance
- Agricultural credit cards



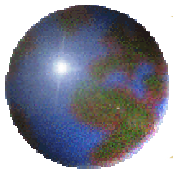
Improving the Payoffs to Investments in Agricultural Research

- Breeding for traits demanded in markets
- Pursue greater water and nutrient use efficiency with conservation and precision farming
- Pursue regional and international technology flows
- Test alternative extension strategies

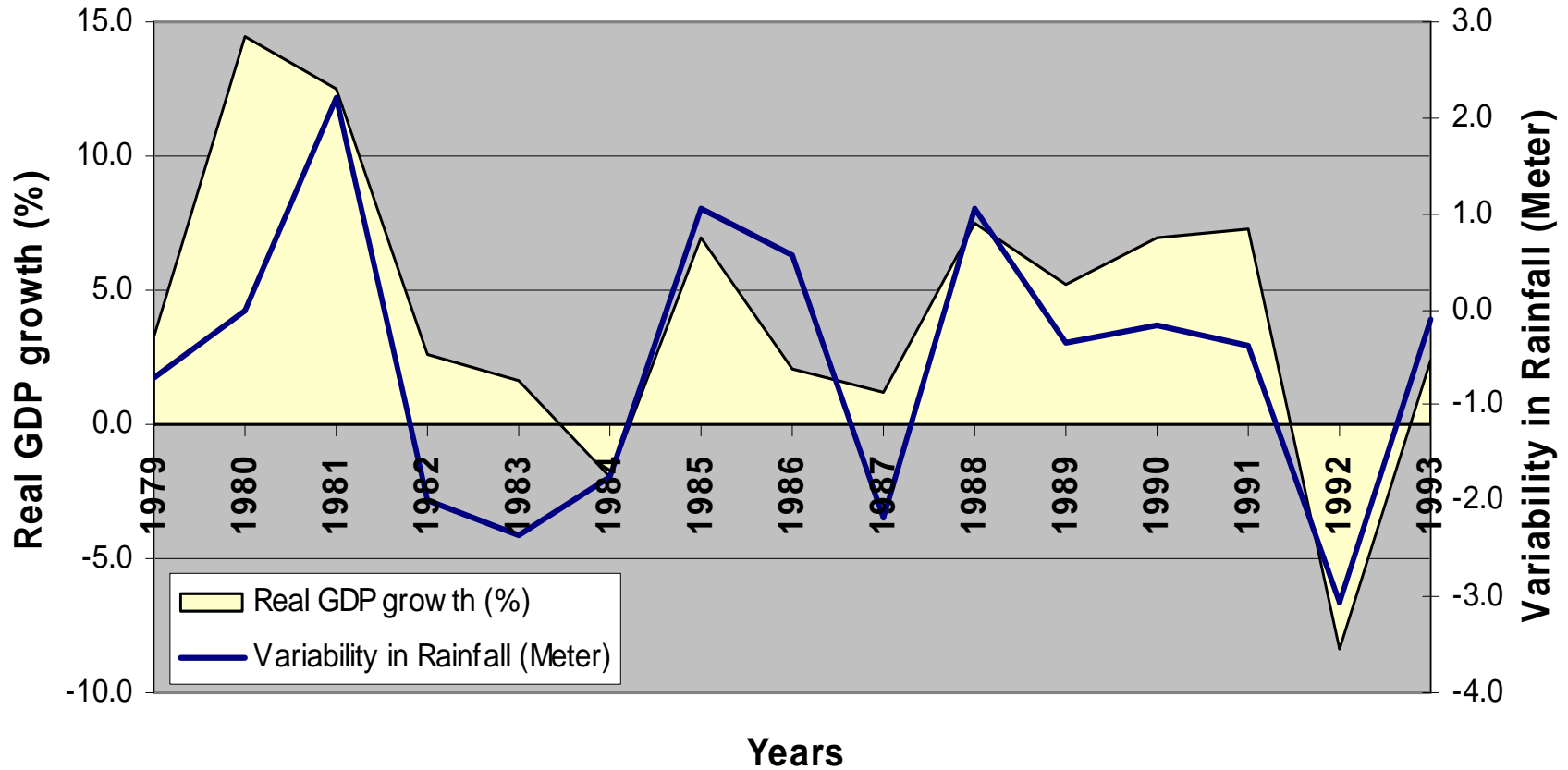


Improving the Payoffs to Fertilizer Subsidies

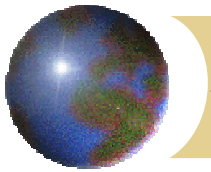
- *Investments in agricultural research offer higher returns than in fertilizer subsidies*
- But if fertilizer subsidies are offered use them to leverage
 - *expansion of wholesale-retail trade in inputs*
 - *expansion of private sector extension support*
 - *Improvement of targeting x nutrients x farmers*



Plan Ahead for Natural Disasters

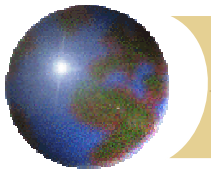


Rainfall & GDP growth: Zimbabwe 1978-1993



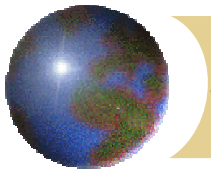
Mitigating the Risks of Grain Supply Shortfalls

- Price hedging of grain stocks
 - *Call option to resolve deficit*
 - *Put option to hold surplus until ready to sell*
- Index-based macro-weather insurance



WDR 2008: Overall Message

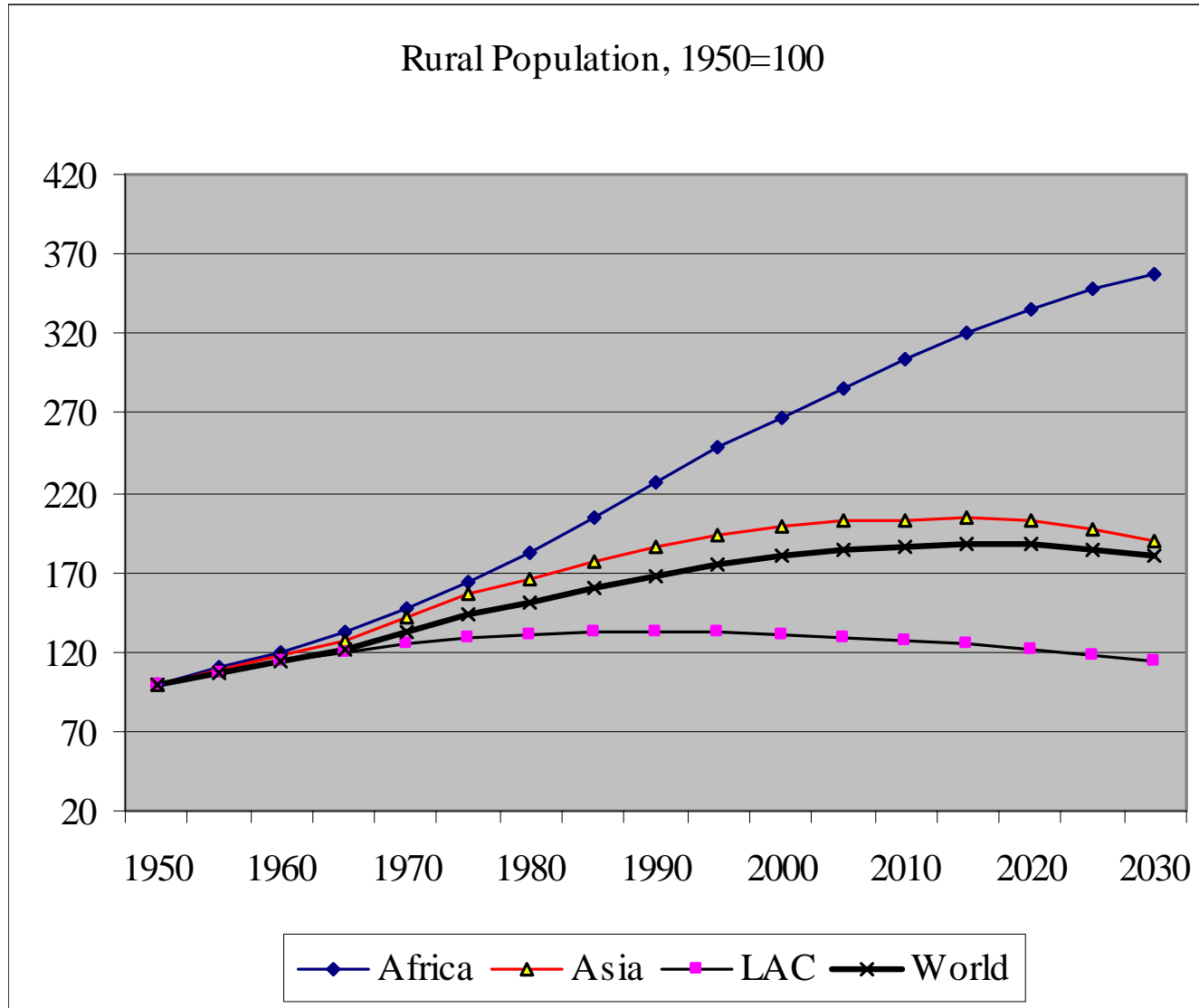
- However, **agriculture alone will not eliminate rural poverty**

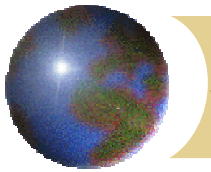


Rural Non-farm Development

- **Promote the rural non-farm economy** for good jobs and self-employment opportunities
 - *Investment climate, area (cluster) development*
- **Investment in education** improves farming skills, business skills and facilitates successful transitions out of agriculture

Agricultural Population Transitions



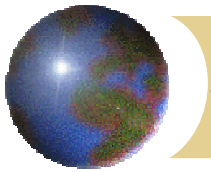


WDR 2008: Chapter outline

Part 1 – Why Use Agriculture for
Development

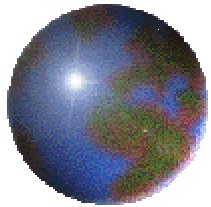
Part 2 – What to do in Using
Agriculture for Development

Part 3. How to Implement Agriculture
for Development Agendas



WDR 2008: Special focus sections (draft)

1. Decision making by small farmers
2. Rural poverty dynamics
3. Agriculture and food security
4. Biotechnology
5. Climate change
6. Energy and bio-fuels
7. Agriculture and health



Thank you!

www.worldbank.org/WDR2008