


The Global Food Crisis and Agricultural Development: Problems and Solutions

Presentation at AIARD Capitol Hill Forum,
“A Dialogue: Advancing Agricultural Development and
Addressing the Global Food Crisis—Present and Future”
March 3, 2009



Christopher Delgado
Strategy and Policy Adviser
Agriculture & Rural Development
World Bank

world development report

2008

“Agriculture for Development”

Before the Current Food Crisis...



**WDR 2008's
Inconvenient Facts**

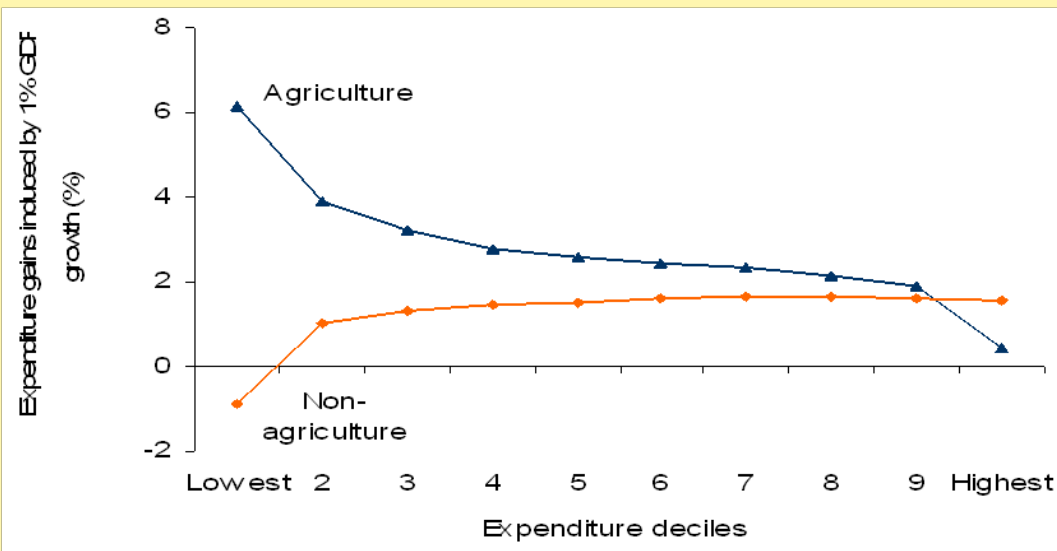
Ag Growth Reduces Poverty More than Non-Ag Growth

Important worldwide:

- 2.5 billion people in agriculture,
- 900 million extreme rural poor,
- Increasing in SS-Africa & South Asia

It can succeed:

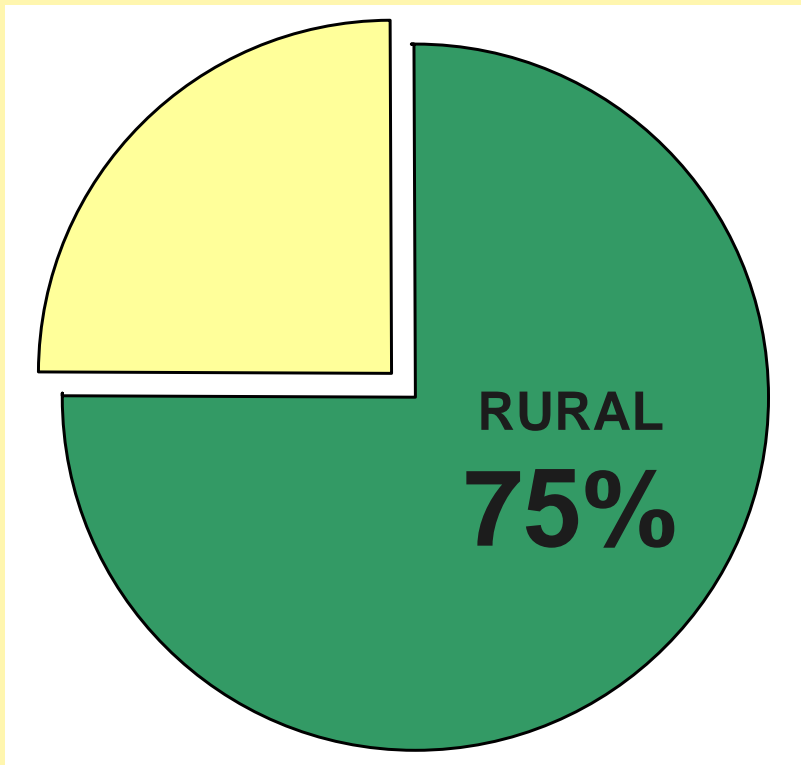
- GDP growth from agriculture raises the income of the poor 2-4 times more than GDP growth from non-agriculture



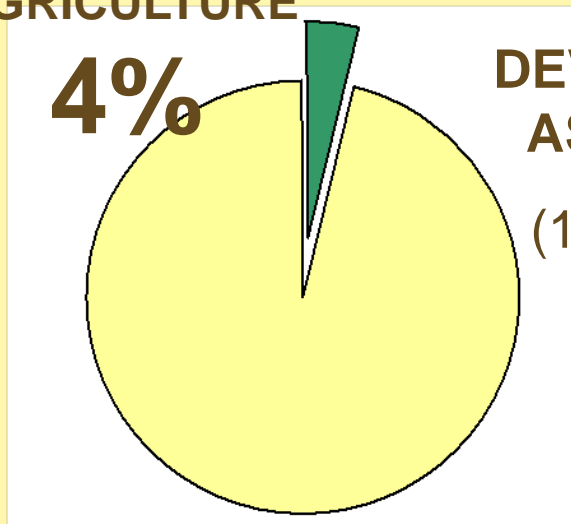


Discrepancy Between Need and What is Being Done

WORLD POOR



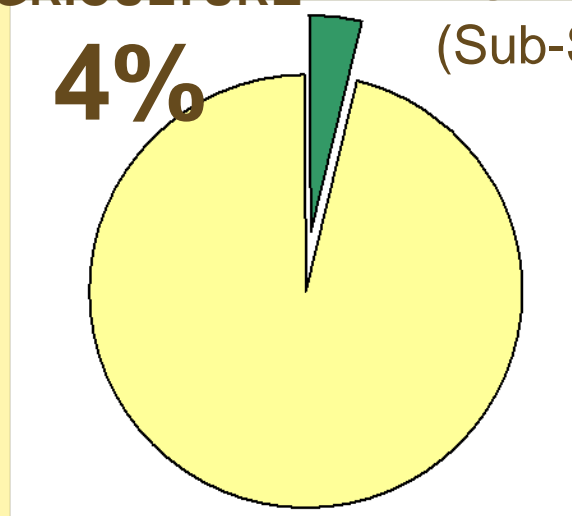
AGRICULTURE



OFFICIAL DEVELOPMENT ASSISTANCE

ASSISTANCE
(12% in 1990)

AGRICULTURE

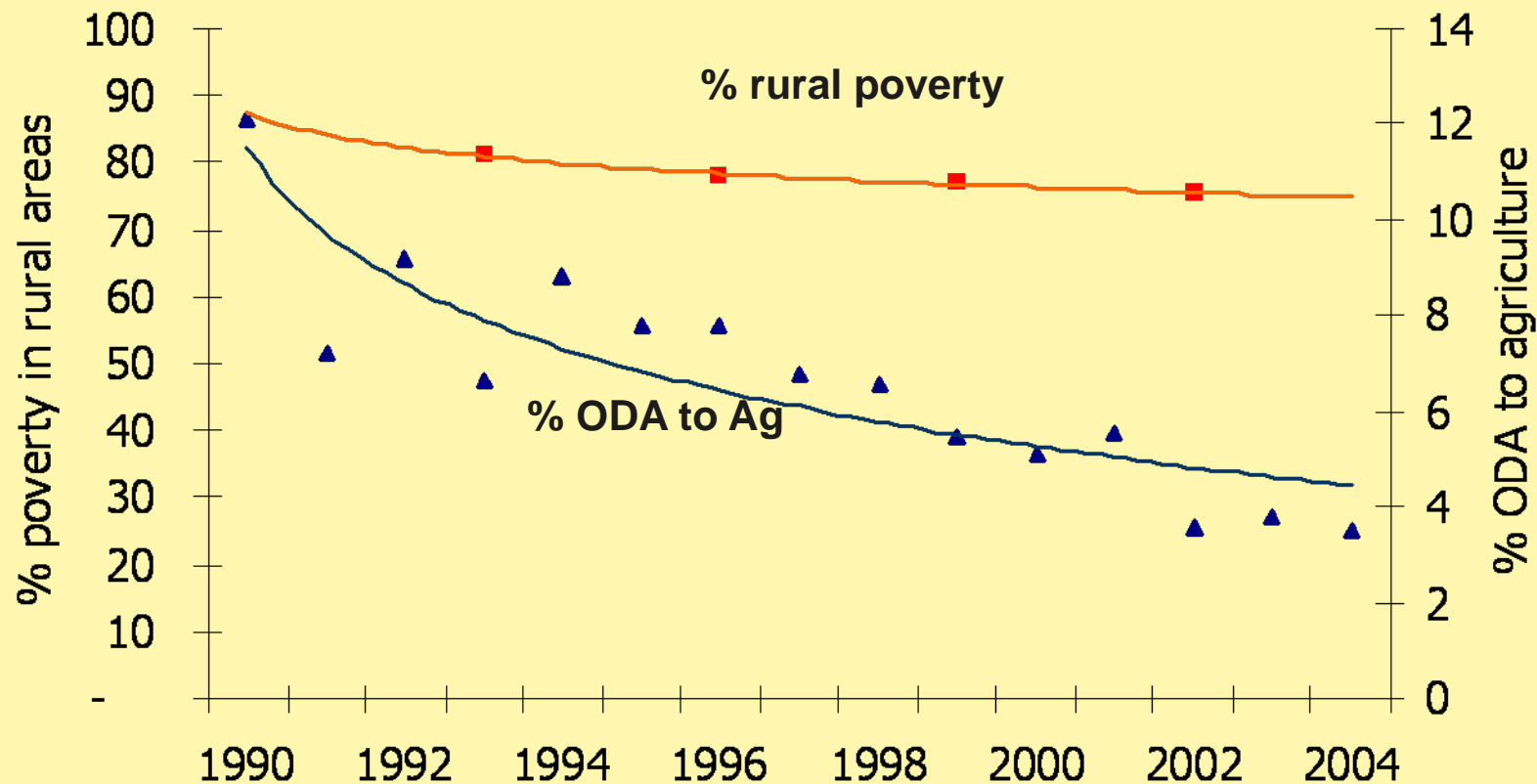


PUBLIC SPENDING
(Sub-Saharan Africa)

Agriculture main livelihood

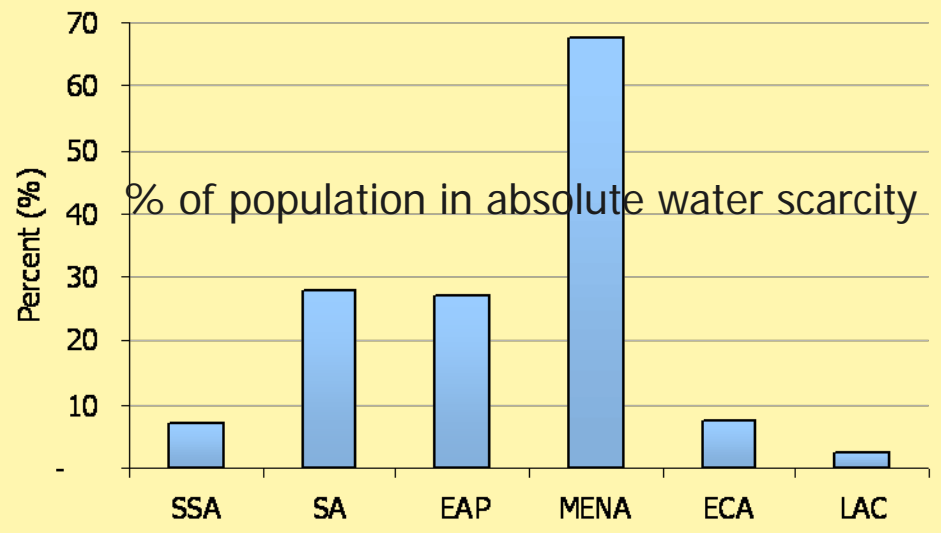
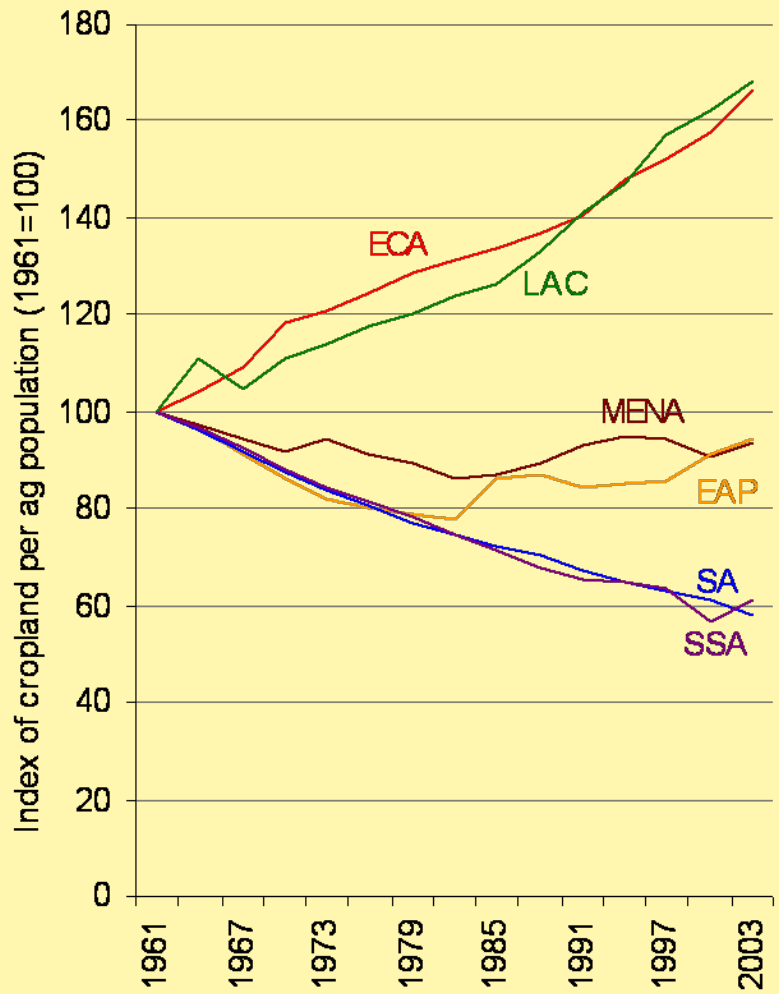
Donors Also Off the Mark

Donor support to agriculture declined sharply
1990-2006



And Increasing Land and Water Constraints

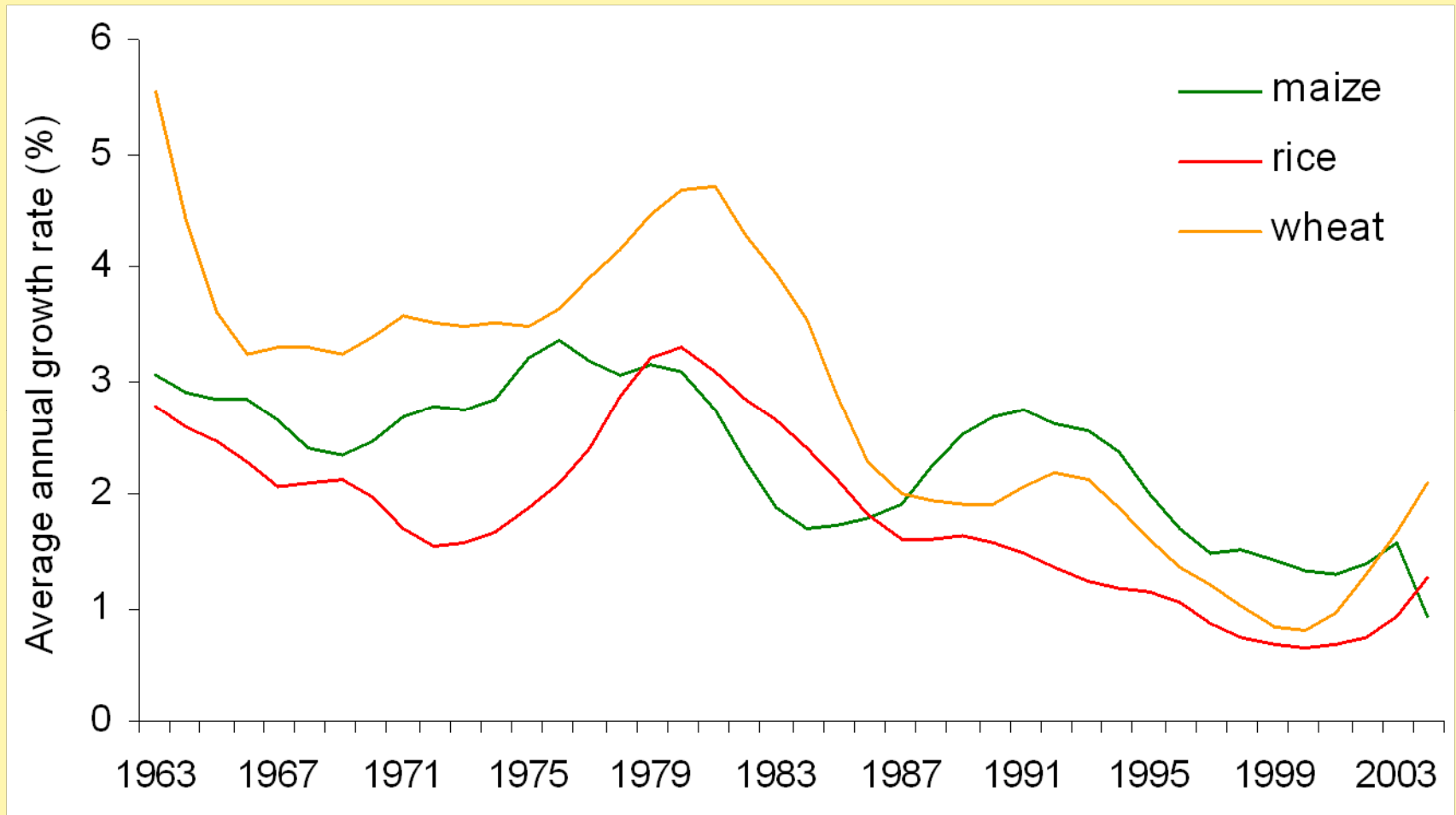
Cropland per capita of agricultural population



Climate change will make resource constraints even more serious

And Growth Rates Of Yields For Major Cereals Decreasing

Decreasing in Developing Countries.....





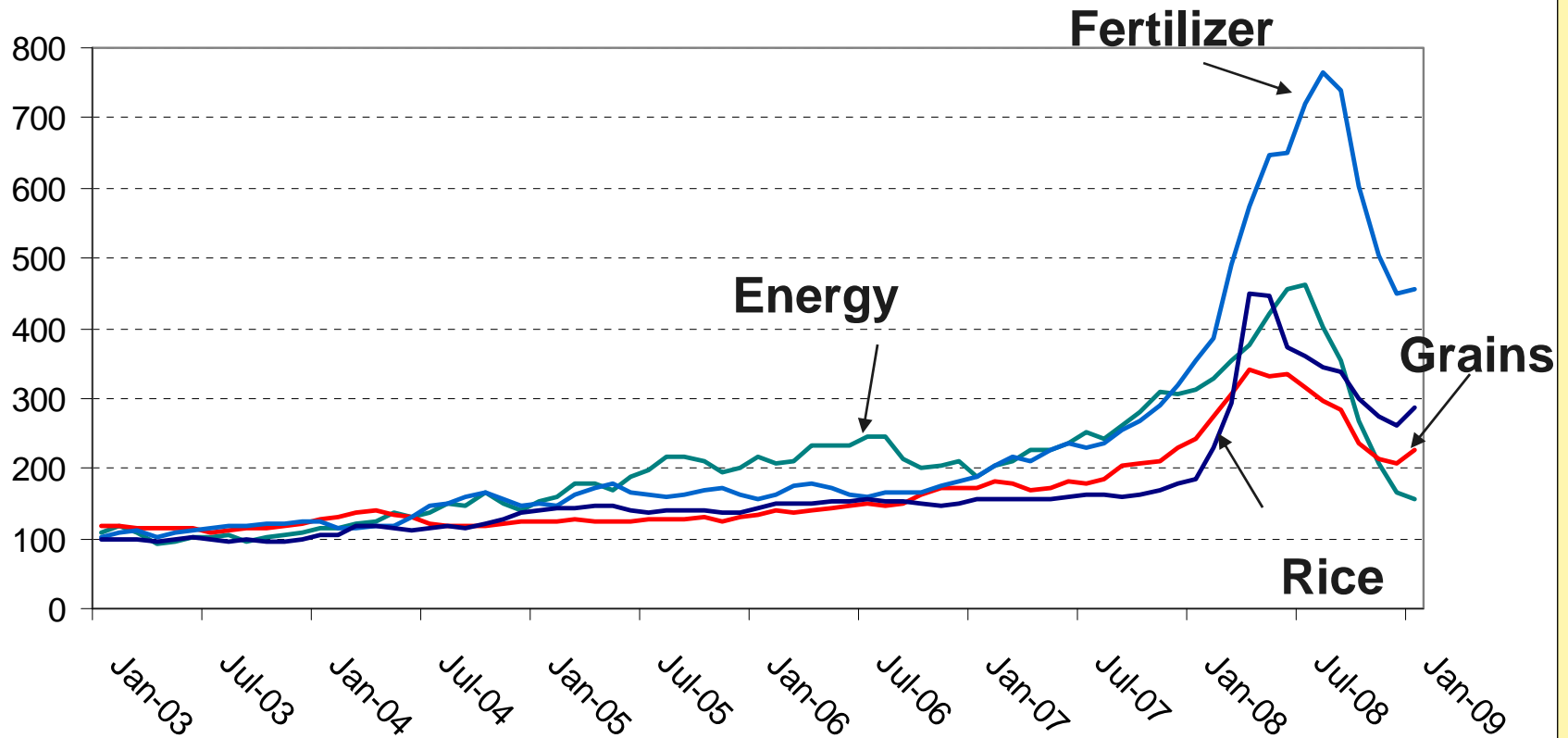
Then...



Global Food Crises Happen

Global Prices Again Increasing, Likely to Remain High

Commodity price indices in current US\$ to Jan. 2009
(2000=100)





Vulnerability of Poor to Volatile Grain Prices is High

- **One seventh of humanity, 923 million people still chronically malnourished (FAO)**
- **In Sub-Saharan Africa 1 in 3 people still do not have enough to eat**
- **And relative grain price levels still “high” and rising again**
- **But the true enemy of both the poor and investors is increased grain price volatility**



For the Poor: Mechanisms of Vulnerability to Grain Prices

- The poor in developing countries spend well over half their income on food staples, and have no choice but to respond to higher prices by reducing consumption even further**
- In Ethiopia, grain prices are 80% of family food cost; in the U.S. they are less than 5%**
- Even the mass smallholder farmers are in trouble with volatility: few have the resources to take risks, and input prices in 2008 increased much more than output prices**



Financial Crisis Exacerbates Vulnerability to Food Prices

- **Agricultural exports very important to income of the poor in Africa and poor Asia, but falling** due to falling demand and prices under global recession
 - Ex: Current account balance in Ghana = -17% in 2008; cheaper fuel helps, but ag exports a problem for 2009
- **Employment opportunities falling and fiscal space severely constrained (GEP 2009)**
- **Inflation rising**
 - Ex: 64% in Ethiopia in 2008, led by 80% food price inflation



Financial Crisis Hinders Adaptation to Food Volatility

- **Incomes are down, prospects daunting, and Gov'ts are out of funds**
- **Other coping mechanisms such as remittances** to developing countries of US\$250 billion in 2007 have started to collapse
- **Prospects for aid inflows are uncertain**
- **The financial crisis also makes grain prices uncertain**, hindering investments in productivity and stability of production



Global Grain Price Volatility (the Real Spoiler)





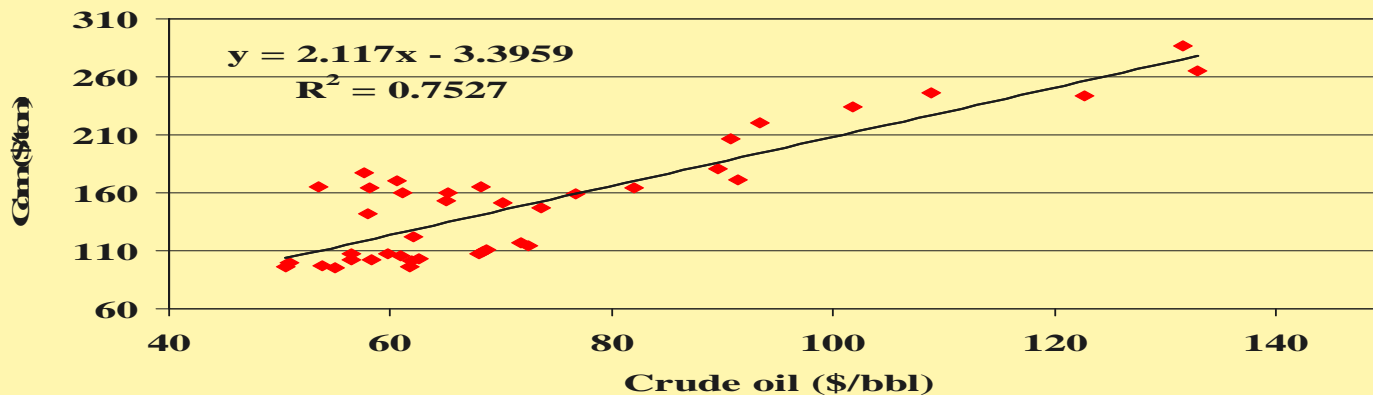
Grain Price Volatility Seems to be Increasing

- **Grain price volatility for cereals is thought to have decreased along with real prices since 1970s to 2000**
- **Yet global price volatility has almost doubled for corn and wheat over the last 10 years (and for rice in the last year)**
- **Price volatility adds important elements of uncertainty and risk to the already difficult issue of high food prices, especially when financial resources are scarce**
- **Whether or not increased global food price volatility is transitory depends on the drivers of change in volatility**

Drivers of Price Volatility (1)

Hypothesis: The higher price volatility of oil markets was transferred to corn markets as oil prices rose above \$50/barrel and corn-based ethanol use increased over the past 3 years

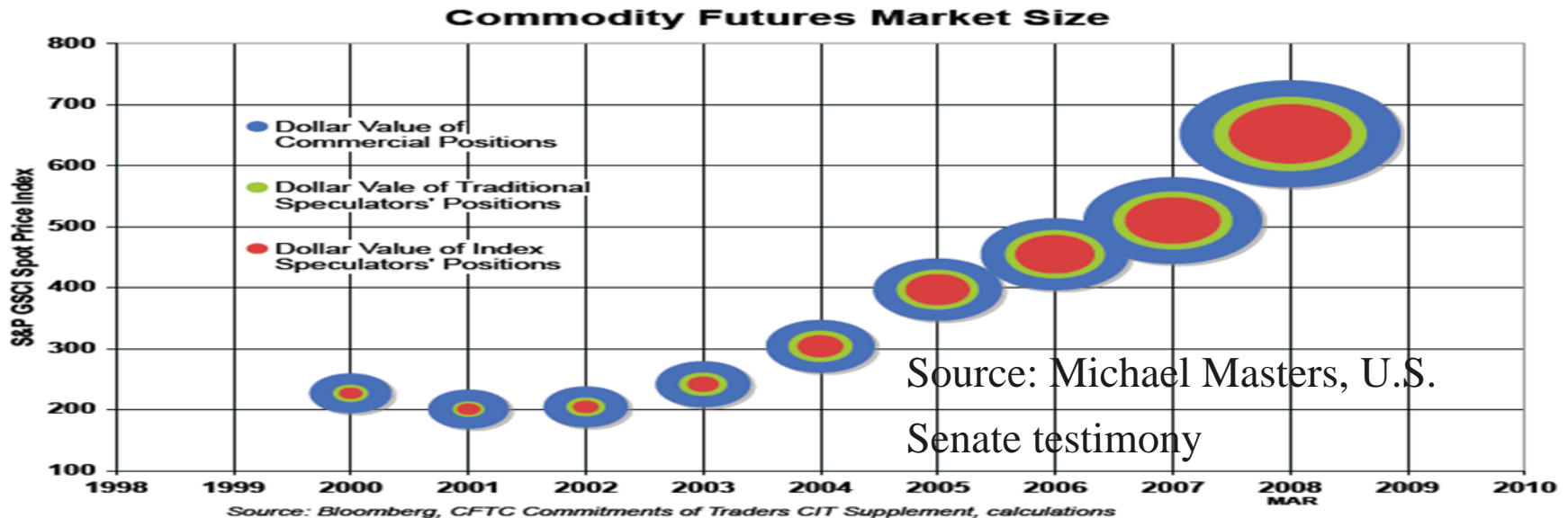
- Metal and oil prices were more than twice as volatile as corn prices since 2000
- The correlation of corn prices with oil prices is much higher (75%) when the oil price is high (>\$50) than otherwise (5%)—especially if oil is high relative to corn



Drivers of Price Volatility (2)

Hypothesis: Food futures are increasingly tied to the more volatile behavior of non-agricultural commodities.

- Commodity index funds included US\$250 billion in agricultural futures in the 2003 to 2007 period, accounting for 27% of total U.S. agricultural futures (World Bank, GEP 2009)

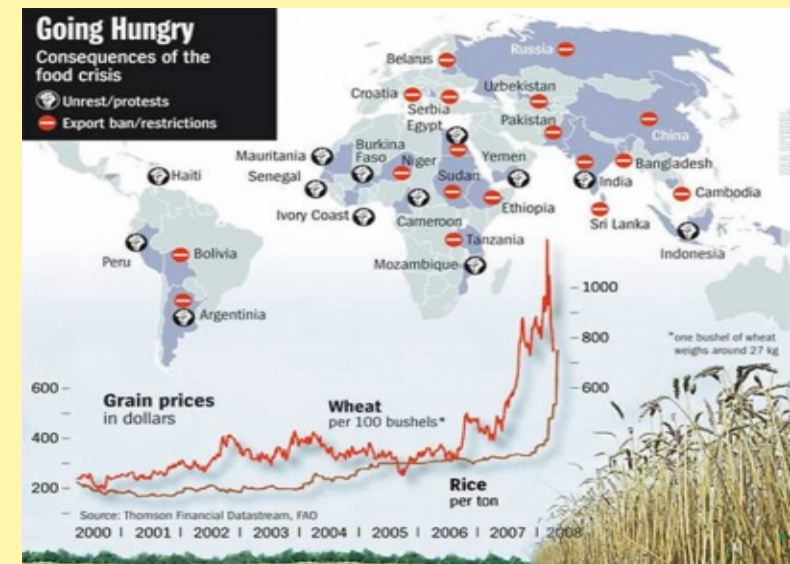
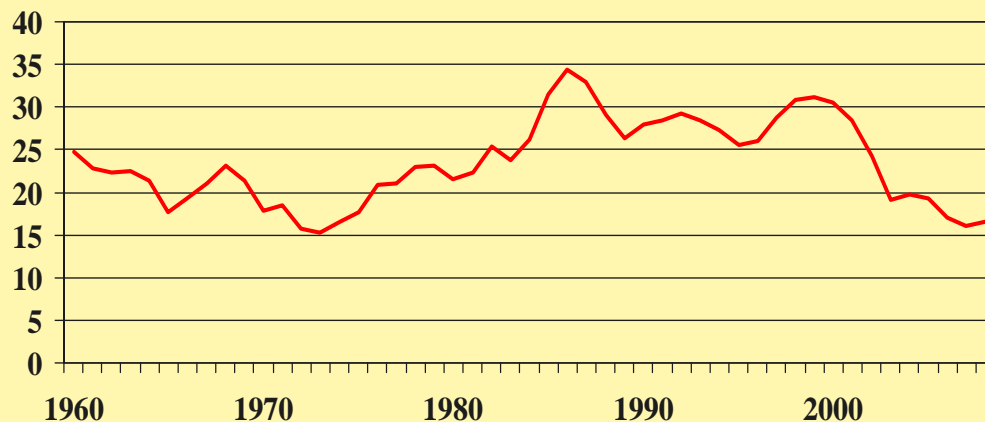


Drivers of Price Volatility (3)

Hypothesis: Global carryover grain stocks in the range of 14% to 20% of total usage now, compared to 30% to 35% in the late 1980s and 1990s, have been associated with more defensive policy stances (such as trade barriers, price wedges)

- **Events in Asia** have been determinant for some time

World Grain End Stocks-to-Use





Drivers of Price Volatility (4)

Hypothesis: Climate events are becoming more extreme under climate change, especially in the tropics, and these are likely to accelerate, leading to much higher volatility and even lower viability of grain self-sufficiency strategies

- **Fact:** higher temperatures very unfavorable to agriculture in tropics
- **Fact:** large share of developing country agriculture is rainfed or lowland coastal, vulnerable to climate-change induced droughts and floods



Longer-run Impacts of High Food Price Volatility

- **Unless high grain prices** engender productivity growth in developing country agriculture, they tend to raise costs more than overall HH income
- **Volatile grain prices** tend to discourage investment in increasing food productivity or labor-intensive enterprise that would help solve long-term problems
- **Volatile food prices also tend to encourage over-investment by poor people in developing countries in backyard subsistence food production** for risk mitigation, further cutting their incomes (well established in 1970s, 1980s)



Reducing Poverty When Faced With Increased Food Price Volatility

Short-run Responses



The Economist
APRIL 19TH-25TH 2008
www.economist.com

- Brazil as the next oil giant
- God help Italy
- London's funny but sad election
- The return of Disney
- Cancer's link to stem cells

The silent tsunami
The food crisis and how to solve it

Emergency Relief and to Breathing Room to Avoid Short-Run Policies That Hinder Longer-Run Solutions



World Bank's Global Food Crisis Response Program

- **\$866 million in 40 Board-approved projects in 30 countries since May 29, 2008**
- **\$704 million of this has been disbursed**
- **\$308 million in Bank funds pipeline in 9 countries**
- **Overall, \$1.174 billion in Bank funds approved and planned in 36 countries worldwide**
- **Additional pipeline of \$187 million in external trust funds (Australia, Russia, EC) directed to 17 countries**
- **GFRP is now a \$1.4 billion effort targeted to 44 separate countries**

World Bank Group Food & Agriculture View Longer-Term



GHANA STOCK EXCHANGE

SYMBOL	PRICE	CHANGE	OPEN	CLOSE
MTV	54000	LOW	54000	54000
MTM	800	800	800	800
MTN	3000	2800	3000	2800
MTB	6510	6500	6510	6510
MTA	130000	130000	130000	130000
MTS	550	550	550	550
MTD	390	390	390	390
MTG	667200	6500	667200	6500
MTI	290	290	290	290
MTJ	7000	7000	7000	7000
MTK	265	265	265	265

Commodities at the Crossroads



Go from \$4 to \$6 Billion New Lending Annually

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

Promoting Agricultural Adaptation to Climate Change and Mitigation

Identifying action steps and timelines for Reduced Emissions & greater Adaptation in Landscapes (REAL)
In Forestry: new partnerships and mechanisms created on the road to Copenhagen, REDD, etc.



Get Serious About Water Use and Access



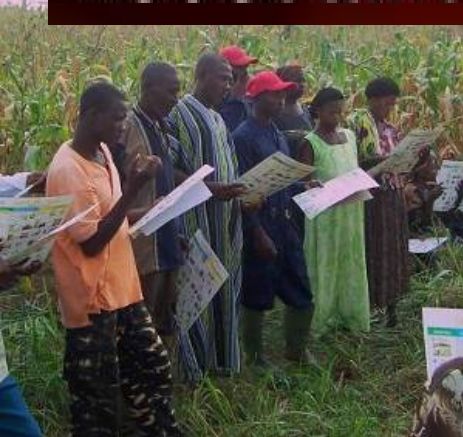
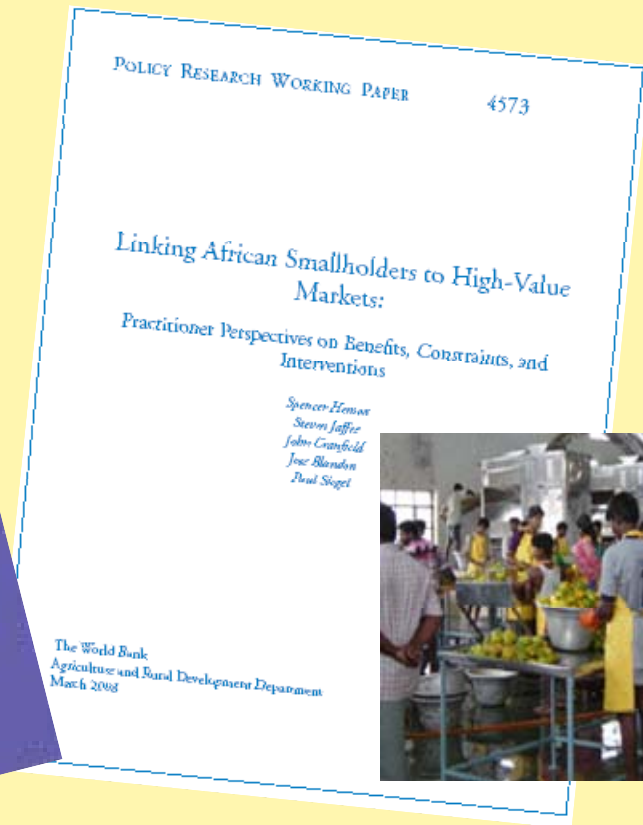
Push on Rural Infrastructure for Productivity and Access



Empower Rural People Through Organization for Access



Helping People Meet Standards for Greater Value Added in Trade



Non-Farm Rural Enterprises Where There is Income to Spend





Conclusions

- **Strong reasons to think that increased volatility of global grain prices is here to stay, and may grow further**
- **The impacts on the poor in developing countries are devastating and need immediate attention**
- **The penalty for not acting is going up**
- **Risk management is vital at all levels in transition to longer term**
- **Investment in the productivity and sustainability of agriculture is the key longer term**
- **Also need focus on empowerment and access of the poor to inputs, services, and markets**
- **Good practice examples abound**