Food Security Crisis: Causes and Solutions

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A few numbers

- World population: nearly 6.8 billion
- World’s hungry: 1 billion (1/7 of total)
- World’s overweight: 1.1 billion (1/6 of total)
- Conclusion? Is the problem just one of distribution, not inadequate production?
Where are the Undernourished? (in millions) - 2005

- East Asia, 219
- South Asia, 314
- Latin America & Caribbean, 45
- Near East and N. Africa, 33
- Sub-Saharan Africa, 212
- High-income countries, 16

Source: Food and Agriculture Organization of the United Nations
Percent of the Population Undernourished, by Region, 2005

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Trends

- % of population undernourished fell from 20% to 16% between 1990/92 and 2006
- Absolute numbers of undernourished increased by 80 million between 1990/92 and 2008
- From 1997-2006, rate of malnourishment fell by 3% per year in East Asia and 1.7% in South Asia.
- Both absolute numbers and rate increased in 2007/08 due to soaring food prices.
- Did 2007/08 represent a fundamental change or just a blip?
2007-08: The Perfect Storm or the New Reality?

- Factors contributing to the price increases:
  - Weather – e.g., drought in Australia
  - Declining world cereal stocks
  - Changing consumer demand (meat, poultry, dairy), especially in Asia
  - Rising energy prices and integration of food and energy markets → increased biofuel demand (in part driven by subsidies) & increased agricultural input costs
  - Expansion of speculative funds into commodities as the mortgage market tanked
  - Export restrictions in Asian countries such as India and Vietnam
  - Possible increasing production costs in China due to falling water tables in north.

- Fall in prices in 2009 – e.g., rice prices about half of what they were in 2008.
Increasing agricultural production will be important in the future, but not for the obvious reason

- **Food security**: Assuring that all people at all times have enough food for a healthy, active life
- Food insecurity is not just a question of the physical *availability* of food. It also depends on *access* to food by the poor, primarily *economic access*.
- Most people are hungry because they lack adequate access to food (i.e., low real incomes). But in many poor countries, particularly in Sub-Saharan Africa, increasing productivity of the food system (farming and marketing) is key to raising real incomes.
Increasing food system *productivity* is crucial to increasing the poor’s real incomes

- Drives down the real price of food to the poor while maintaining profitability/incentives to invest in the food system
- Generates employment, particularly in off-farm parts of the food system and in labor-intensive high-value production (e.g., dairy, fruits and vegetables)
- Lower food costs help increase the profitability of non-farm enterprises by holding down wage costs, thereby generating employment
Transforming the foods system requires sustainable increases in agricultural productivity

- Increased area cultivated per person (e.g., animal traction or minimum tillage)

- Increased production per unit area
  - Improved varieties
  - Improved soil fertility / water conservation

- Increased value of output
  - Higher value crops
  - Lower marketing costs—important when often over 50% of consumer cost comes from off-farm costs
Requirements…

- Investments in human capital
  - Farmer training, extension workers
  - Scientists

- Investments in physical capital
  - Roads, irrigation

- Investments in organizational capital
  - Market information systems
  - Farmer and trader/processor/agribusiness associations
  - Agricultural policy

- Investments in biological capital
  - International agricultural research
  - Conservation farming/Soil fertility
But investment in agriculture lagged declining as food aid costs ballooned.
Challenges

- Creating not just a new Green Revolution but a Doubly Green Revolution in the context of climate change and increasing water scarcities

- Assuring that the issue of access as well as production is addressed. Without addressing adequate access of the poor to food, a pro-agricultural development agenda will be politically unsustainable.

- How to do this in a financially sustainable way?