

# Global Food Policy and Food Security Symposium Series

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## Managing Food Price Volatility: Approaches at the Global, National, and Household Levels

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Image: Sura Nualpradid

# Managing Food Price Volatility: Approaches at the Global, National, and Household Levels

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Global Food Policy and Food Security

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A photograph of a lush green wheat field. The wheat stalks are tall and have long, thin awns. In the upper left corner, there are some red flowers, possibly poppies, interspersed among the wheat. The overall scene is vibrant and healthy.

# What is the right price of food?

Quotations collected by  
Johan Swinnen and Scott Rozelle

# What is the right price of food?

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## Oxfam:

### In 2005:

“US and Europe’s surplus production is sold on world markets at artificially **low** prices, making it impossible for farmers in developing countries to compete. As a consequence, **over 900 millions of farmers are losing their livelihoods.**”

### In 2008:

“**Higher** food prices have pushed millions of people in developing countries further into hunger and poverty. There are now **967 million malnourished people in the world....**”

# What is the right price of food?

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## IFPRI:

### In 2003:

“The combination of agricultural protectionism and subsidies in industrialized countries [and the resulting **low** agricultural prices] has limited agricultural growth in the developing world, **increasing poverty and weakening food security in vulnerable countries.**”

### In 2008:

“In 2007, rapidly **rising** food prices began to **further threaten the food security of poor people around the world.** ... The current food-price crisis can have long-term, detrimental effects on peoples’ health and livelihoods, and can contribute to the **further impoverishment of many of the world’s poorest people.**”

# What is the right price of food?

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## FAO (United Nations):

### In 2005:

“The long-term **downward** trend in agricultural commodity prices **threatens the food security of hundreds of millions** of people in some of the world's poorest developing countries.”

### In 2008:

“**Rising** food prices are bound to **worsen the already unacceptable level of food deprivation suffered by 854 million people**. We are facing the risk that the number of hungry will increase by many more millions of people.”

# What is the right price of food?

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## OECD, IMF, World Bank:

### In 2003/4:

“Many (developed countries) continue to use various forms of export subsidies that drive **down** world prices ... Because the **majority of the world’s poorest households depend on agriculture** and related activities for their livelihood, this is especially alarming.”

### In 2008/9:

“The **increase** in food prices represents **a major crisis for the world’s poor** ... Up to 105 million people could become poor due to rising food prices alone.”



# A Framework for Discussion



# Basic framework for understanding food security issues

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Table 1

	SHORT RUN	LONG RUN
MACRO	Managing food price crises and budgeting for safety nets	Inclusive economic growth and the management of price stability
MICRO	Vulnerability to shocks, coping mechanisms and resilience	Poverty reduction and access to nutritious food = <b><i>sustainable food security</i></b>

# Different categories of price instability management instruments

Table 2

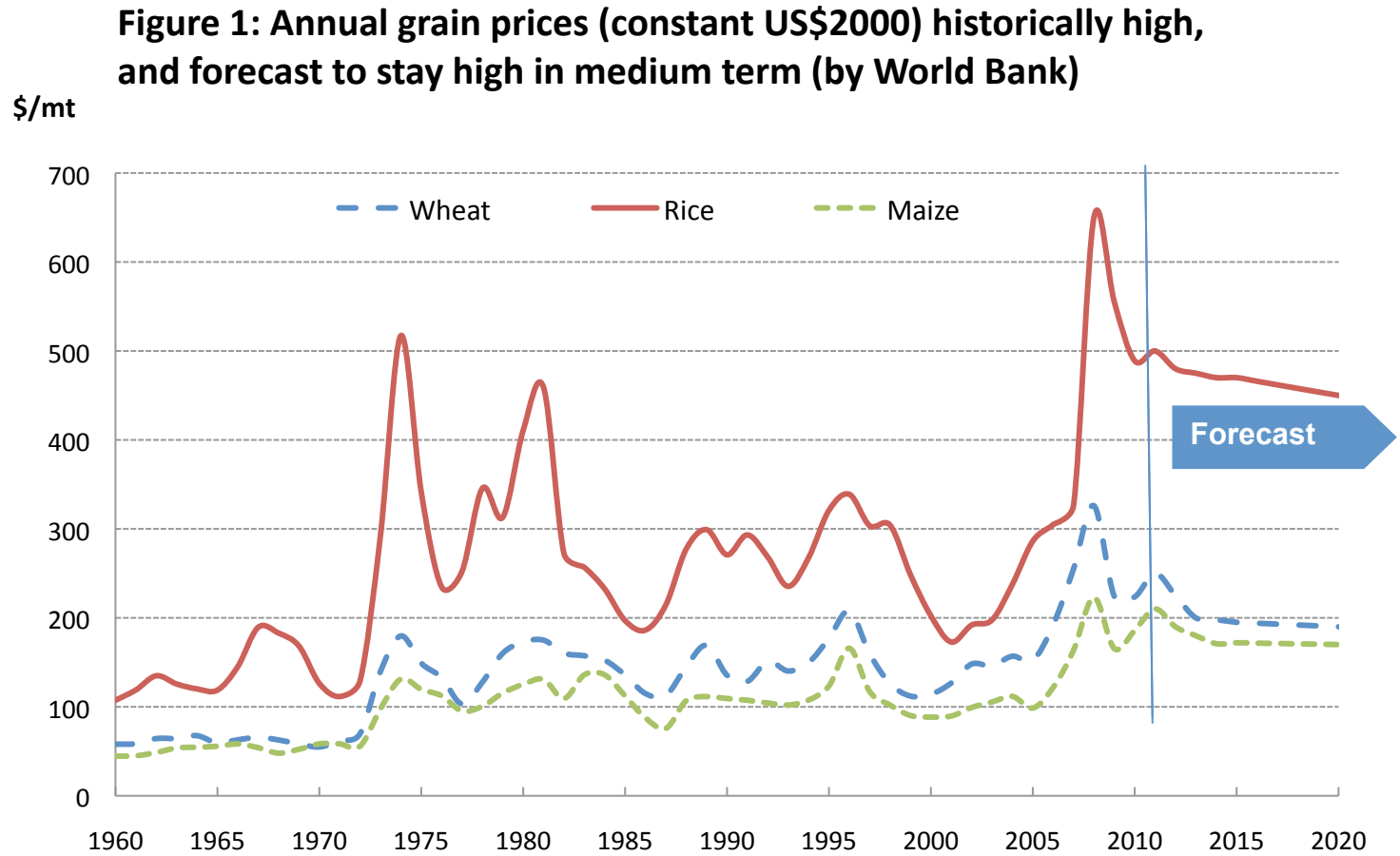
		OBJECTIVE	
		STABILIZE PRICES	REDUCE EFFECTS OF PRICE INSTABILITY
GOVERNANCE	MARKET-BASED	<b>Category A</b> <i>Storage and transportation</i>	<b>Category B</b> <i>Insurance, hedging, and futures markets</i>
	PUBLIC	<b>Category C</b> <i>Buffer stocks</i> <i>Import/export controls</i>	<b>Category D</b> <i>Safety nets</i>

Source: Galtier, 2009

**Some historical perspective:  
What's the problem?**



# World Bank forecast for prices of grains

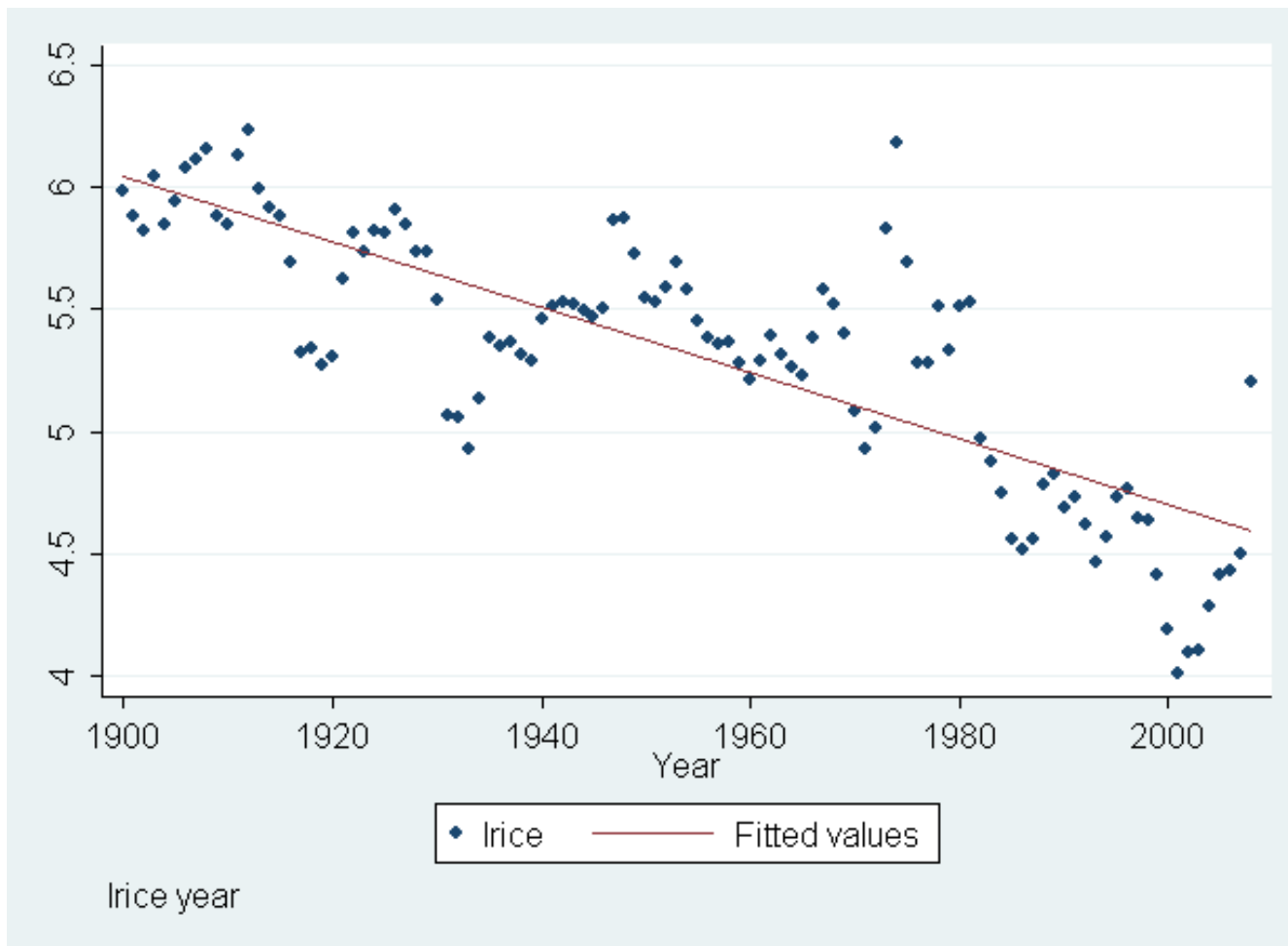


Source: Christiaensen, 2011

# Real rice prices since 1900

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Figure 2. Long-run trend in real rice prices, 1900-2008



Source: Data from Eberstadt (2008), analysis by author.

A woman with dark hair, wearing a red long-sleeved shirt and a woven hat, is looking down at a variety of fresh vegetables at a market stall. The stall is filled with green leafy vegetables, cabbages, and other produce. The background shows more market stalls with various fruits and vegetables.

## General issues to be resolved:

- Where is price instability a problem?
- Which commodities need more stable prices?
- What instruments are available to stabilize prices?
- How can interventions be governed?
- How do we evaluate results?

# Approaches at the local level:

- See Chris Barrett presentation on April 27
- Social safety nets
  - input subsidies, food transfers, cash transfers, nutrition interventions, public works
- Inclusive economic growth and higher real wages
  - the only *sustainable* solution

# Approaches at the National Level:

- Food reserves to stabilize prices
- Border controls to prevent high world prices from being transmitted to domestic markets
- Higher agricultural productivity
- Food subsidies
- Nutrition and health programs



# Approaches at the Global Level:

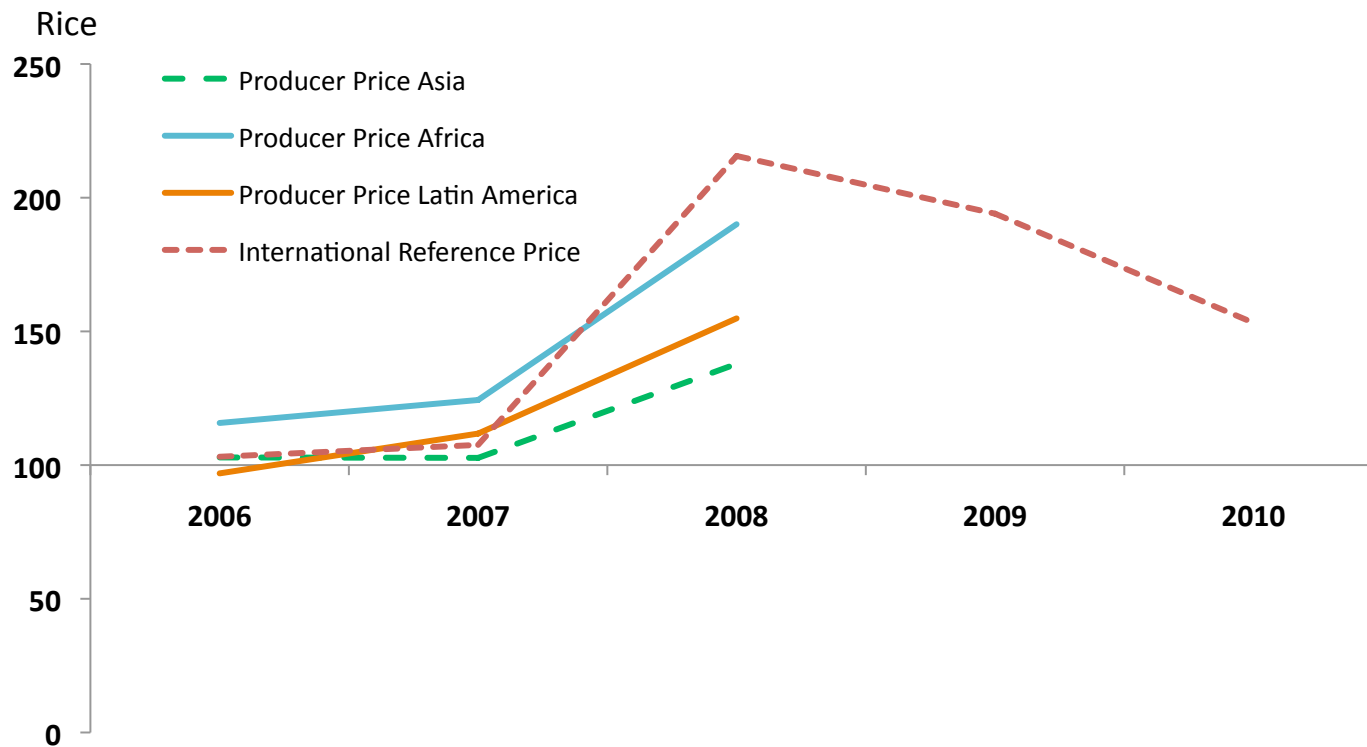
- Information/analysis as a public good
- Transfer risk from countries to donors
- Invest in raising agricultural productivity
- Stabilize food prices in world markets (?)
- Prevent/mitigate climate change (?)



# Contrasting experiences in Asia and Africa

# Producer prices for rice, by continent

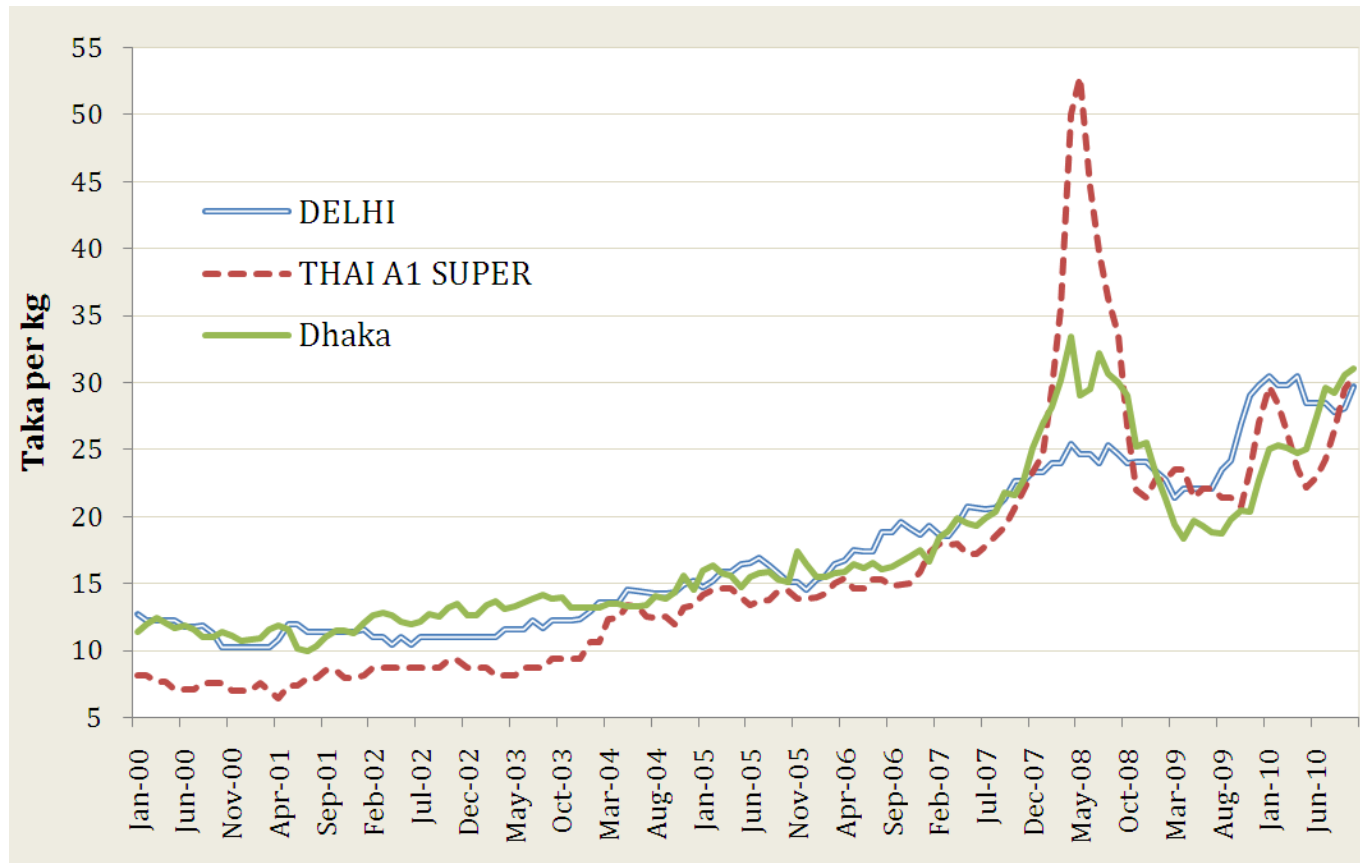
**Figure 3: Indexes of real international and producer prices of rice, developing countries' unweighted average, 2006-2010 (2005=100)**



Source: FAOSTAT producer prices ([www.fao.org](http://www.fao.org)) and international reference prices from the World Bank's Prospects Group ([econ.worldbank.org](http://econ.worldbank.org)) [from Martin and Anderson, 2011]

# Rice prices in India and Bangladesh, relative to Thai export price

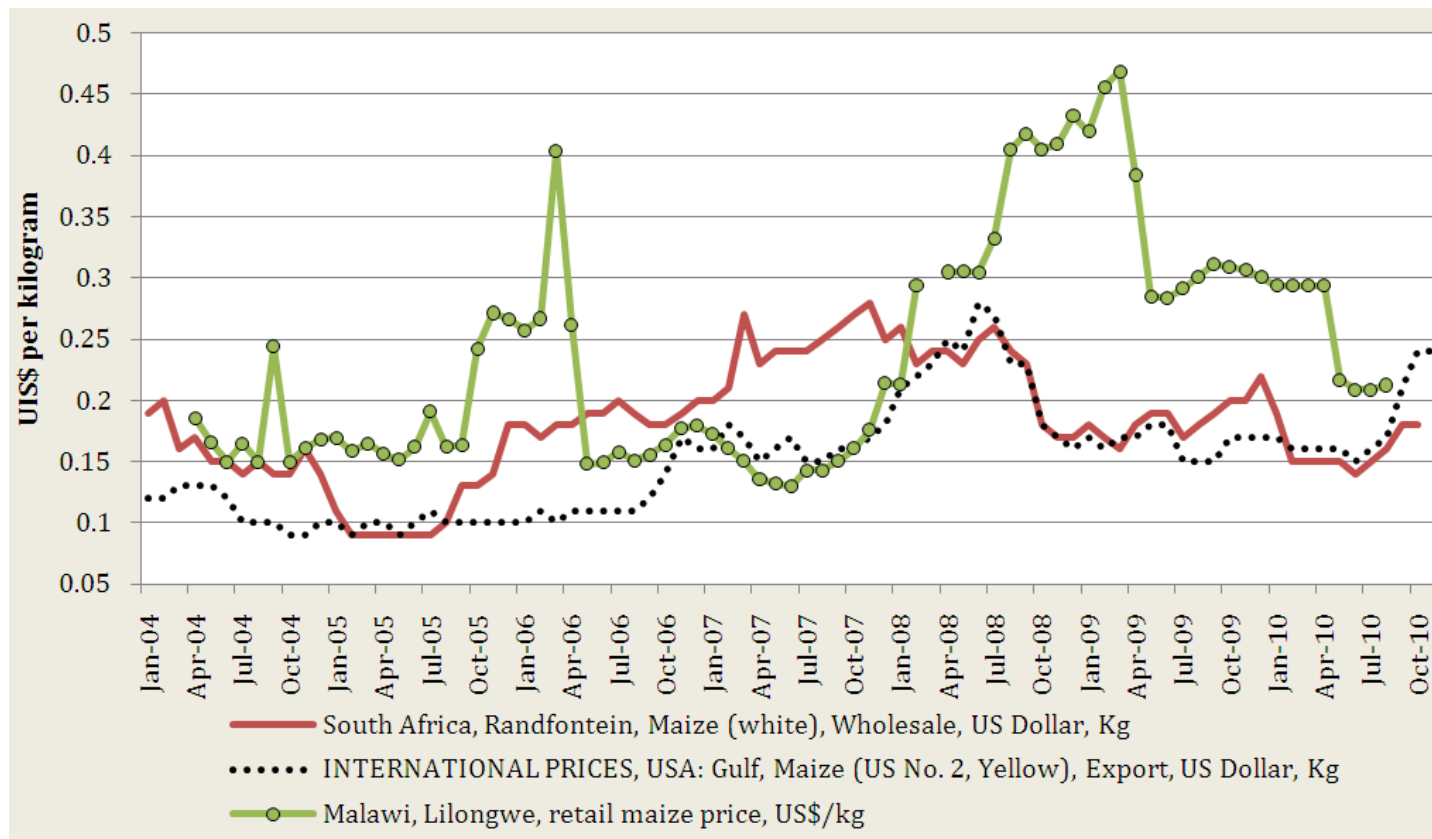
Figure 4. Dhaka, Delhi and Bangkok Rice Prices from Jan 2000 to Oct 2010, converted to Taka



Source: Clay, Keats, and Terhal, 2011

# Maize prices in Malawi compared with world export prices

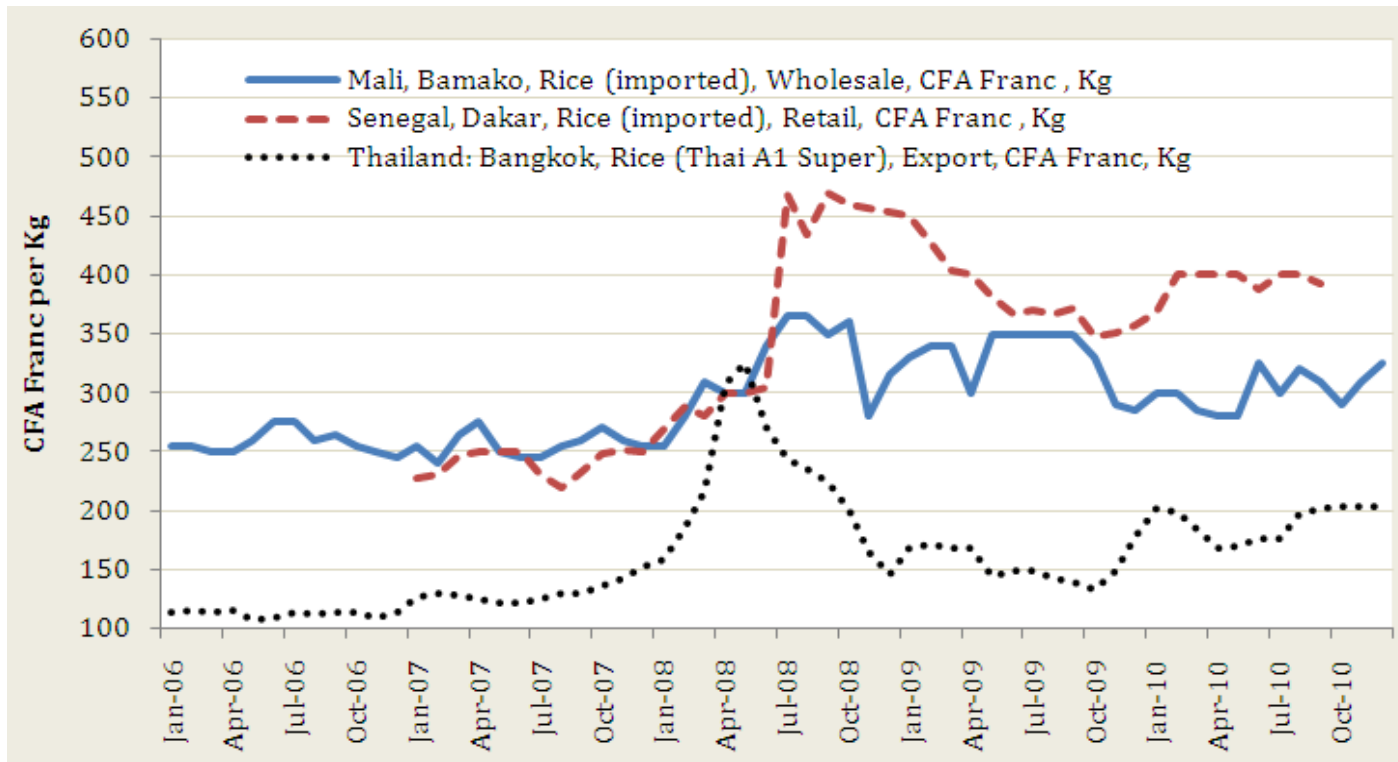
Figure 5. Monthly Malawi and International export prices in US dollars since 2004



Source: Clay, Keats, and Terhal, 2011

# Rice prices in Mali and Senegal

Figure 6. Rice prices in Mali and Senegal, compared with Thai export prices



Source: Clay, Keats and Terhal, 2011

# What to do?

- Help households cope with price risks
- Help countries stabilize domestic food prices, with minimal spillover to global markets
- Help regional organizations provide productive forums for coordinated food reserve policies
- Treat stable food prices as a “good” rather than a “bad”

**So, what is the right price of food?**

**About US \$400 per metric ton for 25%  
broken rice, fob Bangkok or Saigon**



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May 26, 2011  
Stanford University