



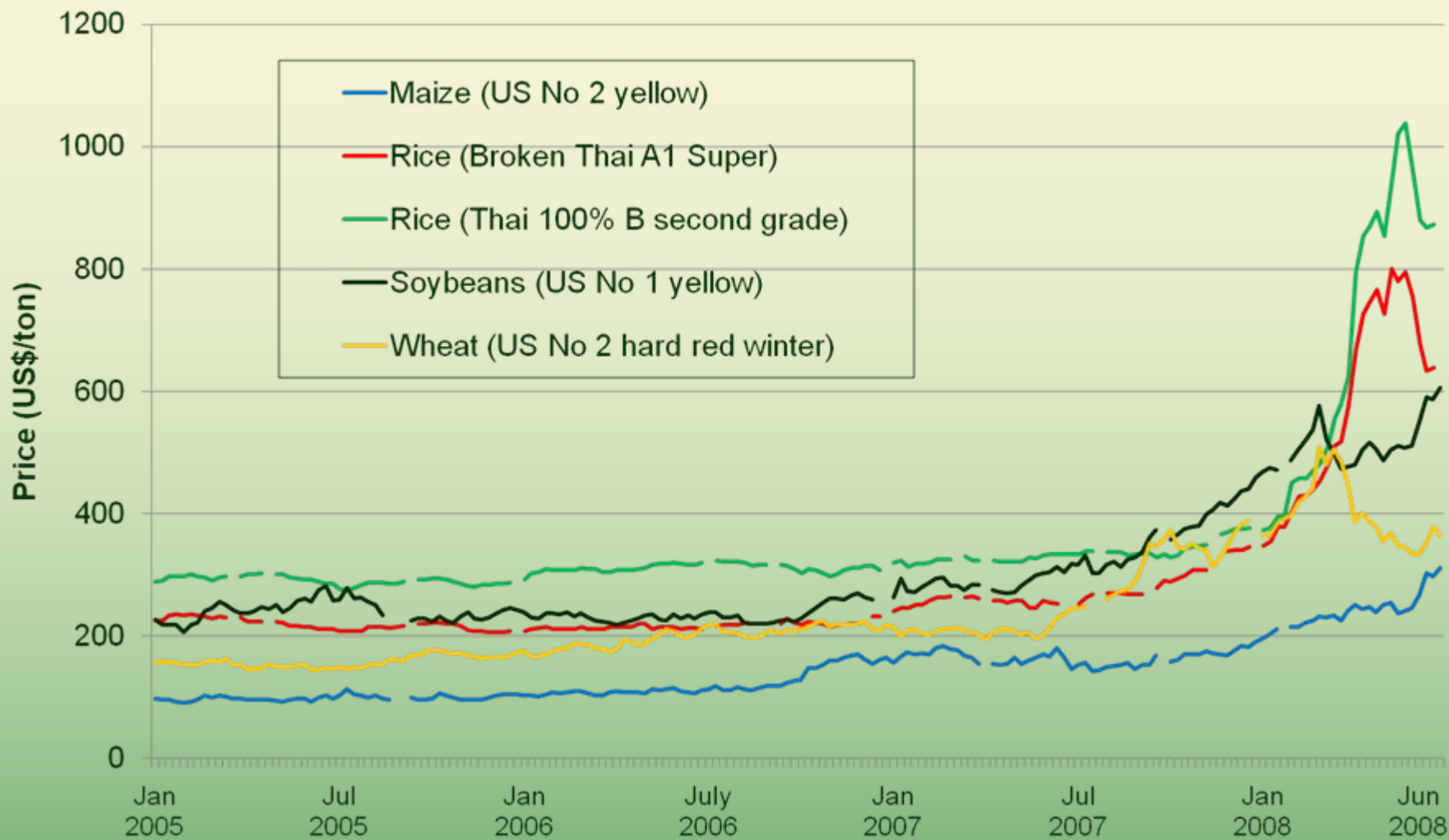
INTERNATIONAL FOOD
POLICY RESEARCH INSTITUTE
sustainable solutions for ending hunger and poverty

Improving access to agricultural inputs in response to the global food crisis

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Presentation at the workshop
“Cultivating innovation: A response to the food price crisis”
The World Bank, Washington, DC
26 September 2008

The crisis: Rising food prices



Multiple causes of the crisis

- High price of oil
 - Raises cost of agricultural production & transport
 - Stimulates diversion of crop to biofuels markets
- Biofuel subsidies
 - Further stimulates demand for maize & oilseeds
- Dollar depreciation
 - Accounts for 30% increase since Jan 2006
- Export restrictions by some countries
 - Vietnam, India, and Egypt limit rice exports
 - Argentina, Russia, and Kazakhstan limit wheat exports
- Long-term imbalance in demand- supply growth
 - Cereal demand growing at about 2% per year
 - Yield growth has fallen to 1-2% per year

Policy response to the food crisis

- Alleviate adverse impact, particularly on the poor
 - Increased allocations for emergency assistance
 - More flexibility in food aid programs (e.g. US)
 - Expand targeted social protection programs
- Address causes of the crisis
 - Encourage countries not to restrict food exports
 - Scale back bio-fuel subsidies
 - Stimulate agricultural production
 - Increase investment in agricultural research
 - Improve access to agricultural inputs

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What are the constraints on the use of modern inputs?

Any policy or program to increase input use must address one or more of the following constraints:

- Absence of **profitable inputs**
 - New technology may not exist that would be profitable under farm conditions
- Farmers lack **information** about profitable inputs
 - Technology may exist but farmer does not know how to use or adopt
- Farmers cannot bear **risks** associated with inputs
 - Farmer knows how to apply, but prefers not to take risk of adoption
- Farms have Insufficient **liquidity** (or credit) to pay for inputs
 - Farmer knows how to apply and can bear risk, but does not have liquidity or credit to pay upfront
- Farmers lack **scale** to adopt some modern inputs
 - Irrigation schemes, pest control, animal vaccination, etc require scale

Promoting fertilizer use (1)

- Fertilizer policy in 1970s and 1980s
 - Universal subsidies, state enterprise monopoly on distribution
 - But high fiscal cost, late delivery, overstaffing, displacement of private sector, & much of the benefits go to large farmers
- Reforms in 1980s and 1990s
 - Universal subsidies phased out, competition introduced
 - Some targeted subsidies remain, e.g. Zambia and Malawi
- Still some support for subsidies
 - Agronomist point to nutrient mining – depletion of soil nutrients
 - Politicians respond to popularity of fertilizer subsidies
 - Economist note that fertilizer use is below optimal, subsidy to offset risk & lack of info
 - Global food crisis provides additional motivation

Promoting fertilizer use (2)

- “Smart subsidies”
 - No precise definition but usually indicates
 - Subsidies targeted at poor and/or small farmers
 - Subsidies design to promote, not replace, markets
- Targeting of fertilizer subsidies
 - Administrative targeting difficult and politically divisive
 - Self targeting via food-for-work or small quantities
- Input vouchers
 - Provide vouchers to farmers redeemable for fertilizer at shops
 - Advantages:
 - “Kick start” private sector distribution
 - Less expensive than distribution of fertilizer
 - Disadvantages
 - Only works if good input distribution network exists
 - Secondary market (resale of vouchers)

Promoting fertilizer use (3)

Example: Malawi input subsidy program

- Evolution of program
 - Coverage, targeting, and goals have changed in response to experience and donor pressure
 - Started in mid-1990s as drought relief, then credit program, then universal distribution of small quantities of fertilizer and maize seed, then targeted, recent use of vouchers
- Evaluation
 - Popular program, reaches millions of farmers, Malawi produced a surplus for export last year
 - But success coincides with several years of good rainfall, lack of stability due to reliance on donor funding, displacement of private sales, not clear if benefit/cost ratio is greater than 1
- Summary: promising but not yet proven

Promoting improved seed (1)

- Seed policy in 1970s and 1980s
 - State seed companies produce, certify, and distribute subsidized seed
 - Some well run and commercially successful (Kenya Seed Co)
 - Many produced small quantities of low quality seed and lost money
- Reforms in 1980s and 1990s
 - Seed sector open to competition
 - Many state seed companies closed or sold
- Need for public sector involvement greater for seed than fertilizer
 - Seed is easy to reproduce (esp non-hybrid grain seed)
 - Private seed company cannot capture gains from new varieties
 - Economic rationale for public sector research and/or support
 - Seed quality difficult to observe
 - Need for quality control via certification, minimum standards, etc.
 - But seed production & distribution can be done by private sector

Promoting improved seed (2)

- Emergency seed distribution programs
 - Distribution of free or subsidized seed after natural disaster, drought, or conflict
 - May be necessary in some situations, but overuse undercuts private seed sector
 - Criticism of use of uniform seed, sometimes imported and inappropriate crops and varieties for local agro-climatic conditions
- Seed vouchers
 - Would promote local seed companies and input dealers
 - Would allow farmers to choose appropriate crops & varieties
 - But problem of heterogeneity – what types of seed would be covered

Limitations of short-term programs

- But risk is that short-term measures may displace long-term measures that have higher payoff
- Roots of food crisis in neglect of **long-term** agricultural investment and institution building:
 - Increased support for agricultural research and development
 - Revitalization of agricultural institutions
 - Agricultural extension & demonstration activities
 - Market information systems
 - Statistics and policy analysis
 - Exploration of pooled fertilizer imports to reduce cost
 - Credit and training to support agro-input dealers
 - Strengthening of informal seed systems
 - International harmonization of seed regulations
 - Lower trade barriers for staple foods and agricultural inputs

Thank you!

Comments and questions welcome:

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