

The Global Food Crisis: How to Overcome it and Set the Foundations for the Transformation of Agriculture

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Presented at the International Conference and Roundtable
The Global Food Crisis, one year on. How to achieve food security for all?
Goethe Institute, Masarykovo Nabrezi 32, Prague 110 00
March 4th, 2009



Outline

- **The Food Crisis: Who Is Affected?**
- **The traditional course out of the crisis**
- **How to overcome the food crisis and set the foundations for the transformation of agriculture**

The Food Crisis: Who Is Affected and How?

- **Consumer prices increase, producer prices also increase.**
- **Most net sellers and marginal buyers of food are in rural areas where most of the poor and food insecure are.**
- **High prices have positive impact in rural labor markets.**
- **Shift to lower input agriculture and traditional food stuffs.**
- **Impacts can not be generalized.**

Comparison of Price Effects: Kenya

| | 2007 | 2008 | 2009 |
|---------------------------|--------------------------|---|--|
| Production Factors | Affordable and available | Not available in time, expensive | Available and more affordable |
| Yields | High (34 bags) | Drop > 30% (21 bags) | Normal (30-32 bags) |
| Prices | Normal/Low | Very High | Not as high |
| Highest margins | Millers & retail | Storage and large scale farmers | ? |
| Price transmission | Storage & millers | Retailers, storage, millers & farmers | Importers, storage & farmers |
| Farm Profits | Normal low | Low if lack of fertilizer; High if fertilizer applied | Potentially high but small-scale farmers are net consumers |

H. Hoeffler and Booker w. Owour, High Commodity Prices -Who Gets the Money? A Case Study on the Impact of High Food Prices and factor Prices on Kenyan Farms. Survey for the HBF.

The Conventional Way Out of a Price Crisis

- **Agriculture is no strange to crisis**
 - **In mid-seventies: exploitation of Brazil Cerrados; expansion of soybeans**
 - **Mid-nineties: utilization of short term set asides in US & elimination Stocks**
- **Expand supply and go back to low prices**

It's Supply: Yield

- Development and adoption of drought/saline/disease resistant crops
- Globalization of agribusiness: Near universal access to the new technologies world-wide
 - Narrowing of technology and yield differentials between the developed and developing world

It's Supply: Acreage

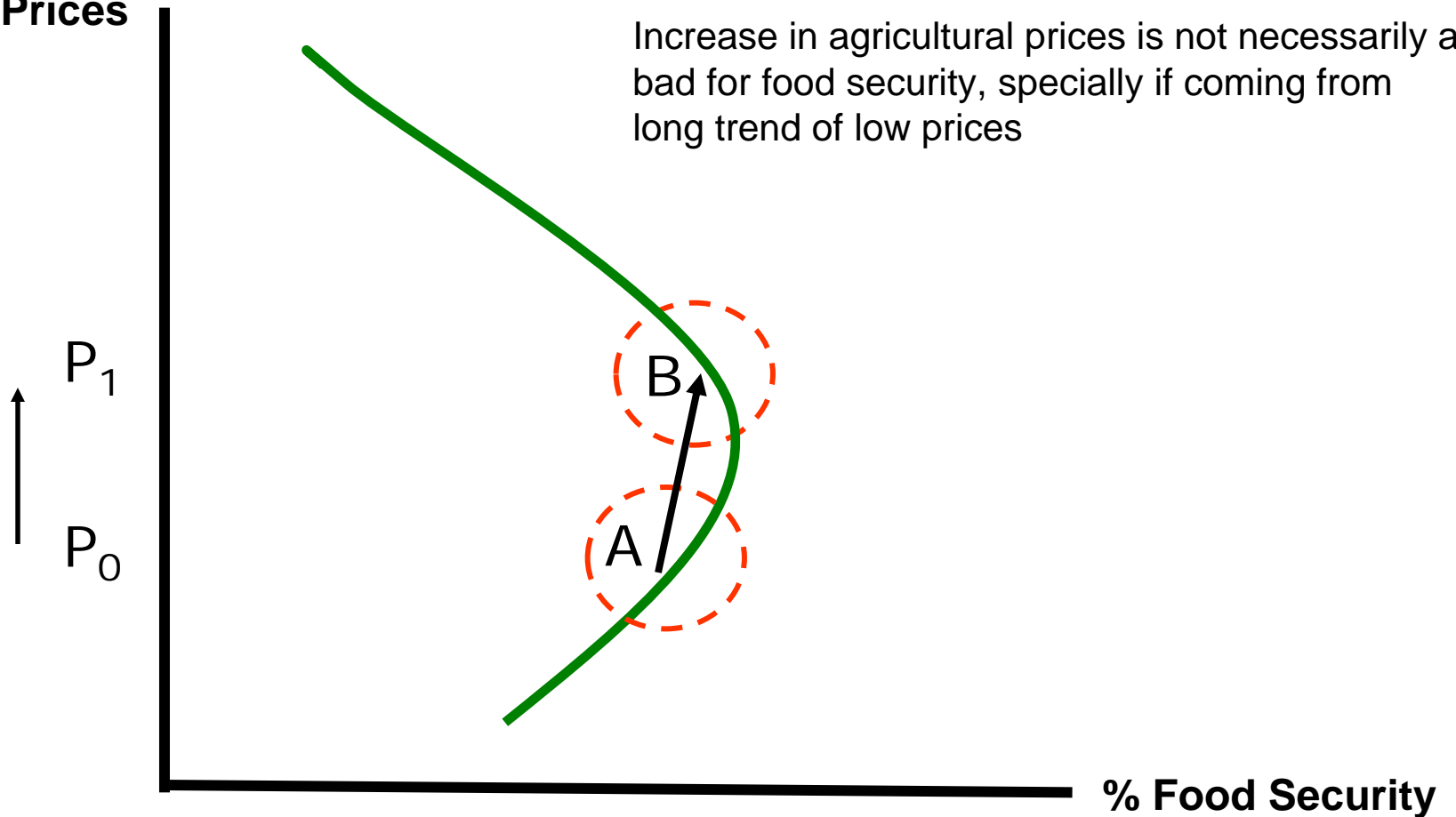
- **Short run: use of set asides, hay/pasture land to crop production**
- **Long-run land potentially available for major crops**
 - Savannah land in Brazil (100 mil. ha. -- USDA says 150)
 - Savannah land in Venezuela, Guyana, Peru (80 mil. ha)
 - Land in former Soviet Union (50 mil. ha.)
 - Arid land in China's west (50 mil. ha. GMO wheat)
 - Savannah land in Sub-Saharan Africa (130 mil. ha. -- 10 percent of 1.3 bil. ha. of Savannah land)
- **Easy to underestimate supply growth; but also the cost.**

How to Overcome the Food Crisis and set the Foundations for the Transformation of Agriculture

- **Higher agricultural prices: opportunity to invest in agriculture. But which type of investment matters.**
- **Goal: poverty reduction, increase food security, and enhance environmental performance.**

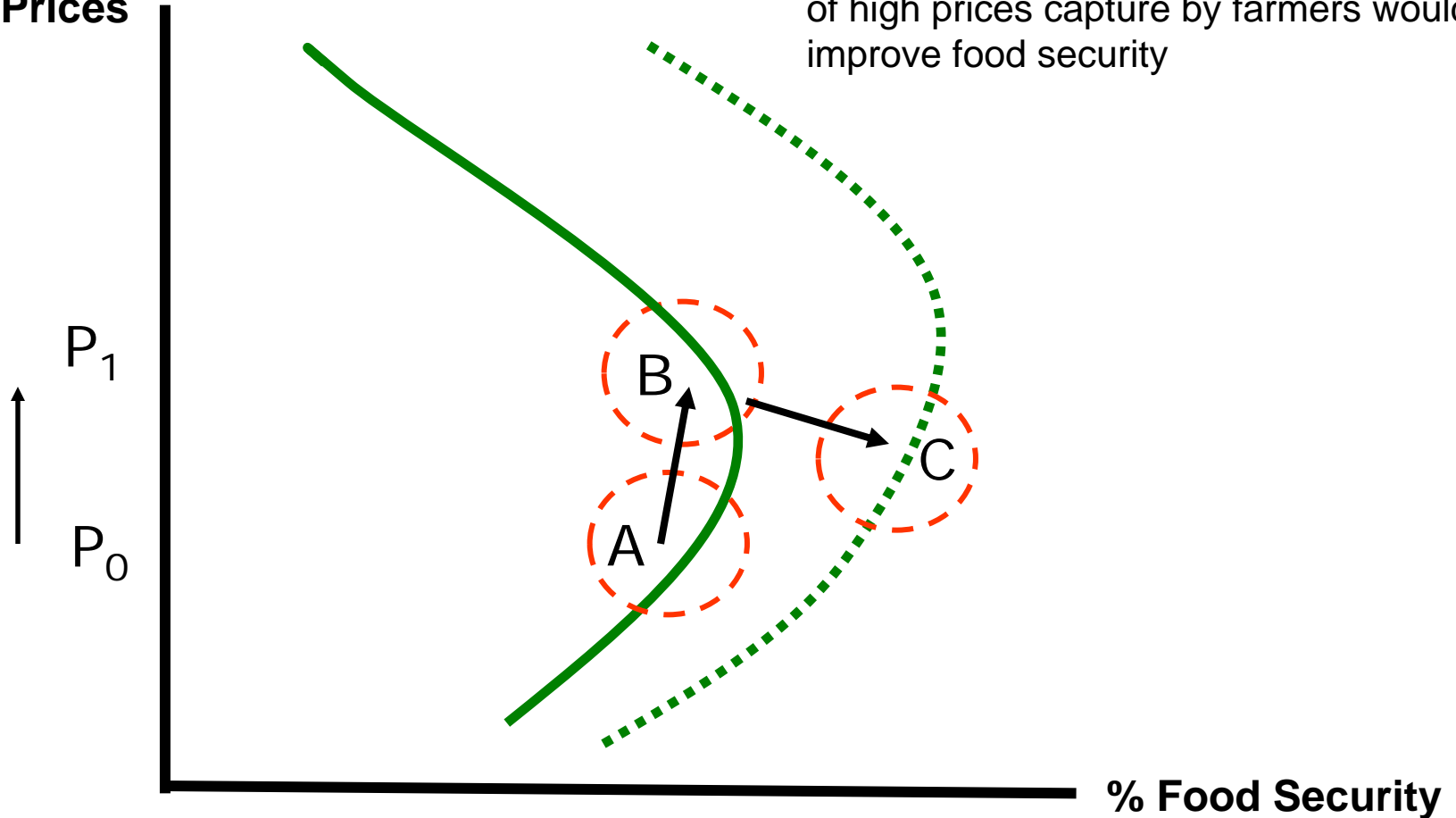
Trade off Between Agricultural Prices and Food Security

Ag Prices



Expand the Impact of Higher Prices in Food Security

Ag Prices

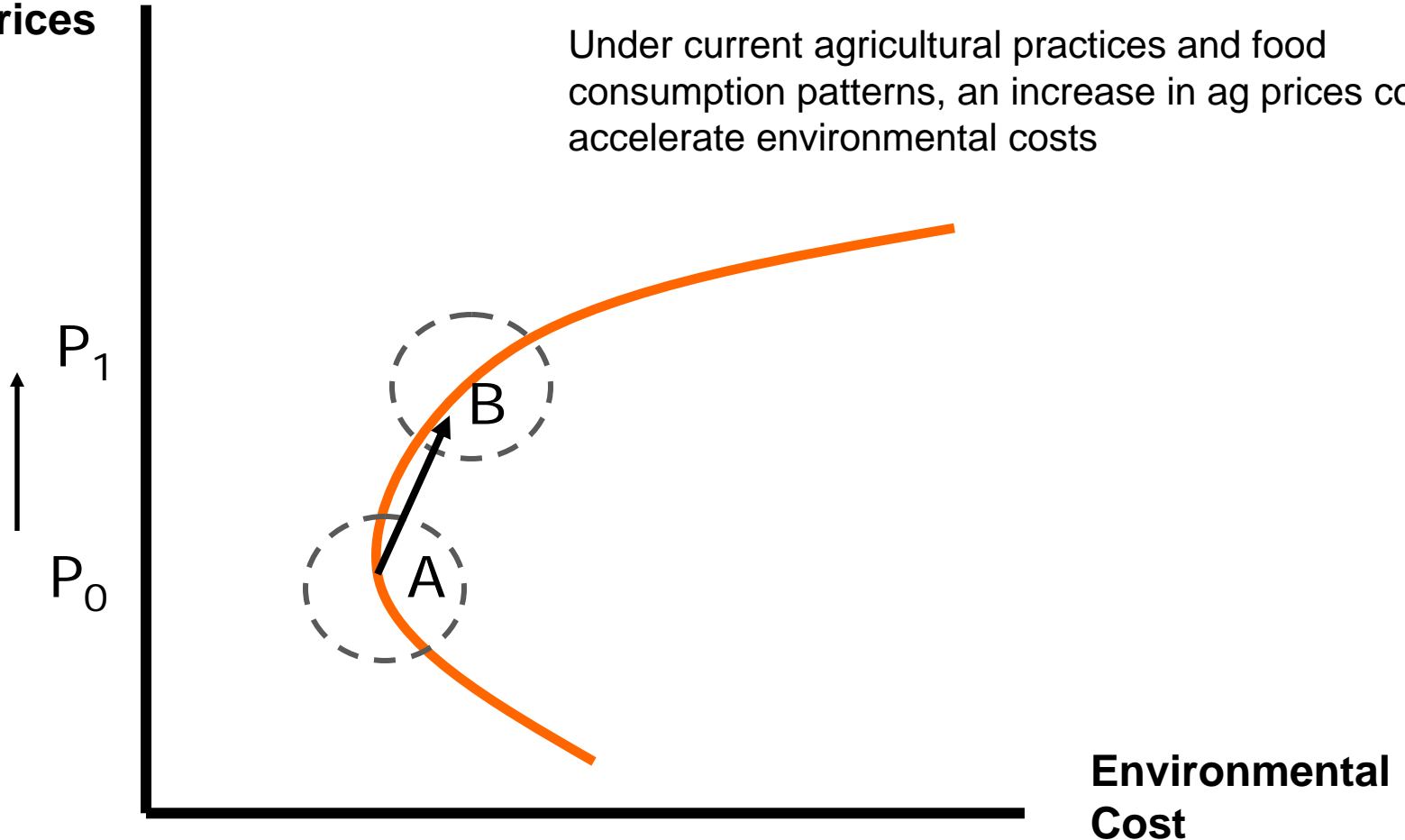


Strategy for Food Security

- **Increase farmers ability to capture larger share of higher prices:**
 - **Invest in farmers' access to markets, improving marketing & distribution systems**
- **Increase access to land, water and productive resources**
- **Invest in research and extension to improve productivity of local crops to supply the now profitable local market**
- **Implement programs to ensure access to food for vulnerable population**

Trade-off Between Agricultural Prices and Environmental Cost

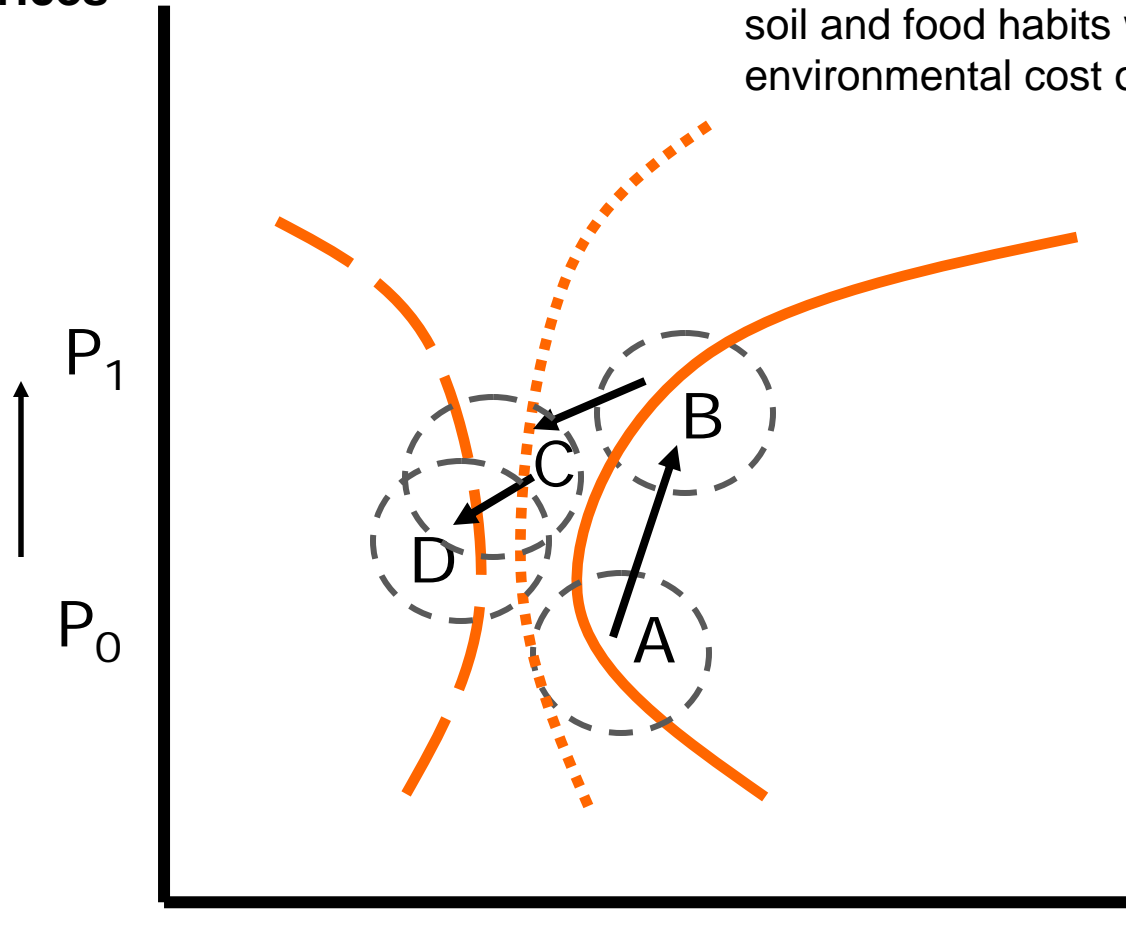
Ag Prices



Higher Ag Prices Create Conditions to Invest in reducing Environmental Cost

Investment in agricultural technologies less intensive in fossil inputs, and in tune with local soil and food habits would reduce environmental cost of agriculture

Ag Prices



Environmental
Cost

Strategy for Climate Change

- **Drastically change diet composition towards more efficient sources of protein and food from local origin**
- **Invest in Research & Extension oriented to:**
 - **Reduce use of fossil based inputs in agriculture**
 - **Improve management practices which increase the environmental performance of production agriculture**
 - **Ensure the best use of soils and landscape**
- **Recuperate the complementarity of crop and livestock activities in the farm**
- **Integrate GHG emissions and other environmental impacts into food system economic balance sheet**

Institutional Investment

- **Strengthen land property rights and enforcing mechanisms to protect small holders**
- **Re-develop domestic institutionality to support transformation of agriculture**
- **International food reserve system**
- **Global coordination of biofuel development**

Concluding Remarks

- **We can not afford to go back to the pre-crisis agriculture. If nothing is done, missed opportunity for poverty reduction, agriculture, and climate change..**
- **Domestic food policy objectives before trade objectives.**
- **Be prepare for lower prices !**

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Thanks

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