Addressing Problems of Price Instability in Staple Food Value Chains

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Major challenge:

• Need new farm technology and marketing technology to reduce costs in the value chain.
Interdependence in the value chain

- $445: Retail price/mt
- $192: Into-mill price/mt
- $179: Wholesale price/mt
- $142: Producer price/mt
- zero

Main problem:

- Need new farm technology and marketing technology to reduce costs in the value chain.
- If demand is inelastic, increased supply causes prices to plunge.
- Price plunges discourage farmers → dis-adoption of the improved farm technology → agricultural stagnation.
- Unless the system is integrated (credit, input delivery, output market access) then constraints at one stage can cause systemic failure.
Problems with Supply-Driven Production Expansion

- Quantity marketed
- Price

Graph showing the supply and demand curves with initial and increased supply.

- Initial supply (S1) and demand (D) at price P1.
- Increased supply (S2) leading to a lower price (P2) and a higher quantity marketed.
Slope of demand curve influenced by:

- transport infrastructure
- how diversified are food consumption patterns
- extent of investment in storage
- seasonal finance markets
- market institutions (e.g., warehouse receipt systems)
- trade / policy barriers (e.g., export bans, import tariffs)

MOST OF THESE FACTORS ARE INFLUENCED BY GOVERNMENT BEHAVIOR
Markets still burdened by numerous policy and regulatory barriers

- Examples: traders wanting to move product from N. Mozambique to southern Malawi need to get export permit in Quelimane
- Vacillations in trade policy inhibit bank financing for grain purchase (Uganda-Kenya example)
- Decentralization of marketing regulations creates hodge-podge of differing and inconsistent rules governing inter-district trade → rife for rent seeking, higher marketing costs

Therefore….a major priority for food value chain development

- How to make demand more elastic:
  - How to vent surplus production to other areas of the region – promote regional trade
  - How to promote food consumption diversification for locally/regionally-produced crops
  - How to develop alternative (non-human food) uses of staple food (e.g., livestock/poultry industry)
- Progress on these will enable markets to better absorb supply expansion w/o depressing prices
Are world prices heading higher?

- Bio-fuels: grain markets becoming integrated with petrol markets
- China most likely becoming a major importer

Who will benefit from higher food prices?

- Depends on supply response
- Supply response depends on assets and land
- Recall smallholder landholding patterns
Farm size distribution:
Small farm sector

![Bar chart showing farm size distribution across different countries.]

Smallholder Households’ Position in the Maize Market

![Bar chart showing the position of smallholder households in the maize market across different countries.]
Most rural farm households are buyers of maize (or net buyers)
2% of households account for 50% of marketed grain surplus
Crop price supports:
• highly concentrated benefits
• anti-poor
• Most likely impede small farm diversification into higher-valued activities

Priorities for Program Design

1. R & D: (Alston, Grilliches, Mellor)
2. Education: turns information into knowledge (Johnston)
3. Extension systems: farm management (Evenson)
4. Infrastructure: road, rail, port, communications (Antle)
5. Investments in health and addressing HIV/AIDS (Binswanger)
Priorities for Program Design

- Remove barriers to trade
  - streamline customs clearance, licensing procedures
  - remove import tariffs
  - eliminate sporadic export bans
  - eliminate internal taxation of grain movement
  - Harmonize inter-district
- Invest in rail and road infrastructure
- Need close consultation, coordination and transparency between government and private sector

Budget allocation to Agricultural Sector in Zambia: ZMK465 million in 2005
Getting Markets Right: What does this mean?

- Not getting government out of markets
- Changing the role of government from direct intervention to supportive investments to make markets work
  - Public goods investment
  - Support development of farmer organizations
  - Create “stable” policy environment: Clear, rule-based public operations in markets
  - Commodity risk management tools (e.g. warehouse receipt systems)
  - Greater transparency and consultation needed between private and public sectors
- Public investments to open up new land – stimulate migration

Policy response (cont.)

- Lobby forcefully for more level playing field in international trade
  - OECD support for Africa: $50 bill./yr
  - OECD ag. subsidies: $350 bill./yr
  - Reassess developed country policy of dumping free food in Africa under guise of “food for development”
thank you

NCPB and Nairobi market prices, 1995-2005, Kenya

- **NCPB sale price**
- **Nairobi historical**
- **Nairobi counterfactual**
NCPB and Nairobi market prices, 1995-2005, Kenya

- NCPB purchase price
- Kitale historical
- Kitale counterfactual

shillings per 90kg bag