Theory and Practice of Fertilizer Subsidies in Africa

BY

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Outline of the Presentation

- The Need for Mineral Fertilizers
- Rationale for Fertilizer Subsidies
- Pros and Cons of Subsidies
- Market Friendly Alternatives to Subsidies
- Subsidy Programs in Malawi, Tanzania, and Zambia
- The Way Forward
Food Production and Fertilizer use

- Food production
  - Replenishing the nutrients removed by harvested crops
  - Facilitating the adoption of high-yielding varieties

- Natural Resource Management - Soils
  - Maintenance of nutrient stocks
Developing Countries: Total Cereal Production and Total Fertilizer Use, 1961-2005
East Asia, South Asia, South America, Sub-Saharan Africa
Total Fertilizer Use
1980–2006

Source: Derived from FAO data.
Nutrient Mining in Agricultural Lands of Africa

1995–97

2002–04
Per Hectare Fertilizer Use by Markets, 2006/07
(kg/ha)

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Role of Policy

Environmentally Sound Fertilizer Use depends on the Trinity of:

- Products
- Practices
- Policies
Role of Subsidy in Promoting Fertilizer Use

- It improves incentives for fertilizer use and thereby helps in promoting food production and agricultural growth.
- It reduces risk in the use of a new product.
- It helps poor farmers in the learning process.
Fertilizer Subsidy System

Subsidy = \( P_1 - P_2 \)
Limitations of Subsidy

- It distorts the functioning of the market
- It prevents the development of competitive markets
- It creates fiscal burdens
- It promotes rent-seeking and political interference
Market Friendly Alternatives to Fertilizer Subsidies

- Reduce supply price by shifting the supply curve to the right
- Provide purchasing power support (PPS) to the poor
- Make Social Investment in Acidic Soils
The SSCR Approach*

*Shifting the Supply Curve to the Right.
The Five Pillars of Market Development

- Policy
- Human Capital
- Finance
- Market Information
- Regulation
Other Supporting Measures

- Integration of multi-country markets—developing business linkages
- Technology transfer efforts
- Infrastructure improvement—ports, rural roads and railway capacity
Market development is “necessary but not sufficient” for improving food security in the rural areas.

Market development efforts should be supplemented by PPS to include poor people in the market process—The Voucher System.
Subsidy vs. PPS

- Subsidy is for a product
- PPS (for inputs) is for the people
- “Support the people, not the product”
- Empowering people to participate in the marketplace through input vouchers will kill two birds with one stone—alleviate hunger and poverty and develop markets
Fertilizer Subsidies in Malawi

- Vouchers are distributed to targeted farmers
- Voucher value - 2 bags of fertilizer and 10 kg improved seed
- Average subsidy - over 70%
- 1.5 million farmers were targeted
- Imports by private sector; tenders by GOM; and distribution by ADMARC
- Cost $150-180 M
Impacts of the Program

- Increase in maize production; promoting food security
- Destruction of small agro-dealers
- Negative impact on the market development
- High fiscal costs
- The Dependency Syndrome
- Delays in voucher redemption
Fertilizer Subsidies in Zambia

- Fertilizer Support Program (FSP)/Farmer Input Support Program (FISP)
- Private sector imports; supplies to GOZ on tenders
- Product is distributed to district agricultural committees/camp agricultural committees (CACs)
- Farmers pay 50% of the cost
- 4 bags now (8 bags before) for each smallholder; 500,000 farmers targeted
Impacts of the Program

- Increase in maize production (2.7 M tons)
- Negative impact on the private sector and market development
- No agro-dealer development in rural areas
- Dual pricing system- subsidized product coming back to the market
- Farmers do not have an easy access to fertilizers
- Delays in tender process
Purchasing Power Support in Tanzania

- 1.5 million farmers are targeted
- PPS to smallholder farmers - 2 bags of fertilizers or equivalent and seed
- Promoting the use of domestic resource - MPR
- Agro-dealers are involved in redeeming vouchers
- MNB is responsible for redeeming vouchers
Impacts of the Program

- Increase in food production
- Delays in voucher redemption
- Targeting of the poor - political
- Very poor are not reached
- Fiscal sustainability
The Way Forward

- Focus on improving the efficiency and effectiveness of the market
- Develop PPS for the poor but no free lunch
- Involve private sector in voucher redemption
- Provide good mechanisms for redemption of vouchers by banks
THANK YOU VERY MUCH
FOR YOUR ATTENTION
Urea Price Indices, 1999 = 100
(International Price Index Yuzhnyy fob)
Impacts of Exchange Rates