



Partnership to Cut Hunger and Poverty in Africa

Research-Based Advocacy for African Agricultural Development

Innovations in Managing Access to Farm Inputs

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Policy Dialogue on Innovation, Agriculture, and the Response to the Food
Price Crisis

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Overview

- Introduction
- Obstacles and Innovations for Increasing Input Adoption
 - Technology
 - Capacity Building
 - Marketing
 - Infrastructure
- A Caution on Subsidy Programs
- Conclusions



1. Introduction

- Partnership to Cut Hunger and Poverty in Africa
 - Independent US-African coalition founded 2001 by 4 African Presidents, former USAID Administrator, US NGO and political leaders
 - Research-based advocacy to increase US investment in African agriculture, improve the effectiveness of related US policies and programs
- Michigan State University's Food Security Research project
 - Input Use, Input Market Development and Natural Resources Group
 - Valerie Kelly, Thom Jayne, Eric Crawford
 - <http://www.aec.msu.edu/fs2/inputs/index.htm>



The Global Food/Oil Price Crisis Presents a Challenge and An Opportunity

- Challenge/opportunity to achieve support for major investments needed to unlock Africa's agricultural development potential.
 - Until recently commodity prices too low to stimulate major investment in agriculture.
 - Currently SSA uses 40% of arable land, 20% of irrigable lands.
- Investment challenges
 - SSA will need \$5 billion per year to reach MDG of halving the proportion of the world's poor and hungry by 2015 (IFPRI)
 - USAID/Zambia -- \$10 million/\$350 mln country portfolio in ag
- Opportunity for bold experimentation



2. Obstacles and innovations for input market development in sub-Saharan Africa

- Increased levels of fertilizer use, improved soil fertility and farmer management practices, improved seed technologies required to generate significant gains in SSA agricultural productivity



Technology

To address limited purchasing power, high risk associated with rainfed agriculture

- ❑ Micro-dosing of traditional fertilizers (ICRISAT, others)
- ❑ New product development. E.g., Twin-N. Mapleton Int. technique to concentrate, freeze-dry naturally occurring nitrogen-fixing bacteria. Rehydrated mix is sprayed at rate of 4 gms/ha replacing up to 3 bags of urea/ha. Twin –N cost: \$50/ha. <http://www.mapletoninternational.com/>
- ❑ Fine-tuning fertilizer recommendations (NARS, CG); working with companies to produce specialized formulations (FIPS/Kenya, USAID/Zambia PROFIT)
- ❑ New public-private research partnerships: Water Efficient Maize for Africa (WEMA)—Collaboration of AATF, CIMMYT, Gates, NARS to develop and test drought-tolerant maize for Africa to be made available to farmers royalty-free.



Capacity

To improve farmer training and increase response to improved seeds and fertilizers

- Agronomic and business training of farmers through non-traditional channels
 - Producer organizations (CLUSA-Mozambique, Zambia; FIPS-Kenya, Uganda)
 - Expanded extension by private sector in collaboration with public sector (Mozambique-cotton/maize; World Cocoa Foundation, West Africa)
 - School gardens (Peace Corps, WFP)
 - Increasing use of the internet for extension advice
- The future?
 - On-demand courses to communities through polytechnics and local community colleges, coordinated with lead university and national agricultural research organizations



Markets

To reduce the extremely high marketing costs that put fertilizer out of smallholder reach smallholders

- Packaging in smaller quantities (FIPS/Kenya; ICRISAT/Zimbabwe; Sasakawa-Global 2000-Uganda)
- Reducing VAT and other taxes associated with fertilizer import and handling (Kenya)
- Regional procurement of fertilizer (ADB facility)



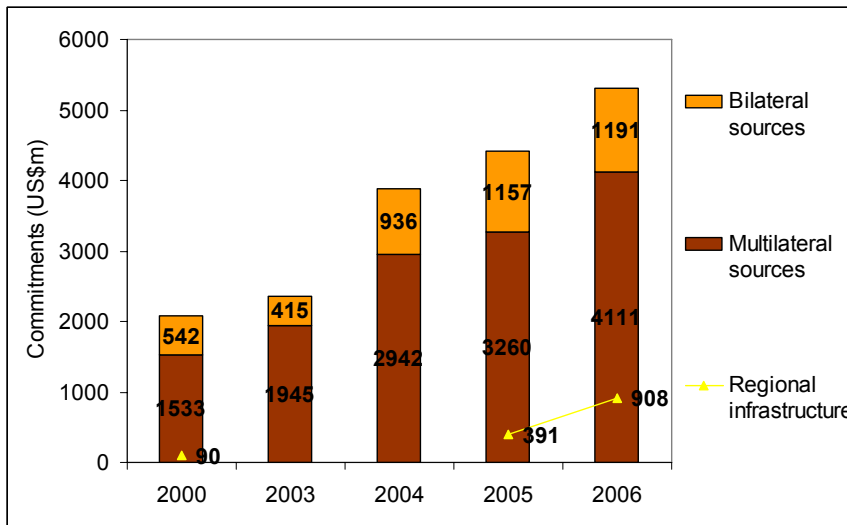
Infrastructure

- ❑ During Asia and Latin America's Green Revolutions, much was achieved through improvements in farm-level productivity
- ❑ But SSA lacks much of the institutional capacity (research, training, governance, markets) and *physical infrastructure* (roads, other transport, irrigation, power) that helped make GR possible in other regions
- ❑ Infrastructure is central to agriculture's success: it helps foster access to inputs that enhance productivity and yields, get products to market, and add value to agricultural commodities
- ❑ China and India have cut rural poverty by investing in agriculture and infrastructure, especially rural roads.
Studies in Africa show the same potential.

Africa's high cost infrastructure

	SSA	Rest of World
Power tariffs (US\$ per kWh)	0.10 - 0.30	0.05 - 0.10
Road freight tariffs (US\$ per ton-km)	0.05 - 0.25	0.01 - 0.04
International phone call (US\$ per 3 min call to US)	0.80	0.20
Internet dial-up service (US\$ per month)	50.00	15.00 – 25.00

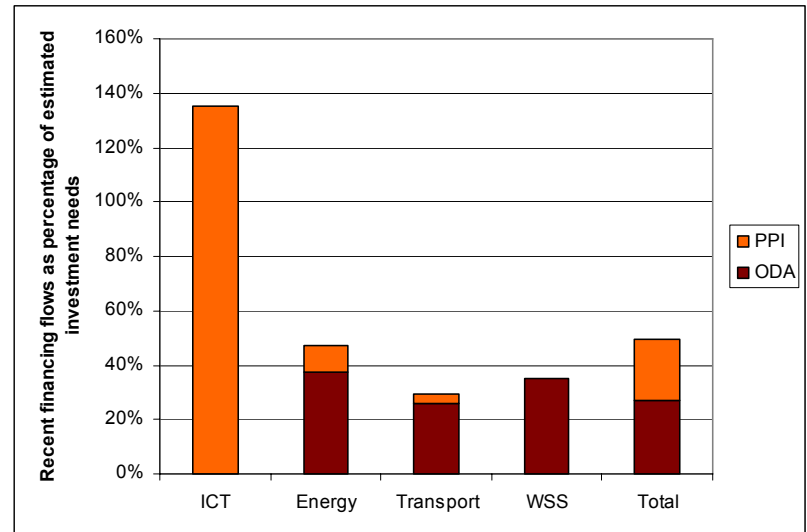
Closing the financing gap



ODA has increased by 20% since 2005. Yet, major funding gaps remain in all infrastructure sectors but ICT, even when private sector finance is included.

Financing gap: \$6.5 billion annually, construction only

US spends \$110 billion annually to build and maintain its own roads!





3. A Caution on Subsidy Programs

- **Contribution of fertilizer subsidy programs to reducing poverty and hunger higher if designed and implemented to**
 - **target households with little ability to afford fertilizer**
 - **target areas where applying fertilizer can actually contribute to yields**
 - **promote the development of a commercial fertilizer distribution system rather than undercutting it (voucher programs)**



Thank you!