

Fertilizer policy and use in Tanzania

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Outline

- Evolution of fertilizer policy in Tanzania
- Trends in fertilizer use
- Fertilizer use by region and by crop
- Composition of cost of fertilizer
- Recent experience with fertilizer subsidy

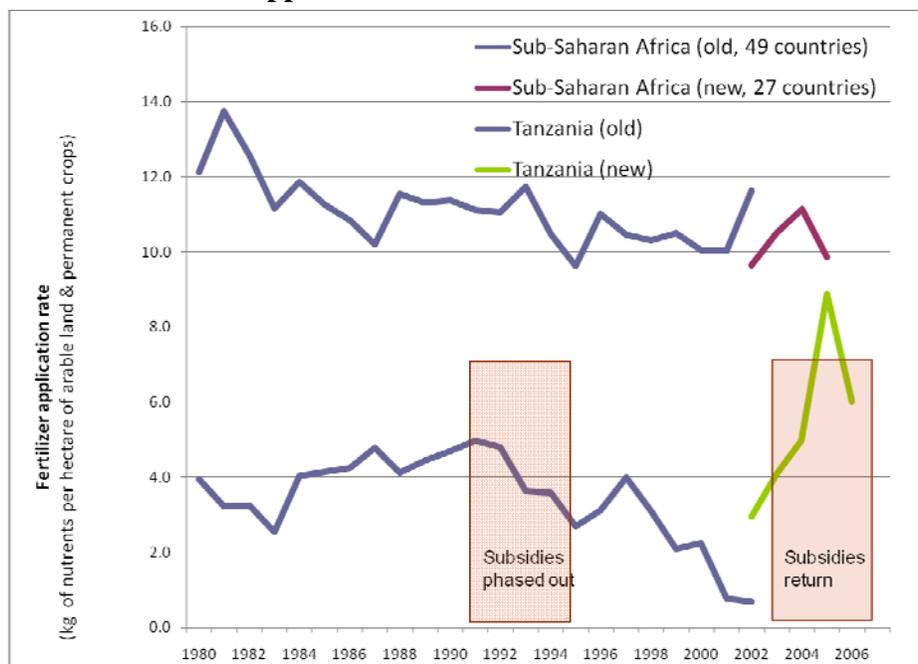
Evolution of fertilizer policy

Evolution of fertilizer policy

- 1967 Arusha Declaration
 - Villagization
 - Nationalization of industry & ag marketing
 - Fertilizer importation and distribution state monopoly
 - Highly subsidized price, but delays and shortages
 - Economic crisis by mid-1980s
- 1986 Start of economic reforms
 - Liberalization of prices & forex, end of state monopolies
 - Agricultural market liberalization
 - Fertilizer subsidies phased out 1991-94
- 2003-present
 - Return of limited fertilizer subsidies

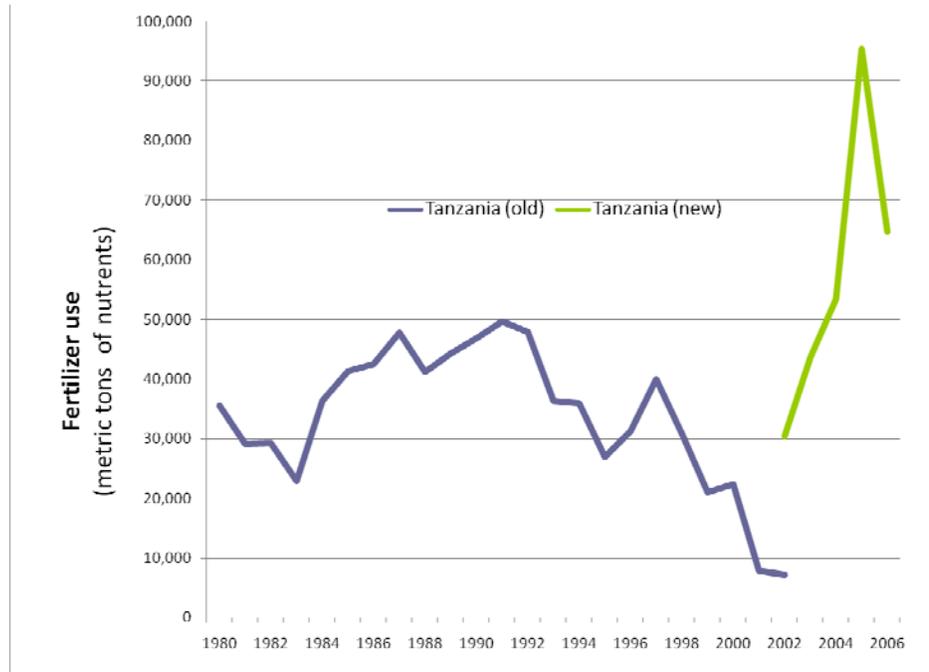
Trends in fertilizer use

Trends in fertilizer application rates in SSA and Tanzania



Source: FAO, 2009.

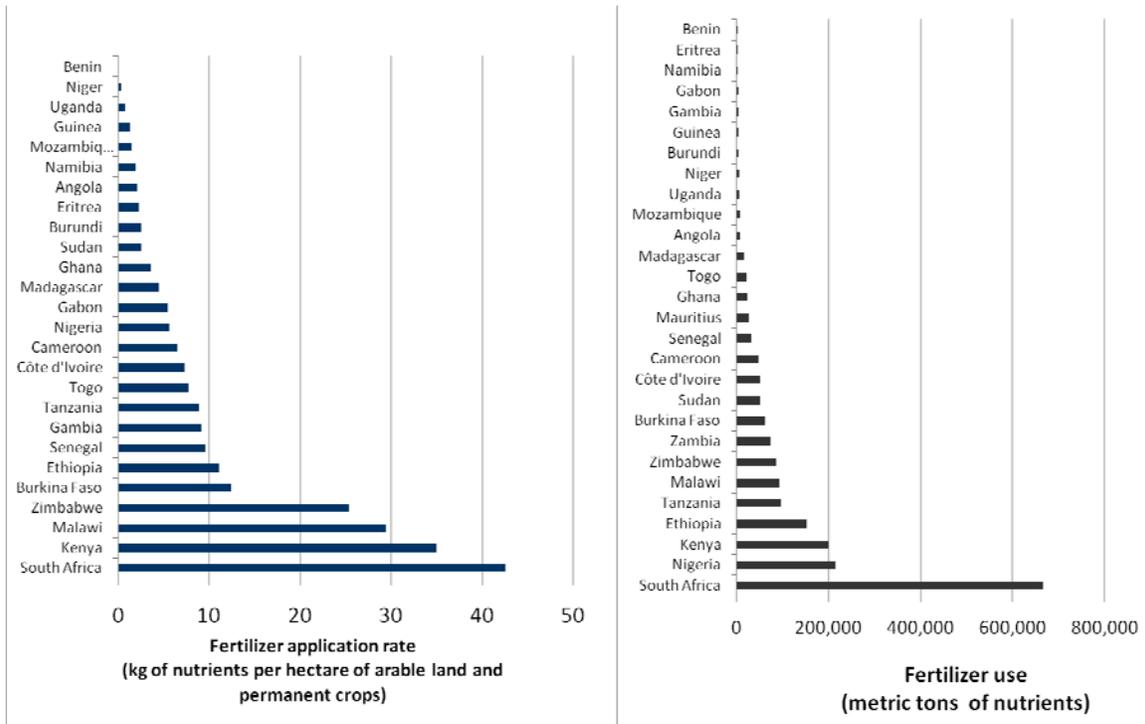
Trends in fertilizer use in Tanzania (1980-2006)



Source: FAO, 2009.

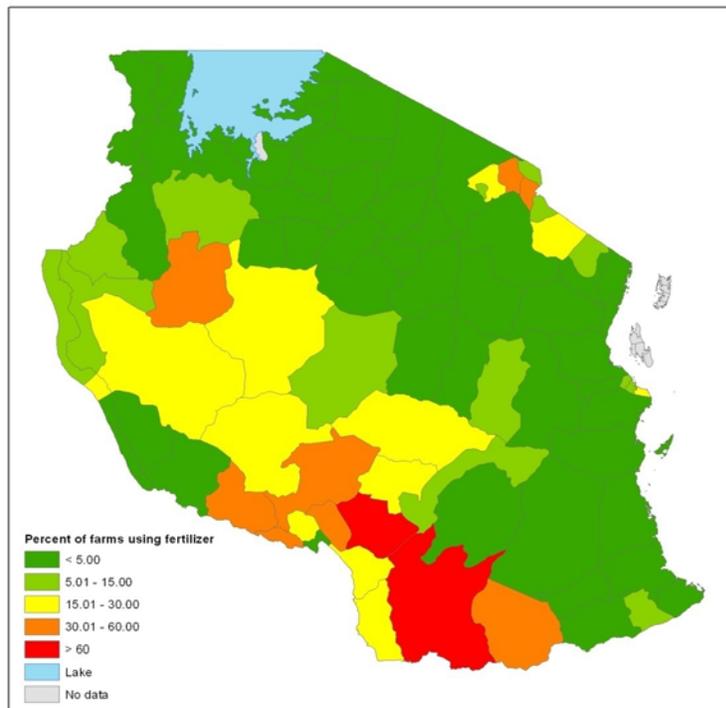
Fertilizer use by region & by crop

Comparison of fertilizer use in selected African countries in 2005



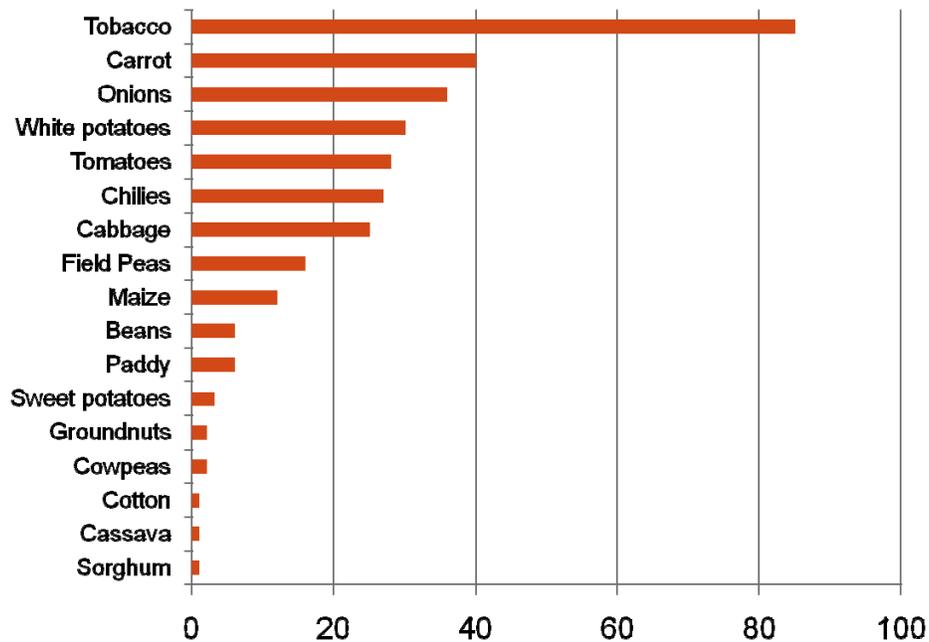
Source: FAO, 2009. .

Map of the percentage of farmers using fertilizer in Tanzania by district



Source: Tanzania Agricultural Sample Census 2002-03 : .

Percentage of farmers using fertilizer in Tanzania by crop



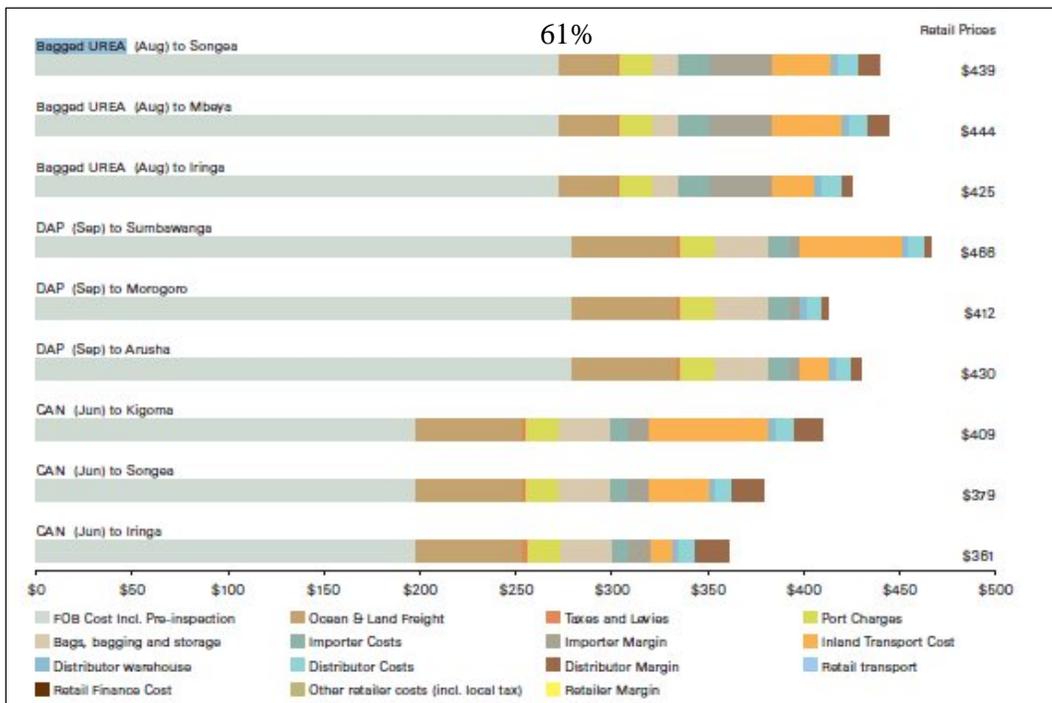
Source: Tanzania Agricultural Sample Census 2002-03 : .

Characteristics of fertilizer purchases

- Location of purchase
 - 81% local market or trade store
 - 12% cooperative
 - 7% other
- Source of finance
 - 69% Sale of farm products
 - 24% Other income sources
 - 2% Credit
 - 5% Other
- Reasons for not using fertilizer
 - 63% Price too high
 - 20% Not available
 - 10% Fertilizer no use
 - 7% Other

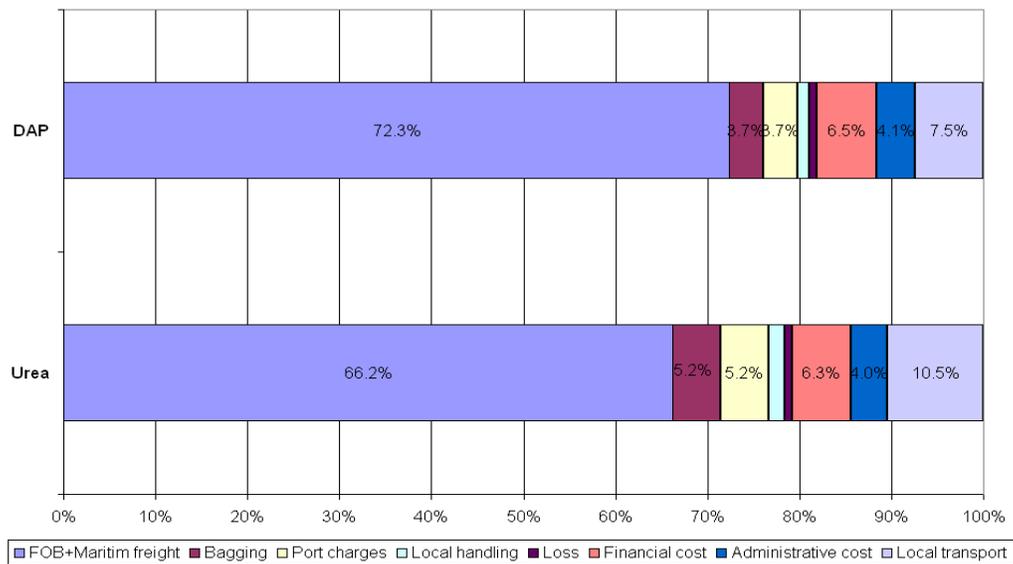
Composition of fertilizer costs

Composition of costs of fertilizer in Tanzania



Source: Chemonics-IFDC, 2007.

Composition of costs of fertilizer in Tanzania (2)



Source: Zorya et al, 2009.

Recent experience with fertilizer subsidies

2003-2007 – Subsidies for transport of fertilizer

2008-2013? – National Agricultural Input Voucher Scheme (NAIVS)

2003-2007 Fertilizer transport subsidies

- Objective:
 - Facilitate fertilizer use in remote areas
- Policy:
 - Subsidize transportation of fertilizer to selected regions (including southern highlands).
 - Fix margins and prices to ensure subsidy passed to farmers
 - Government manages physical flows
- Outcome:
 - FAO shows increased use of fertilizer
 - But heavy involvement of government in managing distribution
 - Late delivery due to fact that subsidies tied to political budgetary process
 - Price controls not effective at farm level
 - Some leakage to other neighboring countries

2007- National Ag Input Voucher Scheme (NAIVS)

- Objectives:
 - Facilitate fertilizer use in high-potential areas
 - Offset rising cost of fertilizer
 - Stimulate production to reduce food prices
 - Stimulate (rather than displace) private distribution network
- Policy:
 - Distribution of vouchers for inputs
 - Targeting
 - Complementary support for input sector
 - Scaling up and scaling down

NAIVS: Vouchers

- Distributed to selected farmers in selected districts
- Three input vouchers:
 - 1 bag of urea
 - 1 bag of DAP/Mijingu
 - Improved maize or rice seed
- Voucher worth 50% of price
 - so 50% co-financed by farmers
- Vouchers are handled by agro-dealers trained and certified by CNFA
- Vouchers redeemed by National Microfinance Bank (largest branch network in country)

NAIVS: Targeting

- Targeting at regional level/district:
 - No. of maize and rice farmers
 - Irrigation
 - Southern and Northern Highlands, Western Region
- Targeting at household level:
 - Full-time farmer residing in the village
 - Cultivating maize and/or rice
 - Not more than 1.0 hectare of land
 - Willing to use provided inputs on those crops
 - Willing to follow recommended agricultural practices
 - Willing and able to co-finance the input purchased through the vouchers
 - Priority given to :
 - Female-headed households
 - Households who didn't use any or little fertilizer and improved seeds for targeted crops over the last five years.

NAIVS: Complementary support

- Public awareness campaign
- Program to strengthening agro-dealers with training and certification
- Support to the seeds sector
- Integrated soil fertility management
- Monitoring and evaluation

NAIVS: Scaling up and scaling down

- 2007 Pilot program in two districts
- 2008 Scaled up to 53 districts
 - 700 thousand beneficiaries
 - US\$ 60 million cost
- 2009-11 Expands to 57 districts
 - 1.5-2.0 million beneficiaries
 - US\$100-150 million cost
 - IDA/World Bank funding about 50% of cost
- After 2011,
 - IDA support ends, NAIVS winds down?

Conclusions on NAIVS

- Too soon to evaluate impact
- But promising combination of features
 - Targeting maximizes benefits
 - Vouchers minimize distortions
 - Complementary measures to support distribution network
- However, some questions remain
 - Given high cost, can it be replicated in other countries?
 - When IDA support ends, will it be
 - Politically feasible to phase out programme?
 - Or fiscally feasible to continue it?
 - Are targeting procedures successful?
 - Will cost-benefit analysis show benefits in agricultural output greater than cost?