

# Managing Access to farm Inputs

by

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**IFDC**

Presented at the World Bank Symposium

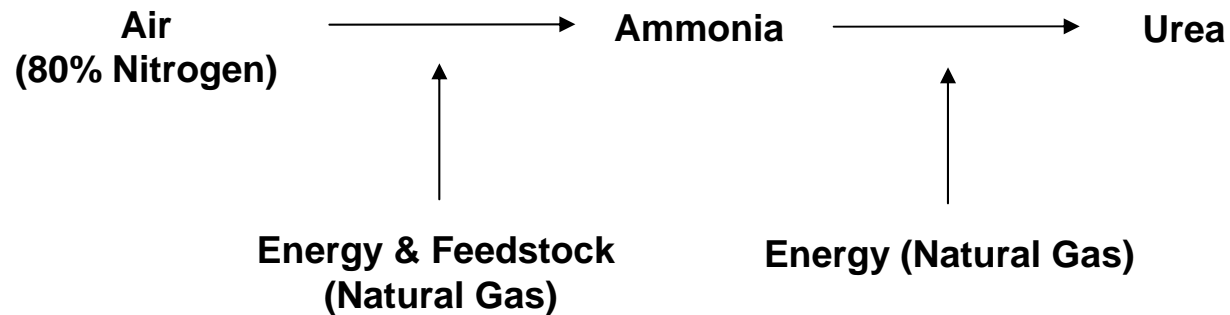
*Cultivating Innovation: A Response to the*  
**Food Price Crisis**

Washington, D.C.

September 26, 2008

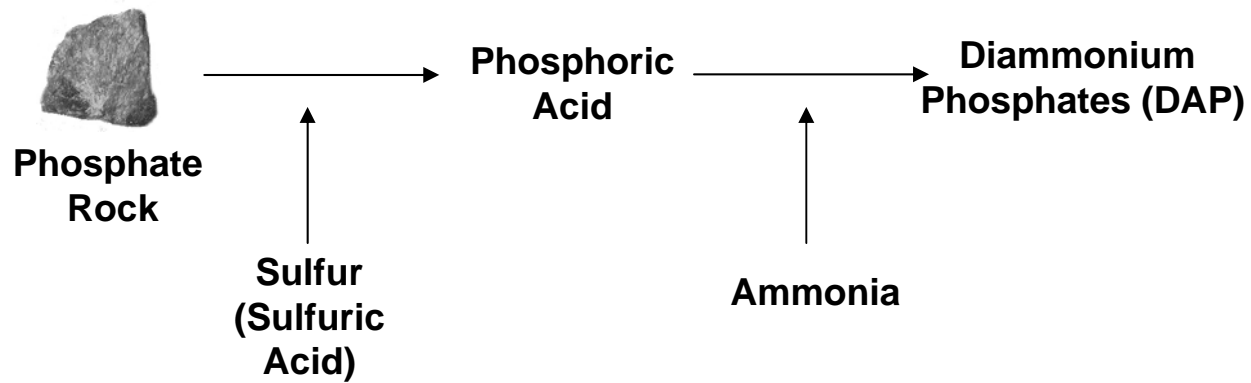
# Fundamentals of Fertilizer Production

# Nitrogen



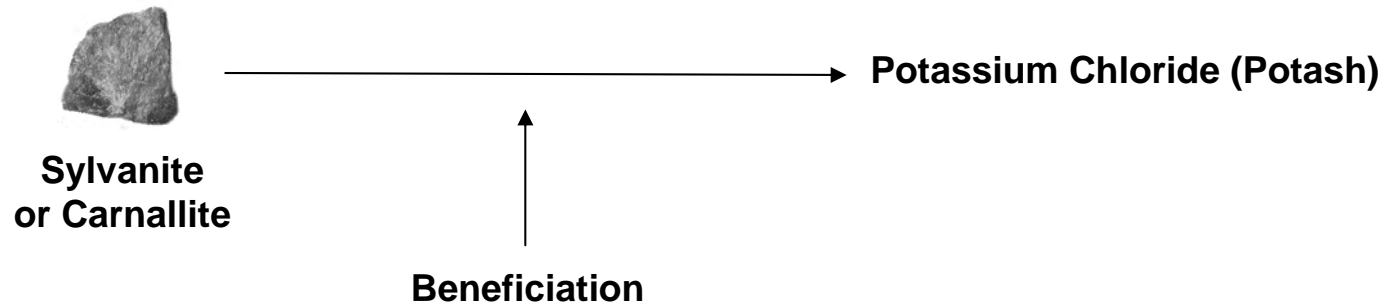
**Total Energy and Feedstock: Equivalent to  
4 Barrels of Oil**

# Phosphates

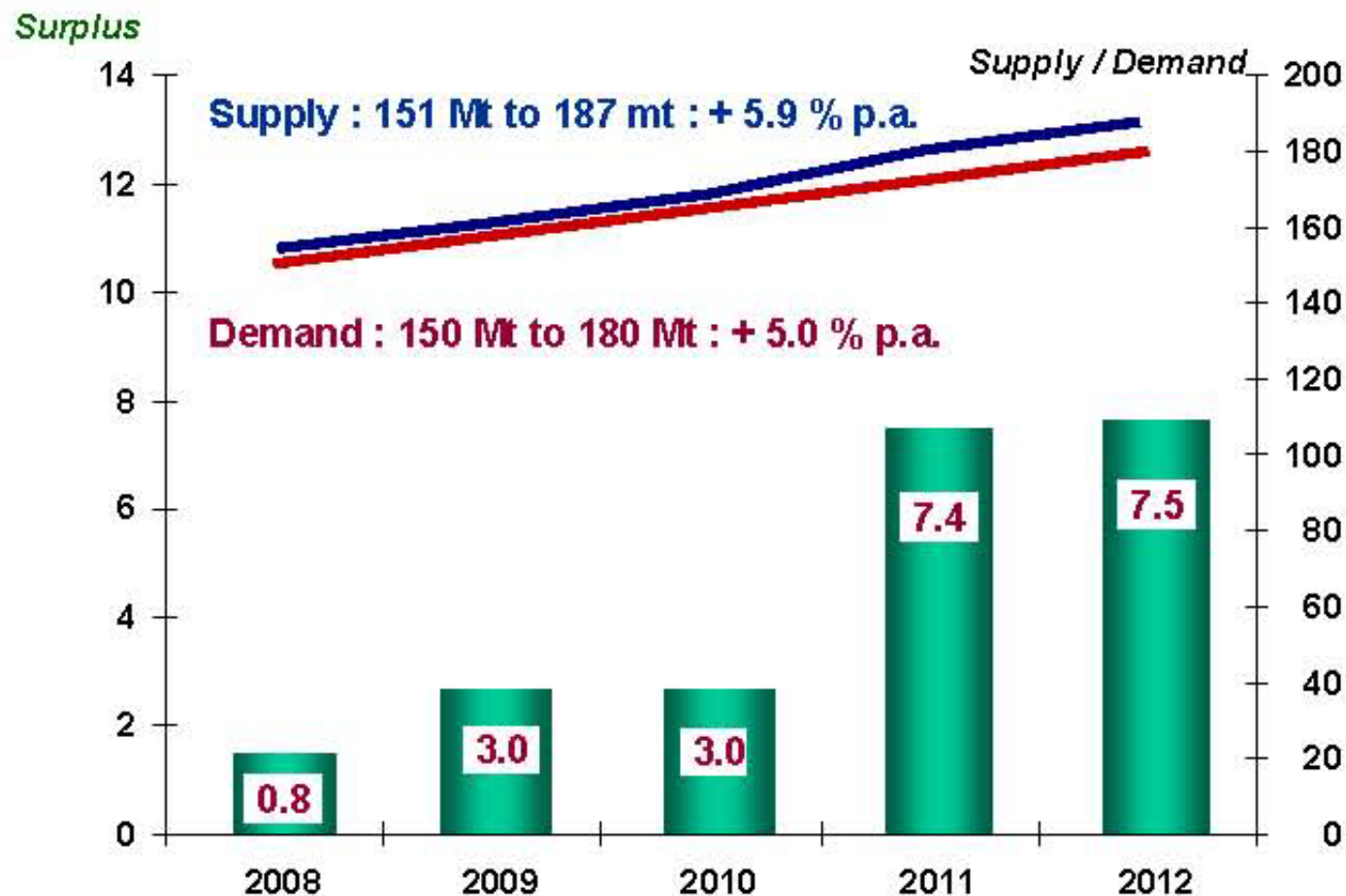


**1 Ton Sulfur Produces ~ 2 ton of DAP**

# Potash



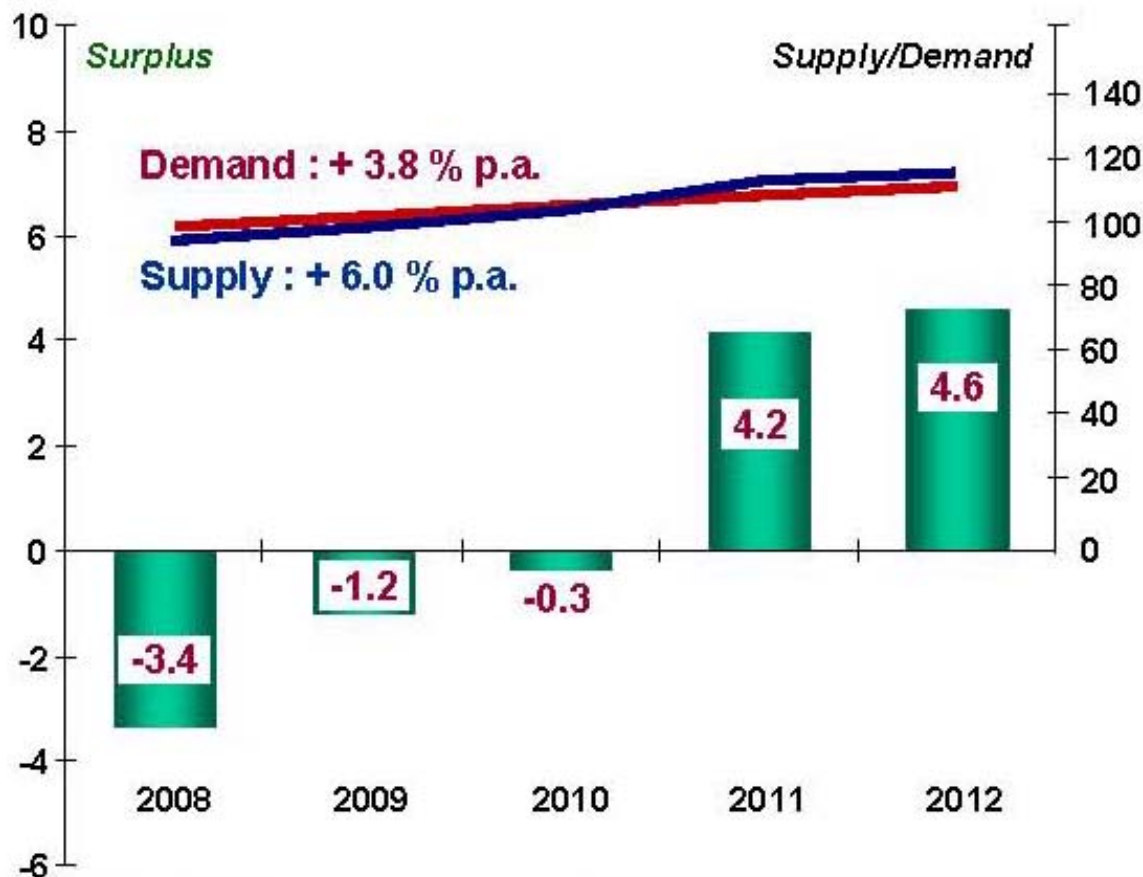
# World Urea Supply / Demand Balance



IFA Annual Conference - Vienna, Austria - 19-21 May 2008



# World Urea Supply / Demand Balance excluding China

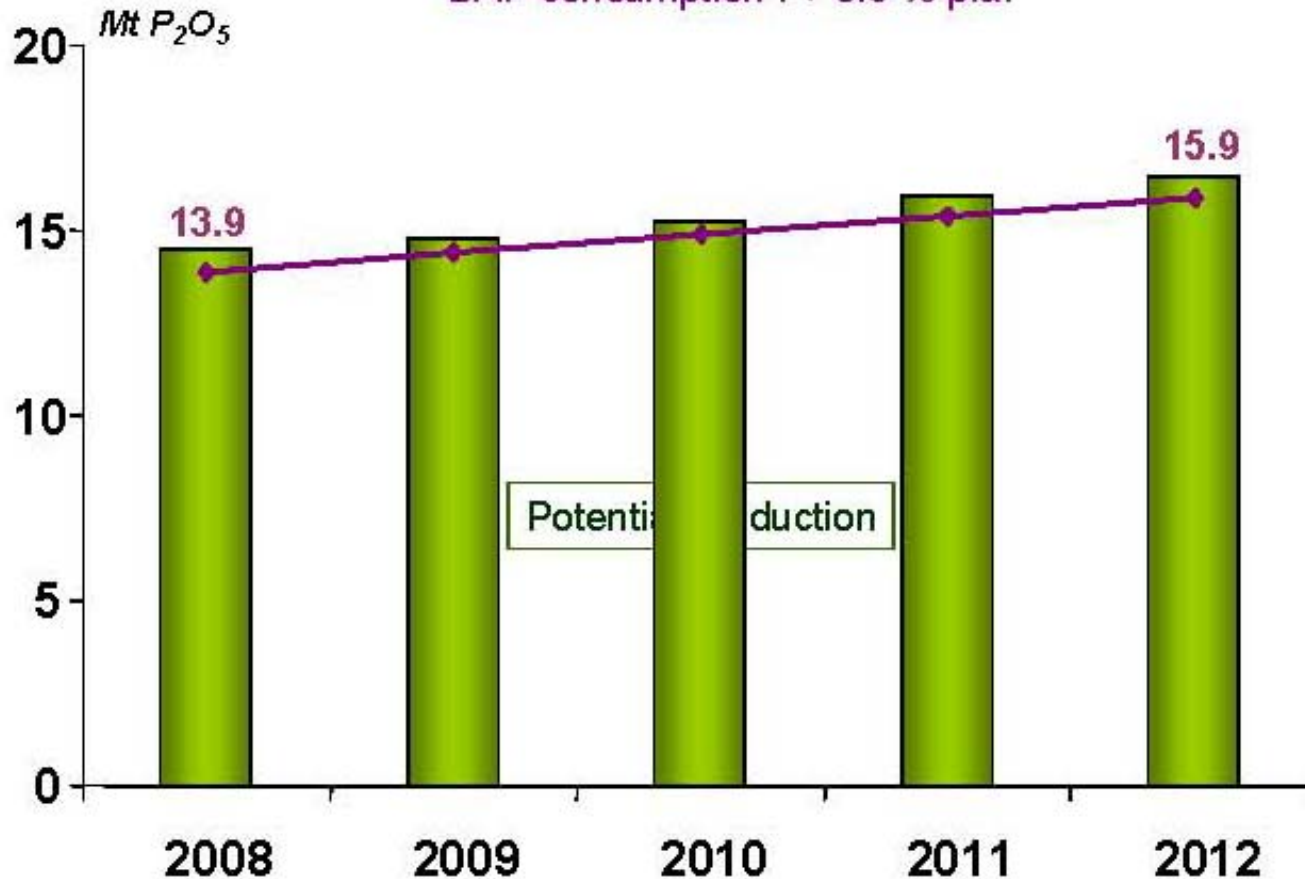


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# World DAP : Supply / Demand

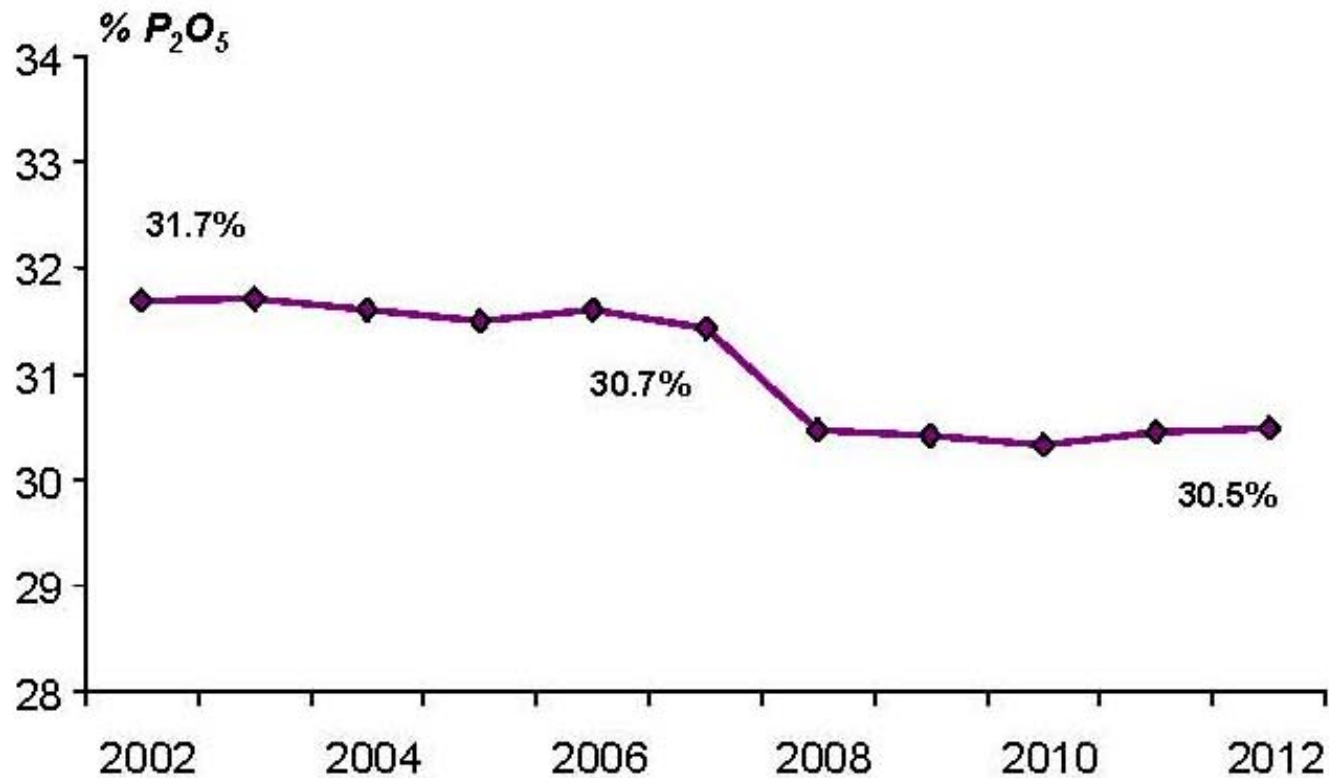
DAP consumption : + 3.6 % p.a.



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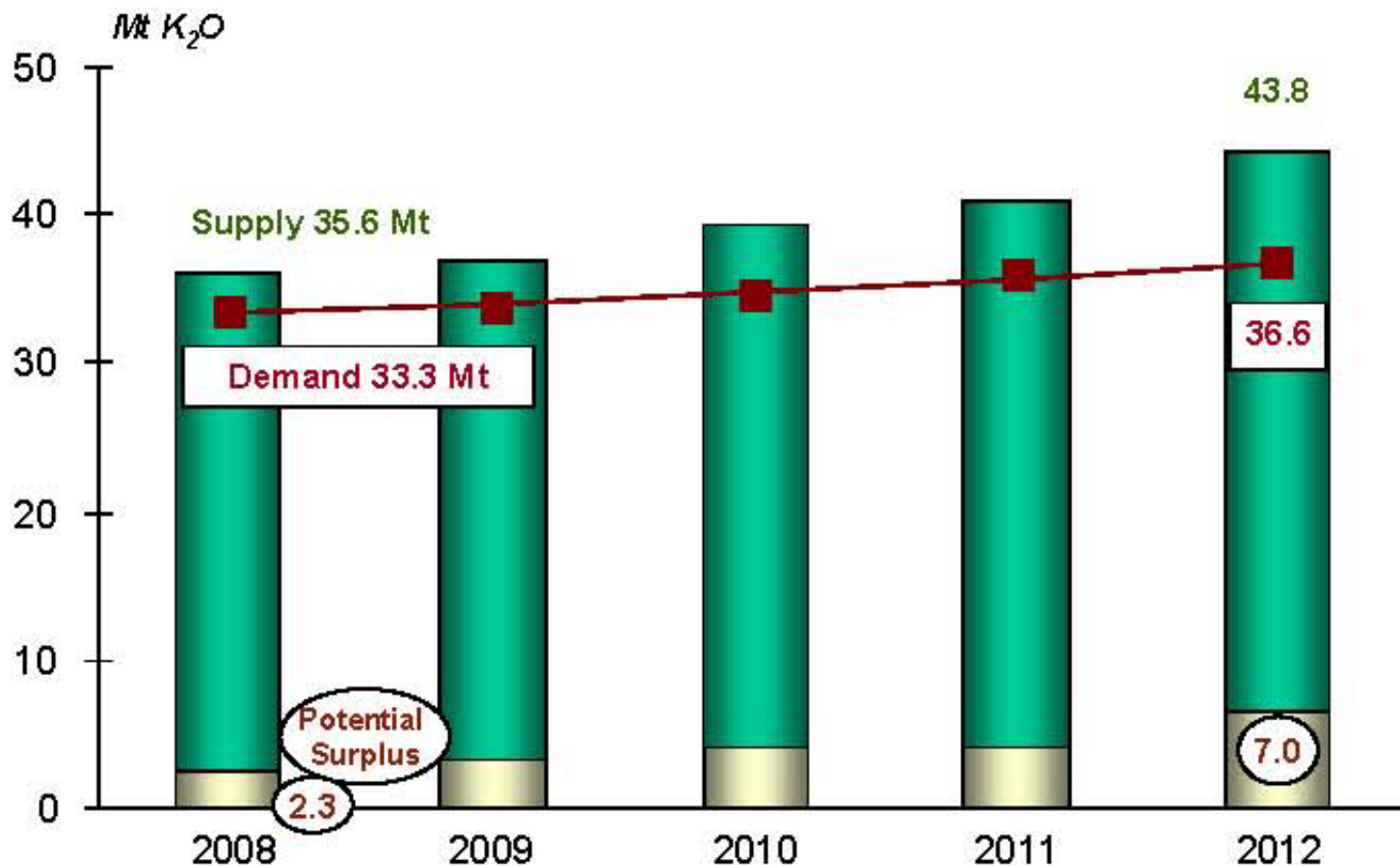
## Phosphate Rock Grade - excl. China



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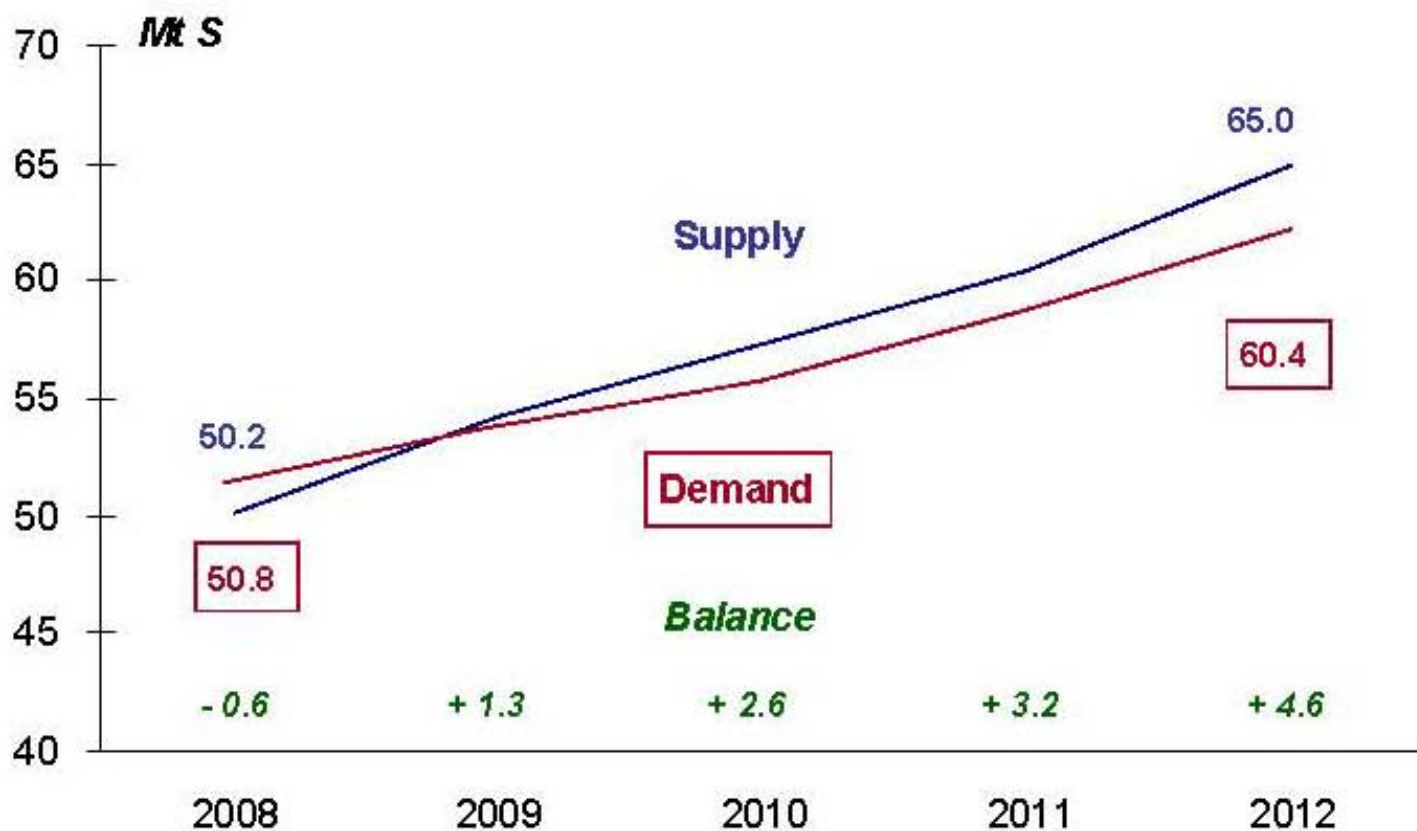
# World Potash Supply/Demand Balance



IFA Annual Conference - Vienna, Austria - 19-21 May 2008



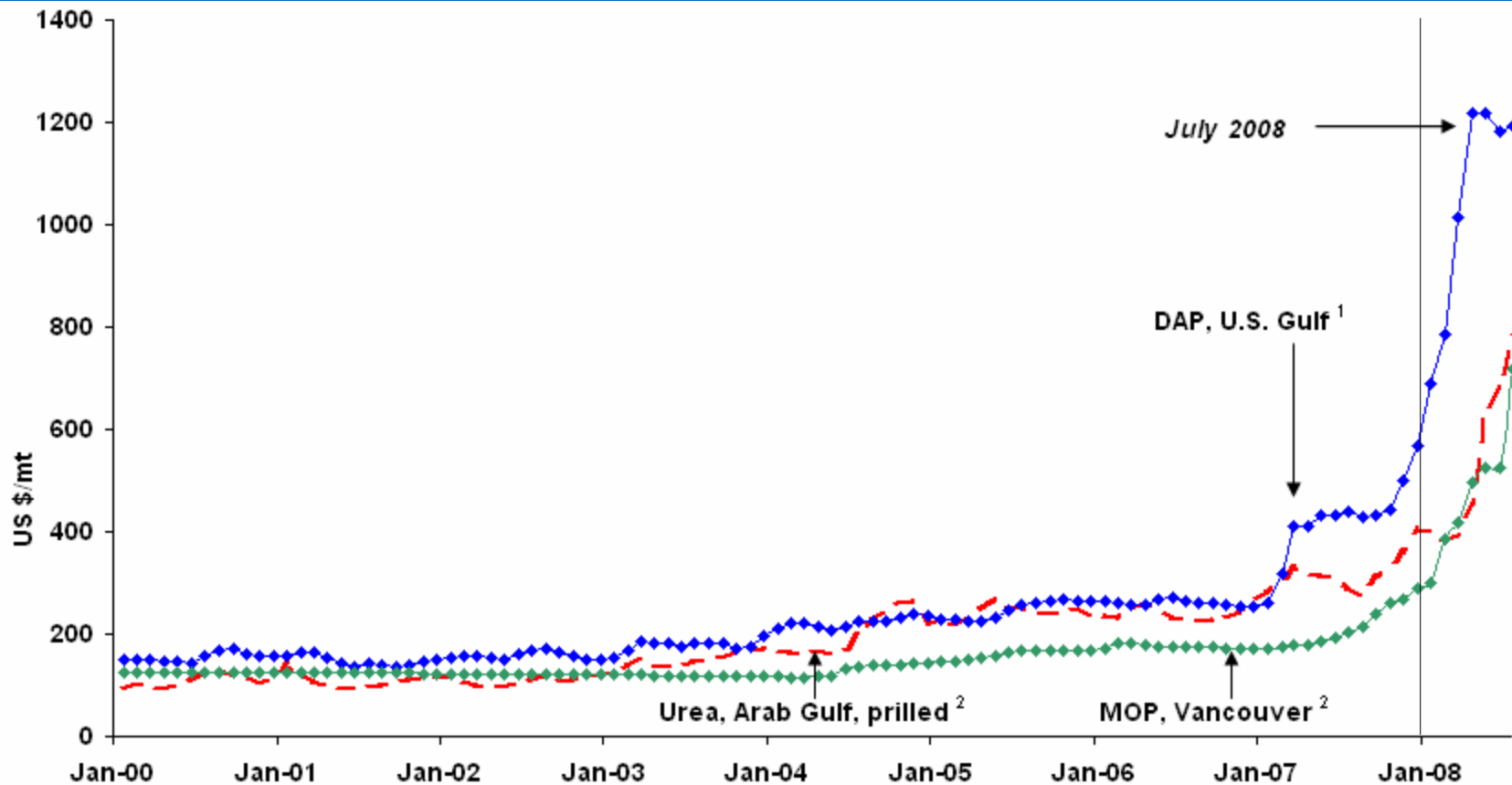
# World Sulphur Supply/Demand Balance



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# Fertilizer Prices (FOB, bulk) Monthly Averages January 2000 – July 2008



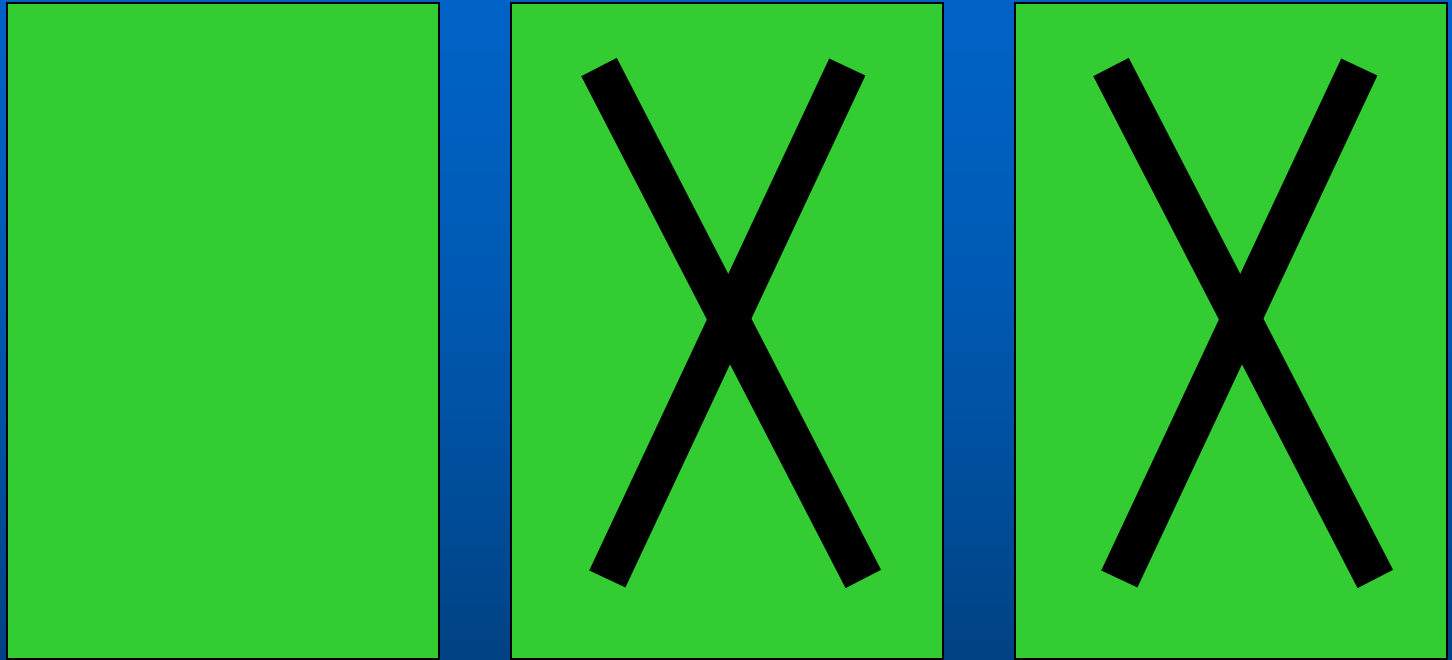
1. Derived from *Green Markets*. 2. Derived from *FMB Weekly*.

FOB = free on board (average price, with buyer paying freight and insurance, to destination port). DAP = diammonium phosphate. MOP = muriate of potash.

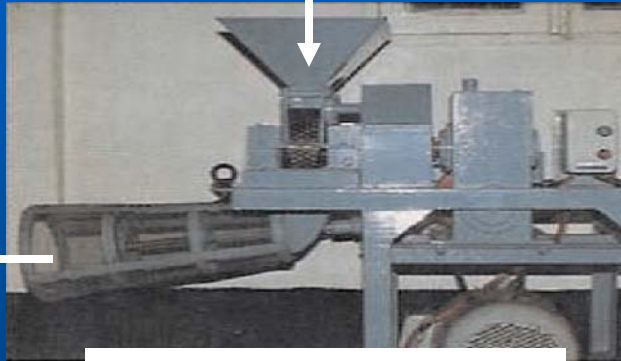
# What Can Be Done in the Short Term?

1. **Transfer proven efficient nutrient management technologies to farmers**
2. **Make fertilizers available to farmers thru purchasing power support—e.g.,targeted vouchers**

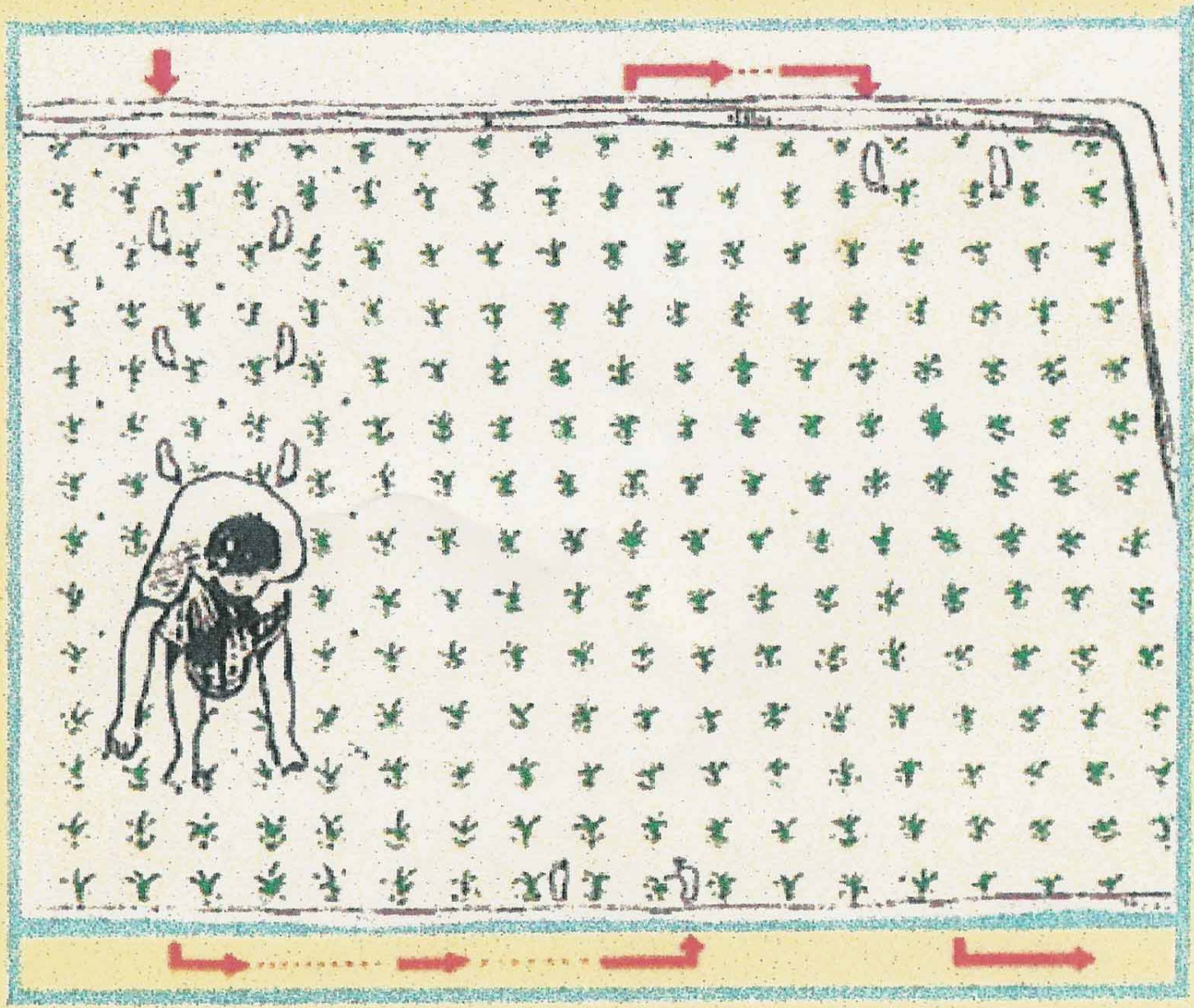
# Urea Deep Placement Bangladesh



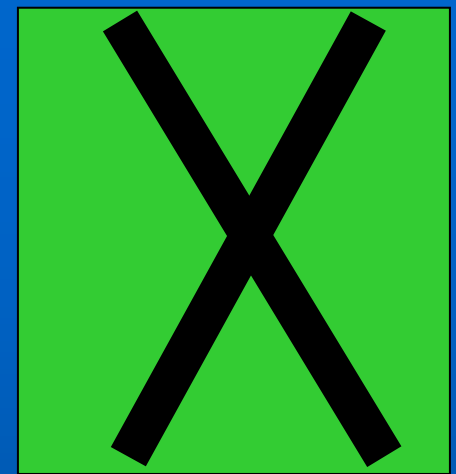
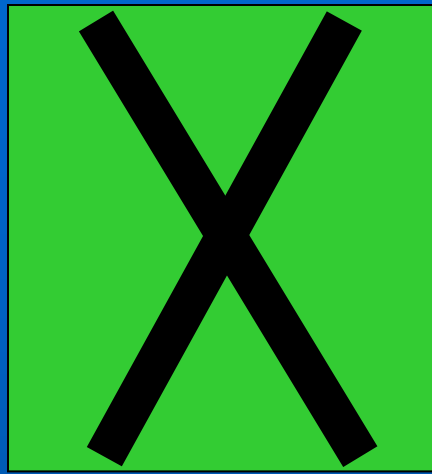
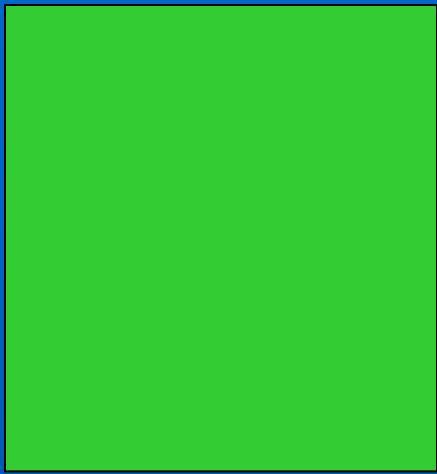
**2 Out of 3 Bags of Urea Lost for Split Application in Wetland Rice**



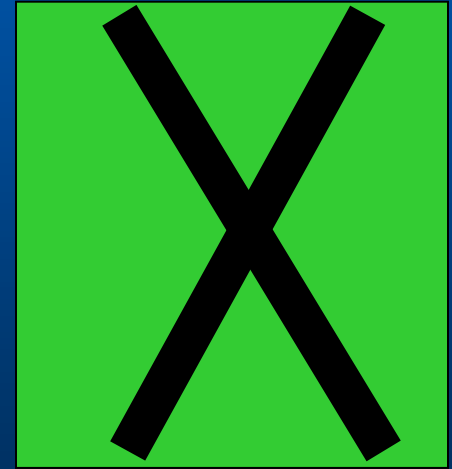
# Conversion of Prilled Urea to USG Using a Briquetter



Deep placement of USG in paddy field

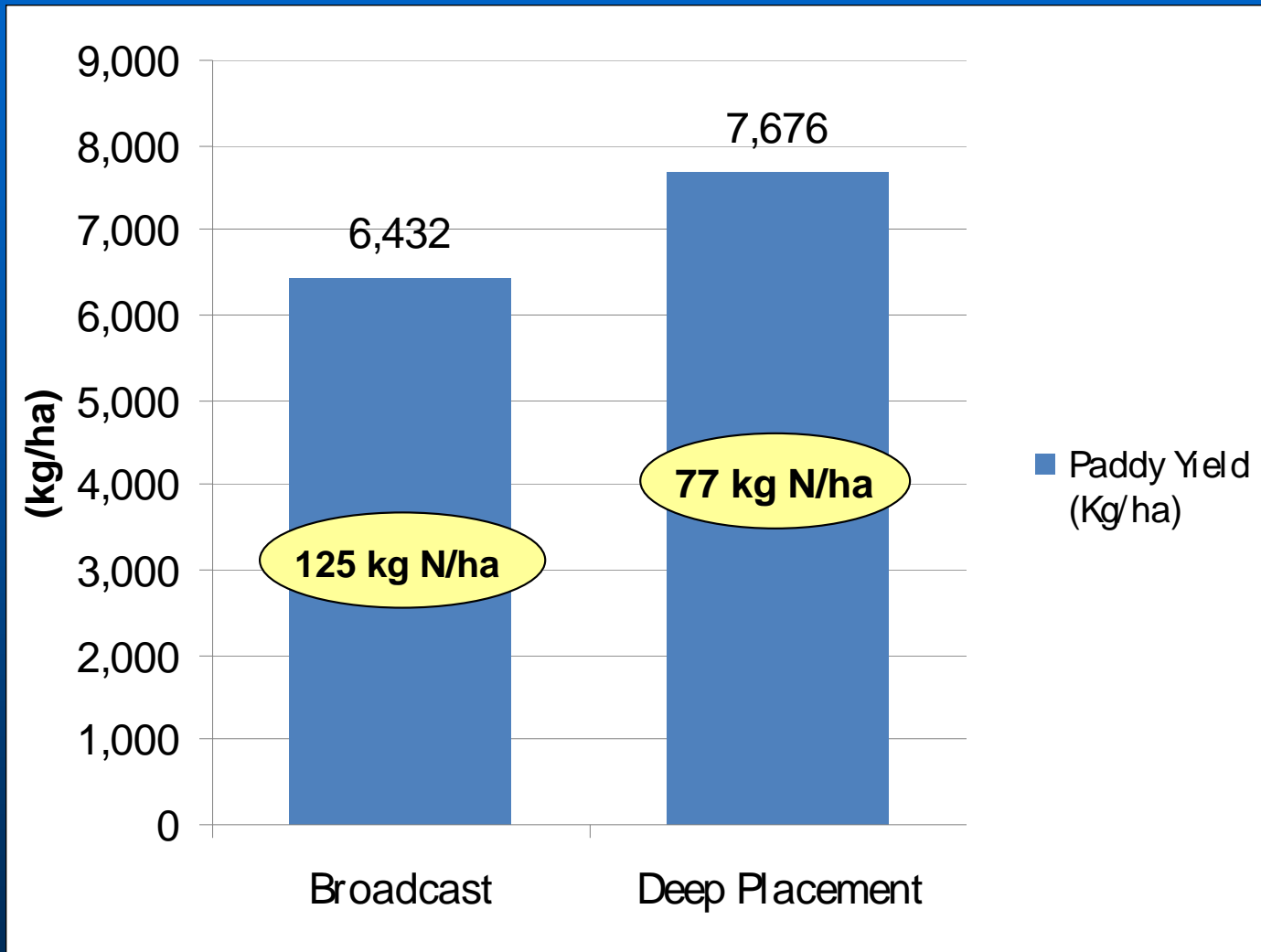


**2 Out of 3 Bags of Urea Lost for  
Split Application**

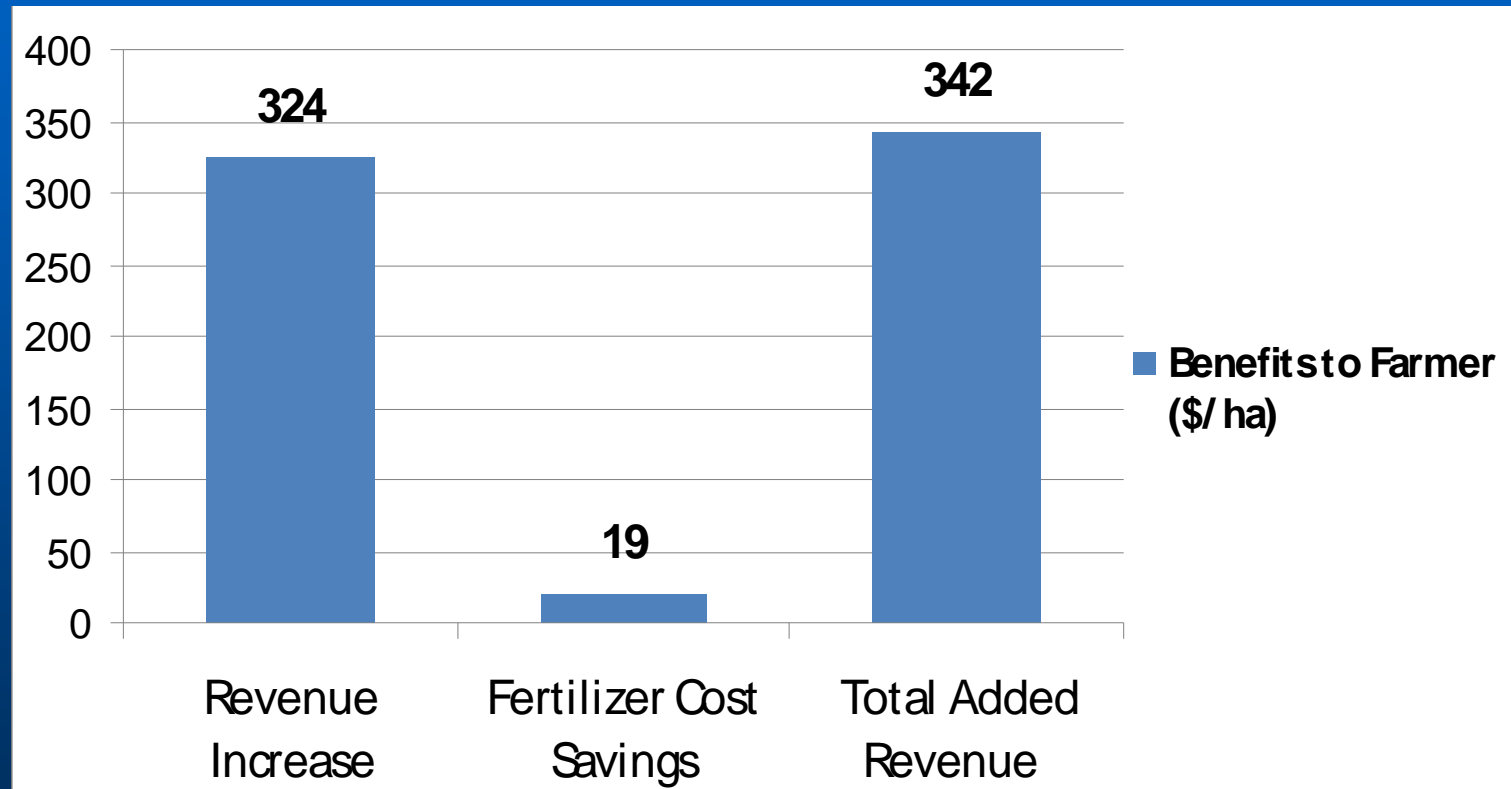


**1 Out of 3 Bags of Urea Lost for  
USG**

# Average Impact on Paddy Yield Bangladesh

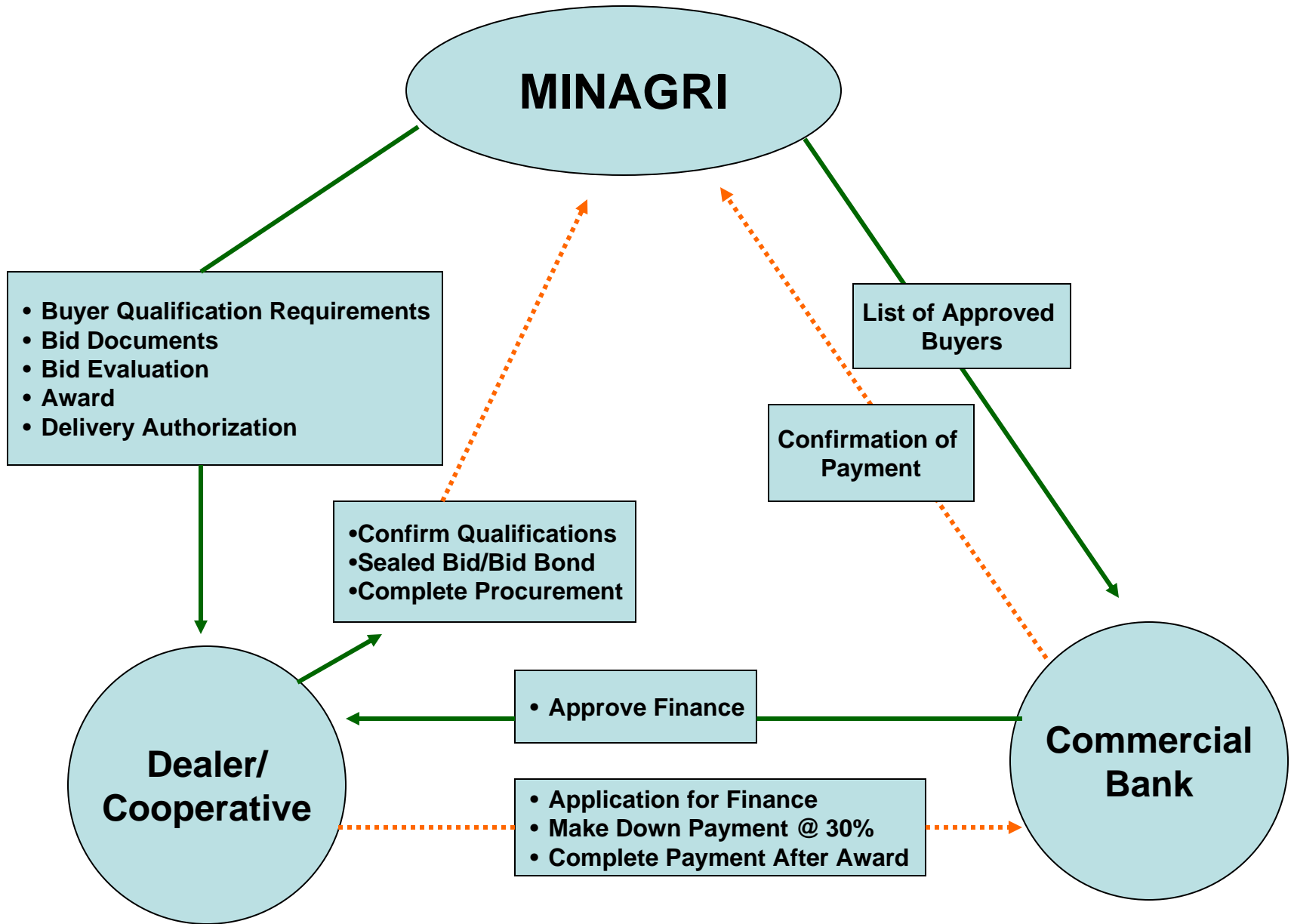


# Impact of Urea Deep Placement Technology on Farmers' Revenues Bangladesh

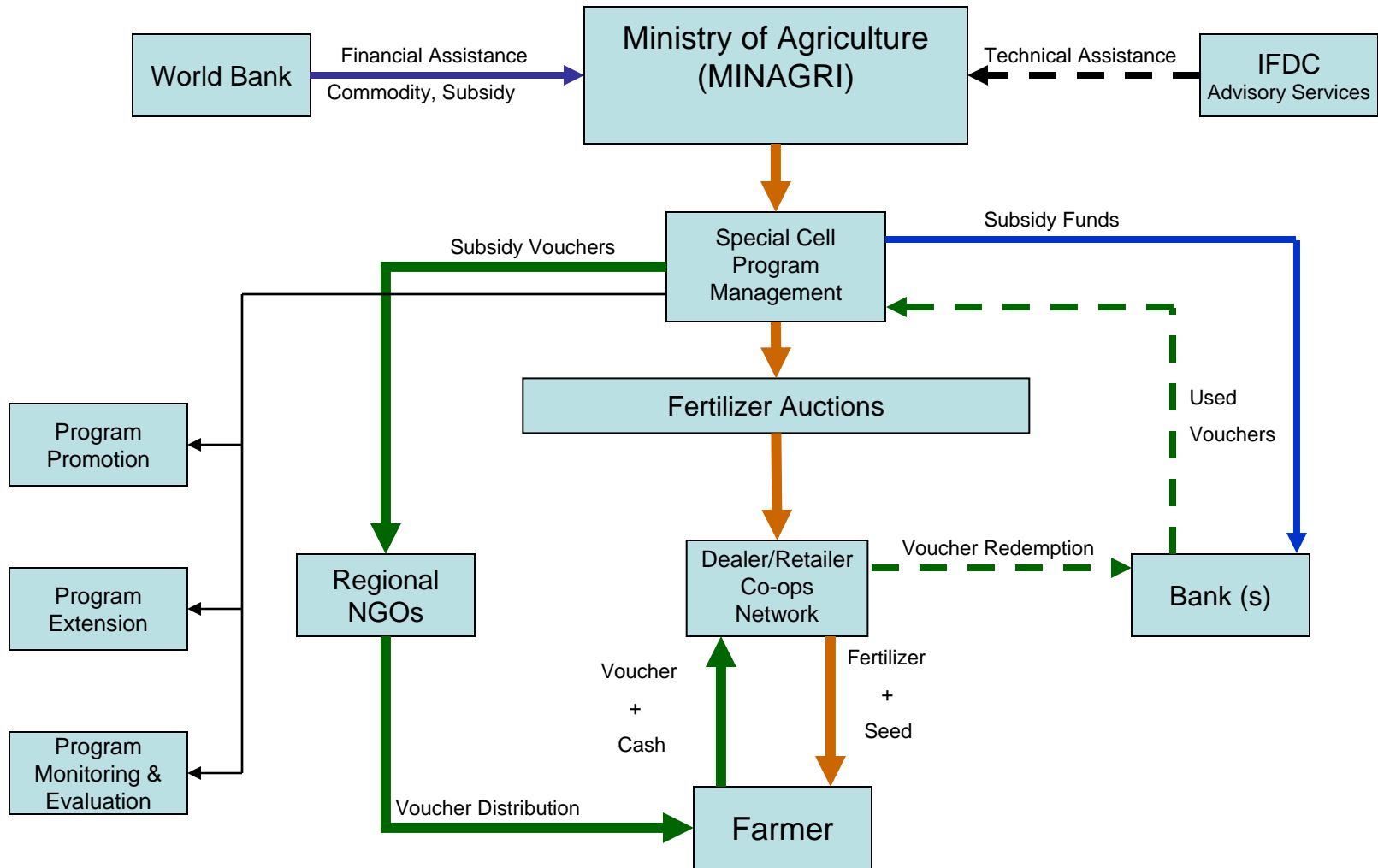


# Fertilizer Program Rwanda Auction/Voucher

# Fertilizer Auction—Flow of Documentation



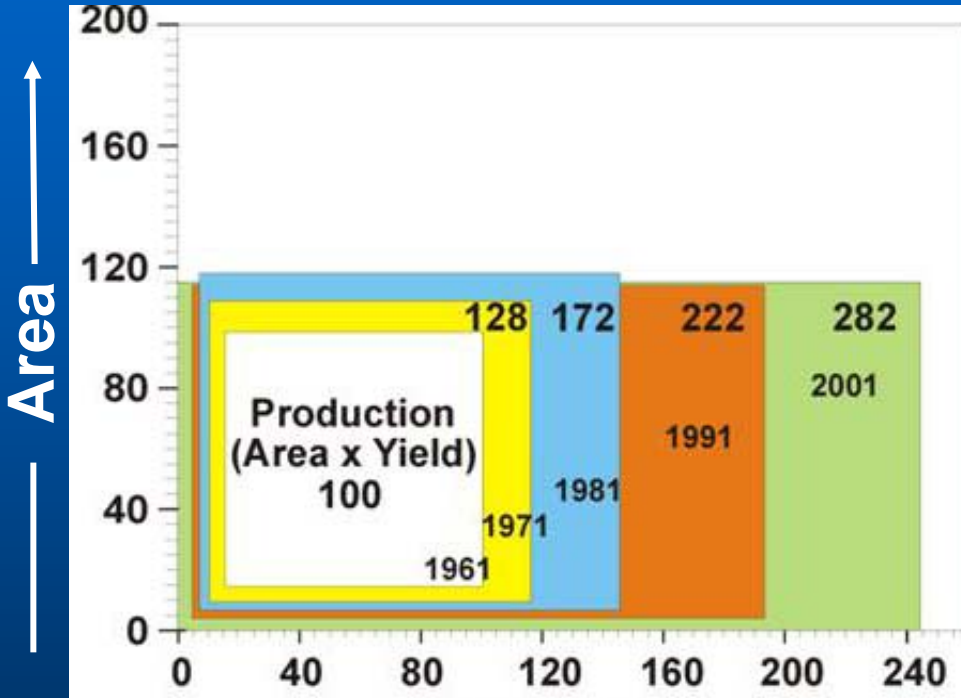
# Rwanda Agricultural Intensification Program – 2008/09 Season Subsidy Through Voucher Program – Flow Diagram



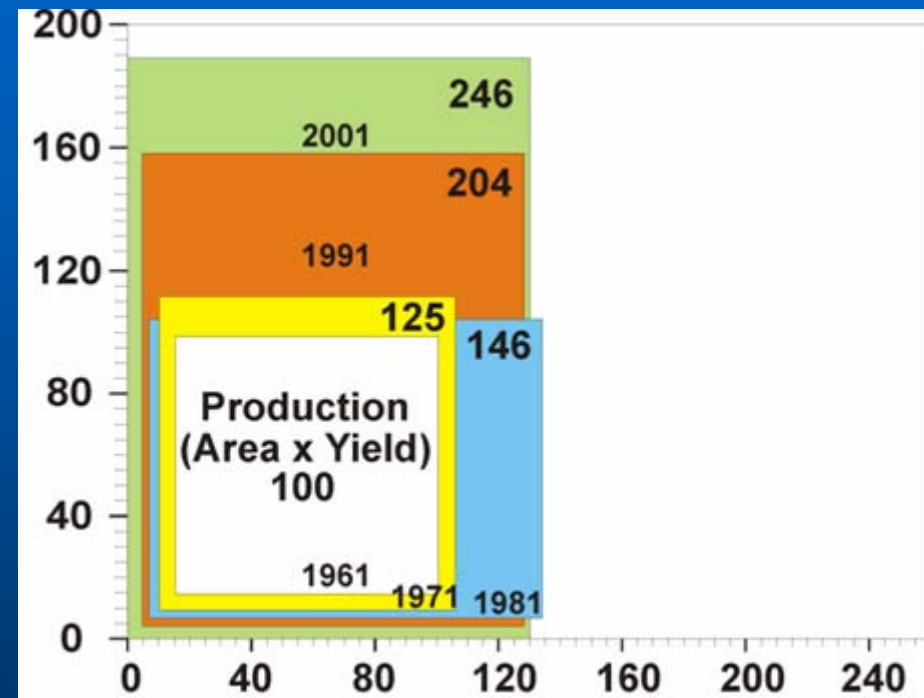
# Africa Specific Interventions

# Cereal Production, 1961–2001

(% change)

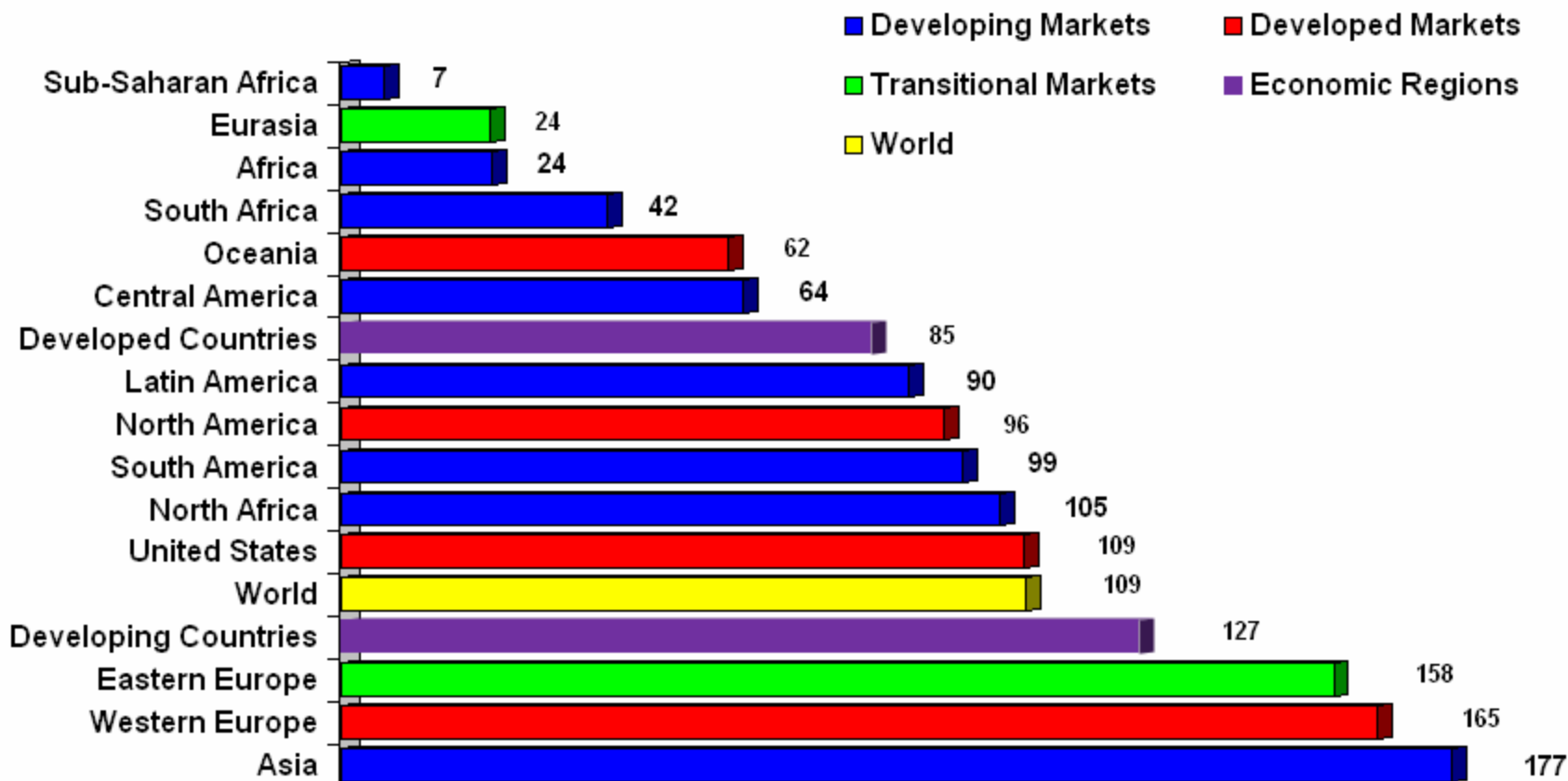


*South Asia*

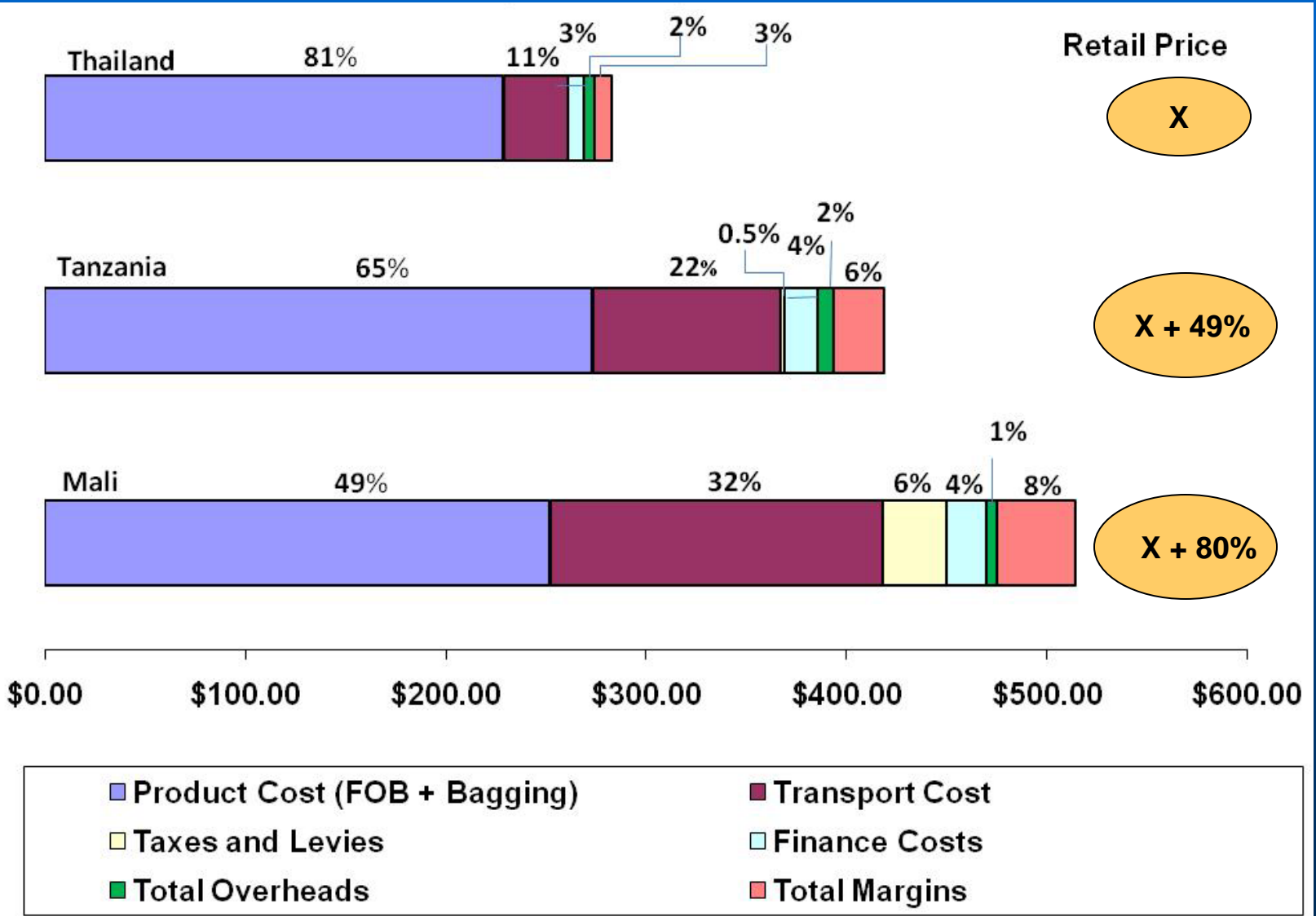


*Sub-Saharan Africa*

## Per Hectare Fertilizer Use by Markets and Economic Regions, 2005/06 (kg/ha)



# Fertilizer Price Formation: Thailand vs. Sub-Saharan Africa (2006)



# Actions on the Fertilizer Sector

- **Eliminate taxes and tariffs**
- **Assess economic viability of fertilizer production and blending**
- **Evaluate regional procurement option**
- **Promote intra-regional trade**
- **Develop capacity for quality control**
- **Develop and scale up networks of input dealers**
- **Facilitate financial arrangements for importers and dealers**
- **Targeted support to the smallholder farmers to access fertilizer and other inputs**

# Longer Term Interventions

- **Conduct research to improve nutrient management efficiency**
  - **New products**
  - **Better water and soil management**
  - **Better fertilizer recommendations**

# Conclusions

- **Global fertilizer supply/demand will remain tight for next 2-3 years**
- **New investments will increase global supply but may not reduce prices to the 2005-2006 levels**

# Conclusions

- **Short- term interventions should**
  - **Provide purchasing power support to farmers**
  - **Promote productivity enhancing technologies**
  - **Remove taxes and tariffs on inputs**
  - **Accelerate dealer development**

# Conclusions (cont'd)

- **Simultaneous interventions**
  - **Promote public private partnership**
  - **Increase private sector participation**
  - **Evaluate regional procurement options**
  - **Assess economic viability for fertilizer production**
  - **Improve access to finance for private sector**
  - **Market support services**
    - **MIS**
    - **Quality control**

# Thank You

