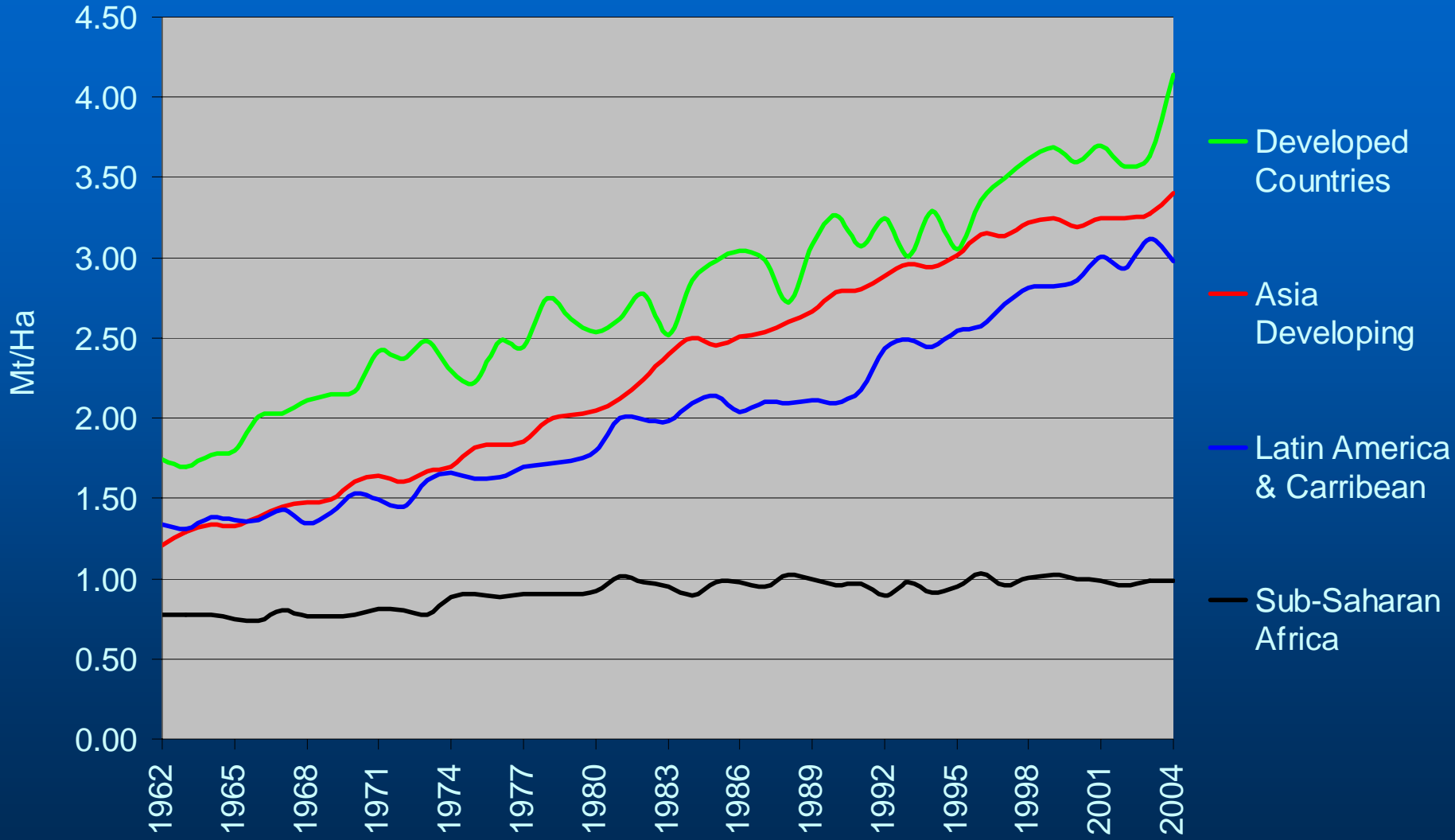


Improving Access to Fertilizers

by
Amit Roy
IFDC

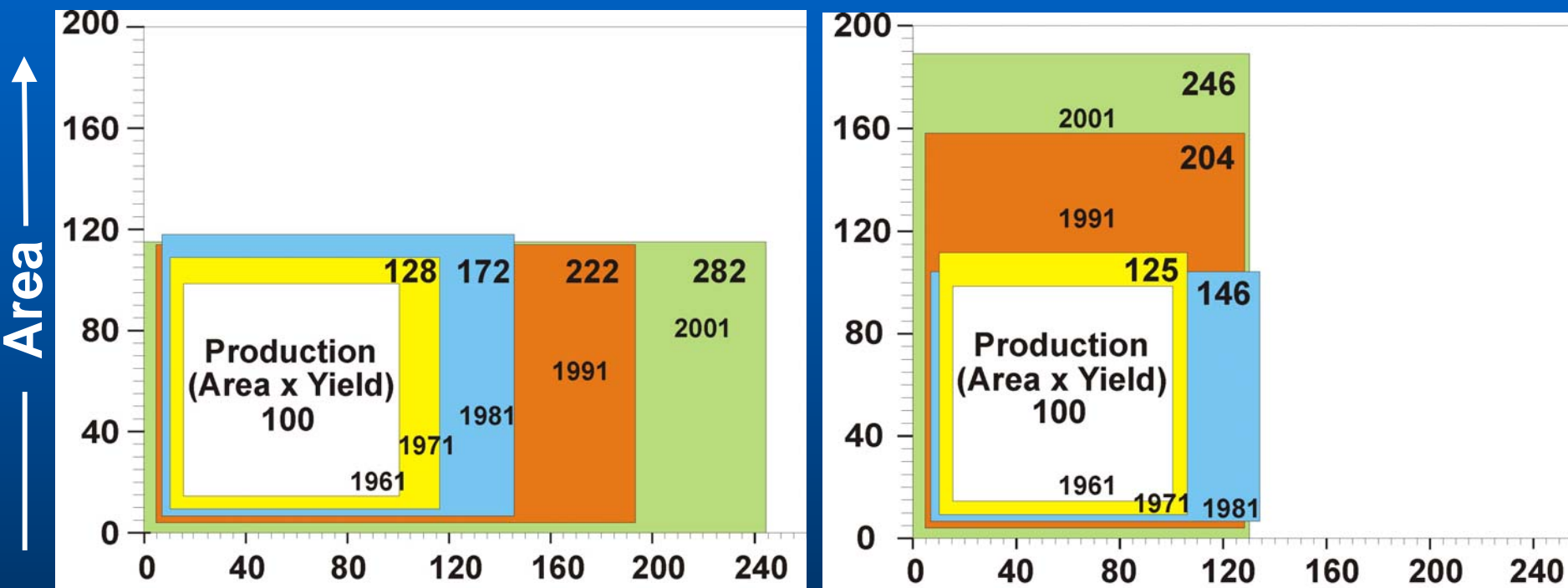
Presented at the
International Workshop on Strengthening and Widening Markets and
Overcoming Supply Side Constraints for African Agriculture
June 3-5, 2007
Lusaka, Zambia

Cereal Yields (Mt/Ha)



Cereal Production, 1961–2001

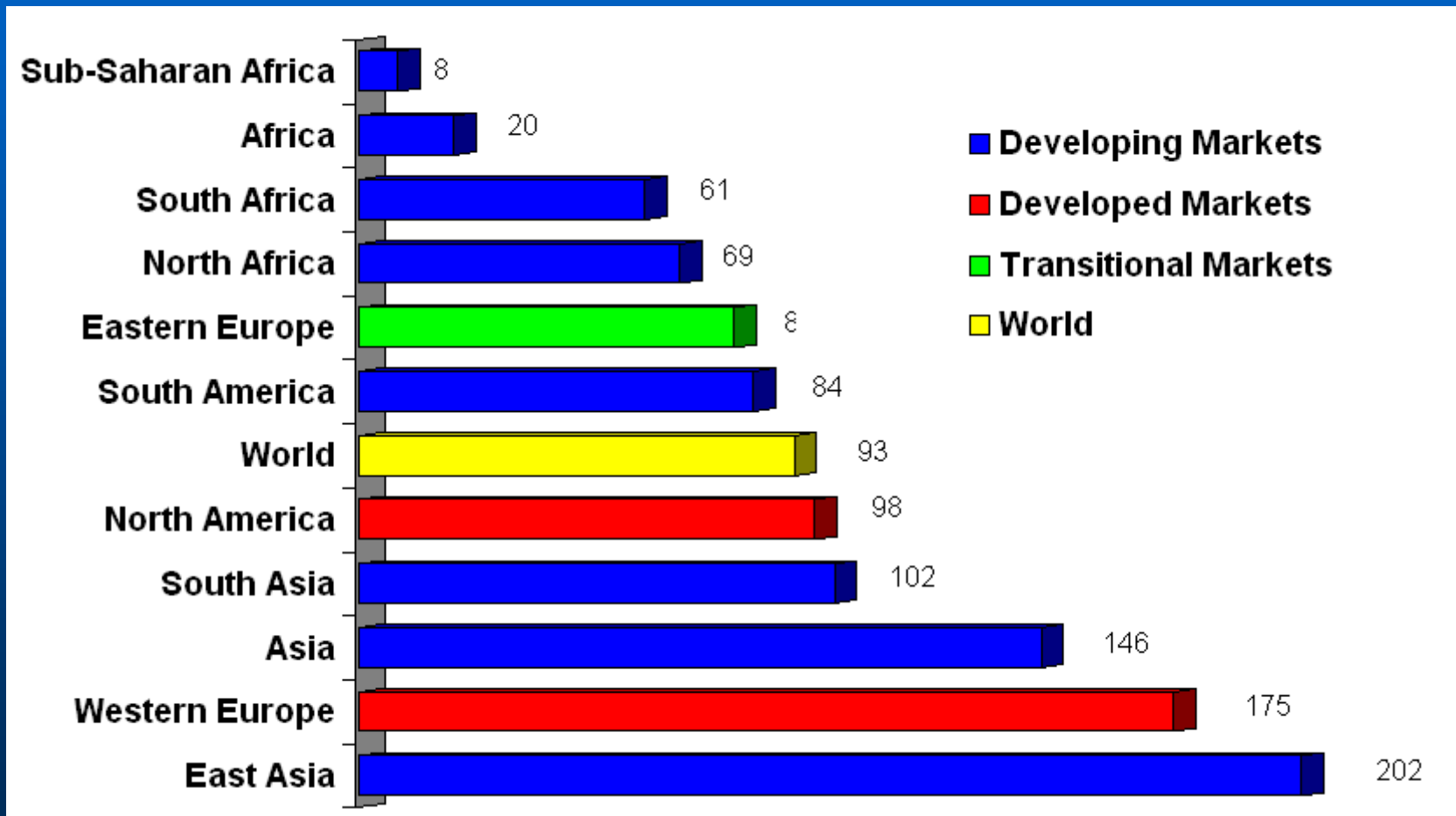
(% change)



South Asia

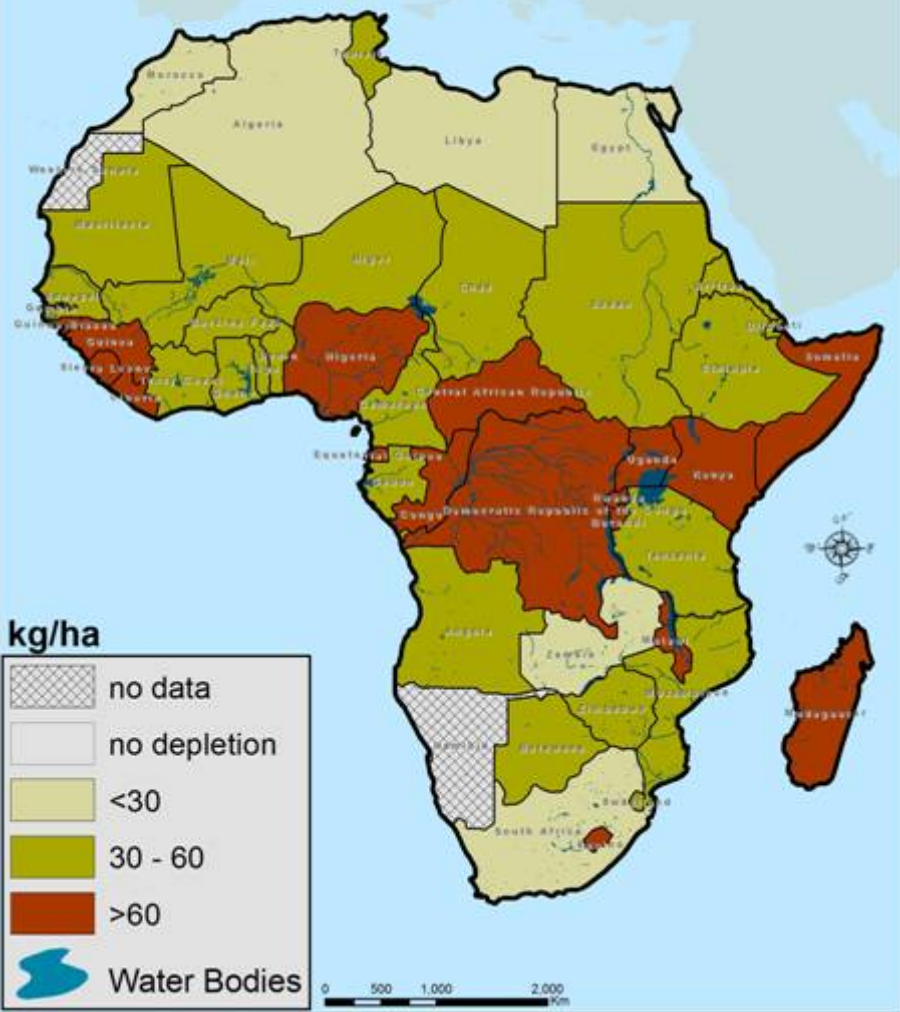
Sub-Saharan Africa

Per Hectare Fertilizer Use by Markets 2002/03 (kg/ha)

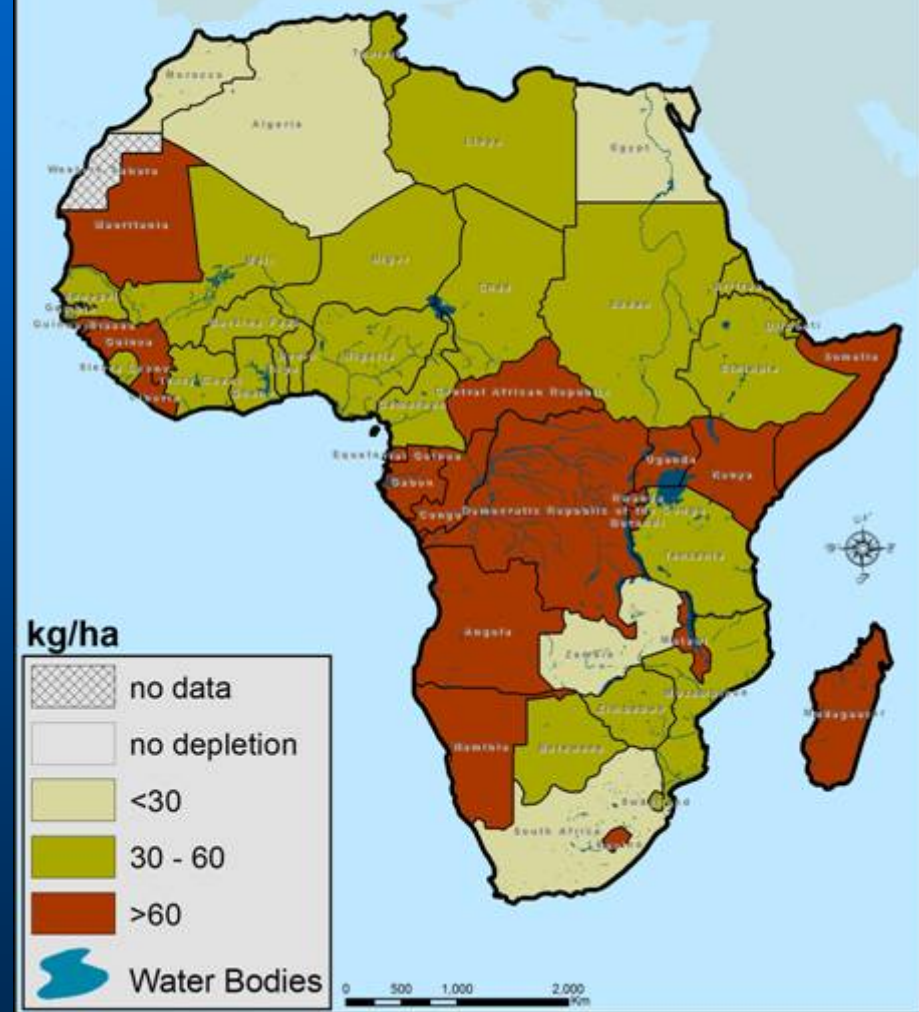


Nutrient Mining in Agricultural Lands of Africa

1995-97

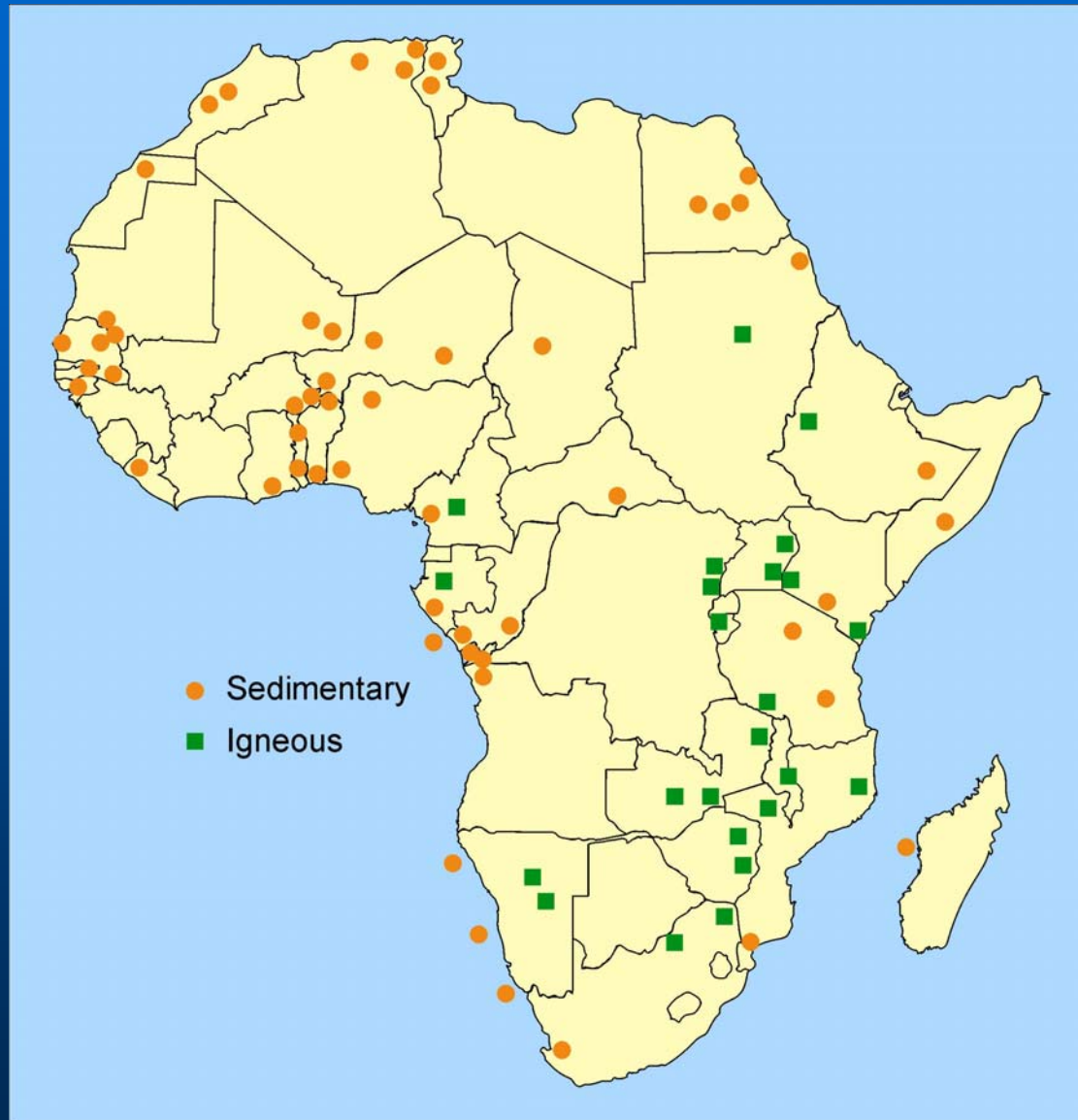


2002-04

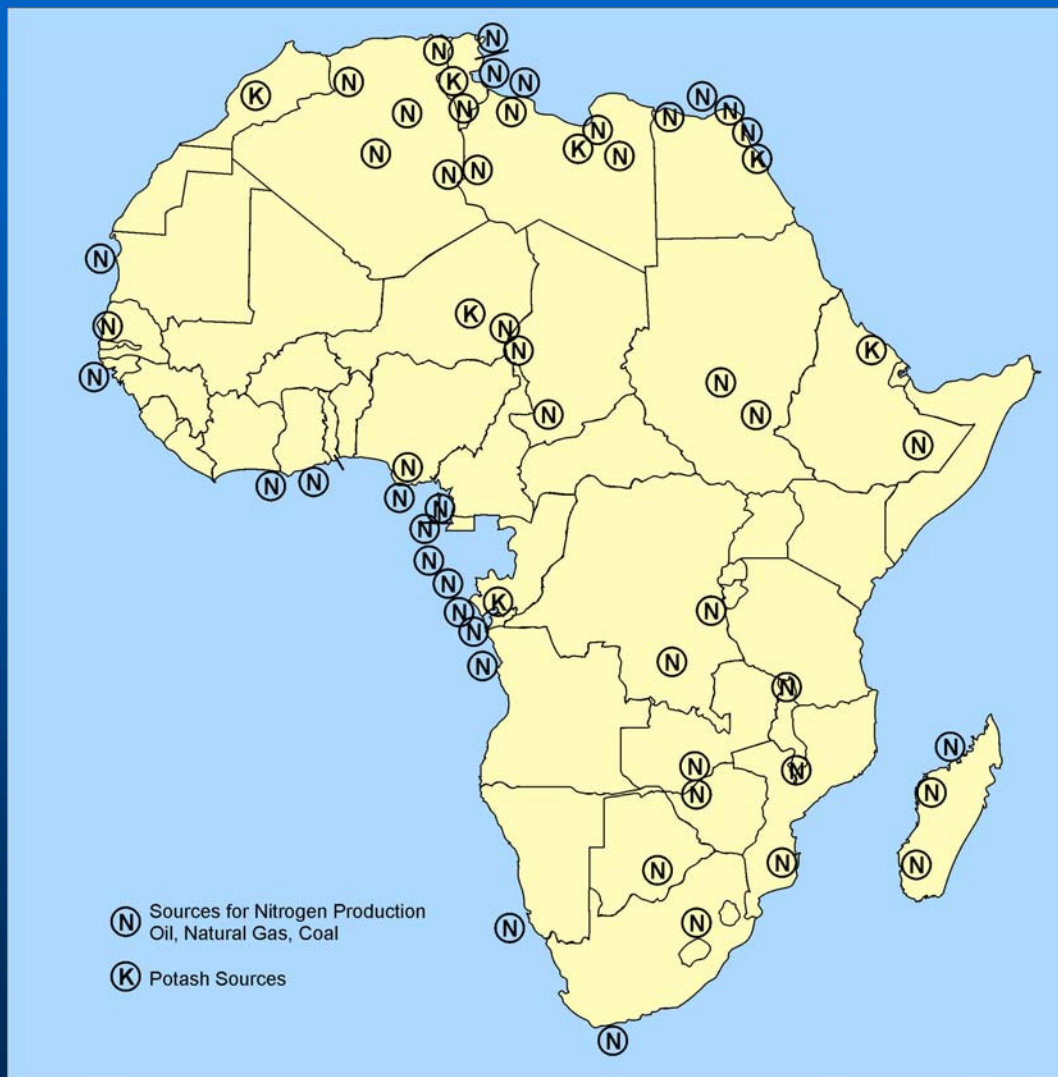


Continent in need of fertilizer is
well endowed with fertilizer
resources

Significant Phosphate Deposits of Africa



Significant Potential Nitrogen and Potash Resources of Africa



The Africa Fertilizer Summit

Abuja, Nigeria, June 9-13, 2006

An AU/NEPAD Initiative
Implemented by IFDC

Guiding Principle

- Inorganic fertilizers are essential for agricultural growth in Africa – but they are not enough
- Holistic approach needed to improve:
 - **Access**: Increase volume, range, and quality of inputs using commercial channels
 - **Affordability**: Reduce the price of all inputs
 - **Incentives**: Improve functioning of the output markets

Abuja Declaration

**Fertilizer is a Strategic Commodity
Without Borders**

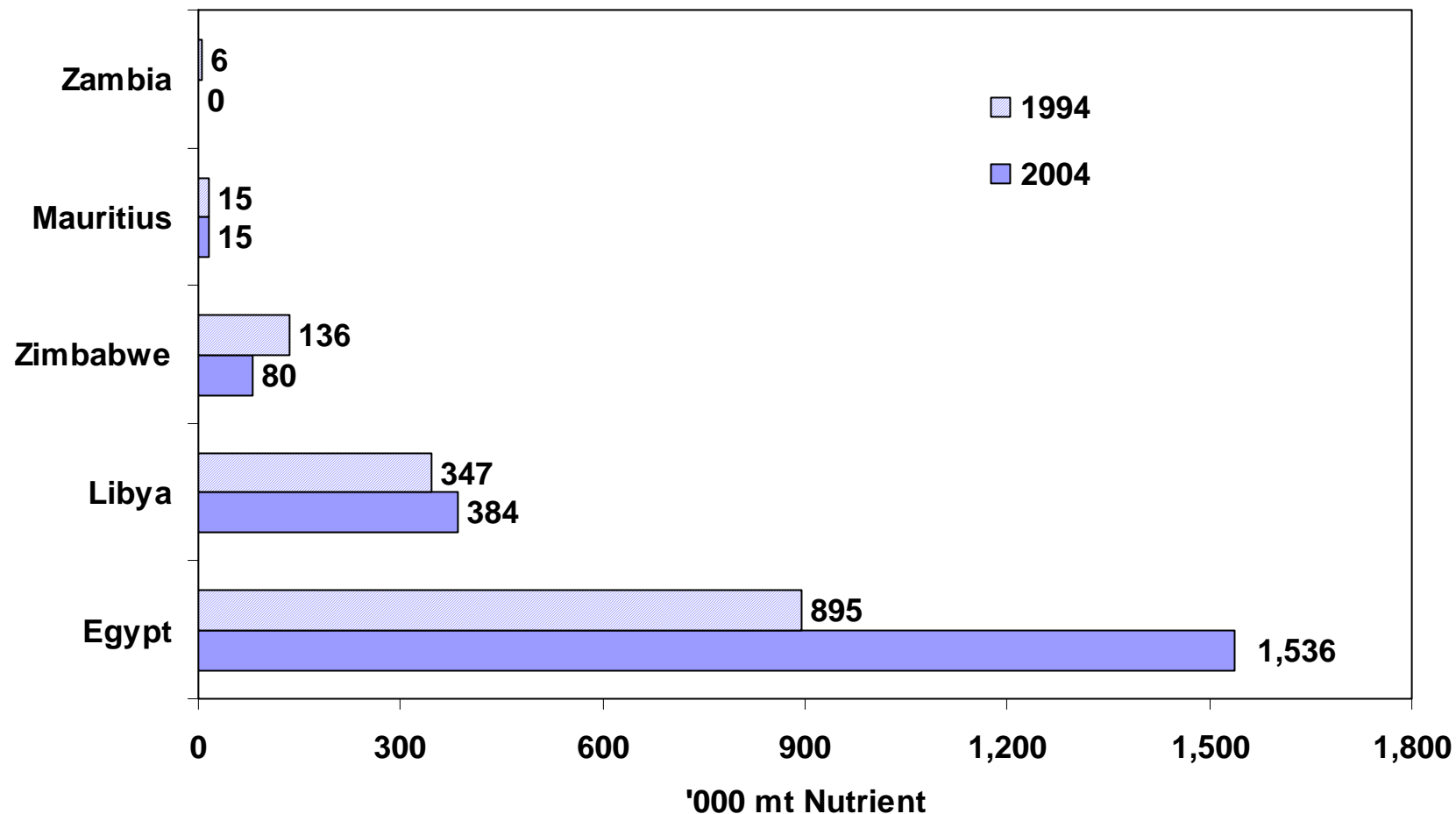
Twelve Resolutions Adopted

www.africafertilizersummit.org

AFS- Priority Actions

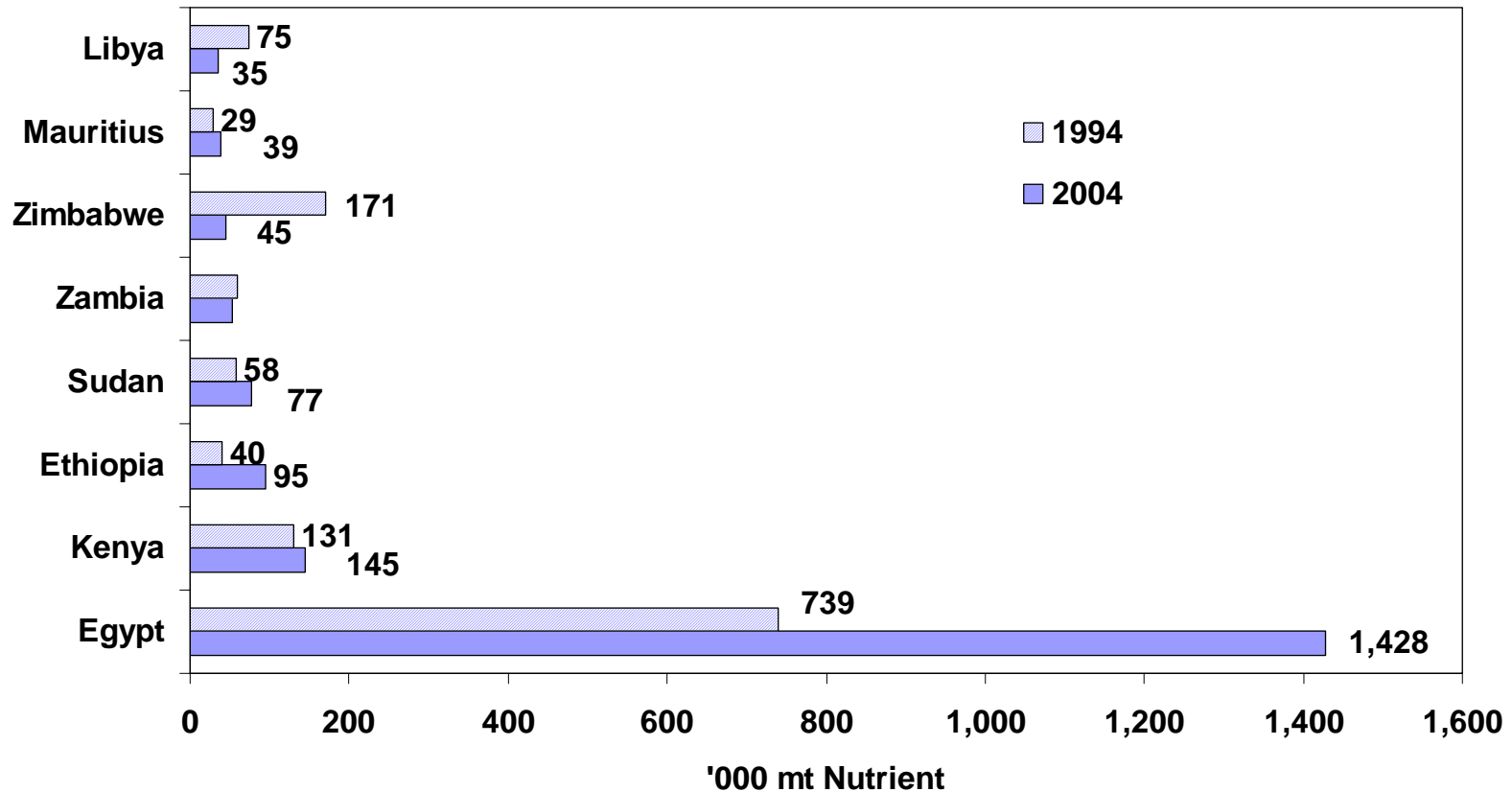
- **Agro-dealer development**
- **National Agricultural Input Credit Guarantee Facilities**
- **“Smart” subsidies for the poor and vulnerable**
- **Regional procurement and production to realize economies of scale**
- **Fertilizer Development Financing Mech.**

Selected COMESA Countries Total Fertilizer Production 1994 and 2004



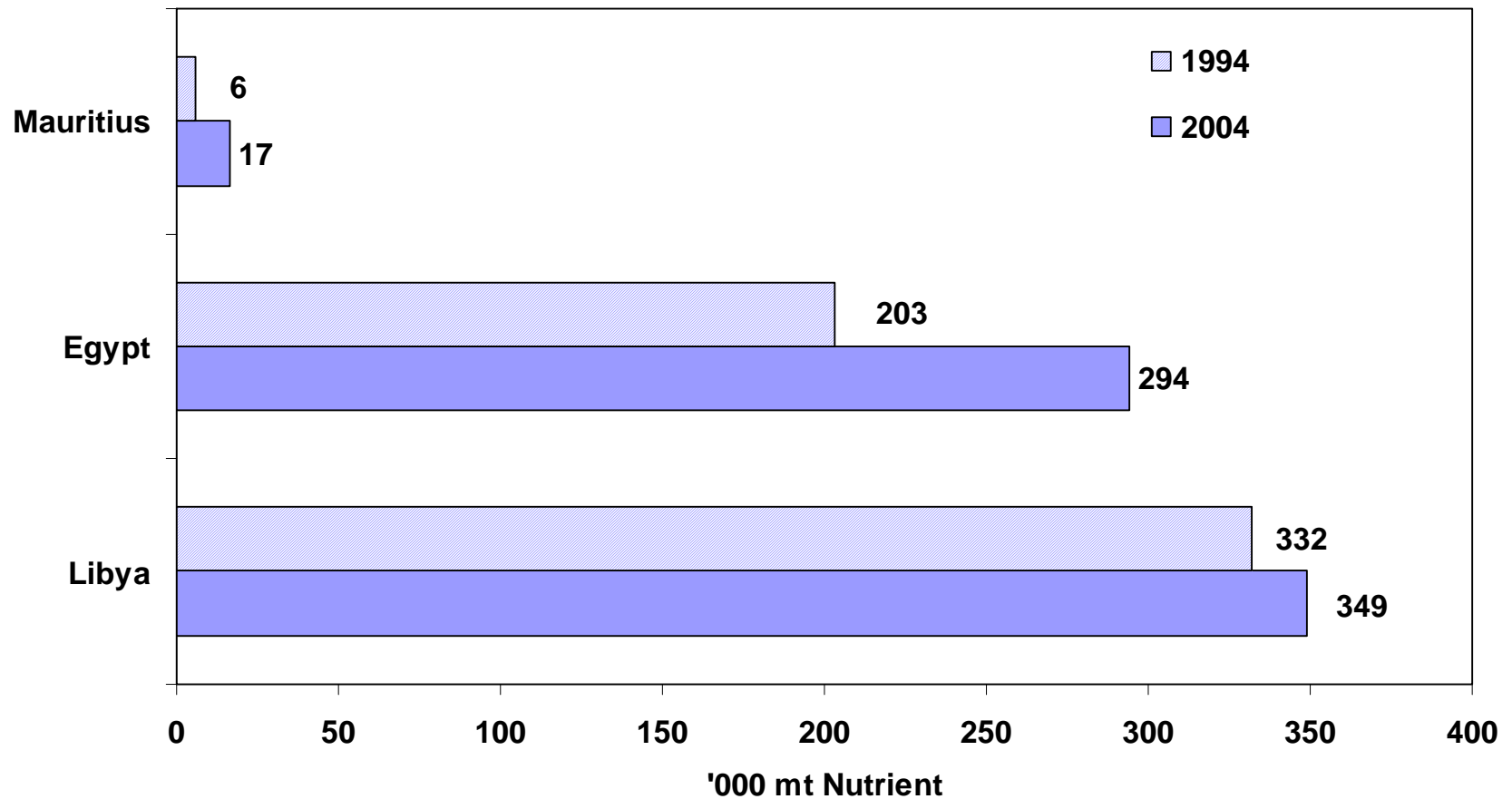
Source: IFADATA Statistics CD, 2007.

Selected COMESA Countries Total Fertilizer Consumption 1994 and 2004



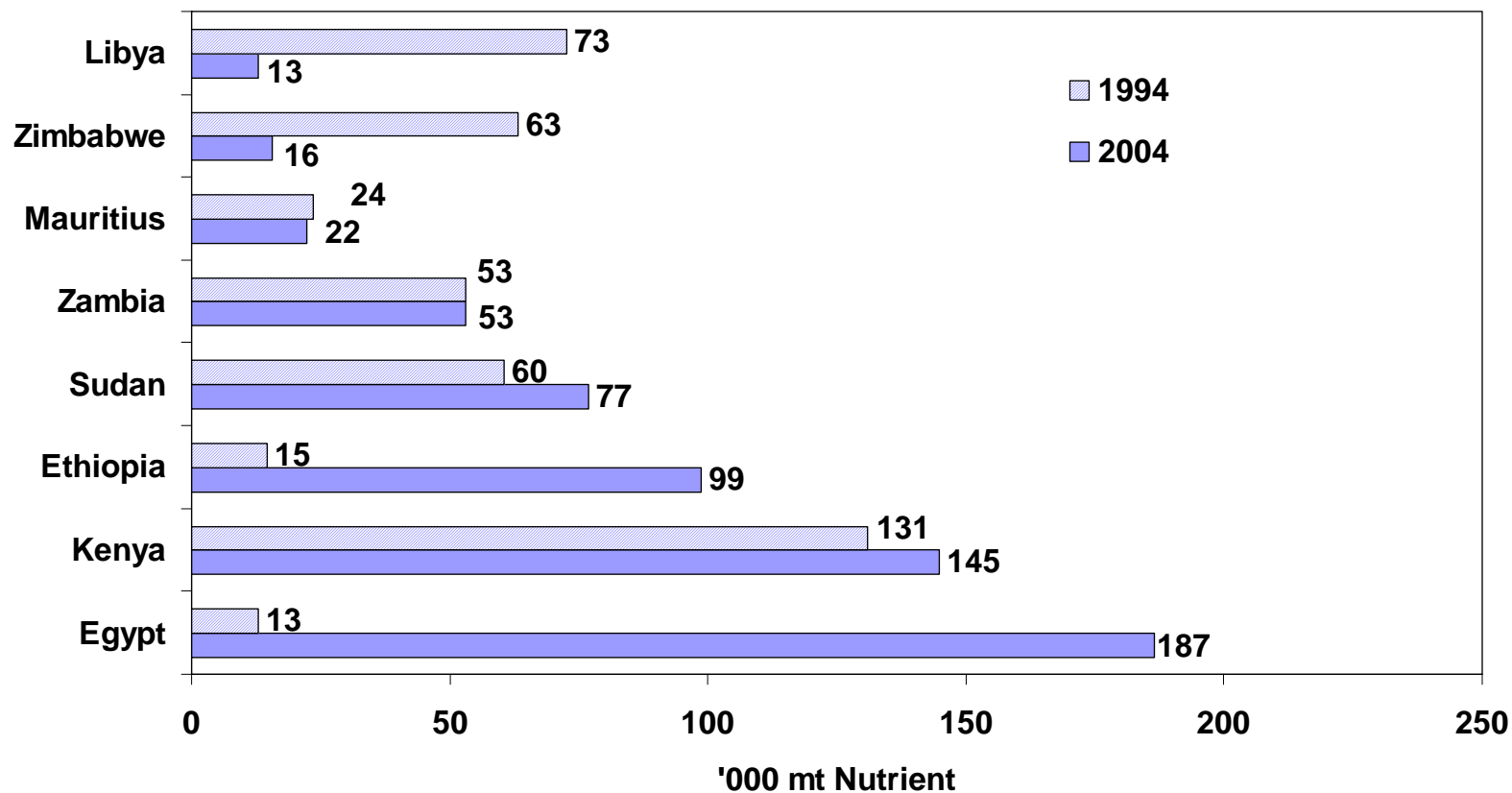
Source: IFADATA Statistics CD, 2007.

Selected COMESA Countries Total Fertilizer Exports 1994 and 2004



Source: IFADATA Statistics CD, 2007.

Selected COMESA Countries Total Fertilizer Imports 1994 and 2004



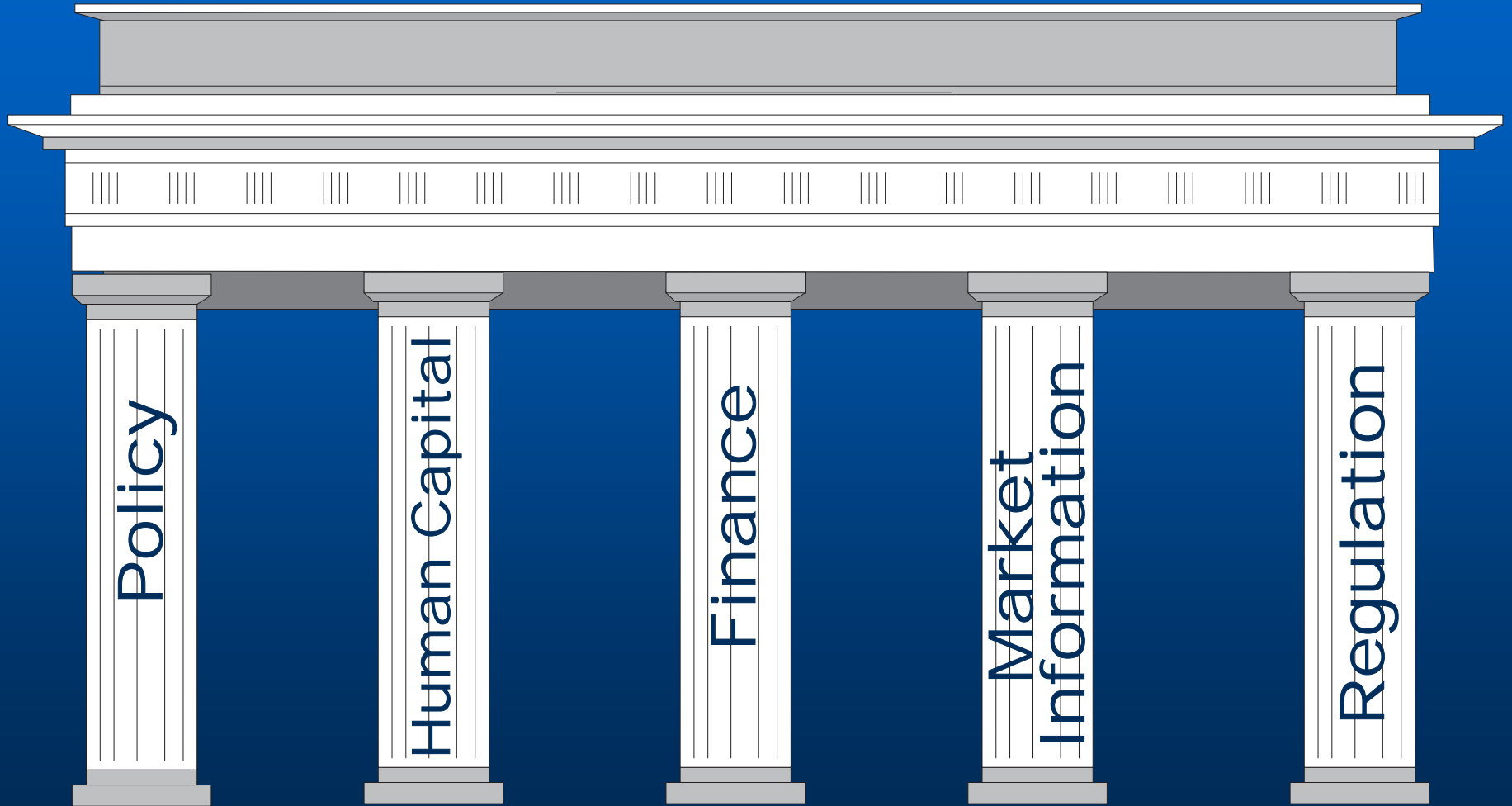
Source: IFADATA Statistics CD, 2007.

Constraints Fertilizer Market Development

- Market Development-Related Constraints
- Technical Constraints
- Infrastructural Constraints

Market Development

The Five Pillars of Market Development



Infrastructural

Freight Charges Through Alternative Routes in Zambia

| Route | | US \$/ton |
|-------|---|-----------------|
| I. | Johannesburg—Lusaka Lusaka—Kasama/Kapiri | 90 <u>50</u> |
| Ia. | Total | 140 |
| Ib. | Dar-es-Salaam—Kapiri/Kasama | 50 |
| Ic. | Net savings in transportation cost via DSM route (Ia minus Ib) | 90 |
| II. | Johannesburg—Lusaka Lusaka—Chipata | 90 <u>40</u> |
| Ila. | Total | 130 |
| IIb. | Nacala to Chipata | <u>60</u> |
| IIc. | Net savings in transportation cost via Nacala route (Ila minus IIb) | 70 |

Source: Action plan team calculations.

Technical

Fertilizer Products in Malawi

| Products | N | P2O5 | K2O | S | B |
|------------------|------|------|-----|---|-----|
| Urea | 46 | 0 | 0 | 0 | 0 |
| CAN | 27 | 0 | 0 | 0 | 0 |
| AS | 21 | 0 | 0 | 0 | 0 |
| AN | 34 | 0 | 0 | 0 | 0 |
| DAP | 18 | 46 | 0 | 0 | 0 |
| SSP | 0 | 18 | 0 | 0 | 0 |
| TSP | 0 | 46 | 0 | 0 | 0 |
| MOP | 0 | 0 | 60 | 0 | 0 |
| SOP | 0 | 0 | 50 | 0 | 0 |
| 23-21-0+4S | 23 | 21 | 0 | 4 | 0 |
| Compound B | 4 | 15 | 18 | 0 | 0 |
| Compound C | 6 | 15 | 18 | 0 | 0 |
| Compound D | 8 | 18 | 15 | 6 | 0.1 |
| Compound J | 15 | 5 | 20 | 3 | 0.1 |
| Compound S | 6 | 17 | 6 | 3 | 0.1 |
| Compound 3D | 20 | 10 | 5 | 3 | 0 |
| Compound 321 | 12 | 19 | 5 | 3 | 0 |
| Compound Super B | 5.4 | 20 | 24 | 6 | 0.1 |
| Compound Super C | 8 | 20 | 24 | 6 | 0.1 |
| Compound Super D | 10.5 | 20 | 24 | 6 | 0.1 |

Potential Savings From an Efficient Marketing System

| Item | Landlocked Country (US \$/ton) | Coastal Country (US \$/ton) |
|---|-----------------------------------|--------------------------------|
| Improvements in market assessment, procurement, and logistics | 50-100 | 40-50 |
| Importation of bulk with local bagging | 10-20 | 15-30 |
| Importation of bulk with local blending and bagging for NPK fertilizers | 25-40 | 30-50 |
| Improvements in marketing and distribution (transportation, storage, delivery, interest charges, etc.) | 30-40 | 30-40 |
| Improvements in fertilizer use efficiency (better extension and education, move from low-analysis to high-analysis products, application methods, etc.) | 40-50 | 20-30 |
| Total Potential Savings (US \$/ton/year) | 155-250 | 135-200 |

**“ Who were the people that made the changes?
The leaders! It was the leaders who made the
science and technology useful...Are there
two or three, hopefully many more, who have
the courage to take the recommendations on
the use of fertilizer forward?”**

**Excerpt from the speech by Dr. Norman
Borlaug, 1970 Nobel Peace Prize Laureate, at the
Head of State Session of the Africa Fertilizer Summit**

Thank You

