



GECAFS
Global Environmental Change
and Food Systems

Photo by WFP 2008

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Adapting African Food Systems to a 4° C+ World

African growth and agriculture?

- Agriculture employs 60% labour; contributes average of 30% GDP
- Agricultural development and alleviating food insecurity already a challenge.. Hungry seasons persist
- Impact of 2007/8 food price crisis: 1 billion extra hungry people (many in SSA)
 - Climate shocks in one place have ripple effects in globalized food systems
 - High prices for food and inputs persisted....

Prevalence of undernourishment

	1990-1992	1995-1997	2003-2005
SS Africa	34	34	30
Central Africa	34	51	57
East Africa	45	44	35
Southern Africa	45	43	37
West Africa	20	16	14
Kenya	33	30	32
Zambia	40	41	45
World	18	15	13

Percent of total population

FAO 2009 (<http://www.fao.org/economic/ess/food-security-statistics/en/>)

Food system options at 4° +

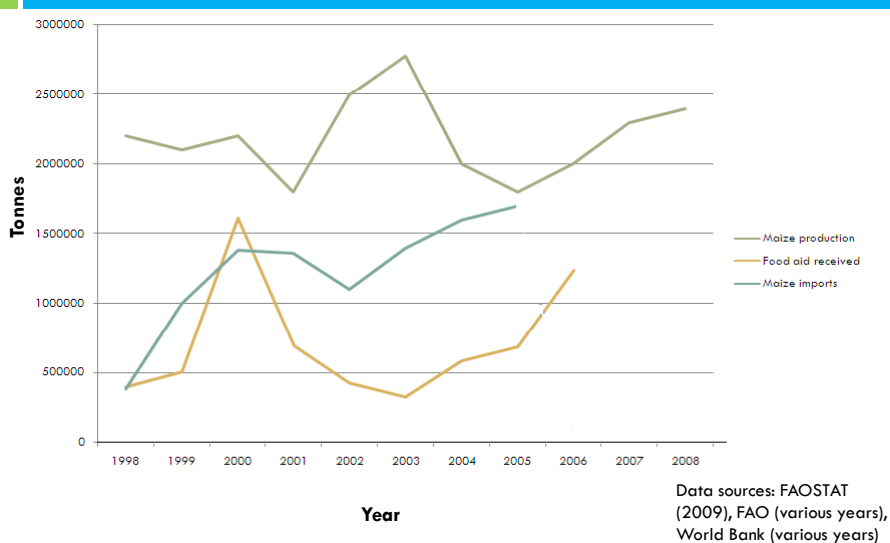
- Livelihood transitions for producers
- Changes in crops
- Changes in diets
- More food relief
- More reliance on international markets

- **Overall, radical shifts in food security patterns and strategies**

What will implementing these options depend upon?

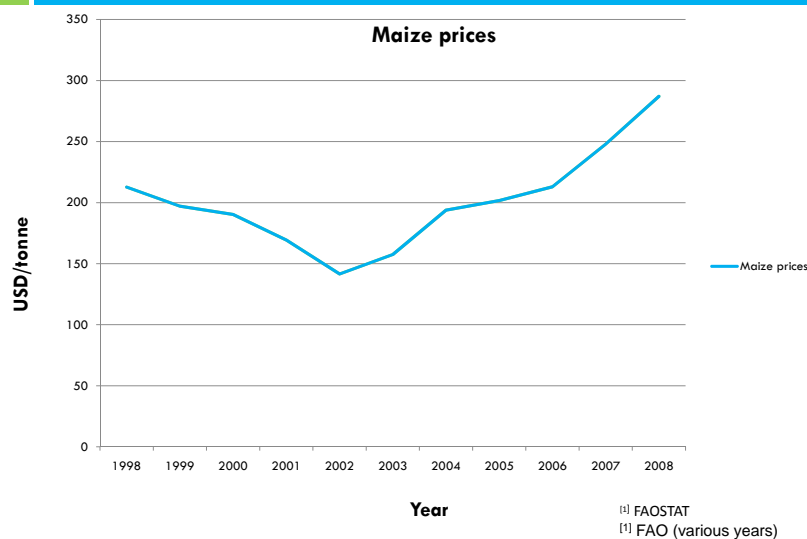
- Alleviating chronic poverty, implementing social protection
- Getting markets for food and agricultural commodities to work
- Supporting farmers, especially the poorest, in taking new risks
- Reforming food security monitoring and relief institutions

Production trends Kenya



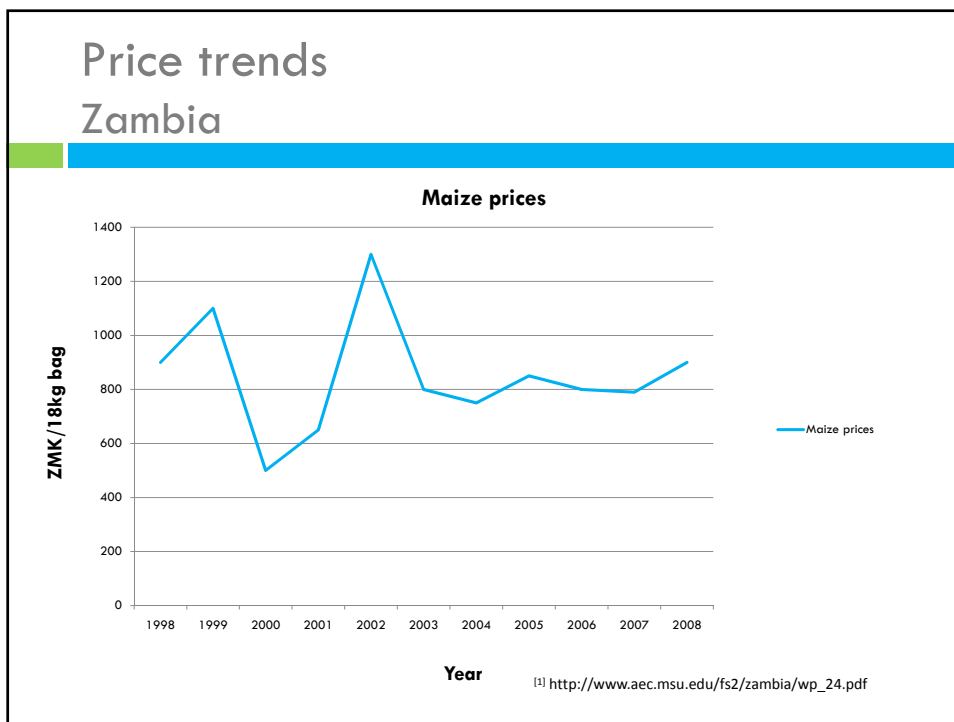
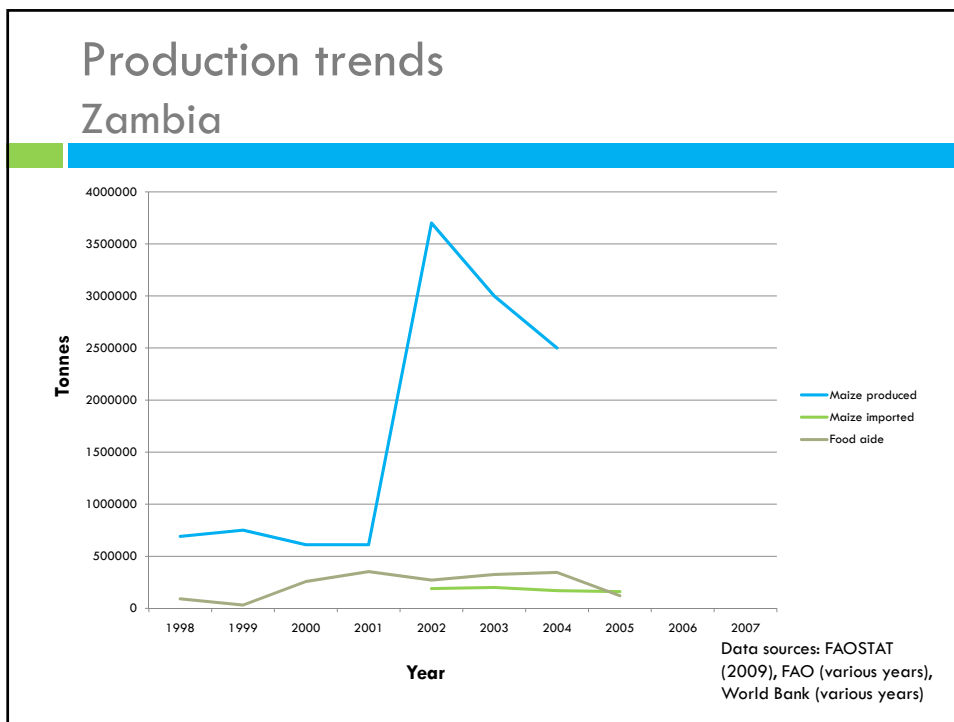
Price trends

Kenya



Institutional issues: Kenya

- Staple crop markets
- Pastoral/ agro-pastoral areas
 - ▣ Poorly integrated markets
 - ▣ Decade of droughts; 40% herd loss 2009
- Food security responses last decade
 - ▣ KFSSG monitoring efforts
 - ▣ Pastoral livelihood support
 - ▣ 2009: 10 M hungry; only 48% EMRP funded
- Political crises
 - ▣ Overwhelmed issues 2008/9



Institutional issues: Zambia

- Staple crop markets
 - ▣ South Africa as a source of maize?
 - ▣ Trend of increased cassava?
 - ▣ Crop reporting data in the region unreliable
 - ▣ Trade barriers increase costs
- Food security responses last decade
 - ▣ 2002/3 cause for concern
 - ▣ Food security reporting improving slowly
 - ▣ Social protection improving?

Conclusions for adapting food systems

- Scarce evidence of adaptive capacity
- Little evidence of ability to support poor farmers and food insecure households
 - ▣ Limited social protection
 - ▣ Agricultural risk
- Markets a big and unresolved issue
- Availability of food imports
- **What future for African livelihoods?**