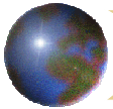


Policy options for influencing prices: Agricultural productivity and crop diversification

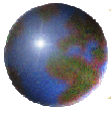
Steven Haggblade (MSU)

Presented at the Comesa policy seminar
"Food price variability: Causes, consequences, and policy options"
on 25-26 January 2010 in Maputo, Mozambique
under the Comesa-MSU-IFPRI African Agricultural Markets Project (AAMP)

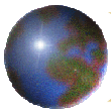
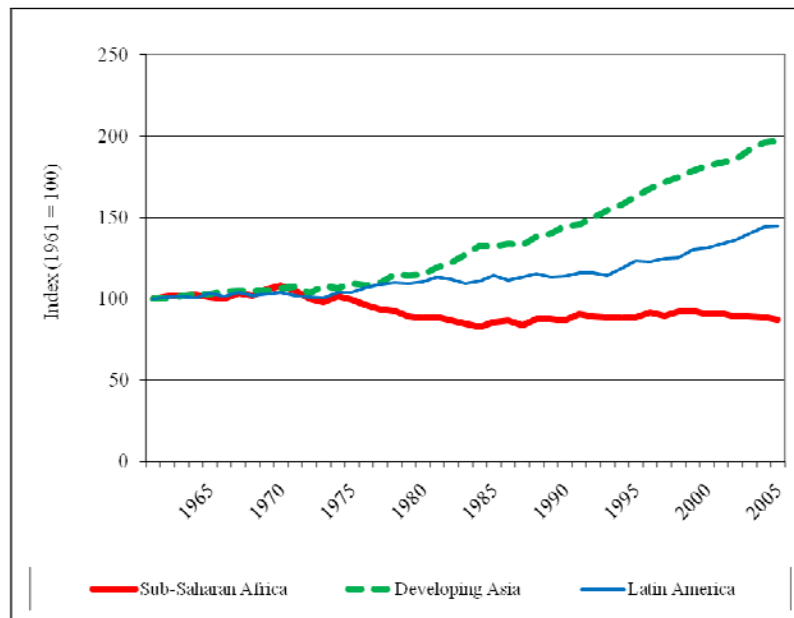


Outline: Policy options for influencing prices

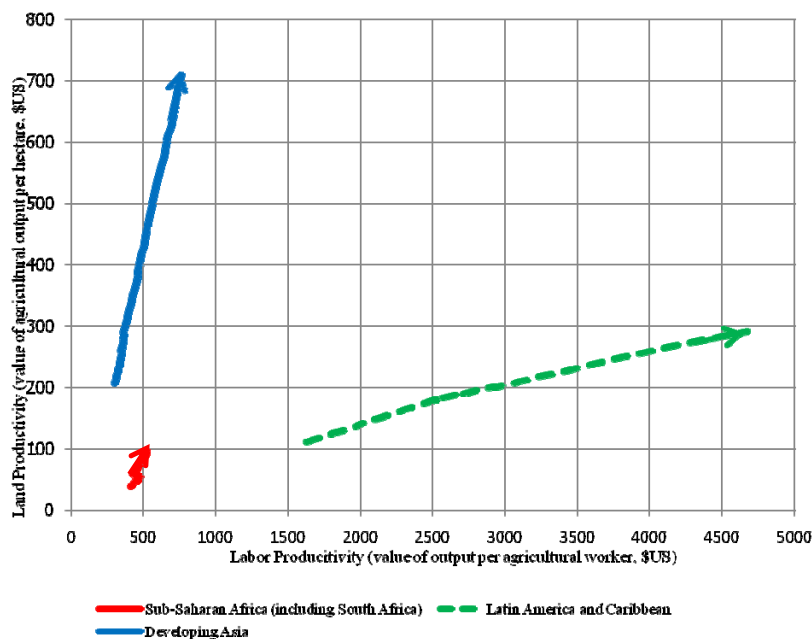
1. Agricultural productivity
2. Diversification
 - a. Food consumption
 - b. Animal feeds

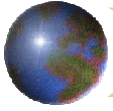


1. Africa's farm productivity lags

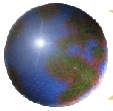
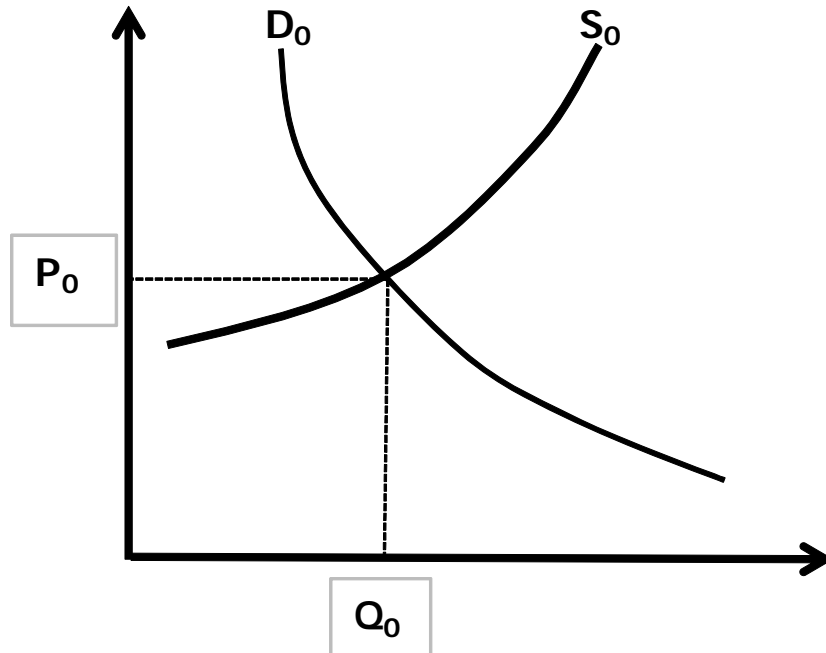


Africa's productivity: lowest in the world

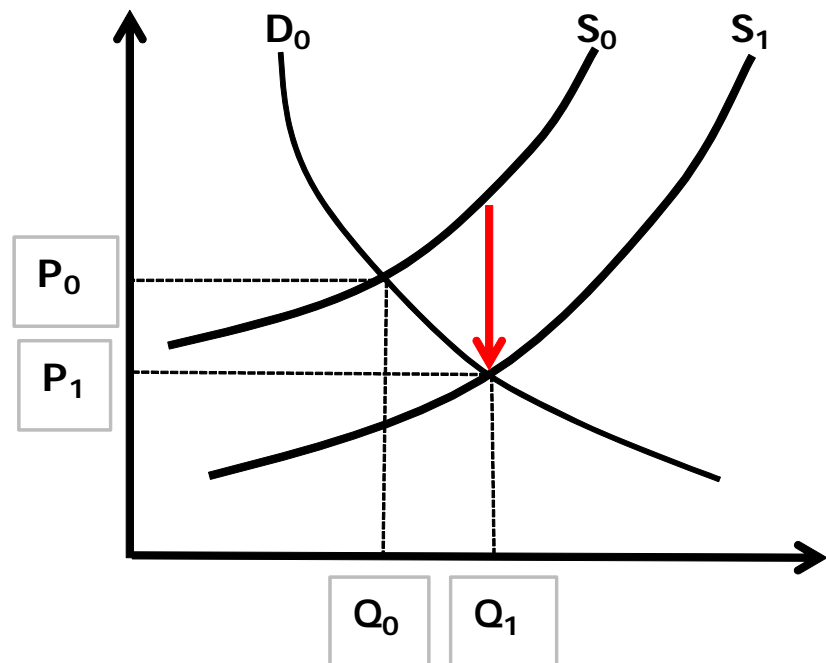


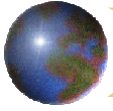


Impact of improved farm technology

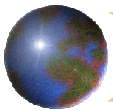


Impact of improved farm technology

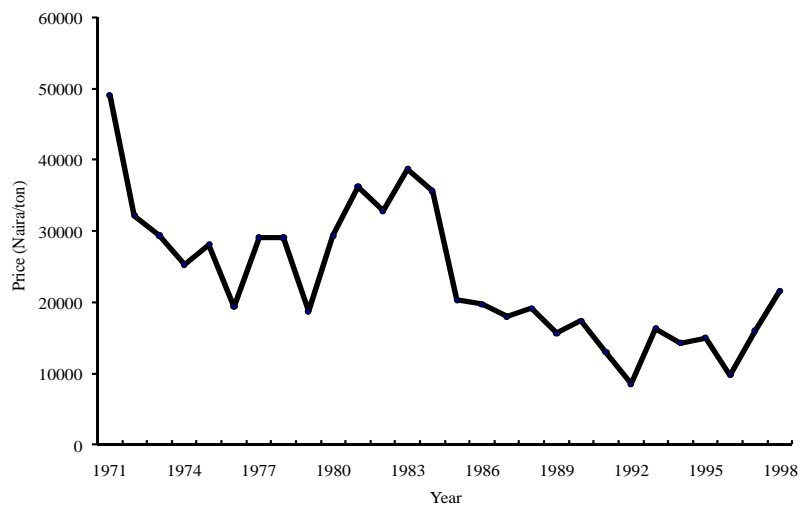


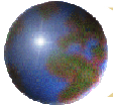


Improved cassava varieties double yields



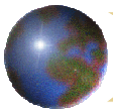
Cassava prices fall as a result





Improved technology requires long-term investments in agricultural research

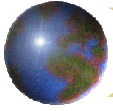
- SR52 maize: 28 years
- TMS cassava: 25 years of active breeding
- Requires long-term institutional support (investment, human capital formation, solid recurrent budgets)



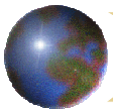
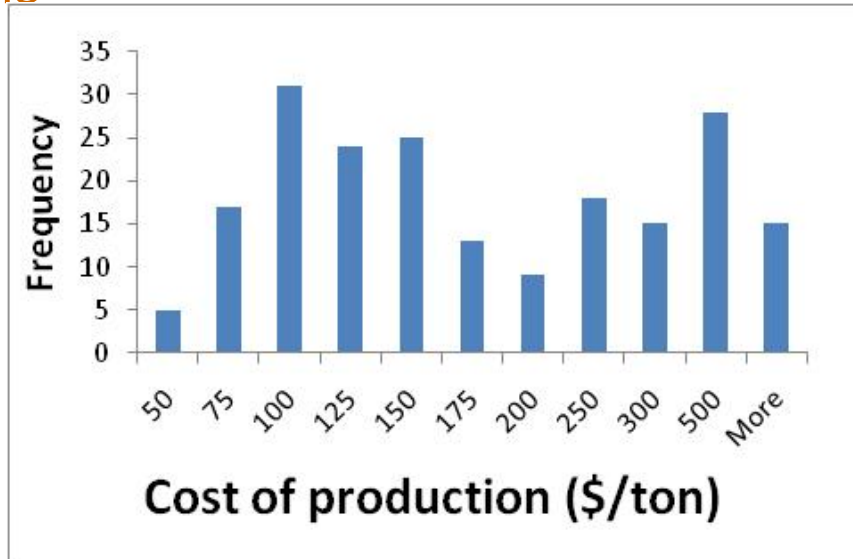
Improved farm management

- Raises productivity
- Requires agronomic research
- And strong extension systems





Cost of production differs across farms

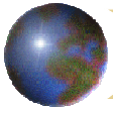


Outline: Policy options for influencing prices

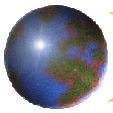
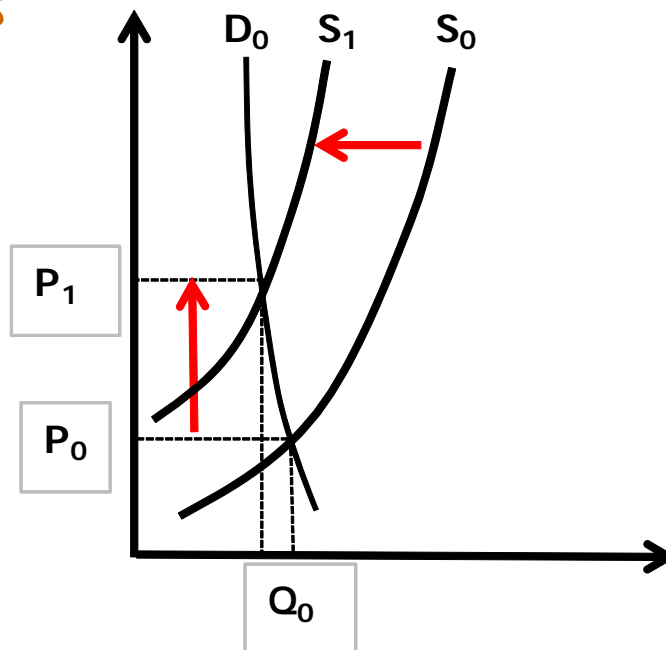
1. Agricultural productivity

2. Diversification

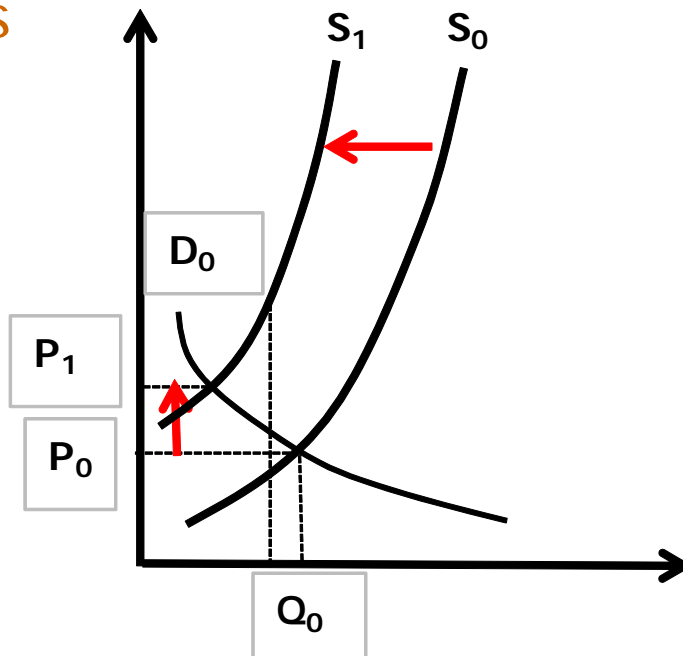
- a. Food consumption
- b. Animal feeds

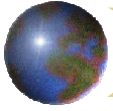


2. No diversification → big price shocks



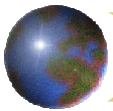
2. Diversification moderates price shocks





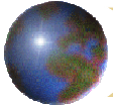
2. Diversification: Uganda's food basket

Calorie source	Uganda
Plantains	18
Cassava	13
Maize	11
Sweet potato	9
Beans	6
Wheat	2
Rice	2
Other	39
Total	100

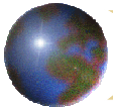


2. Diversification: cassava in northern Mozambique substitutes for maize during drought years



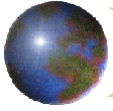


2b. Livestock feeds



2. Diversification → Substitution possibilities

- Human foods (matoke, cassava, sweet potatoes, etc)
- Livestock feeds



Conclusion

- Agricultural research & extension → higher productivity → lower food prices
- Diversification → substitution among human and animal foods → moderates maize price shocks

