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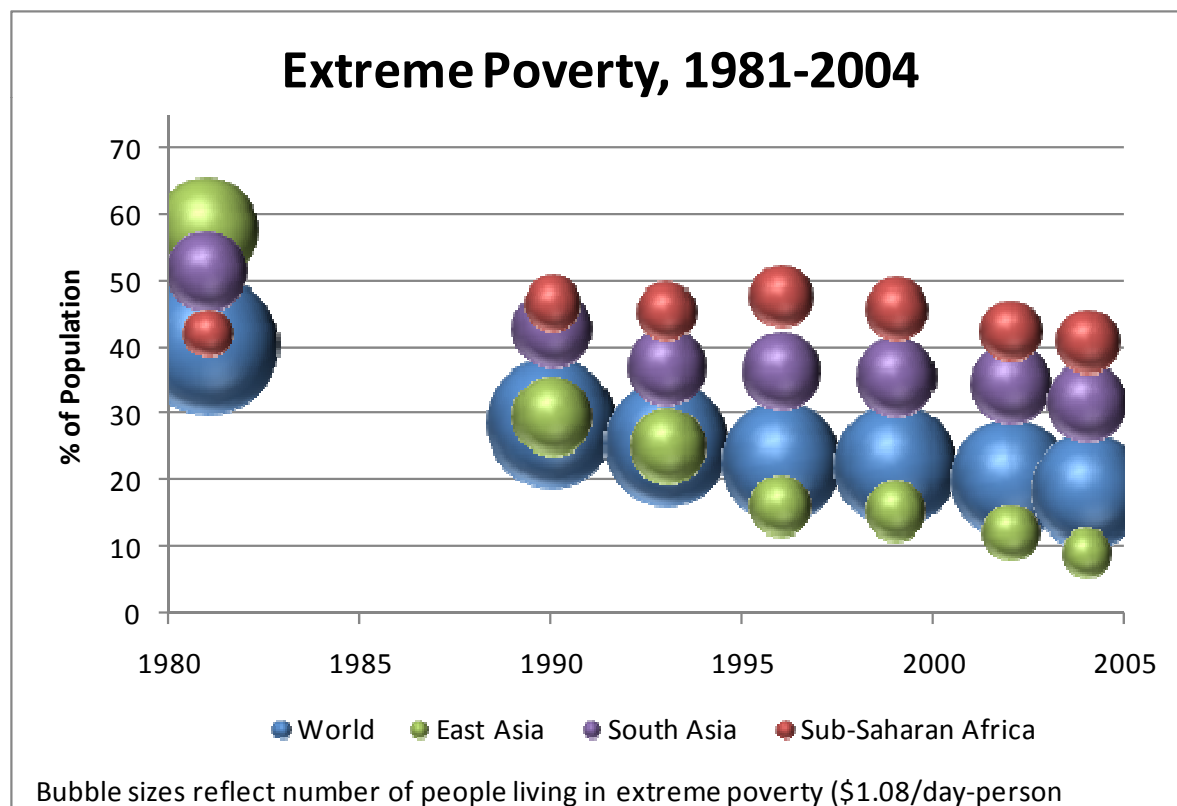
Food systems and the escape from poverty and hunger traps in sub-Saharan Africa

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**There is reason for hope ...
now less than 1 bn in extreme poverty and
real progress in some regions**



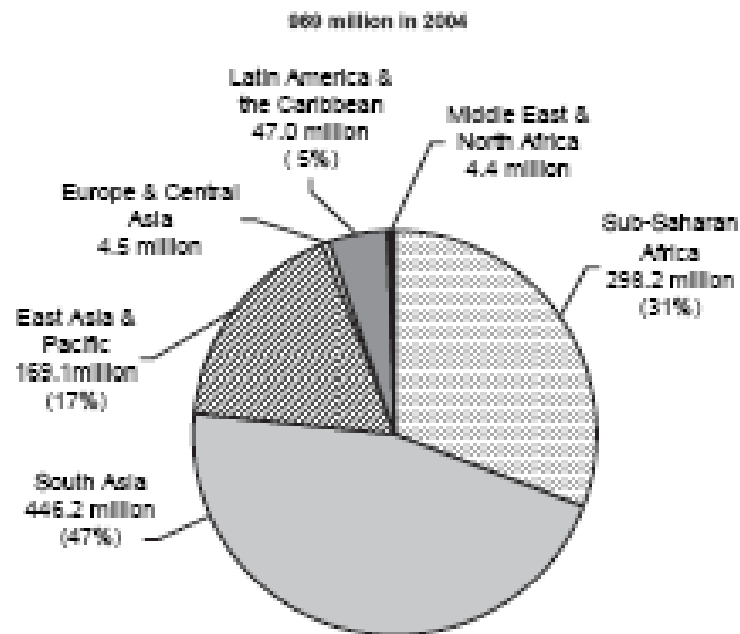
**But no real
progress in
sub-Saharan
Africa in the
last 25 years.**

Source: World Bank, *World Development Indicators*

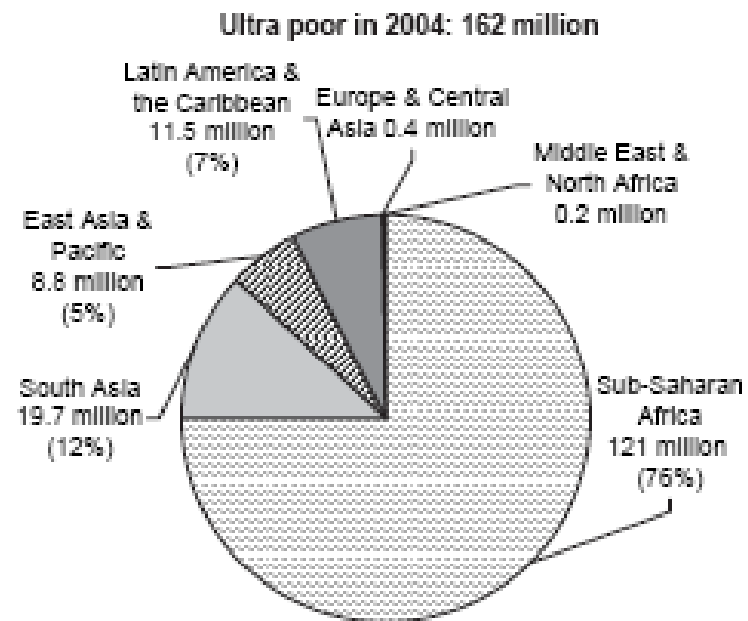


And ultra-poverty especially stubborn and prevalent in sub-Saharan Africa

Extreme poverty (<\$1/day pc)



Ultra-poor (<\$0.50/day pc)





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Poverty/hunger trap

Reinforcing feedback:

Poverty causes hunger: Low incomes and high and/or volatile food prices lead to hunger.

But hunger also causes poverty: Hunger leads to low birth weight, delayed child cognitive and physical development, adult energy and attention deficits, increased likelihood of illness or injury, etc. ... all causally associated with low productivity and income.





Two key features of poverty traps:

1) Initial conditions matter

- “It takes money to make money” ... investment is the engine of growth and exit from poverty.
- In SSA, ultra-poor are heavily rural and depend on meager (and degrading) natural resource base and have little access to key infrastructure.

2) Risk matters

- Direct loss of productive assets to biophysical shocks, conflict, etc.
- Responses: ex post coping (e.g., school drop-outs, distress asset sale) and ex ante risk management (e.g., low-risk, low-return livelihoods).



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Food systems' central role

Food systems improvements play a central role in breaking out of SSA's ultra-poverty/hunger trap:

Reason 1: income generation and asset holdings:

- Most ultra-poor live in rural areas (rural-urban poverty gap increases in poverty depth), and are employed in agriculture, at least part-time.
- Increasing the productivity of the assets controlled by the poor (and the stock of assets they control) is fundamental to any strategy to break out of the poverty/hunger trap. So must increase the productivity of the rural poor's labor, land, livestock and other assets.



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Food systems' central role

Reason 2: Budget dependence

Food is 65-80% of ultra-poor's budgets.

Most SSA farmers are not net sellers of basic commodities ... most are net buyers, so price effects of productivity growth reinforce gains to the rural poor.

Country	Crop	Year	% Sellers (g=gross, n=net)
Ethiopia	Maize and teff	1996	25 ⁿ
	Barley	1999-2000	10 ^g
	Maize		23 ^g
	Sorghum		11 ^g
	Teff		20 ^g
	Wheat		12 ^g
Kenya	Maize	1997	29 ⁿ
		1998	34 ⁿ
		1999	39 ⁿ
		2000	30 ⁿ
Madagascar	Rice	1990	32 ^g
		2001	25 ⁿ
Mozambique	Basic food	1996-7	14 ^g
	Maize	2001-2	30 ^g
	Maize	2005	16 ^g
	Rice	2002	43 ⁿ
Rwanda	Beans	1986-7	22 ⁿ
	Sorghum		24 ⁿ
Somalia	Maize	1986-7	39 ⁿ
Tanzania	Food	2003	33 ⁿ
Zambia	Maize	2000	26 ⁿ
Zimbabwe	Maize	1984-5	45 ⁿ
	Grains	1996	27 ^g



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Food systems' central role

An example from Madagascar:

A doubling of rice yields:

- reduces the share of food insecure households by 38%
- shortens the average hungry period by 1.7 months (1/3)
- increases real unskilled wages in lean season by 89 % (due to both price and labor demand effects)
- All the poor benefit: unskilled workers, consumers, and net seller producers ... the poorest gain most.



(Minten and Barrett, *World Development*, forthcoming).



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Food systems' central role

Result:

- World Bank estimates that real GDP growth from agriculture is 2.7 times more effective in reducing extreme poverty headcount in poorest countries, vs. non-ag sectors.
- Historically, advances in food system productivity have been the foundation of poverty reduction and modern economic growth throughout history.



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Key principles

No one size fits all approach is viable. Need to contextualize. But there exist several key principles for targeting food system interventions:

Principle 1: Build and protect household-level productive asset endowments.

Multiple assets matter: Human capital, land (incl. soil fertility), water, livestock, investible funds (savings, credit)

Interventions can involve direct provision (e.g., free education)

But mainly need to improve investment incentives.





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Key principles

Principle 1: Build and protect household-level productive asset endowments.

How to improve incentives?

- 1) More secure property rights (tenure, police)
- 2) Resolve financial market failures
- 3) “Crowding-in” investment in complementary inputs (e.g., infrastructure)
- 4) Provision of safety nets

A key concern: Soil quality

SSA losing ~\$4bn/yr in soil nutrients...
plus feeds a *Striga* problem that costs
another \$7 bn/yr in yield losses.





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Key principles

Principle 2: Improve the productivity of the poor's current asset holdings.

- 1) Improved production/processing technologies
- 2) More efficient/remunerative marketing channels

Uptake/participation turns on assets, so don't forget #1!

Key concern 1: Agricultural research in SSA

Avg RoR ~35%, and ~80% of ultra-poor in agriculture
But only 4% of public expenditures are on ag and a small fraction of that goes into research.

Key concern 2: Changing agrifood supply chains

Who is participating, on what terms, w/ what effects?



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Key principles

Principle 3: Improve risk management options for the ultra-poor.

Regressivity, multidimensionality and context-specificity of uninsured risk exposure make this an especially difficult challenge.

Risk reduction:

Improved crops and livestock, better water control, diversification, peace, disease control

Risk transfer:

Improved markets, index-based risk finance, global humanitarian response





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Key principles

Principle 4: Facilitate favorable transitions out of agriculture.

Must equip the next generation to transition into remunerative non-farm employment.

Key is early childhood health, nutrition and education, especially for disadvantaged children. Goes hand-in-hand with improvements to parents' productivity, risk management and asset holdings.

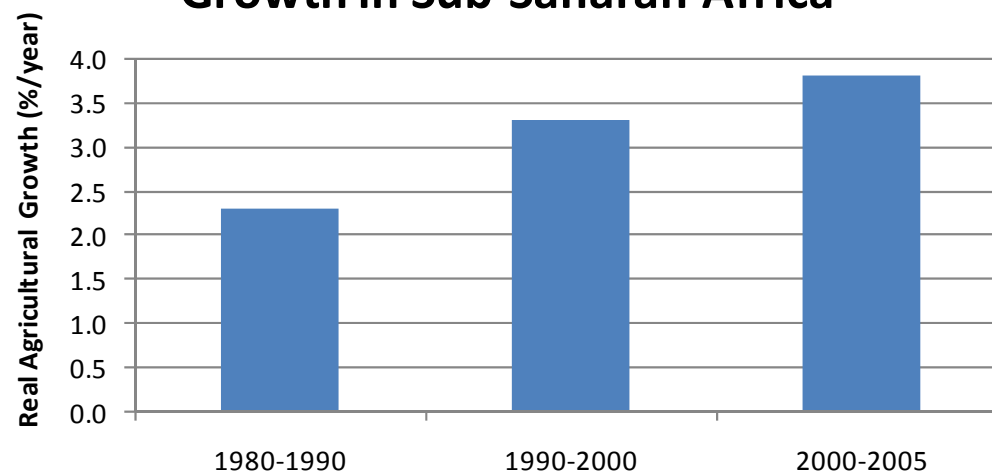




There is real reason for hope:

- Real ag output growth is accelerating ... back to positive per capita rates of food output growth
- Renewed and innovative initiatives (e.g., AGRA) and attention (e.g., WDR 2008), and turn-around in both public aid and private investment in rural SSA.

Figure 3: Accelerating Agricultural Growth in Sub-Saharan Africa



Source: World Bank, *World Development Indicators*



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Conclusions

But recognizing the need to intervene is the easy part.

We need to emphasize food systems improvements and focus on four key principles:

- *Build and protect household-level productive assets.*
- *Improve the productivity of the poor's current asset holdings.*
- *Improve risk management options for the ultra-poor.*
- *Facilitate favorable transitions out of agriculture.*

But appropriate policy design and implementation are highly context specific. So need to continuously and rigorously research the settings in which we work and the policies we design and introduce ...

... beware repeating the errors of the SAP era!



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Thank you for your time, attention and comments

