



INVESTMENTS PRIORITIES FOR IMPROVING FOOD SECURITY IN AFRICA.

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OUTLINE

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- Food production and security situation in Africa
- Factors driving agricultural production and food security in Africa.
 - Supply side forces
 - Demand side forces
- Priority investments for improving Food Security

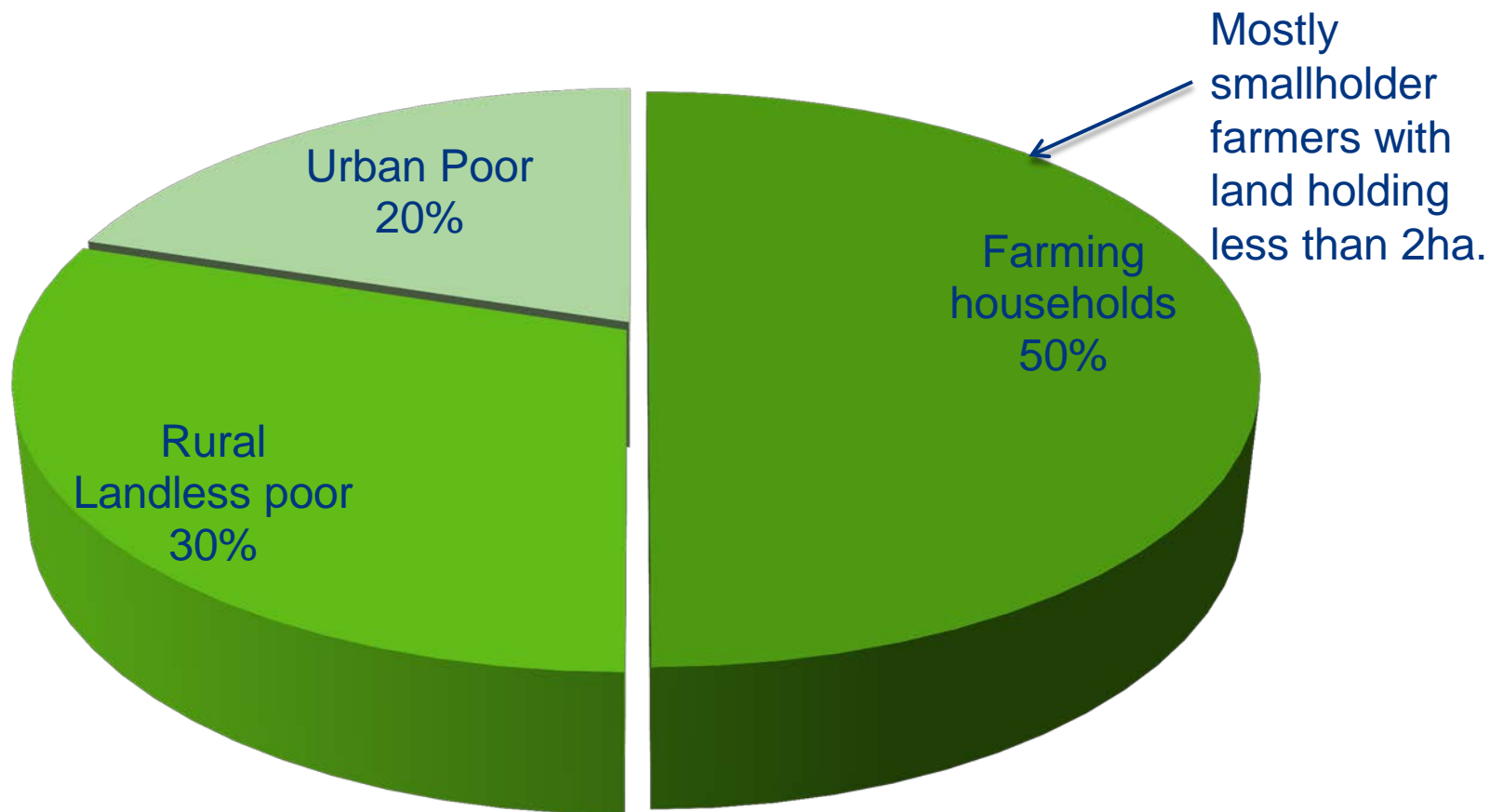
Food Production and Food Security Situation in Africa.

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- 24 countries in Africa need external assistance for food:
Reasons -
 - Crop failure
 - Natural disasters
 - Distribution disruption
 - Decrease in area planted/yield
- West & East Africa – Reduction in Cereal Crop output (2011 -2012)
- Southern Africa – Mixed – Above average for half of the countries (2011-2012)

Proportion of Food Insecure in Africa

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Source: Heidhues *et al.*, 2004

Factors Driving Agricultural production and Food Security in Africa.

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1. Supply Side Forces

- Land crisis – Limiting expansion of cultivated area especially for smallholder farmers.
- Resurgence of agricultural input and market subsidies to promote food production
- Stagnantly low productivity
- Other factors - Climate Change

Factors Driving Agricultural production and Food Security in Africa.

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2. Demand Side Forces

- Rising and volatile food prices
- Increased demand – Population growth, urbanization and rising incomes.
- Rising food deficits in some region – general movement toward import parity prices
- Shift in consumption preferences - Rising importance of wheat in urban consumption

Supply Side Drivers

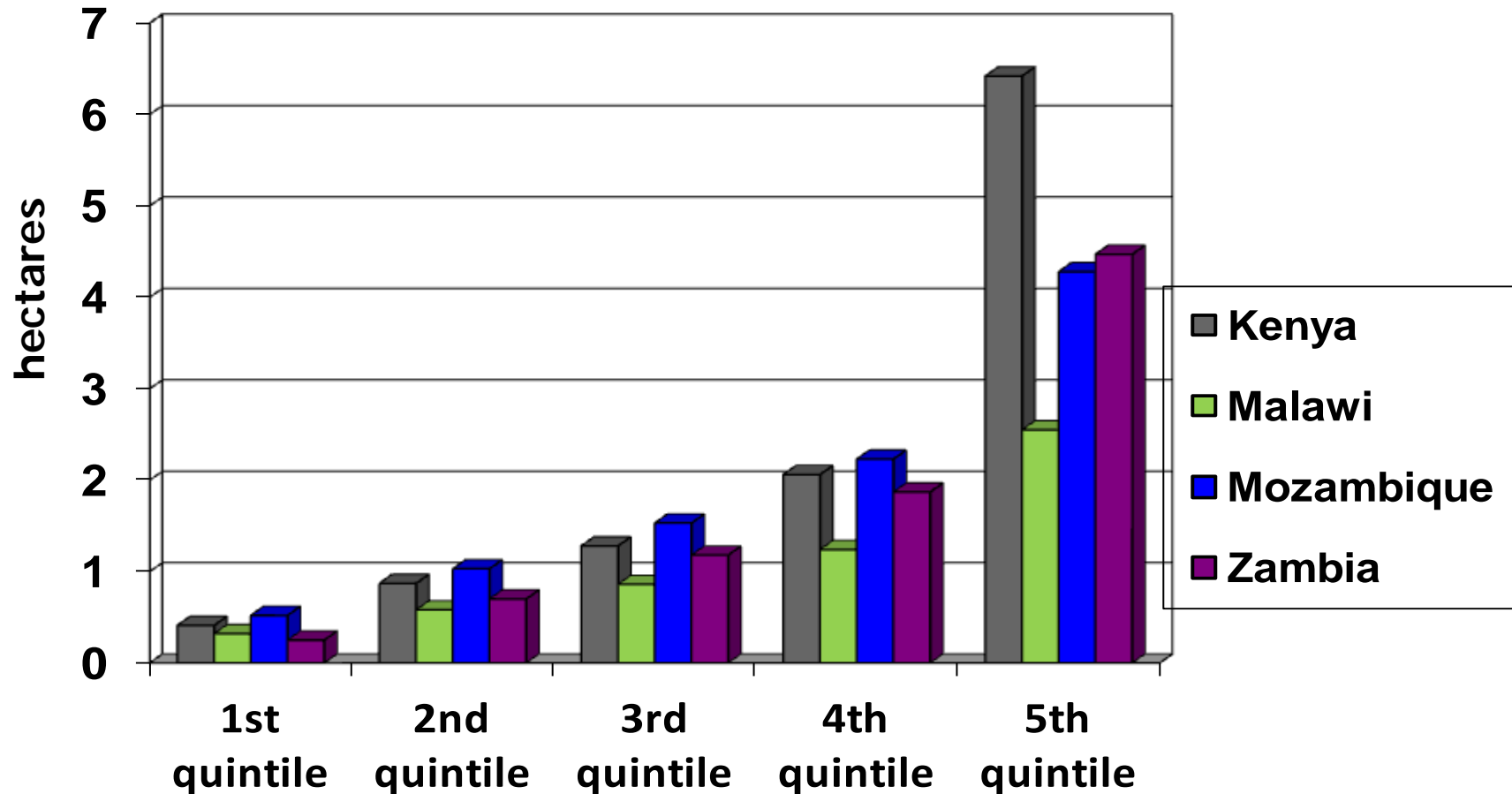
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1. Land crisis
 - Evidence that smallholders (who constitute 50% of the food insecure) face land constraints - amidst unutilized land.



Most smallholder farms lack the land and other resources to produce a surplus

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Source: Jayne et al., 2012

Arable land-to-person ratio (10 year average) in selected countries (ha/person)

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	1960-69	1970-79	1980-89	1990-99	2000-09	2000-09 land-person ratio as % of 1960-69
Ethiopia	0.501	0.444	0.333	0.224	0.218	43.5%
Zambia	0.643	0.607	0.398	0.342	0.297	46.2%
Kenya	0.462	0.364	0.305	0.264	0.219	47.4%
Uganda	0.655	0.569	0.509	0.416	0.349	53.3%
Malawi	0.480	0.466	0.357	0.304	0.307	64.0%
Zimbabwe	0.613	0.550	0.452	0.420	0.469	76.5%
Rwanda	0.212	0.213	0.195	0.186	0.174	82.1%
Mozambique	0.356	0.337	0.320	0.314	0.294	82.6%
Ghana	0.646	0.559	0.508	0.492	0.565	87.5%
Nigeria	0.982	0.860	0.756	0.769	0.898	91.4%

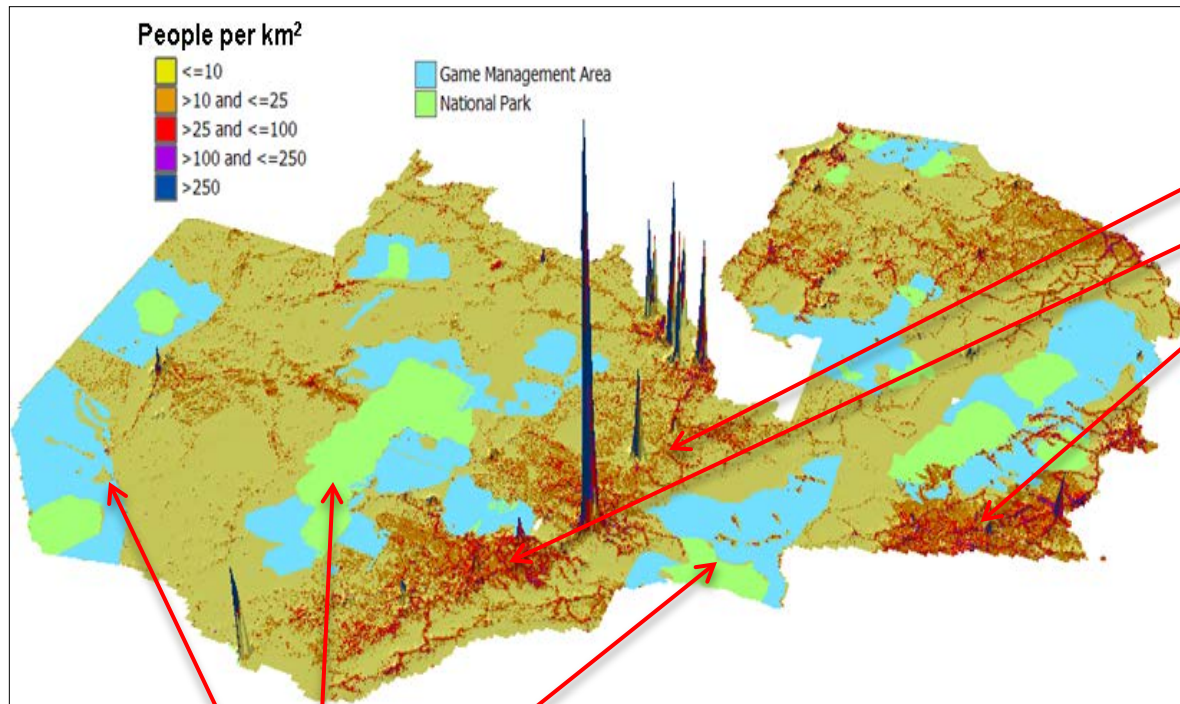
Source: FAO STAT (2010)

Indaba Agricultural Policy Research Institute



Land utilization follows infrastructure development - roads

Figure 1. Population Density and Distribution in Zambia, 2007



Settlements concentrated on areas with infrastructure

Hence the paradox of land constraints in midst of plenty

Considerable land is covered by water, national parks

Source: FSRP (2009). Agricultural Surveys – Voice of smallholder farmers

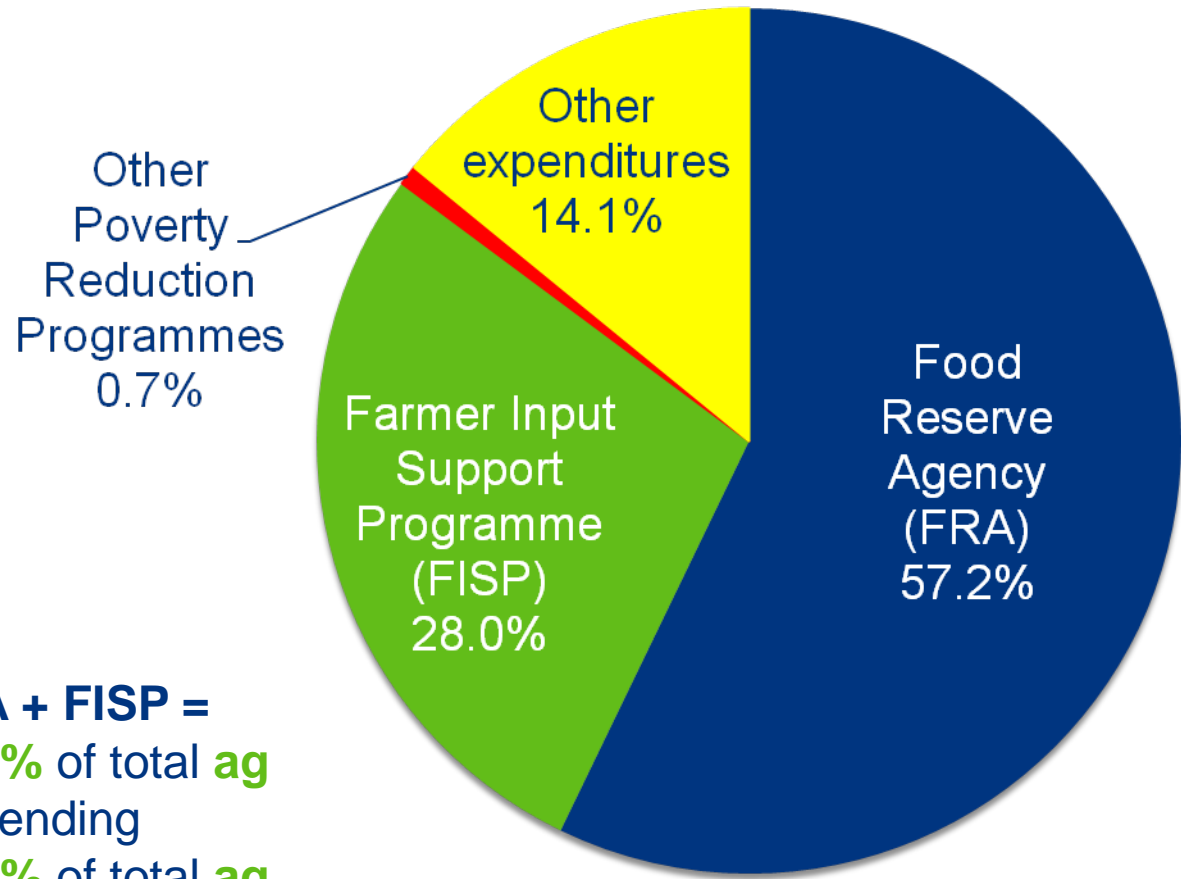


Supply Side Drivers

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2. Resurgence of agricultural input and food marketing subsidies to promote food production
 - US\$2.5 billion each year on fertilizer subsidies
 - Seven countries driving this trend (Nigeria, Ethiopia, Malawi, Zambia, Tanzania, Kenya, Ghana)

Public spending on agriculture, 2010 - Zambia



FRA + FISP =

- **85%** of total **ag** spending
- **99%** of total **ag** **poverty reduction** **programme** spending

FISP fertiliser received by farm size category, Zambia - 2010/11

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Total area cultivated	% of small-holder HHs	% receiving FISP fertiliser	Mean kg of FISP fertiliser received	
			Recipient HHs	All HHs
	(A)	(B)	(C)	(D)
0-0.99 ha	39.6%	14.3%	168	24
1-1.99 ha	33.1%	30.6%	227	69
2-4.99 ha	23.5%	45.1%	310	140
5-9.99 ha	3.3%	58.5%	529	310
10-19.99 ha	0.5%	52.6%	657	346
Total	100%	28.6%	270	77

Source: CSO/MACO 2010/11 Crop Forecast Survey

Extreme concentration of marketed maize output – Malawi, 2008/09

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	% of total sample	Farm size (ha)	Asset wealth ('000 kw)	Maize sales (kgs)	Non-farm income ('000 kw)	female headed (%)	Subsidized fert received (kgs/hh)	commercial fert bought (kgs/hh)
Top 50% of maize sales	1.6	2.0	208	2,510	101	13	166	251
Rest of maize sellers	19.6	1.3	94	204	31	25	85	48
Farm hhs not selling maize	78.8	1.2	14	0	12	28	60	34

Source: Agricultural Inputs Support Survey (n=1904 farm households), sample frame from National Statistical Office, Government of Malawi

Effect on food security???

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- Input subsidy programs often politically motivated
- The private sector increasingly being crowded out
- Majority of the poor small farmers not benefiting.
 - ⇒ Little impact on reducing rural poverty and food security
- Drain on government spending - ↓ \$\$ on other known drivers of ag growth, poverty reduction.

Supply Side Drivers

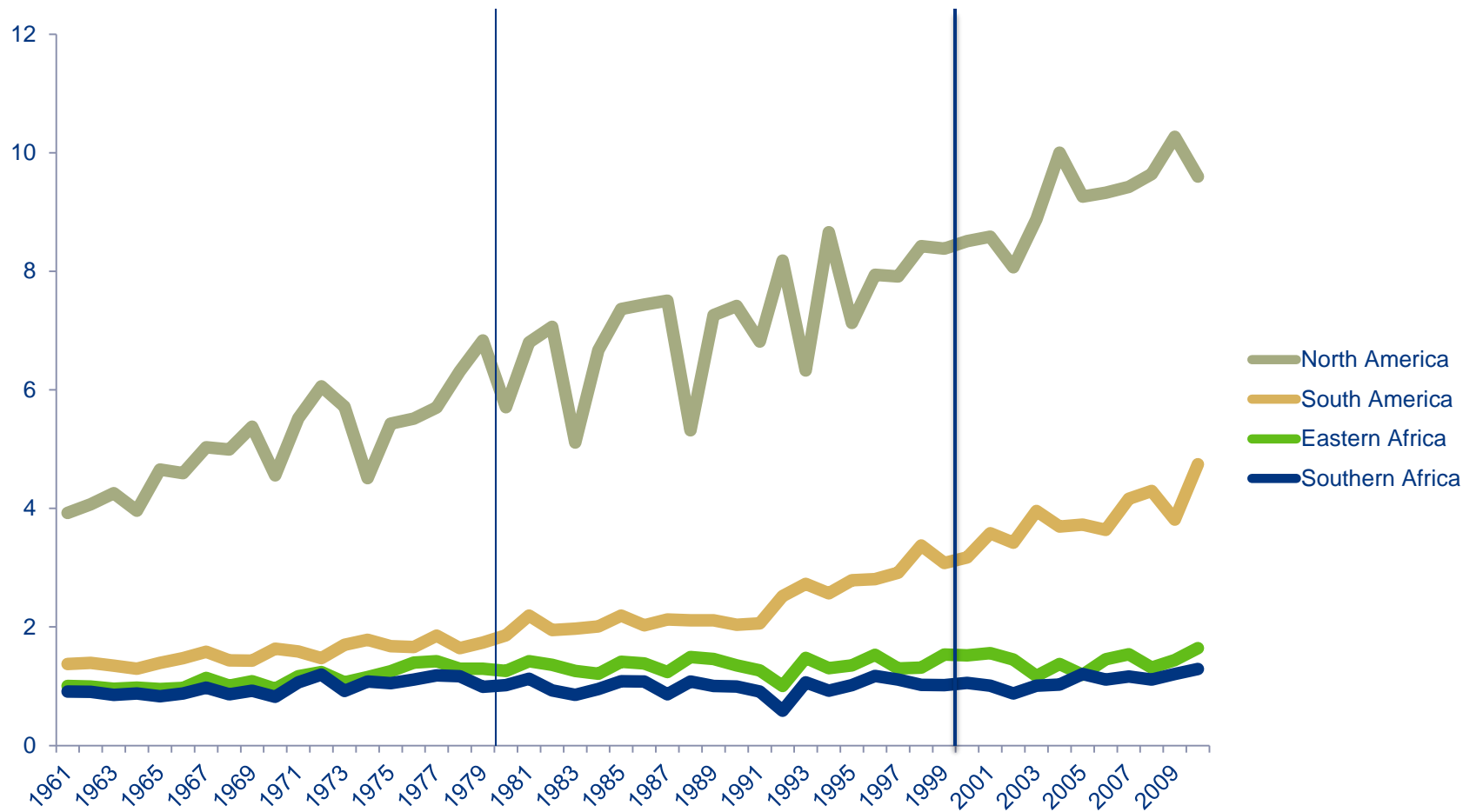
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3. Low productivity

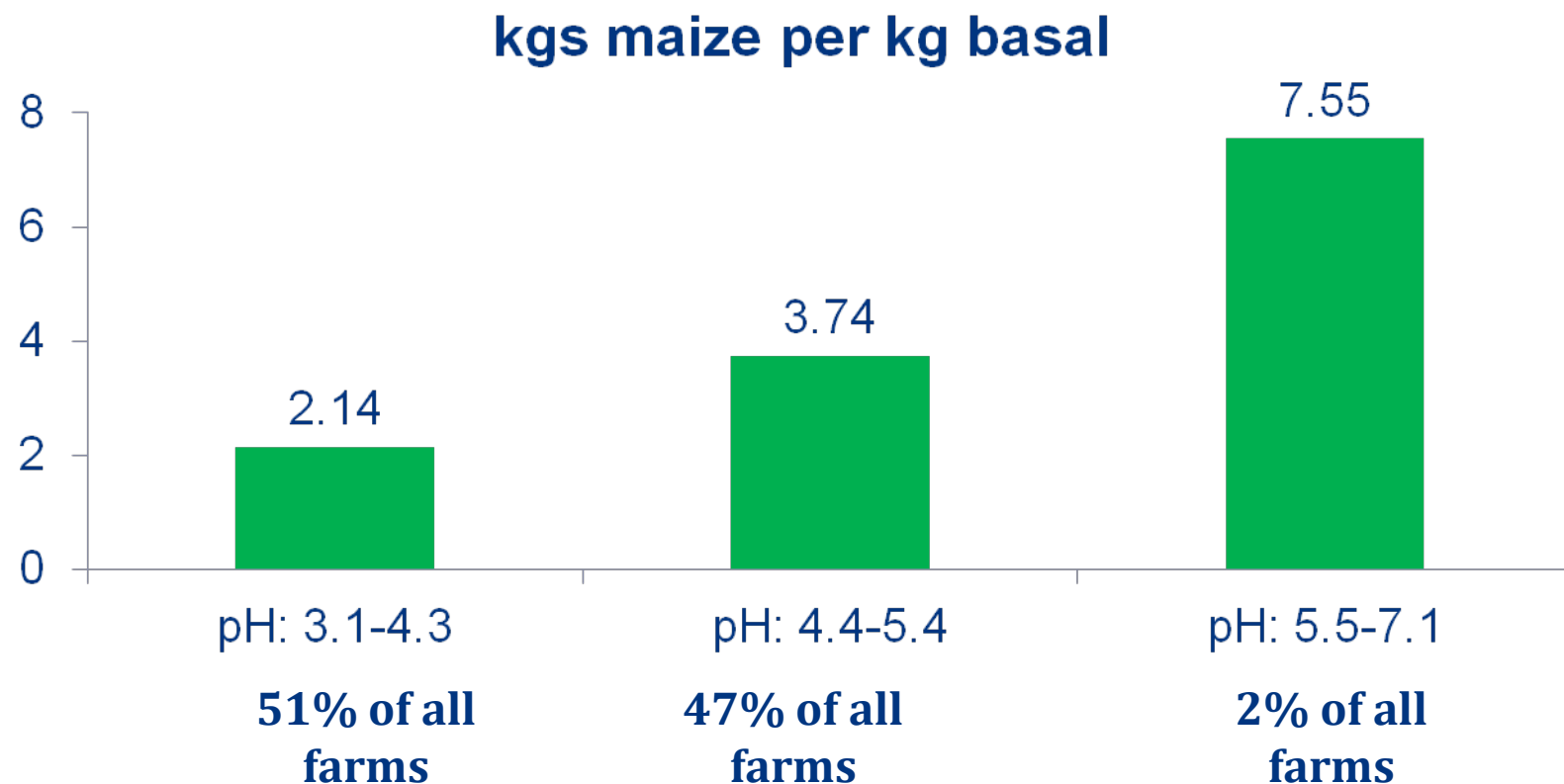
- An overall decline in investments in crop improvement technology, crop yields.
- Continued soil degradation → reduction in the productivity of the farms.
- Limited adoption of soil fertility replenishment strategies.
- Limited land → reduced period of fallow.

Africa Maize Yields in comparison with North and South America (tones per hectare)

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Basal fertilizer productivity - Zambia



Source: Burke et. al, 2012.

PRORITY INVESTMENTS FOR IMPROVING FOOD SECURITY IN AFRICA.

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- Improve smallholder landholding
- Improve Crop productivity
- Promote Smallholder commercialization
- Promote private sector participation

PRIORITY AREA No. 1: INCREASE LAND ACCESS FOR POOR SMALLHOLDER FARMERS

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Programs that address the increasingly severe land access problems facing smallholder agriculture

- Programs to develop improved farm technologies appropriate for 1 hectare farms
- Programs that support small farm entry into higher-value crops with high growth opportunities
- Open up unutilized land for small farm-based expansion
 - Improve infrastructure

PRIORITY AREA No. 2: IMPROVING CROP PRODUCTIVITY

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- Public investment in core areas that are required for sustainable agricultural growth
 - Research & development
 - Seed and soil improvement technologies
 - Regionally targeted lime subsidy
 - Encourage use of appropriate fertilizers
 - Extension
 - Information
 - Infrastructure - especially irrigation

PRIORITY AREA No. 3: SMALL HOLDER COMMERCIALISATION

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- Agricultural growth – for food security requires that smallholders be the engine
- Redirect public spending towards public goods that can be appropriated by all smallholders, not expropriated by an elite minority
- Promote smallholder access to grain markets
- Also.....
 - Promote off-farm activities to address the landless
 - Reduce rural urban migration

PRIORITY AREA No. 4:

Promote Private sector involvement in staple food markets.

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- Governments should move from discretionary to more systematic and rules-based forms of interventions
 - Unpredictable government involvement in grain marketing crowding out private sector participation
- Prioritize public sector approaches - enhance private sector's potential to promote broad-based wealth creation
- Number of private sector buying grain growing over time in all eastern and southern Africa.

THANK YOU

