Strengthening coherence between agriculture and social protection: consultative workshop

Cape Town, South Africa, 25-26 November 2014

trends, challenges and emerging issues in smallholder agricultural policy and programming

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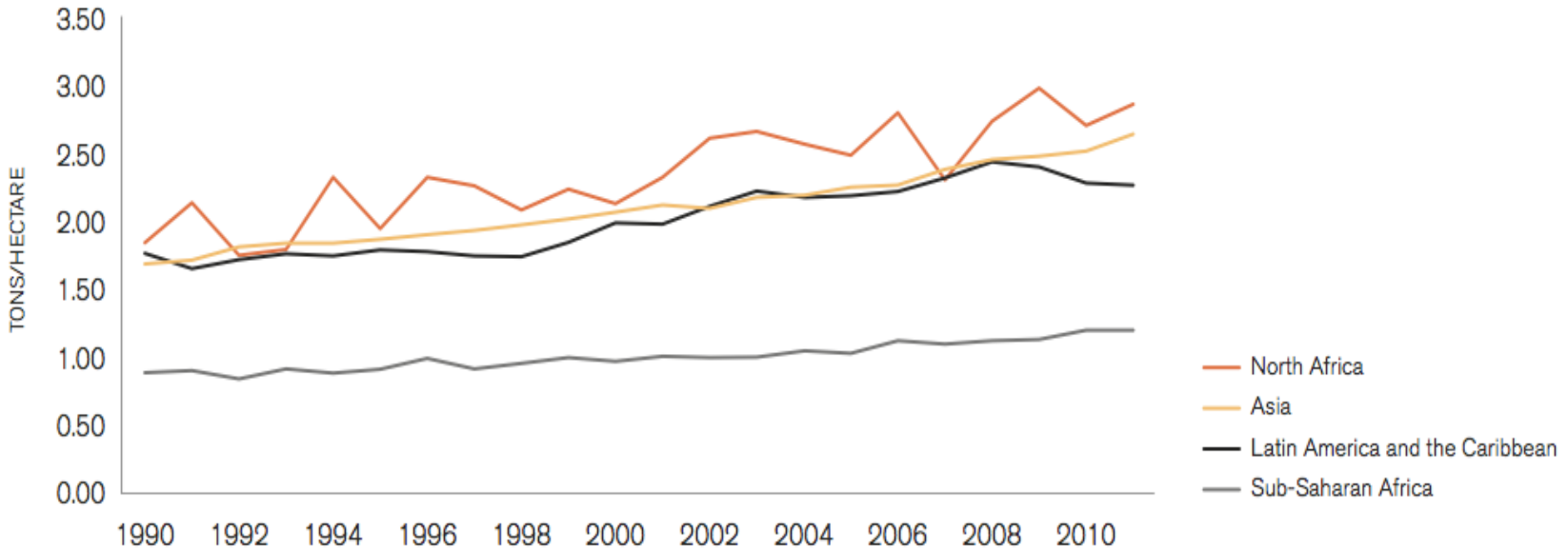
CONTEXT: SSA Crop Yields Remain Low

Cereal Yields by Region in Major Food Deficit Countries



Note: Average cereal yields for the 77 low-income food deficit countries included in the ERS International Food Security Assessment, categorized by region.

Source: ERS (2013). USDA, Economic Research Service using data from United Nations, Food and Agriculture Organization.

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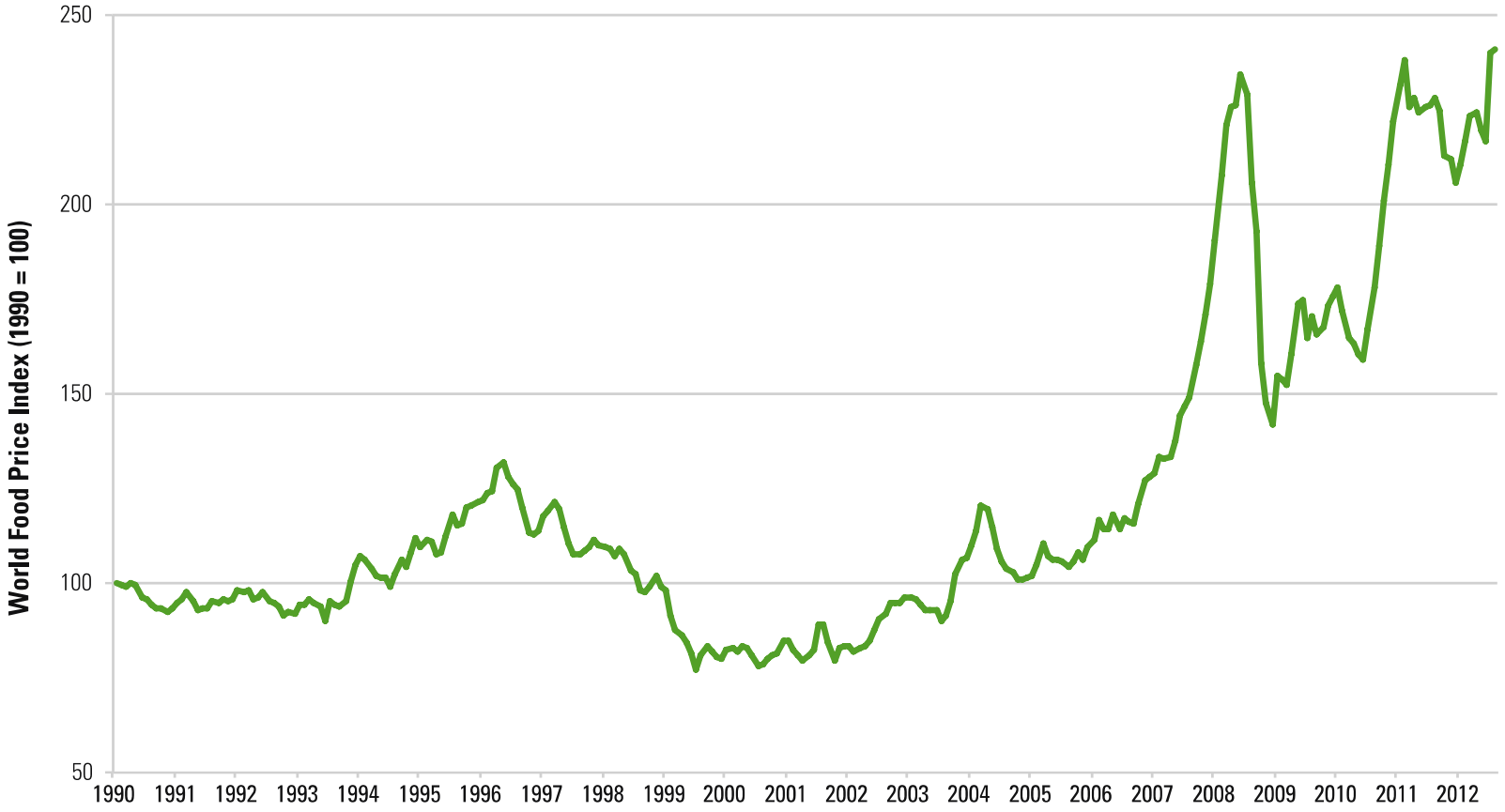
CONTEXT: recent world food price spikes



Source: World Bank.

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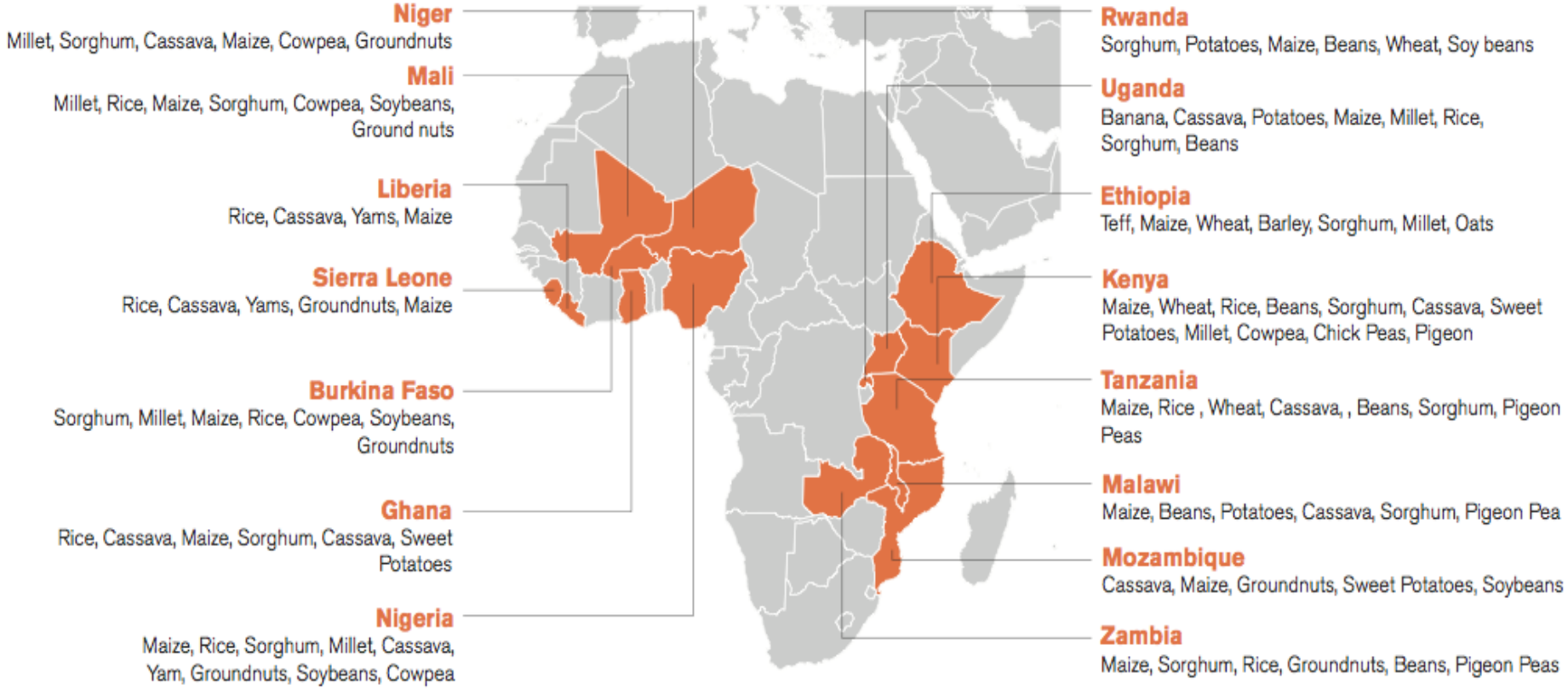
Key 20-year trends in SSA Agriculture

(FAO data)

	MEAN 1968-72	MEAN 2008-2012	% CHANGE
HUMAN POPULATION (millions)			
TOTAL	279	826	*197*
RURAL	234	526	*135*
URBAN	55	301	*449*
ANIMAL POPULATION			
CATTLE (millions)	128	234	*83*
SHEEP (millions)	206	468	*128*
CAMELS (millions)	8.8	17	*92*
milk production (million tons)	9.7	24.3	*151*
meat production (million tons)	3.9	1.2	*187*
LAND USE (million ha)			
ARABLE	132	184	*39*
PERMANENT CROPS	13.6	23.1	*70*
PERMANENT GRASSLNDS	713	724	*1*
IRRIGATED LAND	2.4	5.3	*12*
LAND PRESSURE			
LAND/RURAL PERSON (ha)	0.59	0.35	*-41*
STAPLE CROP PRODUCTION/PERSON (kg/person)	254	280	*10*
MAIN STAPLE CROPS (million tons)			
MAIZE	18.9	56.7	*200*
SORGHUM	8.5	20.1	*136*
RICE	4.6	19.9	*332*
CASSAVA	38.9	135.2	*247*
FERTILISER USE (KG/HA)	7.4	12.9	*74*

African cropping systems are diverse:
but maize & cassava are often important



source: AGRA Africa Agriculture Status Report 2014

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Main agro-ecological zones:

three-quarters of the rural population live in semi-arid, subhumid and humid zones

ZONE	LGP (DAYS)[1]	AVERAGE RAINFALL (MM)[1]	LAND AREA (% OF SSA)[2]	% OF RURAL POPULATION IN SSA[2]	PRINCIPAL AGRICULTURAL PRODUCTS BY FARMING SYSTEM[3]
Arid	< 90	< 200	37.3	5.3 (4)	*Pastoral:* Cattle, camels, sheep, goats *Agro-pastoral:* **Sorghum, millet**: with pulses, sesame, cattle, sheep, camels, goats, poultry
Semiarid	90-179	< 90	18.1	27.0 (38)	
Subhumid	180-269	800-1500	21.7	20.3 (24)	*Mixed cereal/root crop:* **Maize, sorghum, millet, cassava**: with yams, legumes, tobacco, cotton. Cattle *Mixed maize:* **Maize**, with tobacco, cotton, cattle, goats and poultry.
Humid	> 270	> 1500	18.5	28.0 (39)	*Tree crop:* **Cocoa, coffee**, **oil palm, rubber,** with yams and maize. *Forest-based:* **Cassava,** with maize, sorghum, beans and cocoyam.
Highlands[4]	180 – > 270	n.a.	4.4	19.4 (112)	*Highland Perennial:* **Banana, plantain, enset, coffee**, with cassava, sweet potato, beans, cereals. Cattle *Highland Temperate:* **Wheat, barley**, with peas, lentils, broad beans, rape, teff and potatoes. **Cattle**

source: AGRA Africa Agriculture Status Report 2014

some frequently observed features of SSA smallholder farming

production risk: climate and pests

concentration on subsistence crops yet poorer households often in net food deficit over year

low productivity, due to small & declining farm sizes, traditional technologies, difficulties in coping with labour peaks

degrading soils

missing or weak markets for:

- seasonal finance (micro finance ill-adapted to supporting food grains)
- insurance
- land

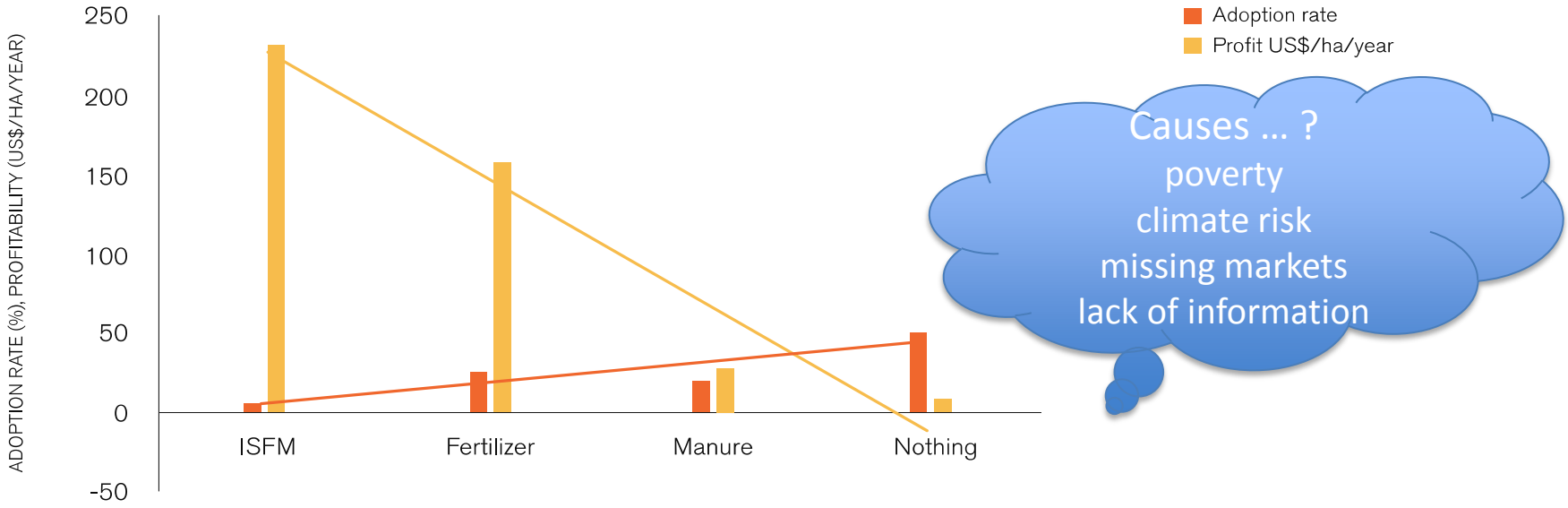
thin markets for inputs

volatile markets for crops

rural labour economy critical for poor & heavily dependent on farms of larger smallholders and commercial farms

leading to bad livelihood outcomes: nutrition & health

a consequence of the factors in the previous slide: inverse relationships between adoption & profitability



Sources: Adoption rate of land management practices: Mali: Direction nationale de l'informatique (DNSI) and the Recensement general de l'agriculture, 2004/2005; Uganda: Uganda national panel survey 2009/10 Agriculture module; Kenya: Kenya Agricultural Sector Household Baseline Survey; Nigeria: Fadama III household survey, 2012; Malawi: National panel survey, agriculture module, 2010/11

Note: Returns are to maize in Nigeria for the following land management practices: i) ISFM (5 t/ha manure, 80 kg N/ha, 100% crop residues, ii) Fertilizer: 80 kg N/ha + 100% crop residues, iii) manure 5 t/ha, 100% crop residues, iv) Nothing – no manure or fertilizer applied, 100% crop residues.

source: adapted from AGRA Africa Agriculture Status Report 2014 p56

agriculture as an "engine of growth"?

Case for agriculture	Case against agriculture
Agriculture is a large enough sector in many countries that its growth can make a real difference to rural living standards. Moreover, agriculture has powerful growth linkage effects on the rest of the economy, including providing a growing demand for nascent industries.	Agriculture has become a relatively small sector in successfully growing countries, and other faster-growing sectors should now be prioritized. In many poor countries where agriculture still dominates, its low productivity and unfavorable market prospects undermine its potential. Moreover, agriculture's growth linkages are weaker in today's liberalized economies and may not be any larger than the linkages associated with employment-intensive manufacturing and services.

Source: Hazell, Poulton, Wiggins & Dorward*: The Future of Small Farms for Poverty Reduction and Growth*, IFPRI Dis Paper 42, 2007

alternatives to agriculture as pathways to development?

Case for agriculture	Case against agriculture
Many poor countries do not have viable alternatives to agriculture. Their manufacturing sectors are small and internationally uncompetitive, and their service sectors are demand constrained.	Trade liberalization and foreign direct investment have opened up new opportunities for developing countries to become early exporters of manufactures and some services and to rely more on low-cost food imports.

Source: Hazell, Poulton, Wiggins & Dorward*: The Future of Small Farms for Poverty Reduction and Growth*, IFPRI Dis Paper 42, 2007

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is it technically feasible for agriculture to play a leading role in development?

Case for agriculture	Case against agriculture
Modern science is opening up new opportunities to increase agricultural productivity, even in countries and regions that have not benefited much from new technologies in the past.	The best technological opportunities have already been exploited, and agricultural research now faces diminishing returns in the better agricultural areas and costly and risky prospects in lagging regions. Modern intensive farming also leads to environmental degradation in many developing-country situations. A shift toward private funding of research means that the problems of poor farmers are less likely to be a priority.

Source: Hazell, Poulton, Wiggins & Dorward*: The Future of Small Farms for Poverty Reduction and Growth*, IFPRI Dis Paper 42, 2007

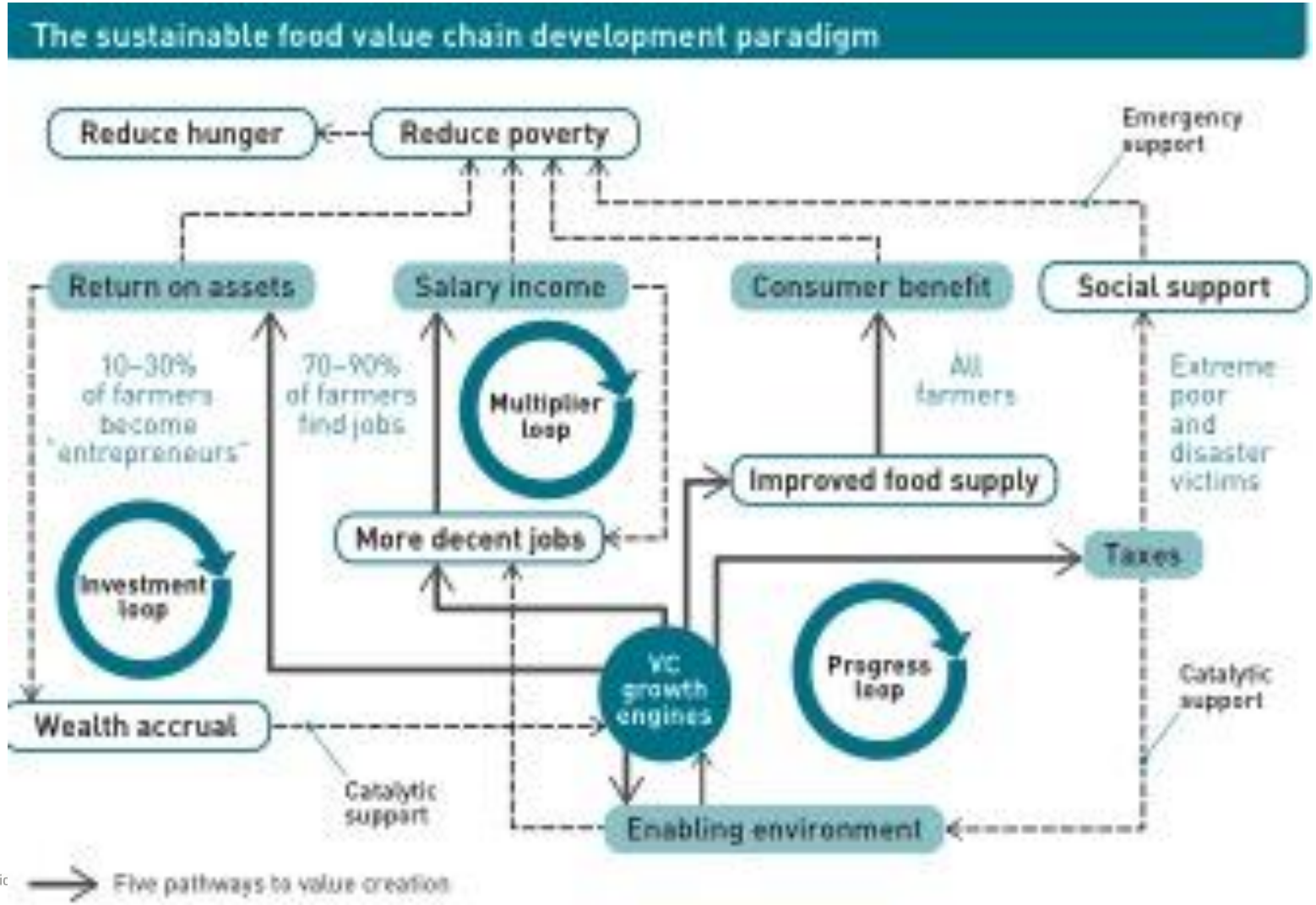
views on potential of agricultural growth to reduce poverty?

Case for agriculture	Case against agriculture
Agricultural growth has proven to be powerfully pro-poor when based on small farms and the products they grow, especially food staples.	Changes in market systems mean that there are limited market opportunities for small farms today, and the prices of the products they grow are at historic lows. The combination of lower prices and smaller farm sizes reduces the direct poverty impact of agricultural intensification. The rural poor have also diversified away from agriculture as their main source of livelihood. Commercial farms and high-value market chains offer better prospects for creating employment and reducing poverty.

Source: Hazell, Poulton, Wiggins & Dorward*: The Future of Small Farms for Poverty Reduction and Growth*, IFPRI Dis Paper 42, 2007

how development of sustainable food value chains can reduce poverty

(source D.Neeven *Developing Sustainable Food Value Chains*, FAO 2014)



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roles for Ministries of Agriculture?

(framework from Cabral & Scoones *Narratives of Agricultural Policy in Africa* future-agricultures.org 2006)

Three policy narratives on roles of government in agriculture

A. **Free market narrative**: agricultural value chains should be left to the private sector. MoAs have continuing role in regulating for food safety, biosafety and environmental responsibility.

A. **Coordinated market narrative**: MoAs can help in early stage development by "kick-starting" markets. There is scope for government coordination to pump-prime investment in value chains (input suppliers, on-farm investments, output storage, processing & marketing). At early stages markets for farm finance are often weak/missing, so providing finance into various stages the value chain can be a powerful intervention)

B. **Embedded-market narrative**: NGOs, CSOs and farmer associations emphasised as alternatives to market and state failures. MoAs should largely support and work through these.

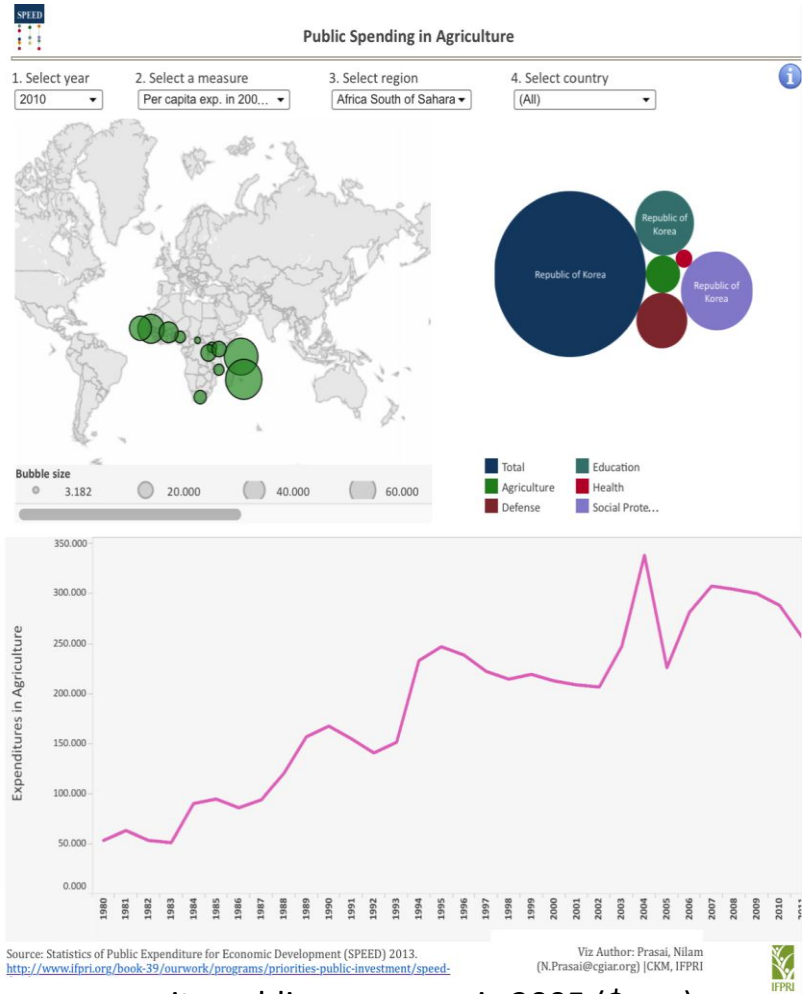
typical challenges of MoAs?

- confusing swings of opinion within national policy elites and donors as to which of the three narratives is dominant
- perceptions across government and donors of weak value-for-money

  (example: sharp differences of view on Malawi fertiliser subsidies)
- declining shares of overall public expenditure – disproportionately very low taking account of links between agriculture and poverty
- recurrent expenditure dominated by salary payments, so little scope for investment
- inadequate technical personnel and equipment
- transfers to parastatal enterprises often a large proportion of budget, but MoA has weak control of parastatals, which are politically connected
- struggles over control of strategic grain reserves and market interventions
- institutional instability and coordination challenges – for example, working with other ministries and also decentralisation/devolution
- challenges of learning to work with NGOs

public expenditure on agriculture and social protection: scattered evidence from SSA

source: IFPRI Statistics for Public Expenditure for Economic Development (SPEED) database



per capita public exp on agric 2005 ($ppp)

per capita public exp on social protection 2005 ($ppp)

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synergies? where agricultural spending may be socially protective

(see Sabates-Wheeler, Devereux & Guenther, Working Paper 6, 2009 www.future-agricultures.org)

- pre-liberalisation subsidies to inputs & agricultural credit helped some poorer smallholders (but largely the less poor)
- grain market interventions could damp seasonal price fluctuations in ways helpful to poor producers and poor consumers (but often very expensive)
- input subsidies have come back justified as:
  - cost-effective to support poor to grow own food
  - encouraging yield-enhancing technology
  - kick-starting markets for inputs and input finance
  - politically attractive: governments delivering to rural population

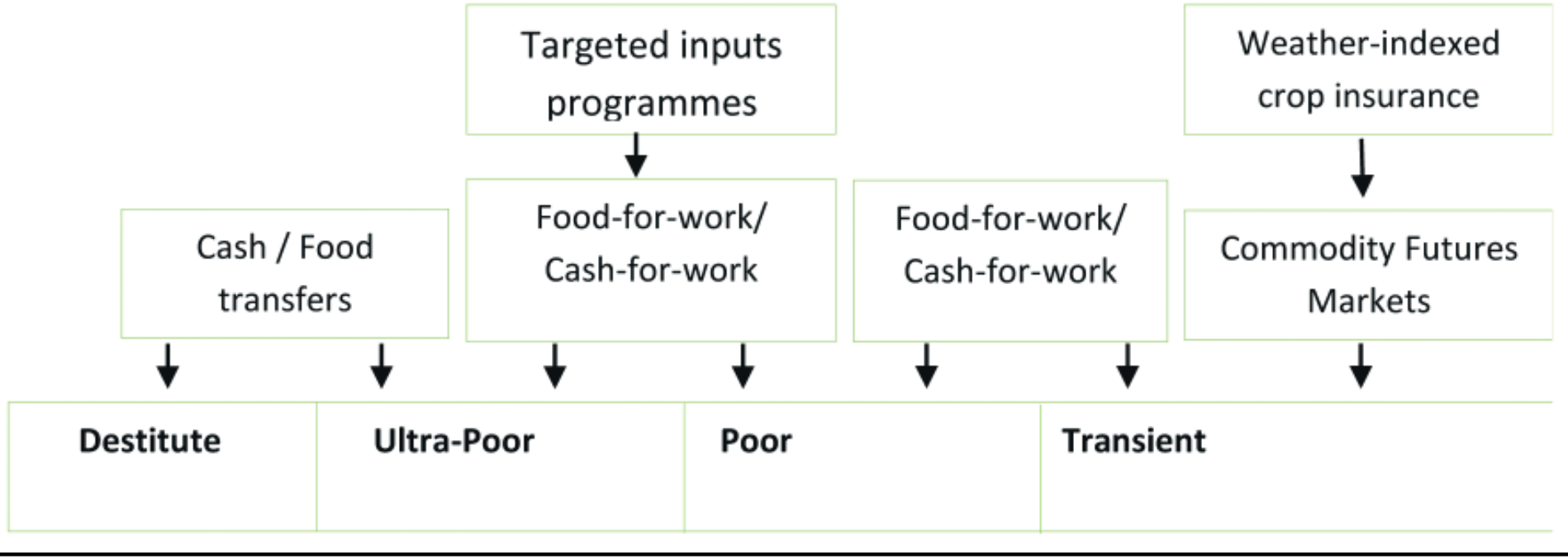
synergies? where social protection measures may promote agriculture?

(see Sabates-Wheeler, Devereux & Guenther, Working Paper 6, 2009 www.future-agricultures.org)

- cash transfers can relax finance constraints enabling expenditure on seeds, fertiliser, small livestock. Meeting immediate food needs allows work on own land during labour peaks
- school feeding: eases immediate pressures on households and longer-term promotes child health and learning
- public works: timing, payment levels and predictability crucial
- soil health: a huge issue, insufficiently addressed?

targeting agri-social protection by levels of poverty & market development

(Slater, R. 2007 cited in Sabates-Wheeler, Devereux & Guenther, Working Paper 6, 2009 www.future-agricultures.org)



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World Bank agricultural programming:

summary of plans to "do more / do less" in 2013-15

Results we will help our clients achieve	
MDG level: Halving poverty and hunger **Sector level:** Improved agricultural growth and environmental services **Project-level examples:** **2 million** hectares of new or improved irrigation **3 million** client days of training **0.5 million** farmers adopting new or improved technologies **1.5 million** farmers reached through IFC investments per year by 2015 **20 percent** median economic rate of return on investment projects (as evaluated by IEG), or at least at levels similar to other sectors	**More** concerted effort is under way to develop and use more and consistent institution-wide core sector indicators, to be monitored through project Implementation Status Reports.
What we will help our clients do	
Raise agricultural productivity Link farmers to markets Facilitate rural non-farm income and on cross-cutting areas: Reduce risk, vulnerability, and gender inequality Enhance environmental services and sustainability **50 percent of program** in poorest regions (AFR and SAR)	**More** capacity development for country driven programs, particularly in Africa; more emphasis to climate-smart agriculture, private sector responses, risk management, nutrition, gender, and governance. **Less** focus on short-term emergency response through GFRP, stand-alone crop or forest projects, and operations outside a country-led strategic framework for coordination of agricultural investments where such frameworks have been put in place in response to aid effectiveness concerns.

source: World Bank Group Agriculture Action Plan: FY2013-2015, p16 -17

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unpacking “climate smart agriculture”

practices which are less land degrading and lower climate-related risks:

- combination of organic and inorganic inputs
- improved crop varieties
- improved water management which requires public investment (with aid support)
- challenge that in context of global warming implications for local climate (e.g. wetter/drier?) uncertain

unpacking "private sector responses": areas for intervention in development of agricultural value chains

Investment climate	Land tenure, regulation for provision of security, warehouse receipt finance, and streamlining customs procedures
Infrastructure	Concessions for storage, irrigation, and transport
Input producers and distributors	Farm equipment, micro irrigation, fertilizer, and agrochemicals
Traders, distributors, and retailers	Backward linkage to smallholders through provision of finance, extension services, and ecosystem services
Financial intermediaries	Expand agribusiness financing with risk sharing, warehouse receipt financing, risk management products, trade finance, and environmental and social standards
Advisory and ecosystem services	Farmer, small- and medium-scale enterprise training, environmental and social standards, resource efficiency, corporate governance, strategic community investments

source: World Bank Group Agriculture Action Plan: FY2013-2015, p6

this author's critique / worries
a somewhat random and non-exhaustive list

Transaction	Small-farm advantage	Large-farm advantage
Unskilled labor supervision, motivation, etc.	√	
Local knowledge	√	
Food purchases and risk (subsistence)	√	
Skilled labor		√
Market knowledge		√
Technical knowledge		√
Inputs purchase		√
Finance and capital		√
Land		√
Output markets		√
Product traceability and quality assurance		√
Risk management		√

Source: Poulton, Dorward, and Kydd 2005.

This lists transactions advantages of small versus large farmers. Will mobile phones (espec 3g) and electronic money transfer (e.g. mpesa) change this?

sceptics of the possibilities smallholder "Green Revolutions" in Africa may be (partly) right:

"agriculture's share of total employment has been falling steadily in almost all countries of the region"

"rural populations continue to grow … so the absolute numbers people working in agriculture seems likely to rise for the next few decades"

"urban employment appears to offer higher wages and standards of living and it remains puzzling why rural-urban migration flows are not larger"

"possible explanations are the strength of informal insurance networks in rural areas" …. and potential loss of land rights"

(Douglas Gollin: Smallholder agriculture in Africa: an overview and implications for policy, IIED, London October 2014)

some question arising from the sceptic perspective

- if rapid productivity growth in smallholder agriculture unlikely, will investments in smallholder development in general prove disappointing?
- with rising numbers people in farming, should agricultural programming for smallholder agriculture be mainly "defensive" – i.e., focused stabilising livelihoods?
- if informal insurance can be superceded (e.g. by social protection measures) is consolidation of holdings into larger units desirable?

“policy lock-ins” may become dysfunctional and hard to exit

Guaranteed output markets (e.g. for grains) can reduce risks in early stages of market development, but can:

- inhibit diversification, even when this is in the interests of poor producers and poor consumers (e.g. in India “fruit and veg” compared to “rice and wheat”)
- social and environmental costs of packages of support (subsidised electicity, water and fertiliser) can be high and politically embedded