



# CHANGING FARM STRUCTURE AND RURAL TRANSFORMATION IN AFRICA

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Plenary Session on  
New Landscapes and Challenges Confronting Africa's Transforming Food Systems  
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# Outline:

1. Summarize key findings from several studies since 2016 regarding
  - trends in the importance of MS farms
  - characteristics of MS farmers
  - productivity differences between SS and MS farms
  - evidence of whether MS farms improve or impede the livelihoods of SS households
2. Conclusions
3. Implications for policy



# Key findings

1. Rapid rise of medium-scale farms
  - Mainly in areas with substantial potential for area expansion (Ghana, Tanzania, Zambia, Nigeria)
  - Much less so in densely populated areas (Kenya, Rwanda, Uganda)

# Changes in farm structure in Ghana (1992-2013)

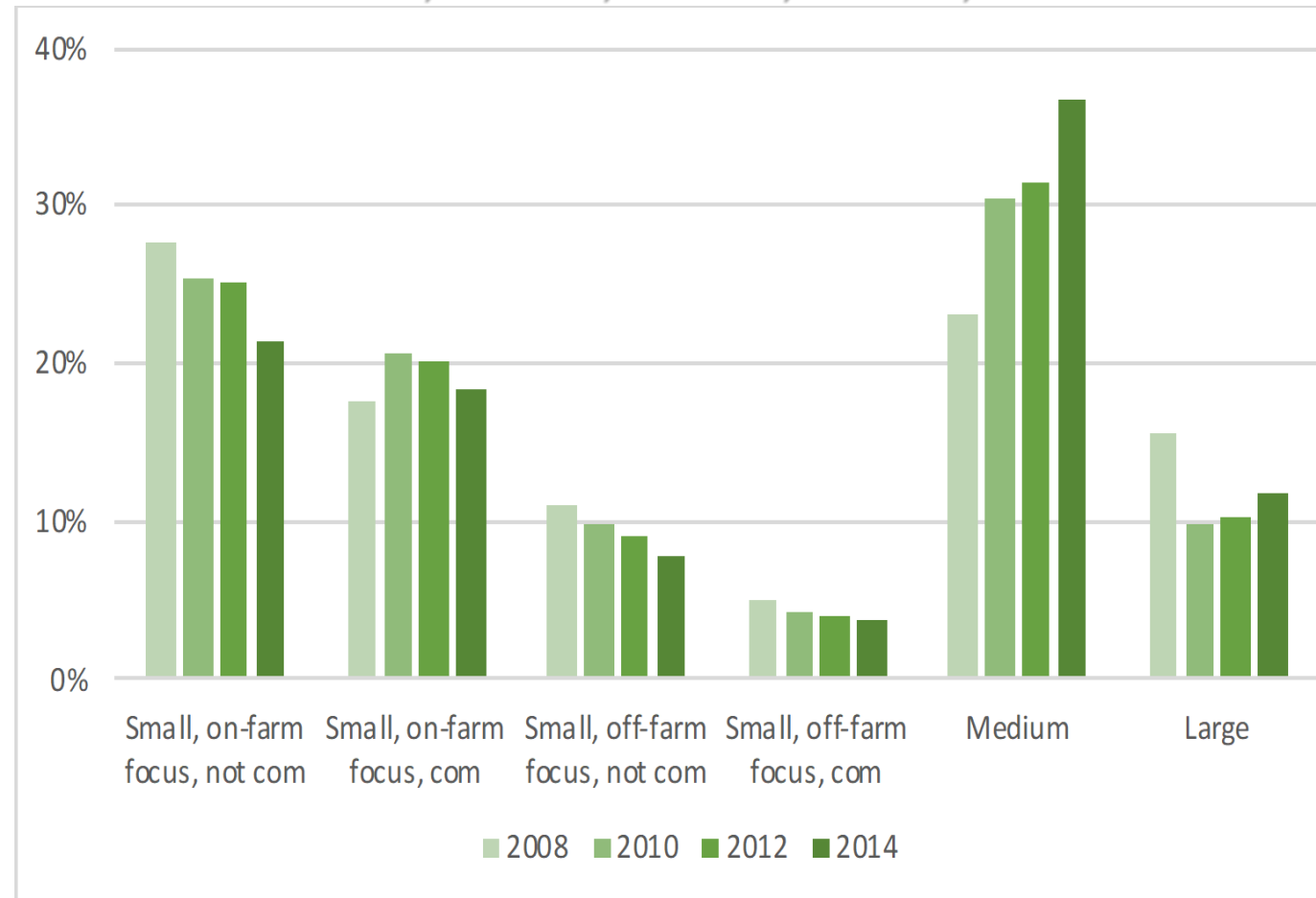
Ghana	Number of farms		% growth in number of farms	% of total cultivated area	
	1992	2013		1992	2013
0-2 ha	1,458,540	1,582,034	8.5	25.1	14.2
2-5 ha	578,890	998,651	72.5	35.6	31.3
5-10 ha	116,800	320,411	174.3	17.2	22.8
10-20 ha	38,690	117,722	204.3	11.0	16.1
20-100 ha	18,980	37,421	97.2	11.1	12.2
>100 ha	--	1,740	-	--	3.5
<b>Total</b>	<b>2,211,900</b>	<b>3,057,978</b>	<b>38.3</b>	<b>100</b>	<b>100</b>

51% of  
total farm-  
land

Source: Ghana Living Standards Surveys, 1992, 2013



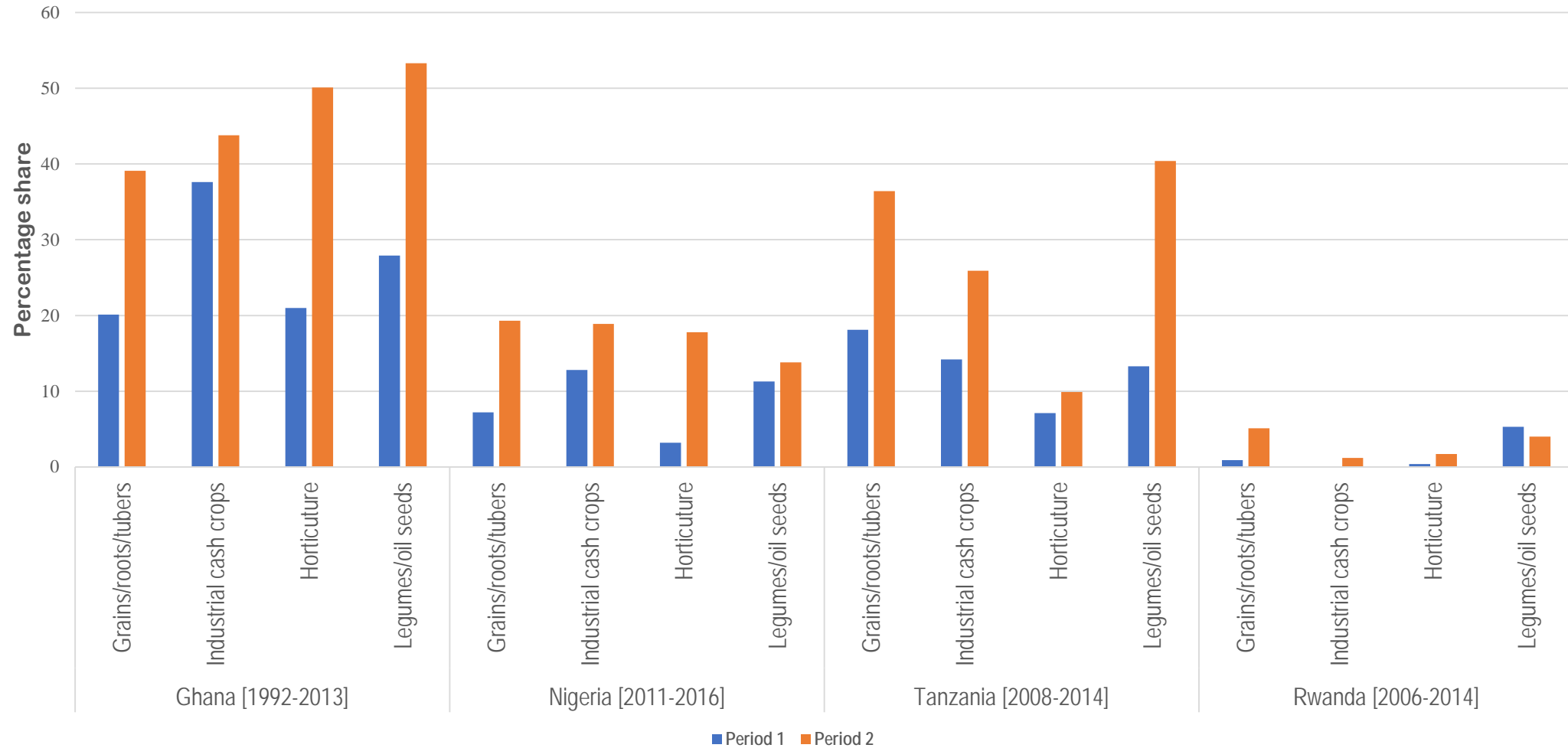
## Distribution of national cultivated area by farm size category, Tanzania NPS, 2008, 2010, 2012, 2014







# Share of total marketed output under MSF is growing





## Contributions to total value of farm output by farm size category, Tanzania, Zambia, and Ghana.

### Farm size category (area cultivated)

<i>Tanzania</i>	0-4.99 ha	5-9.99 ha	10 and over	National (all farms)
2008/09 to 2014/15	53.3%	26.0%	20.7%	100%

Sources: computed from national household survey data; NPS (Tanzania, 2009-2015); RALS (Zambia, 2012-2015); GLSS (Ghana, 2005, 2013).



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<i>Ghana</i>	0-4.99 ha	5-9.99 ha	10 and over	National (all farms)
2005 to 2013	39.7%	51.6%	8.7%	100%

Sources: computed from national household survey data; NPS (Tanzania, 2009-2015); RALS (Zambia, 2012-2015); GLSS (Ghana, 2005, 2013).

# Key findings (continued)

## 2. Diverse pathways into MS farming:

- Small-scale farms successfully growing and commercializing (25 to 50%) – especially high in Nigeria and northern Ghana
- Relatively wealthy rural people using non-farm income to invest in farmland (20% to 40%)
- Urban people investing in farmland (20 to 35%) – esp. high in E/S Africa
- The relative shares of these three groups varies across countries



## Key findings (continued)

3. Rural transformation involves the transfer of land – allowing entrepreneurial people with access to capital to develop the land
  - Customary land is being allocated to investors
  - Land sales markets increasingly active / accepted
  - Governments are passing new land laws to allow these transfers to happen



## Key findings (continued)

### 4. MS farms in Africa appear to be a source of rural dynamism – but evidence is thin and not all consistent

- MS farms attracts LS traders into the area, improving market access conditions for smallholders (Burke et al., 2019)
- MS farms attract mechanization rental markets for SS farms (van der Westhuizen et al. 2019)
- MS farms attracts agro-input and service providers (Wineman et al., 2019)
- MS farms in Tanzania promotes growth in rural NF employment and p.c. incomes (Chamberlin and Jayne)



## Key findings (continued)

6. Sources of productivity advantage for farms cultivating > 10 ha, which contributes to higher net output values per hectare (Muyanga and Jayne, 2019)
- Mechanization → reducing labor costs, which are rising in much of Africa
  - Greater intensity of cash inputs (fertilizers, improved seed, herbicides, etc)

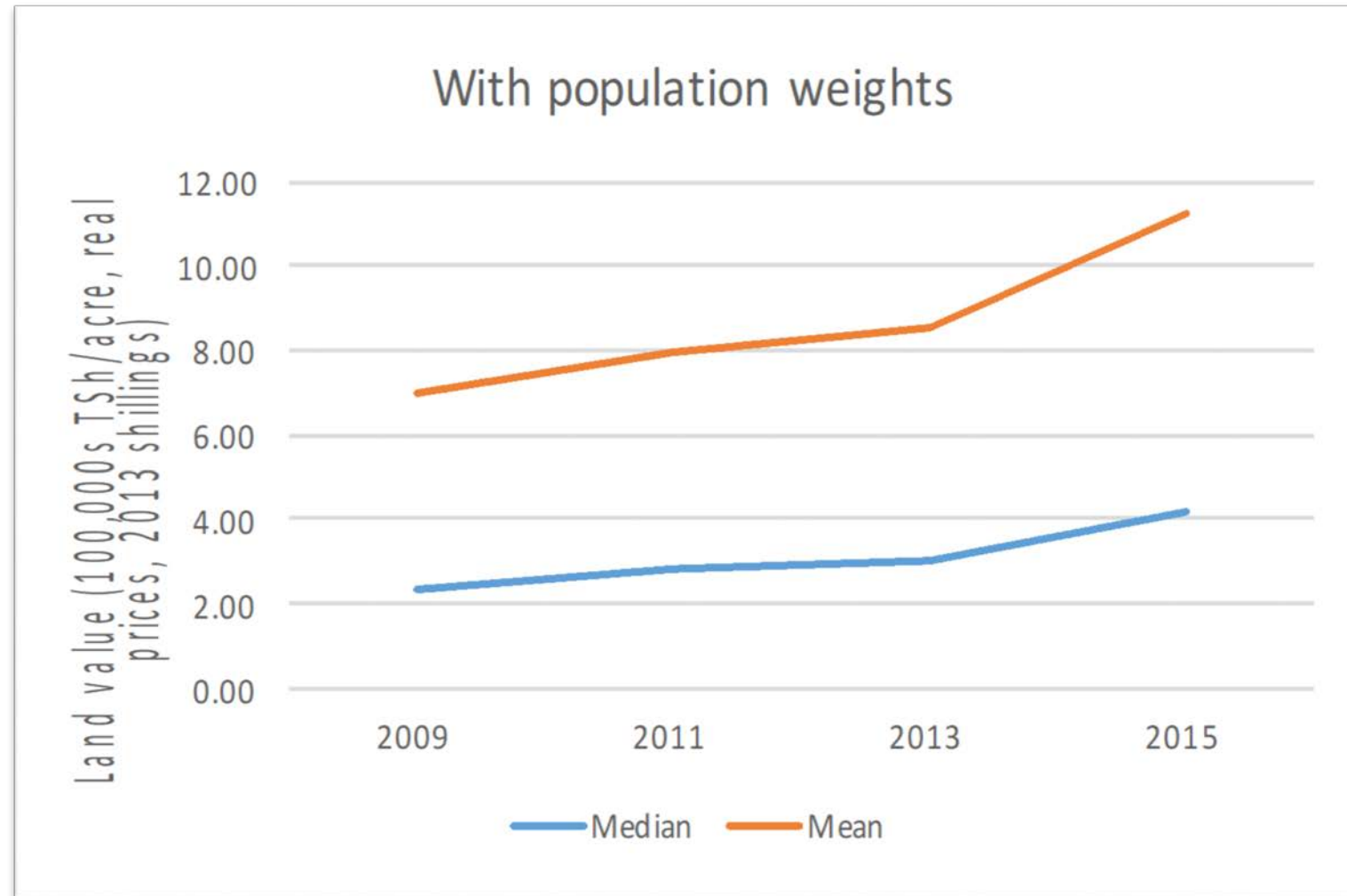
# OLS results for net value maize production per hectare

	Net value of <i>maize production</i> /ha planted '000KSh		
	Model I(a)	Model I(b)	Model I(c)
Ha planted (ha)	1.13***	1.05***	-0.64
Exogenous controls		X	X
Fertilizer (kg/ha planted)			3.16
Family labor (adult equiv. days/ha planted)			-2.51***
Own tractor * ha $\geq$ 20			48.54**





## Mean land prices in Tanzania: +53.9% in real terms in 6 years



# Implications for agricultural policy

1. The rise of MS farms does not invalidate the viability of a smallholder-led agricultural strategy
2. But most governments support MS/commercialized farms (land bills, ISPs channeled to them, price supports, etc).
3. Maintain focus on supporting productivity of smallholder farming → which will facilitate equitable transformation process
4. Except in densely populated areas, MS farms appear to be a source of productivity growth for smallholder farming
5. Sustainable intensification strategies will be highly location-specific, according to economic dynamism and population density

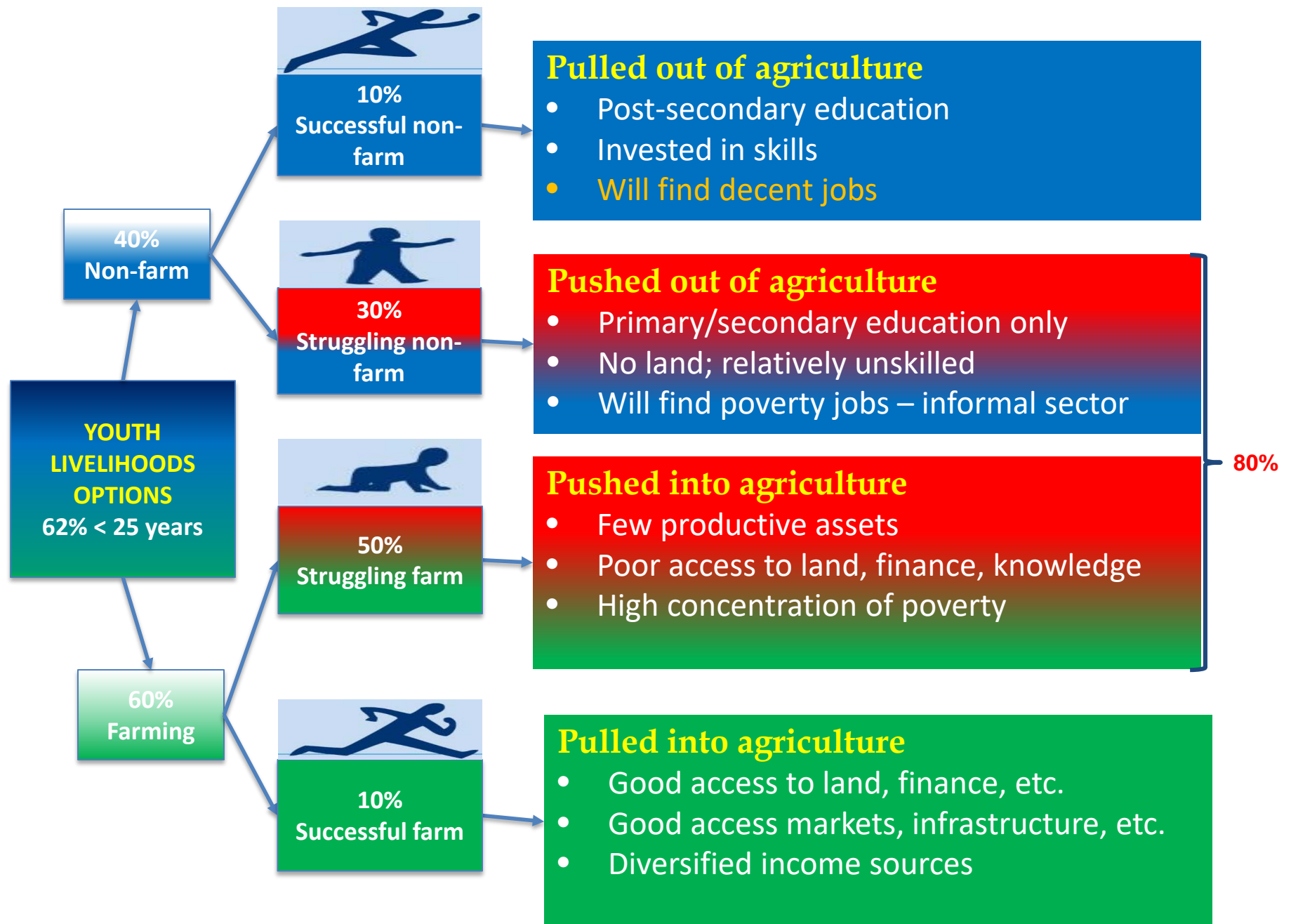


# Implications for land policies

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1. In low population-density areas, allocations to larger farms may support rural transformation w/o displacement of local people
2. In densely populated areas, protect tenure security of “local” rural people
3. Support land markets to allow “local” rural people to be compensated for selling their land / not just losing it
4. Come to grips with the definition of “local”

Thank You



# Structural transformation pathway

