

Africa's Agrifood System and Youth Employment: Trends and Drivers of Change

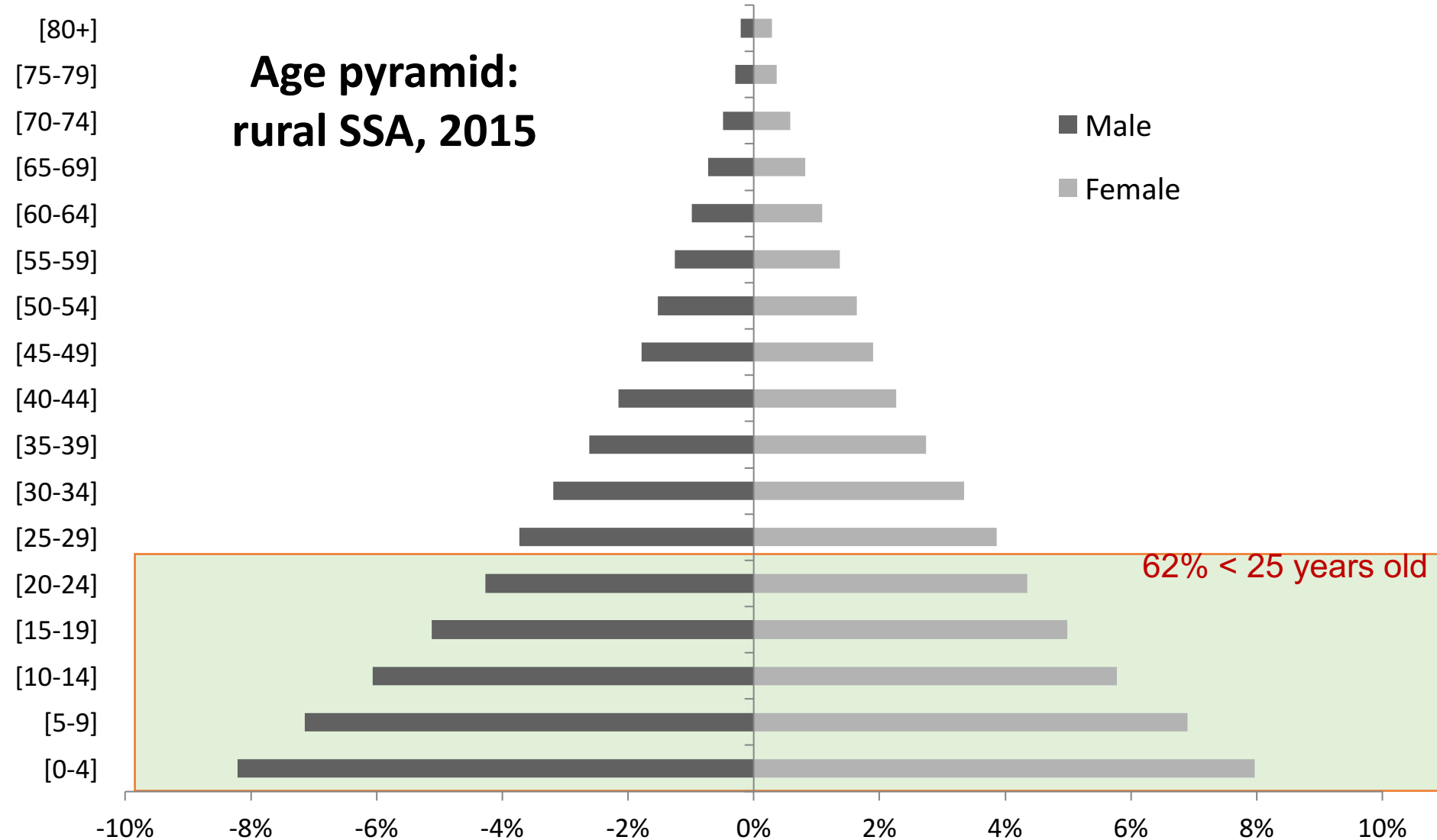


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Youth bulge: Looming employment challenge

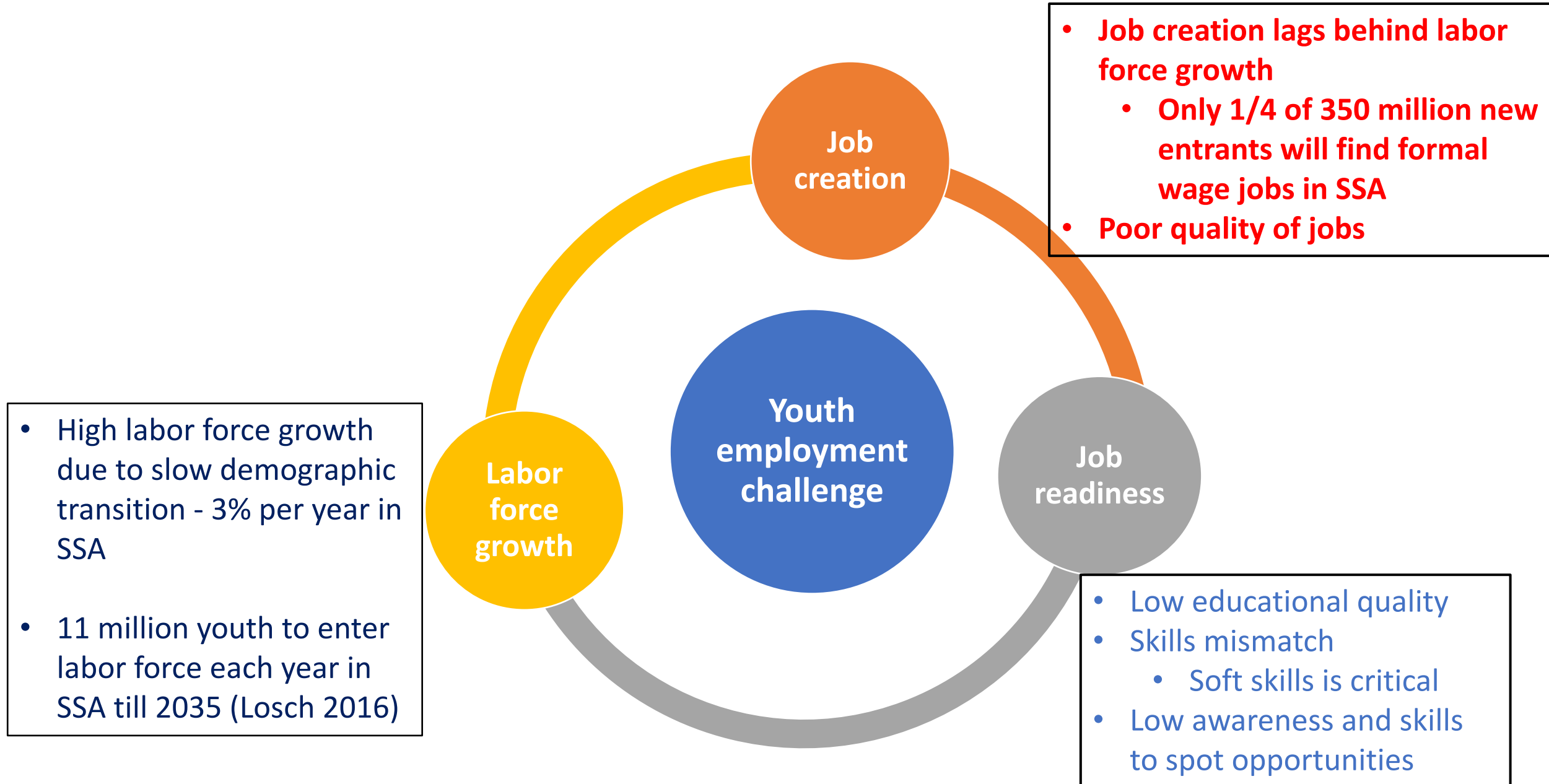


Key Questions

- A. What is the nature of the youth employment challenge?
- B. How is Africa's employment structure evolving?
- C. What is the role of agriculture in the transformation process?
- D. What megatrends would influence the employment generation potential of Agricultural Food System (AFS)?

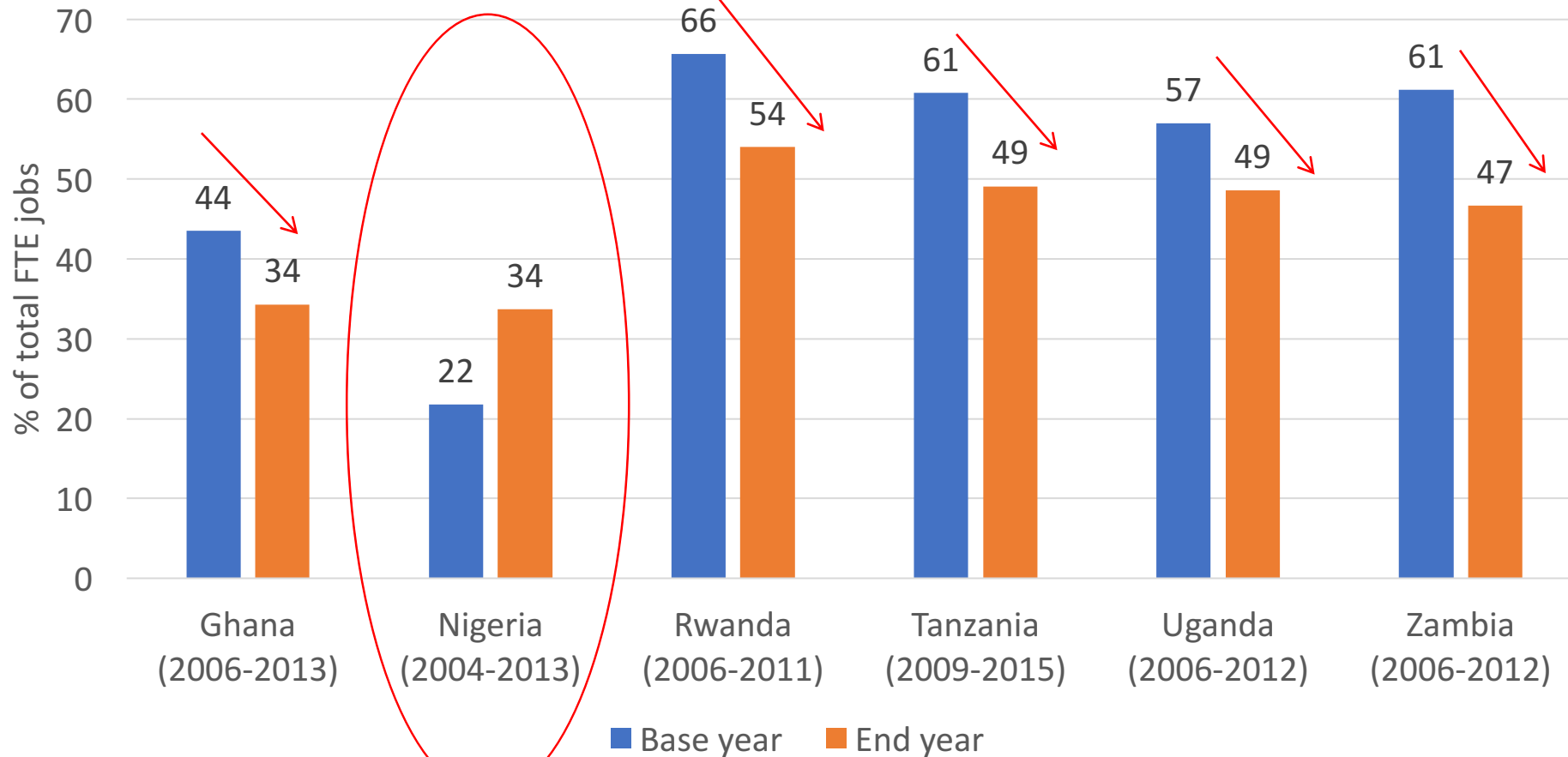


A. Nature of Youth Employment Challenge in Africa



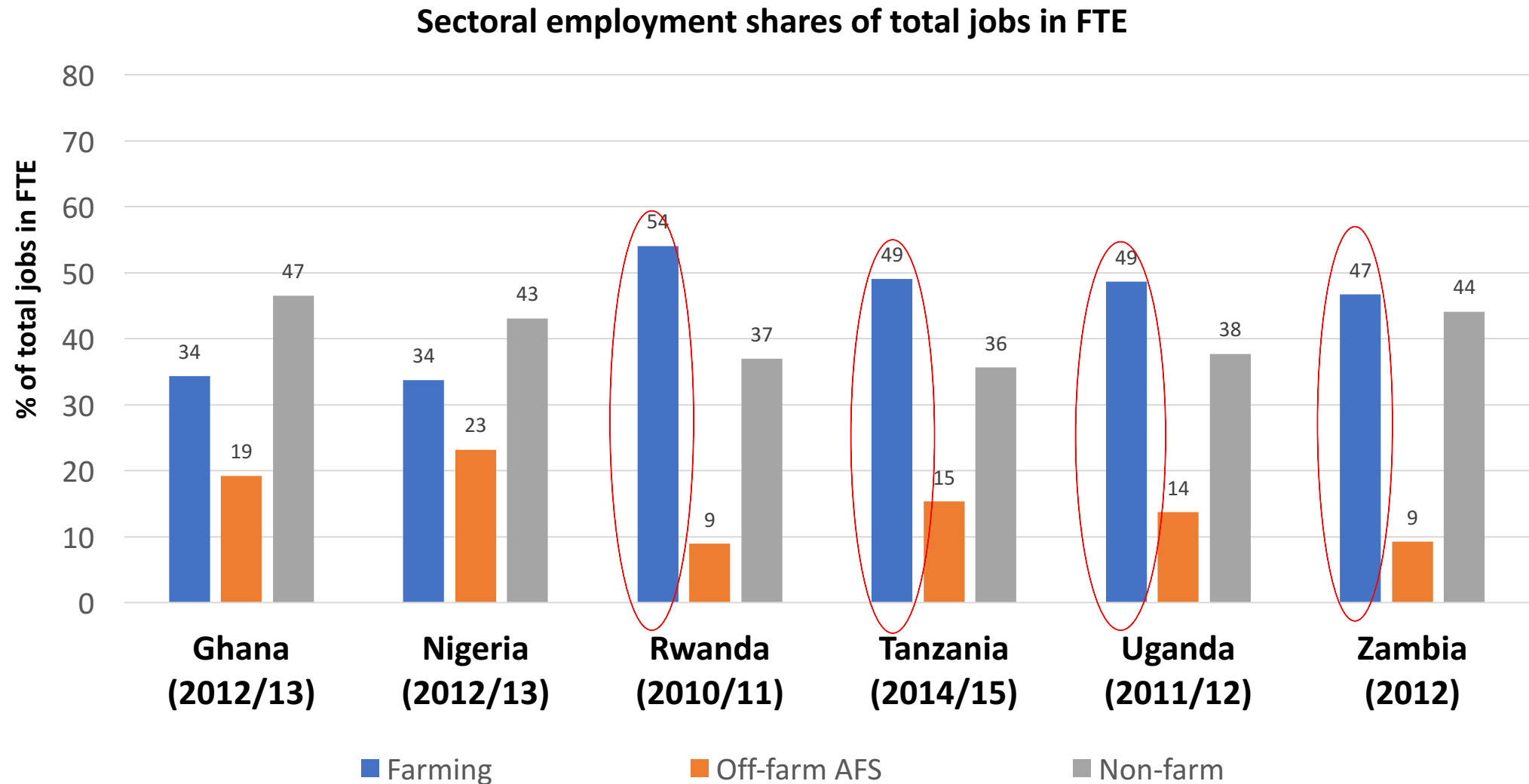
B. How is Africa's employment structure evolving?

Share of total FTE jobs in farming over time



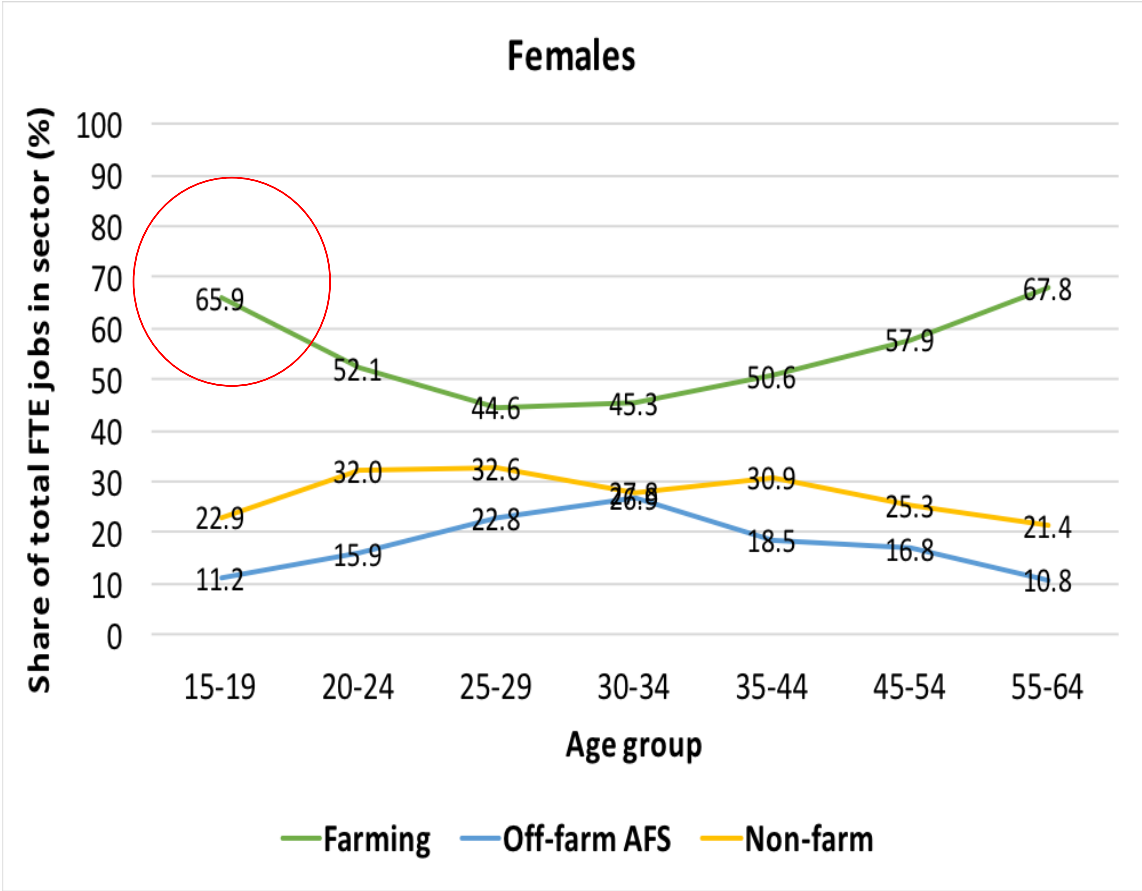
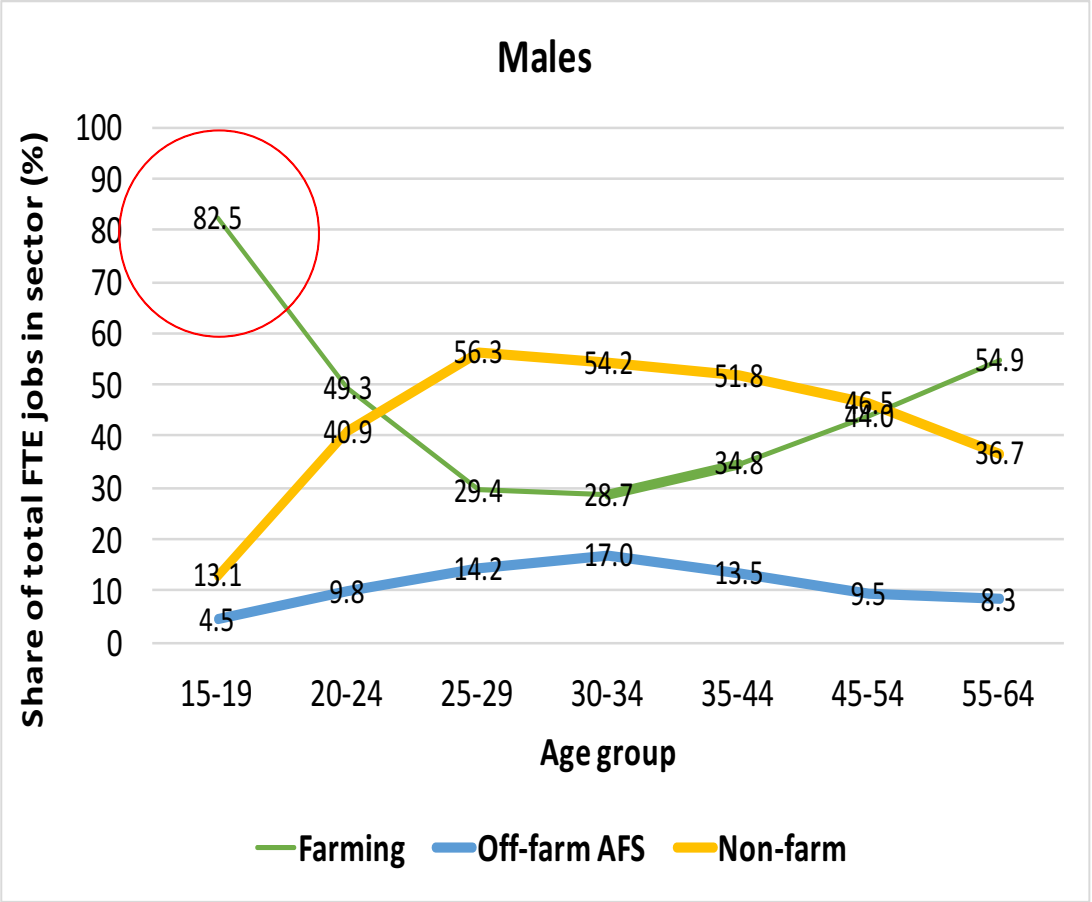
Rapid declines in the share of the labor force in farming (full time equivalents (FTE))

Farming is the single largest employer in most countries despite declining job shares



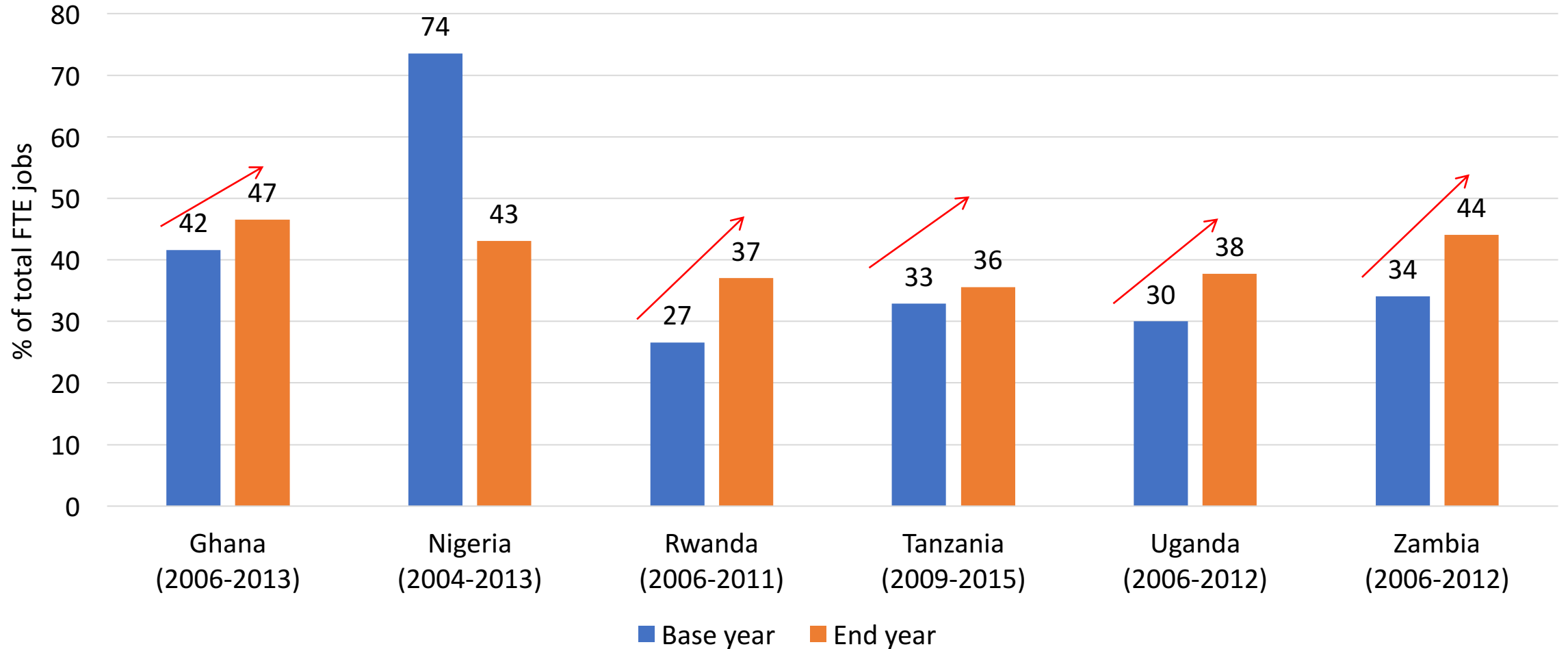
Most of economically active youth are engaged in farming

Proportion of total FTE in farming, off-farm agrifood system and non-farm, Tanzania 2015

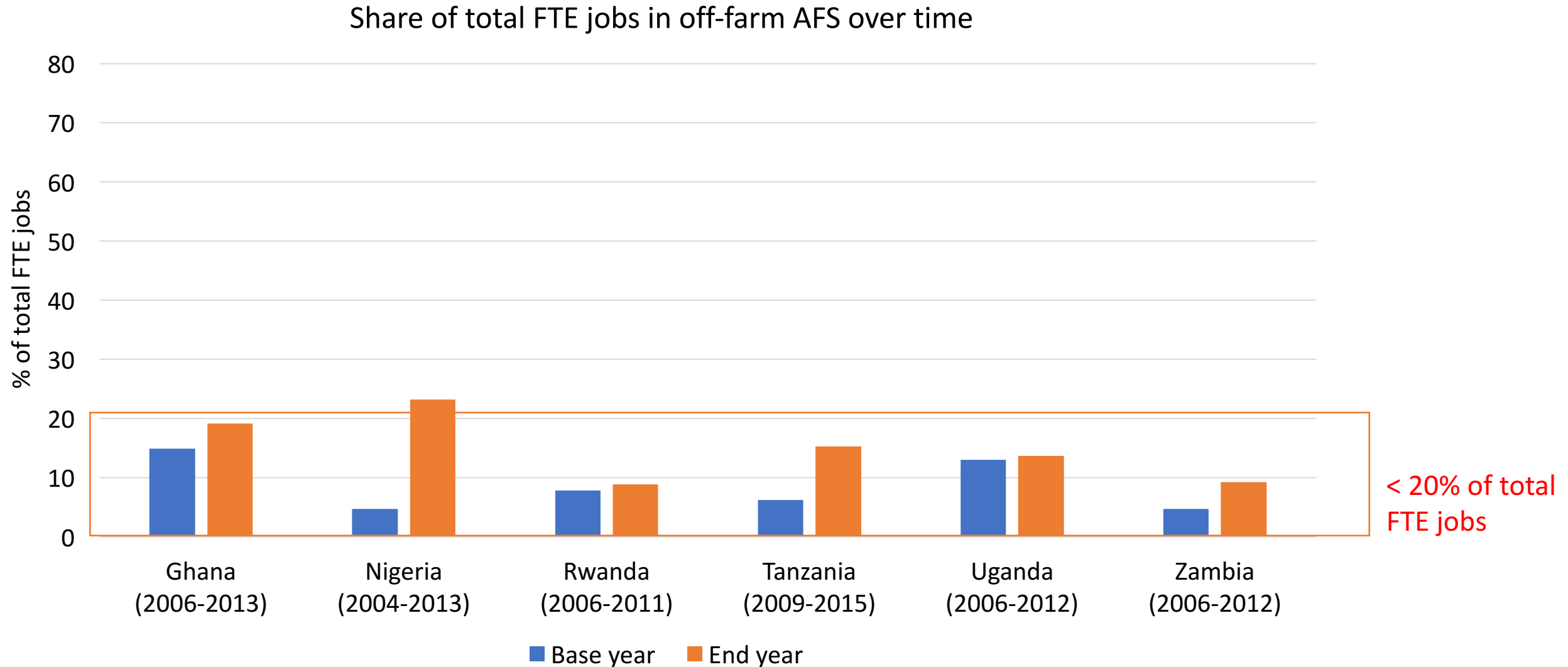


Non-farm outside AFS: Rapid % job growth and largest source of jobs outside farming

Share of FTE jobs in non-farm sector over time



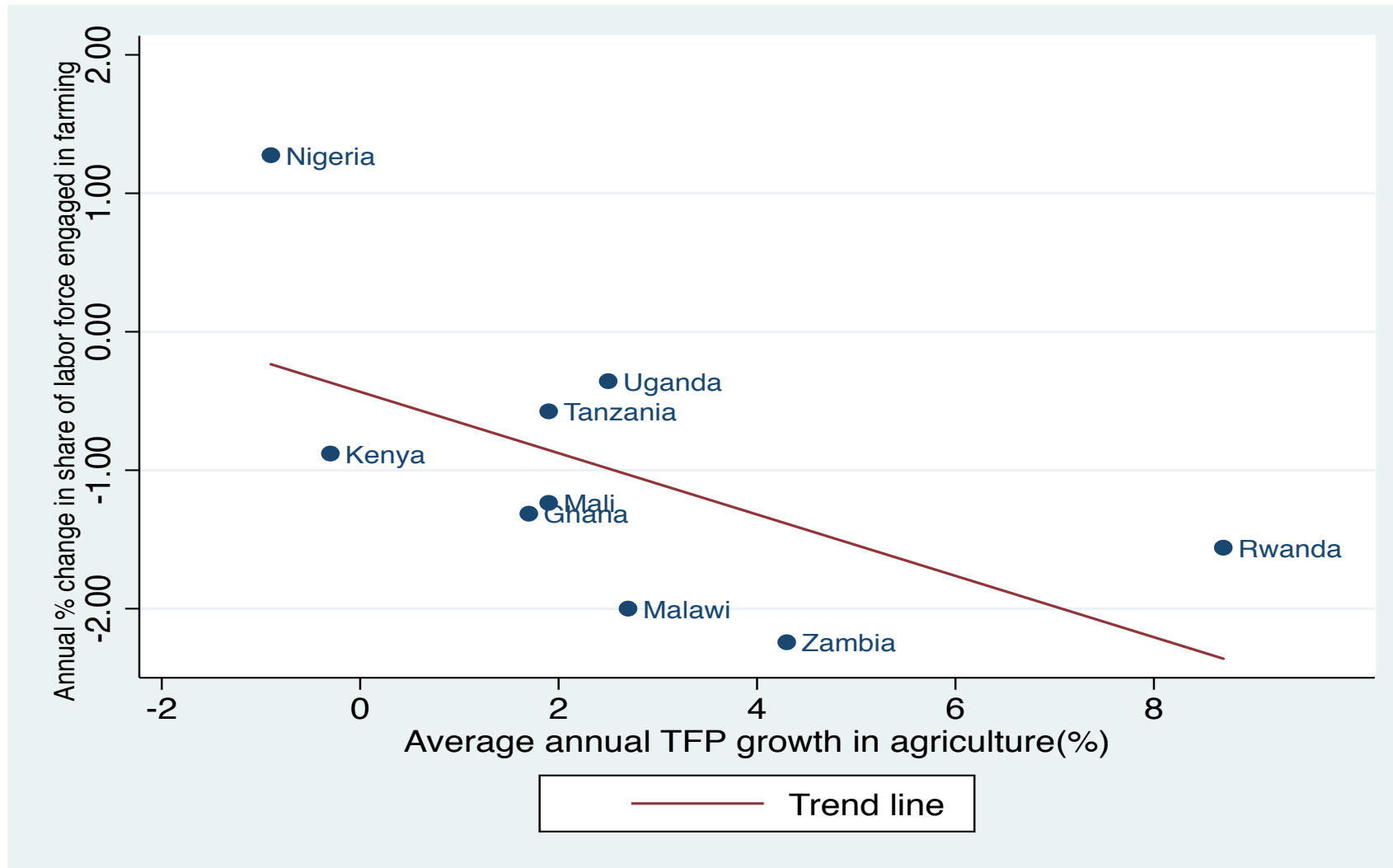
Off-farm AFS: Rapid rate of growth but from low base



Majority of the off-farm AFS jobs in commerce and distribution, much less in agro-processing

Country	Survey years	Total number of jobs in millions	Farming	Off-farm within AFS		Non-farm outside AF
			% of FTE jobs	Agro-processing	Downstream commerce and distribution	% of FTE jobs
				% of FTE jobs	% of FTE jobs	
Ghana	2005/06	10.1	43.5	6.3	8.6	41.6
	2012/13	13.9	34.3	3.7	15.5	46.5
Nigeria	2003/04	34.6	21.8	1.4	3.3	73.5
	2012/13	69.7	33.7	4.6	18.6	43.1
Rwanda	2005/06	6.1	65.7	0.4	7.4	26.6
	2010/11	9.1	54.0	1.2	7.7	37.0
Tanzania	2008/09	18.2	60.8	1.7	4.5	32.9
	2014/15	21.4	49.1	1.2	14.1	35.6
Uganda	2005/06	10.8	57.0	2.8	10.2	30.0
	2011/12	15.9	48.1	3.3	12.3	36.3
Zambia	2005	4.7	61.2	1.6	3.1	34.1
	2012	5.3	46.7	2.1	7.1	44.1

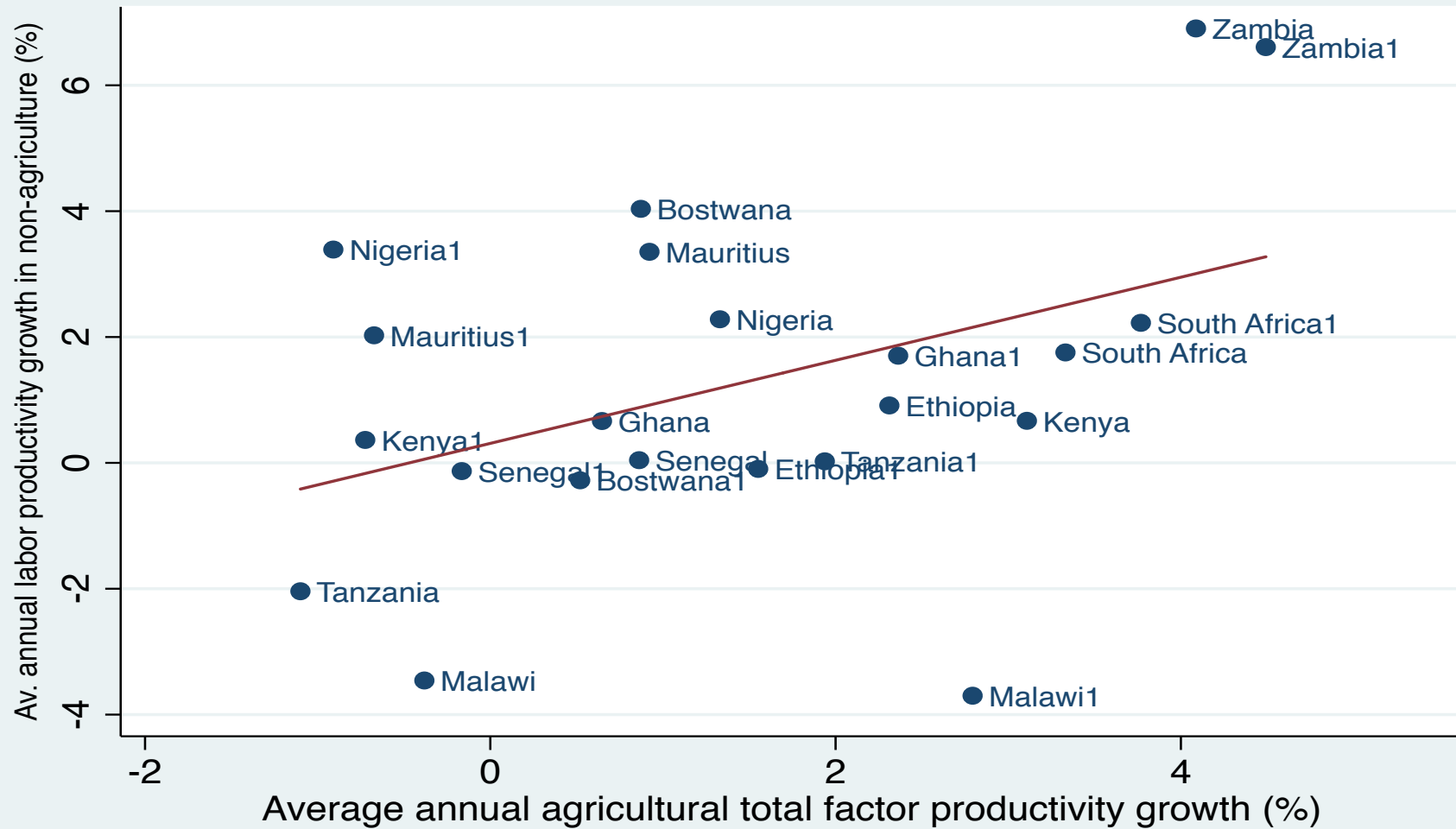
C. What is the role of agriculture in the transformation process?



Farming's employment share declining most rapidly among countries enjoying highest agricultural productivity growth

Source: Yeboah and Jayne, (2017)

C. What is the role of agriculture in the transformation process?



Non-farm labor productivity growth highest among countries with high agricultural productivity growth

	Fixed effect model	
	(i)	(ii)
Log lag labor productivity in agriculture	-0.133*	-0.284**
	(-2.15)	(-2.77)
Log lag labor productivity in non-agriculture	-0.0121	-0.176
	(-0.23)	(-1.89)
Other covariates		
Index of governance (lagged)	-0.0205	0.0698
	(-0.45)	(1.06)
Time trend	-0.00961***	-0.00458
	(-4.62)	(-0.96)
Population density	-0.00181	-0.00475
	(-1.51)	(-1.89)
Road density	-	-0.000260
	-	(-0.21)
Constant	-0.519**	0.0690
	(-3.07)	(0.20)
	-	
Number of observations	161	78
Number of Countries	11	10
Adjusted/Overall R-square	0.71	0.87
Time period	1995-2011	1995-2011

Lagged labor productivity in agriculture is a key driver of observed decline in agriculture employment share

Source: Yeboah and Jayne, 2017

(see: http://foodsecuritypolicy.msu.edu/uploads/files/CrossCountry/Yeboah_and_Jayne_2017-_AGA_article.pdf)

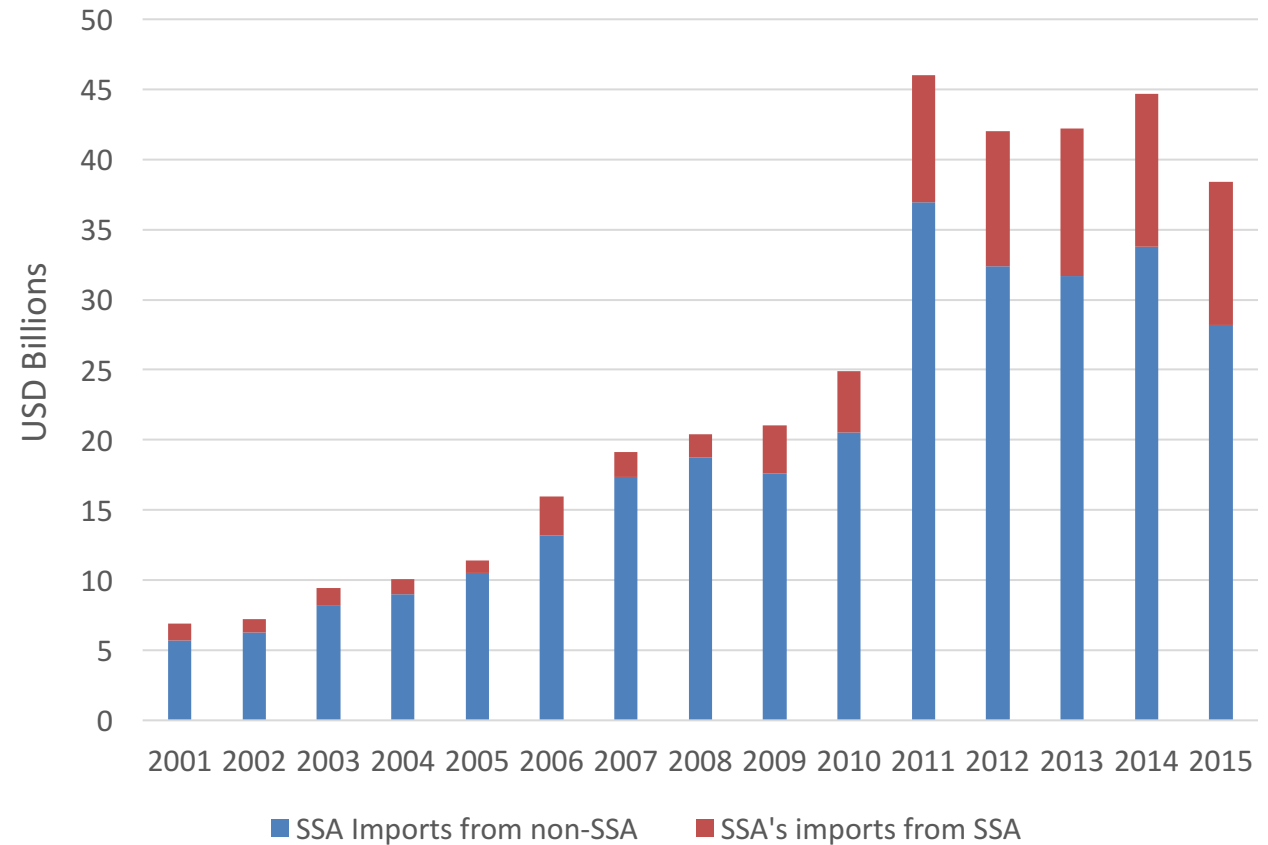
Upshot

- Because of its extensive forward and backward linkages with the rest of the economy, on farm productivity growth influences the following:
 - The rate of job creation in agricultural value chains
 - Employment in value chains is related to supply of competitively priced raw farm commodities
 - Growth in large scale agro-processing in Africa is hindered by a lack of supply of raw materials of consistent quality and quantity (Hollinger and Staatz, 2016).
 - The rate of job creation in non-farm sectors
 - Multiplier effects of agriculture
- Inclusive agricultural growth is needed to generate income and employment multipliers effects in overall economy

D. What megatrends would influence the employment generation potential of AFS?

1. Growing food demand vs rising reliance on food imports

- Food demand to expand by 55% in SSA and value of Africa's agricultural and food system to reach 1 trillion by 2030 (World Bank, 2015)
- Rising reliance on imported foods
 - SSA food import rose from US\$6 billion to US\$ 45 billion between 2001 and 2014
- Opportunity to accelerate economic growth and job creation in import-substituting local production and marketing.



Source: ReNAPRI (2017)

1. Growing food demand vs rising reliance on food imports

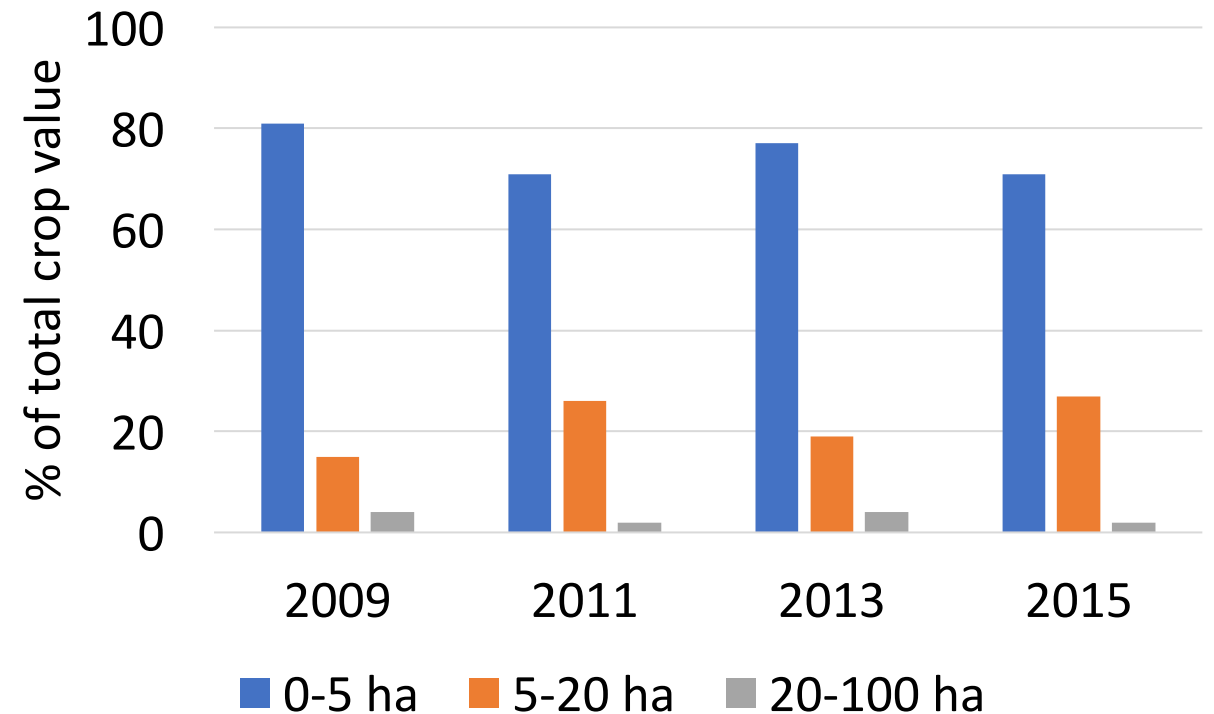
- Challenge: How to integrate small-scale farmers and low-skilled rural youth into local and global supply chains?
 - Skills and capacity constraints
 - Physical infrastructure challenges (e.g. energy, road, cold storage)
 - Access to productive services (e.g. Finance, insurance, market)
- Reliance on food imports may impede job growth in upstream stages of AFS:
 - farming
 - agro-input supply
 - services for farmers
 - crop assembling and wholesale trading
 - agro-processing

2. Land Concentration/Rise of Medium Scale Farms

- Rapid shifts in farmland distribution and ownership patterns towards medium and large scale farms
- Medium and large scale farms account for an increasing share of total agricultural land and value of marketed crop output.
- Medium scale farms tend to be more capitalized and less labor intensive in their production methods

To the extent that overall agricultural production patterns continue to shift towards medium and large scale production, the projected number of jobs that will be generated may be smaller

Share of total crop value by farm size group, Tanzania



3. Land Scarcity and Soil Degradation

- Shrinking average farm size due to rising population density and land fragmentation
 - Farm size has declined by 30–40 per cent in over 40 SSA countries since 1970 (Hardey and Jayne, 2014)
- Land pressure → continuous cultivation of land → soil degradation
- 65% of arable land in SSA are already degraded affecting over 180 million smallholders with an estimated 68 million in lost revenue (Montpellier panel 2014)
- Persistent pattern of degradation could depress agricultural productivity growth and the resultant employment effect

4. Climate Change

- SSA projected to suffer greater effects from climate change
 - Variability in the quantity and timing of rainfall
 - Higher temperature regimes
 - Increased incidences of pest, weed and diseases of crops and livestock are also expected. (IPCC, 2007)
- Impact on agriculture uncertain and likely to vary spatially
 - Greater variability in agricultural production
 - Possible decline in crop productivity (Schlenker and Lobell, 2010)
- Potential employment effects will depend on how well farmers adapt to conditions that threaten productivity growth.

Conclusions

1. Africa's economies are transforming with significant labor exit from farming since 2000s
 - Agricultural productivity growth has been a key driver. SSA experienced 4.68 real % growth rate from 2000 to 2015 -- triple the rate of previous decades
2. Farming's influence on livelihoods and economic growth remains critical
 - Single largest employer of the labor force and young people
 - Performance of farming will influence the rate of off-farm job growth
3. Rapid % growth in off-farm AFS but from low base and employment is concentrated in commerce and distribution and less in agro-processing
 - On-farm productivity growth is critical for stimulating off-farm jobs in AFS

Conclusions (continued)

4. The rate of job creation in Africa's AFS will be influenced by:

- Access to land
- Land degradation
- Level of reliance on food imports
- Climate change

Key areas for policy action

1. Promote broad-based agricultural productivity growth

- By making farming more competitive, good jobs in farming will grow and good off-farm jobs will grow even faster
- Multiplier effects: performance of farming will influence the pace of growth in non-farm and AFS jobs

Key areas for policy action (continued)

2. Strategic policies include

- Public investments that improve on-farm productivity:
 - Crop R&D
 - Extension systems
 - Infrastructure
 - Local policy analysis capacity
- Reduce policy barriers to private investment in value chains
- Strategies that improve skills and competitiveness of agri-food systems
 - Invest in people through quality education, vocational/training schools, mentoring programs, etc.
 - Review education curriculum to keep abreast of current labor market realities and new technologies
 - Dubious about picking particular value chains – rather focus on improving peoples’ ability to identify specific value chain opportunities themselves.

Key areas for policy action (continued)

3. Create conditions for responsive youth employment policymaking
 - Invest in actionable research on labor market conditions and impact evaluation
 - Strengthen youth voice in policy dialogue and program design
 - Educate public to reform social norms that limit youth livelihood development

Thank you