

Pathways For Employment in Sub Saharan Africa: Trends and Drivers of Change



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Key Questions

1. What megatrends would influence the employment generation potential of AFS?
2. How is Africa's employment structure evolving?
3. What is the role of agricultural productivity growth in the transformation process?
4. Policy options for promoting youth employment
 - *quantity*
 - *quality* (jobs above poverty line)

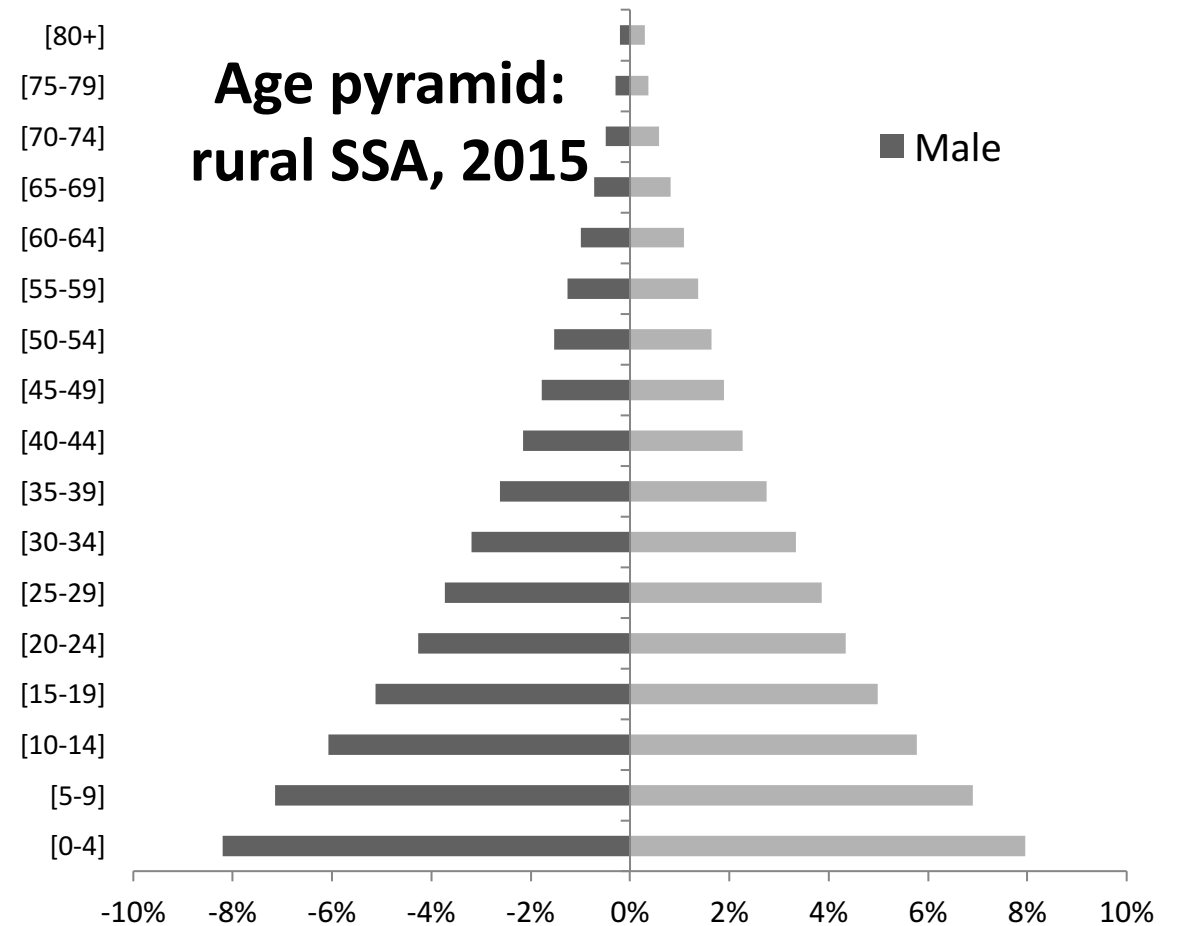


A woman with a headwrap and red necklace is working in a field of green plants. The background shows trees and a cloudy sky. A semi-transparent dark box with white text is overlaid on the image.

1. Megatrends influencing employment potential of agri-food systems

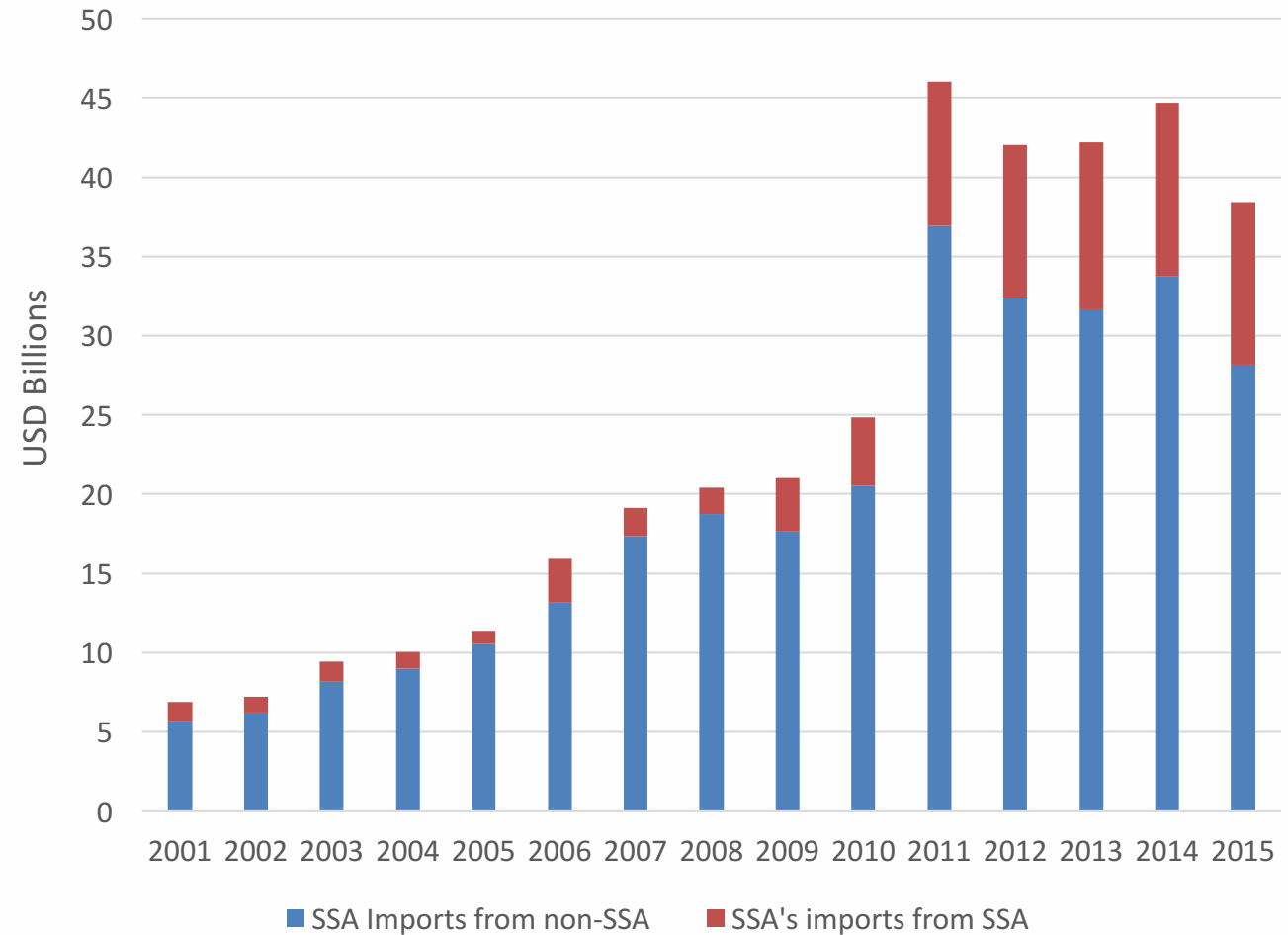
Megatrend #1. Rapid Population Growth and Youth bulge

- Population growth is fastest and youngest in Africa, where threats to food insecurity is greatest
 - 59% of global population growth between 2017 and 2050 will occur in Africa (UN 2017)
- Africa will exert a growing impact on world economy as the region's population increases.
- Young Africans will determine the region's impact on the world
 - Over 60% of population is below age 25



Megatrend #2: Rising Food Demand and Reliance on Food Imports

- Rising domestic demand for food and agricultural products
 - Food demand to expand by 55% in SSA 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
- Major opportunity to accelerate economic growth and job creation in import-substituting local production and marketing



Source: ReNAPRI (2017)

Megatrend #2: Rising Food Demand and 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

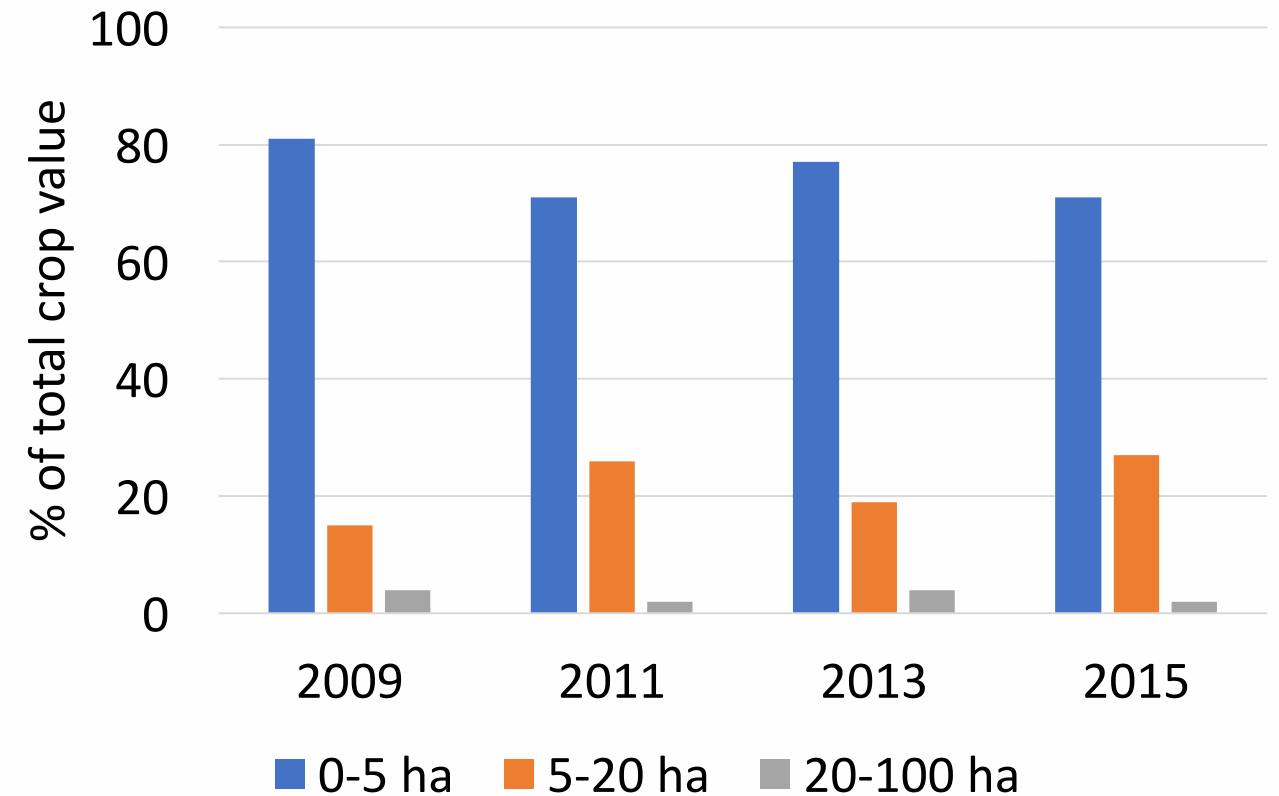
Megatrend #3: Rising Land Scarcity

- Many African countries are either land constrained or approaching the full extent of their land
 - 90% of Africa's surplus land is concentrated in 9 countries: DRC, Angola, Congo, Zambia, Cameroon, Mozambique, CAR, Gabon, Sudan (Headey and Jayne, 2014)
 - Average farm size per capita has declined by 30–40 per cent in over 40 SSA countries since 1970 (Headey and Jayne, 2014)
- Rural youth are waiting longer to inherit land because of significantly longer adult life spans
- Access to land is a key barrier to youth engagement in agriculture (Kosec et al., 2018, Yeboah et al. *forthcoming*)

Megatrend #4: 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
- Medium-scale farms are a potential source of job growth through the multiplier effects of ag productivity growth

Share of total crop value by farm size group, Tanzania



Megatrend #5. Widespread Soil Degradation

- Land pressure → continuous cultivation of land → soil degradation
- Extent of degradation
 - 65% of arable land in SSA
 - over 180 million smallholders affected
 - US\$68 million in lost revenue (Montpellier panel 2014)
- Persistent pattern of degradation could depress agricultural productivity growth and the resultant employment effect




Megatrend #6. 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.

Upshot

- Megatrends are not inevitable!
 - Policy can influence future trajectory of the trends
- Youth employment strategies need to anticipate and proactively bend trends towards socially desirable outcomes

A woman with dark skin, wearing a white t-shirt and a red necklace, is working in a field of green plants. She is looking down at the plants with a slight smile. The background shows a line of trees and a clear sky. The text "2. How is Africa's employment structure evolving?" is overlaid on the left side of the image.

2. How is Africa's employment structure evolving?

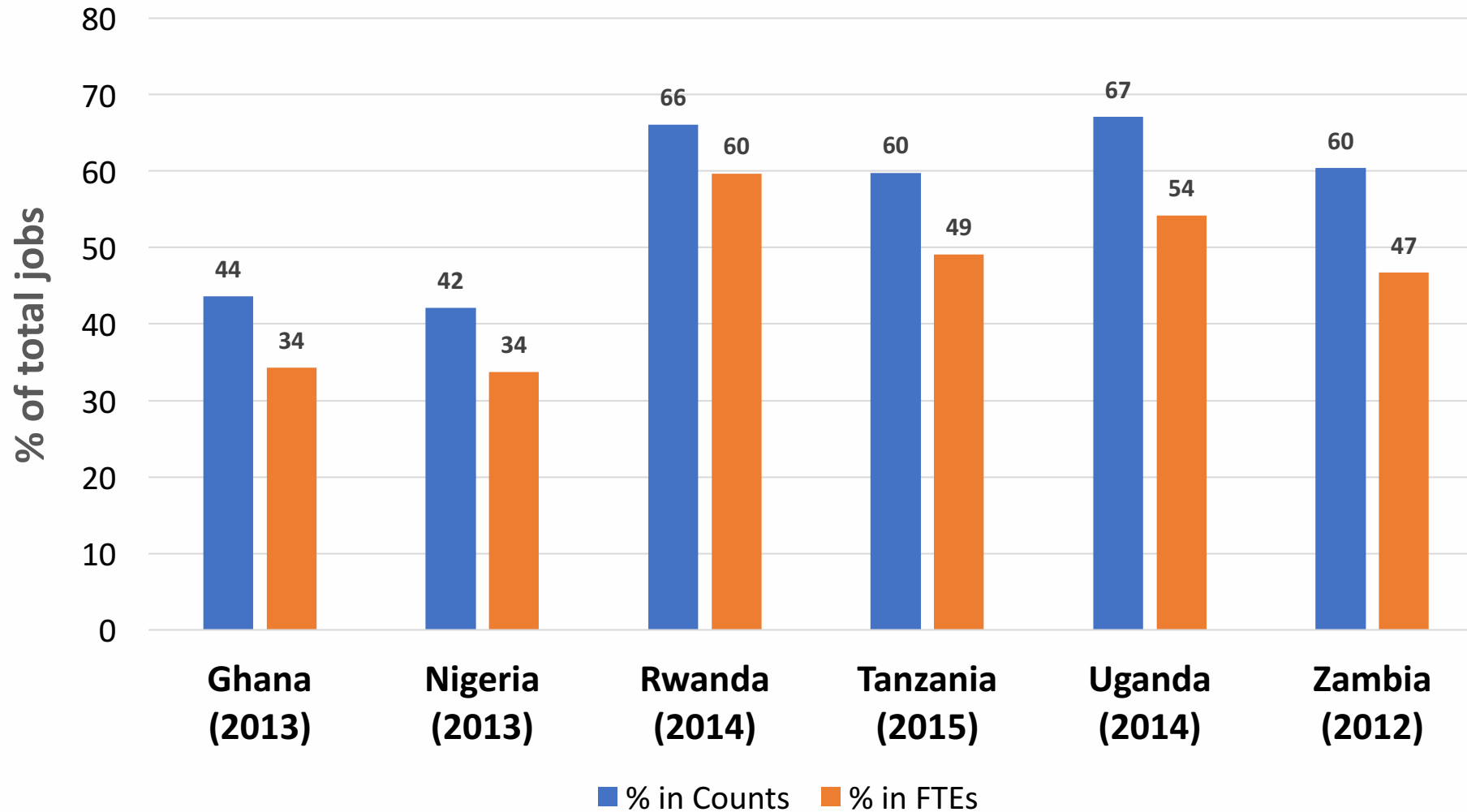
Data and Analytical Approach

- Nationally representative multi-year household data
 - LSMS-ISA (Ghana, Nigeria, Rwanda, Tanzania, Uganda)
 - Labor force surveys (Zambia)
 - Census Data from IPUMS/Minnesota Population Center (Kenya, Malawi, Mali)
- Sectoral employment “stocks” and “flows” in three employment groups
 - Farming
 - Off-farm segment of agri-food system (e.g. agro-processing, food retailing and services)
 - Non-farm sector (outside agri-food system)



Job Counts vs Full Time Equivalents (FTE)

Farming's employment share in counts vs FTE

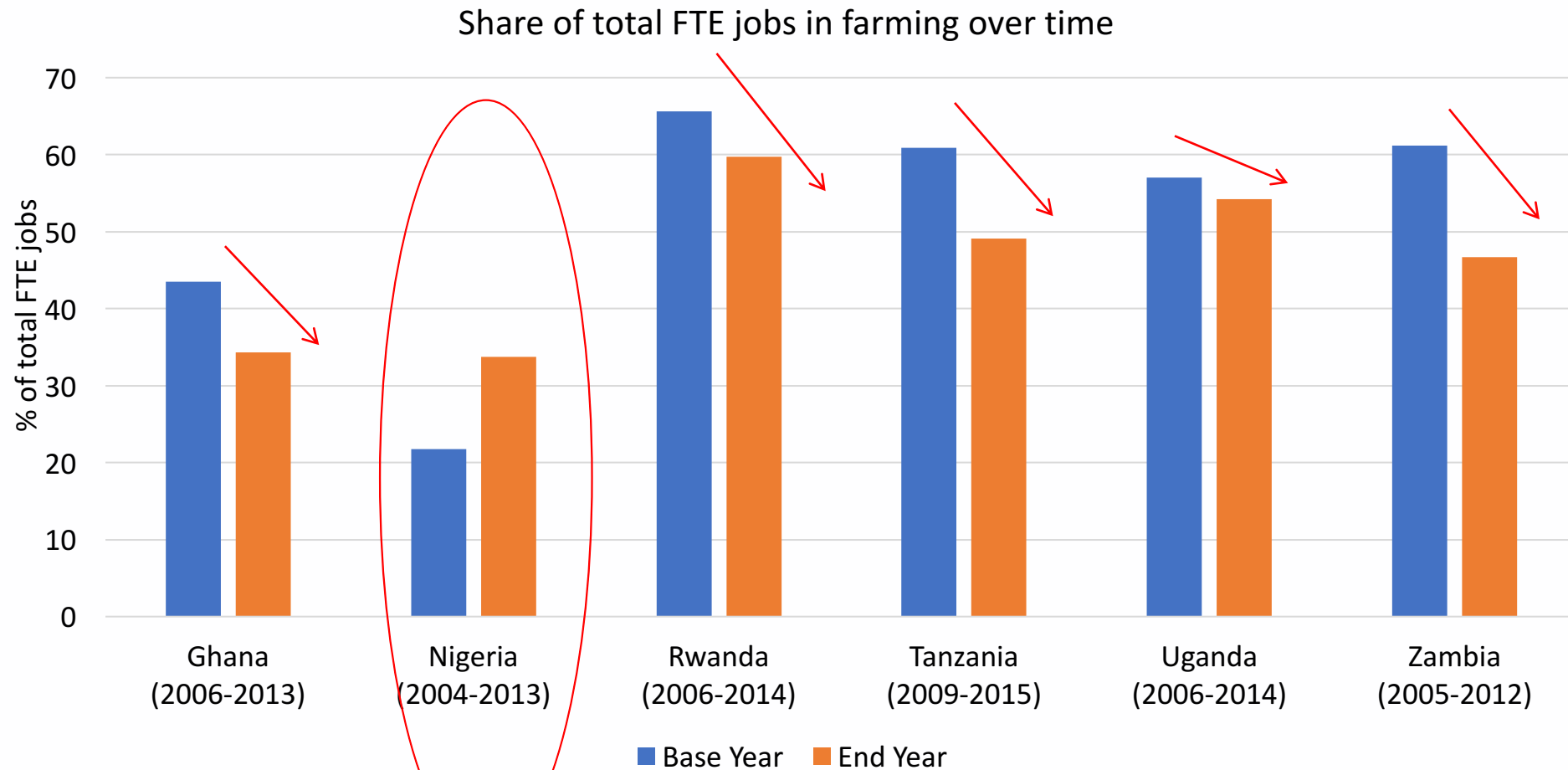


Farming's employment share based on FTE is consistently lower than that based on job counts

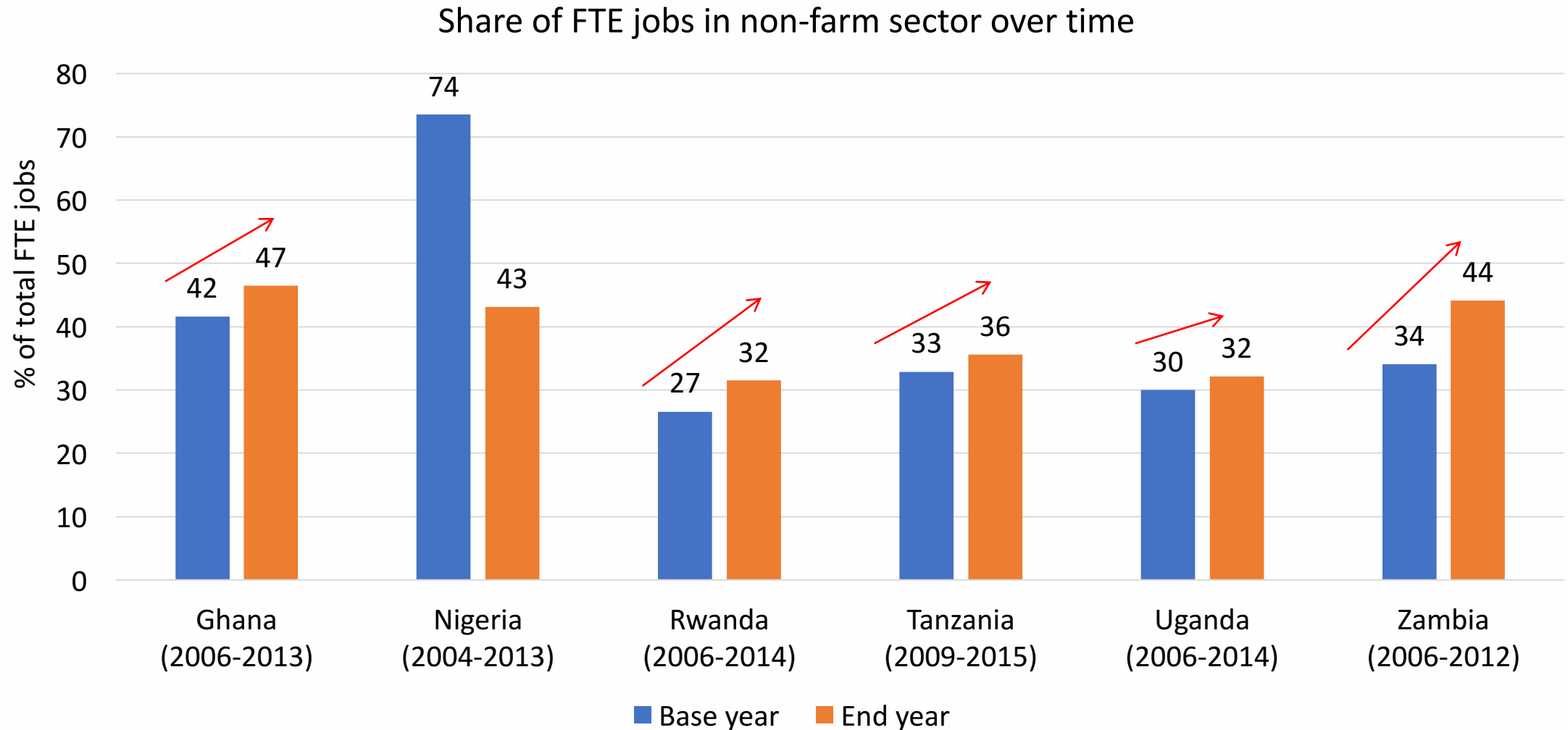


Employment trends

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

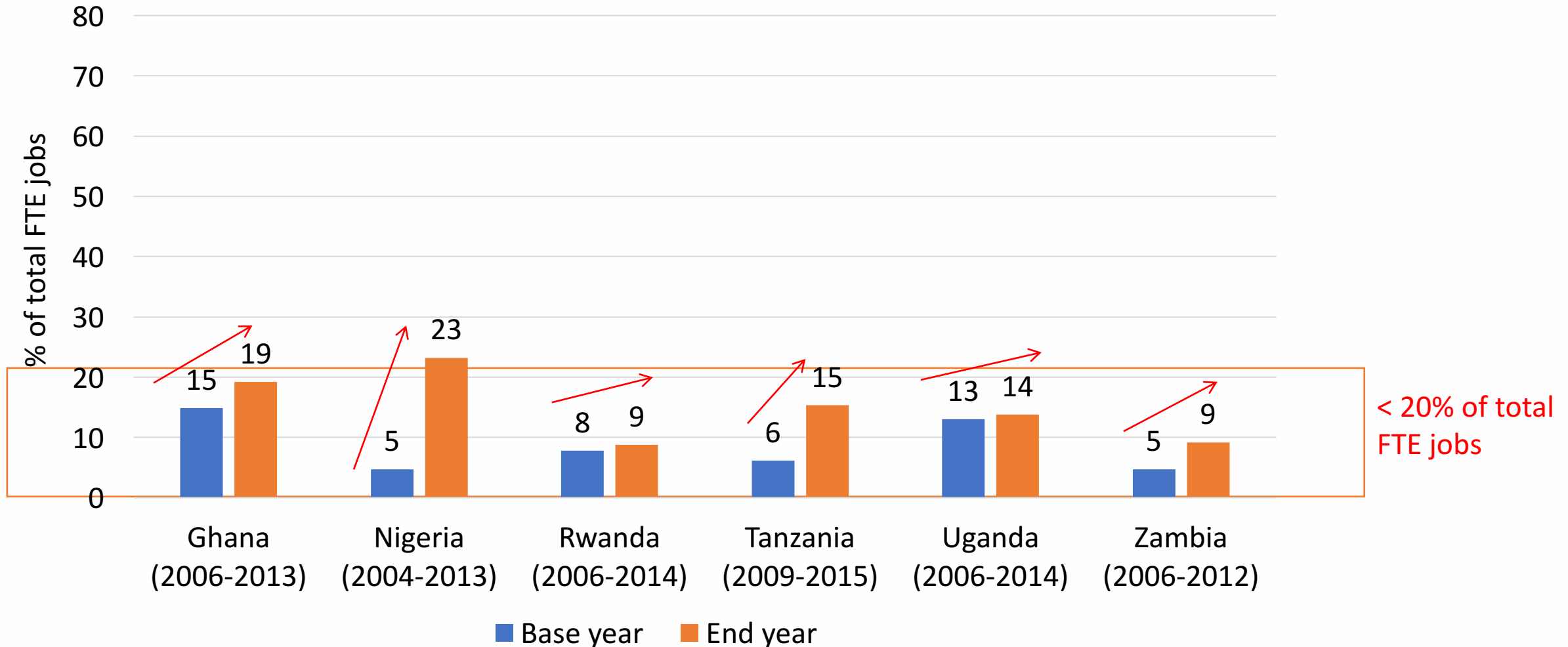


Non-farm outside AFS: Rapid % job growth and largest source of jobs outside farming



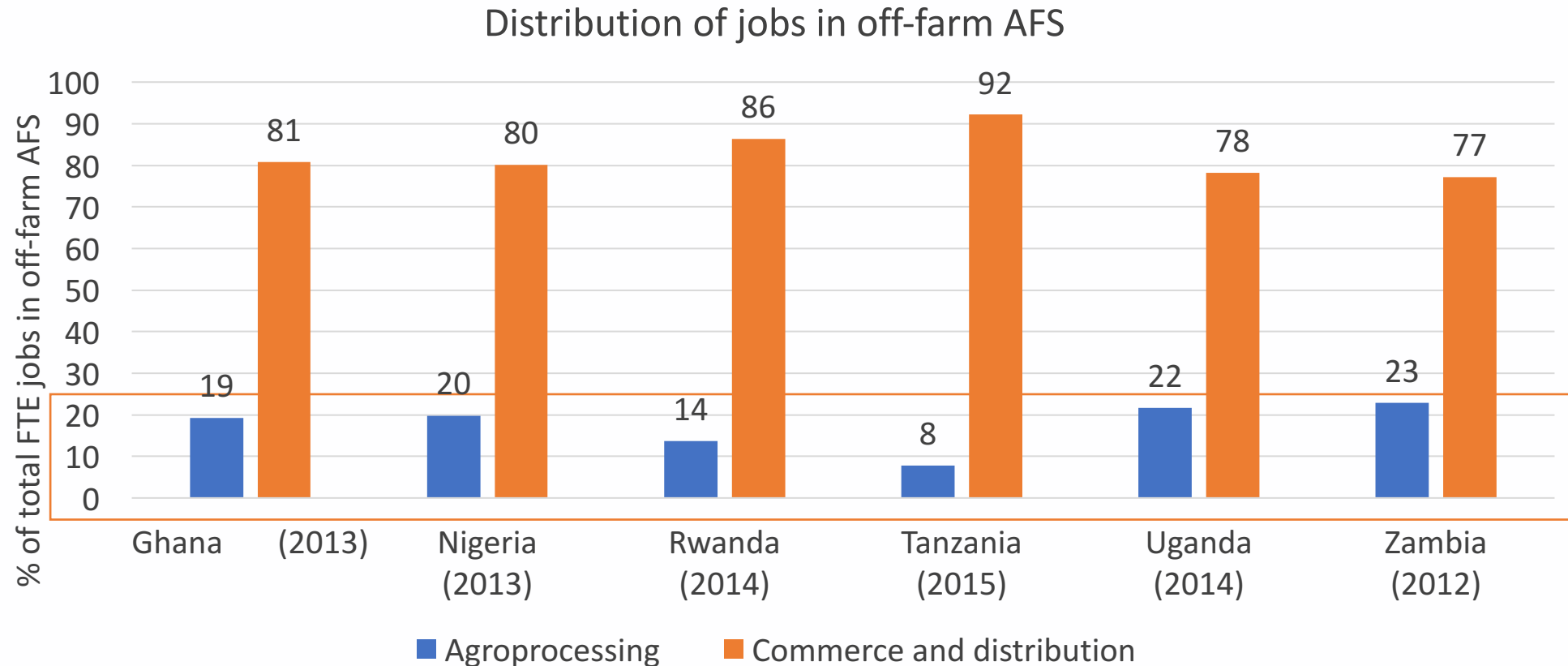
Off-farm AFS: Rapid % growth but from low base

Share of total FTE jobs in off-farm AFS

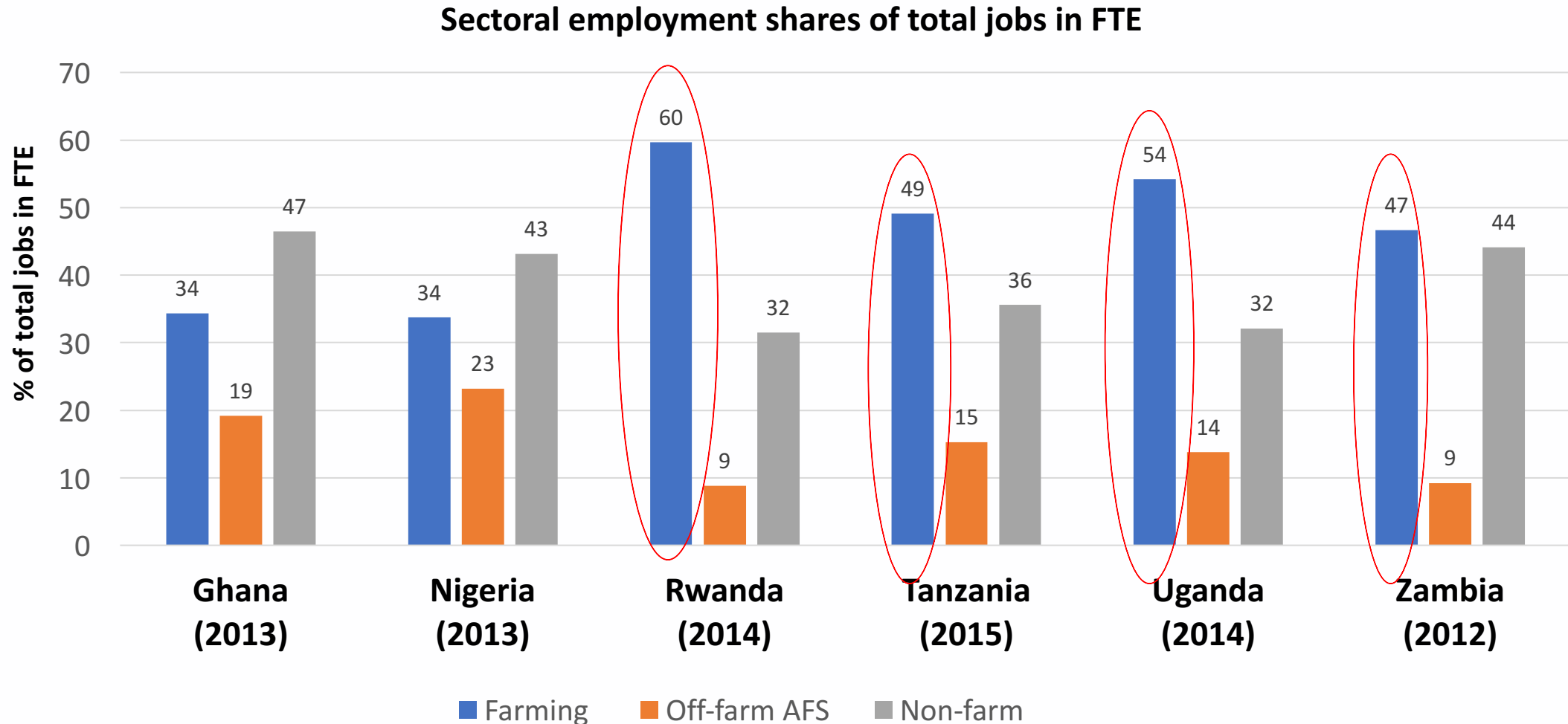


Majority of the off-farm AFS jobs in commerce and distribution, much less in agro-processing

Agro-processing constitute less than 25% of total FTE jobs in off-farm agrifood system



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

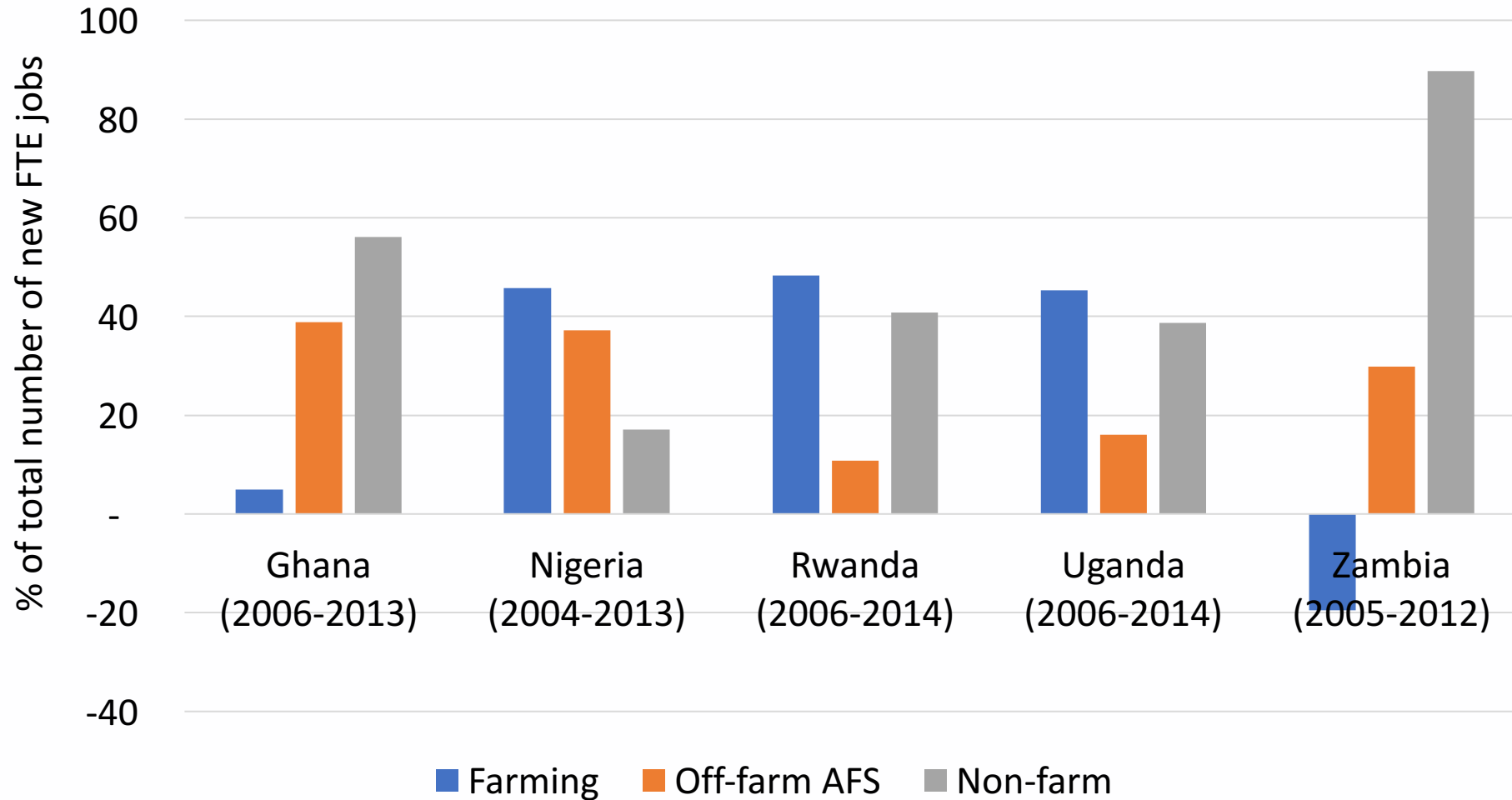




Sources of new jobs

Variable sources of new jobs

Sectoral shares in total number of new FTE jobs created



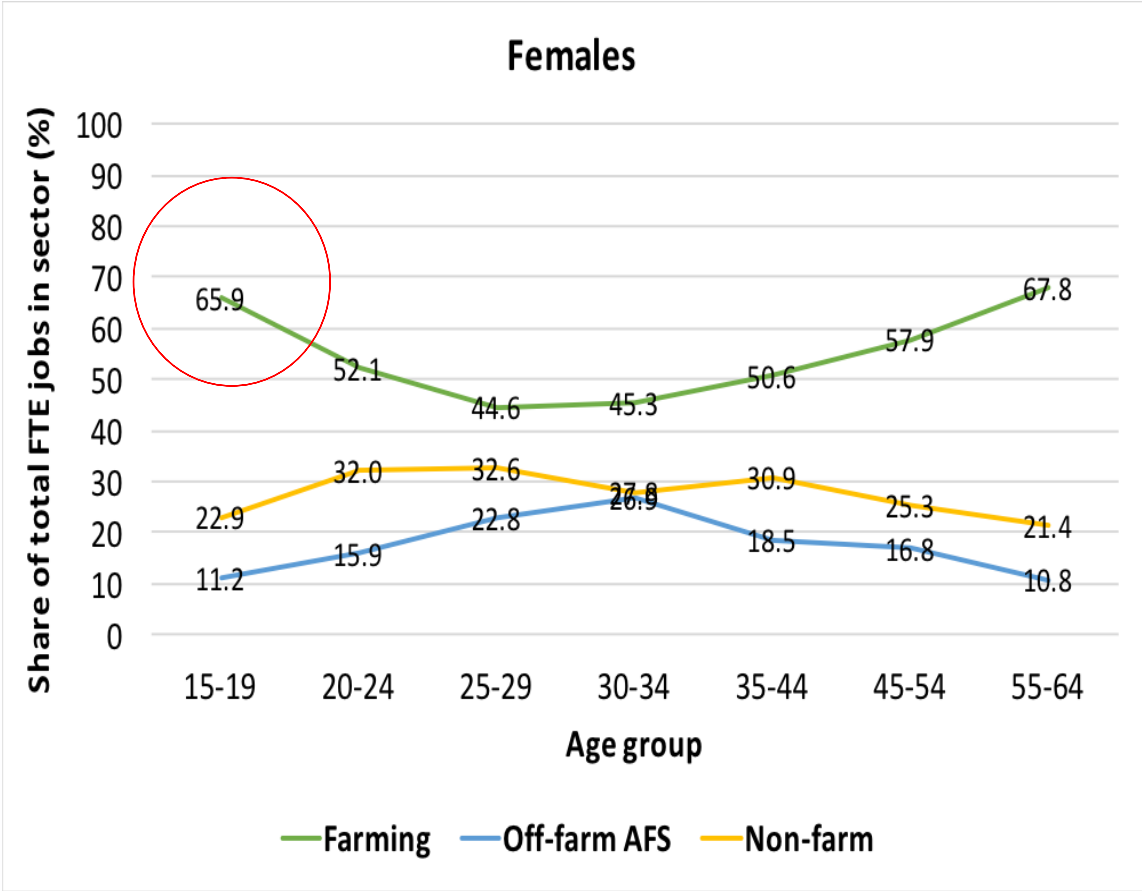
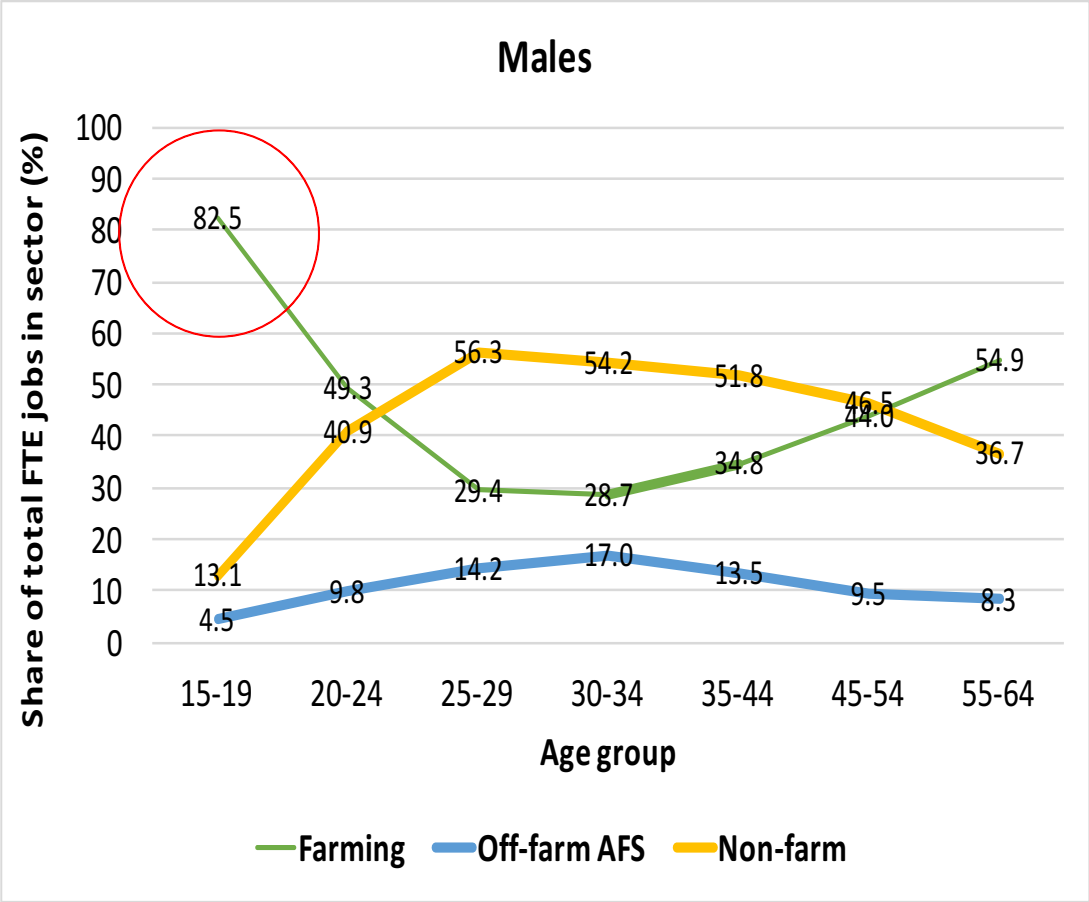
Farming remains a key source of new jobs despite its declining job shares

Youth vs. Entire Workforce

- Employment trends of entire workforce similar to that of youth (15-24 years) and young adults (25-34 years)
 - Youth and young adults constitute 35% and 25% of working-age population respectively
- Relatively high levels of unpaid or family-based activities
 - 43%-63% of all unpaid family-based jobs held by youth
- Relatively high levels of economic inactivity and unemployment
 - 30% or more of people aged 15-24 years are inactive

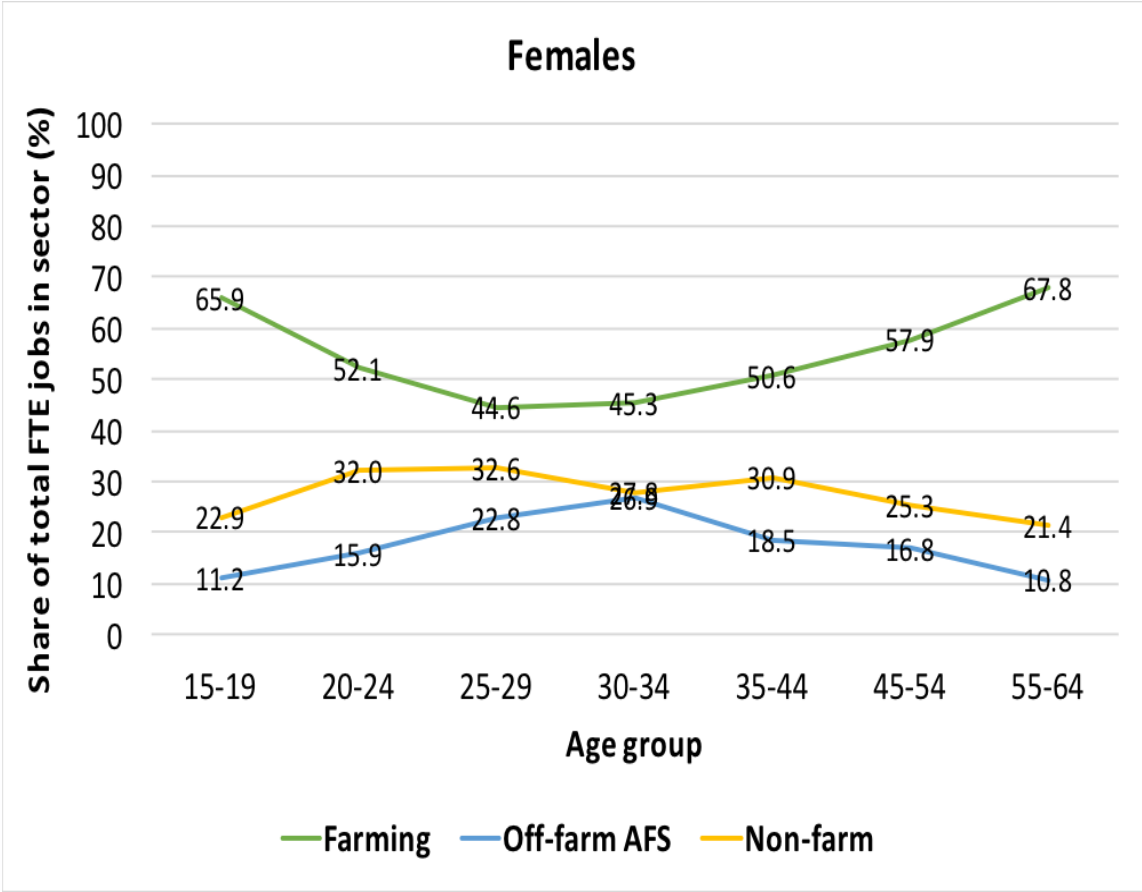
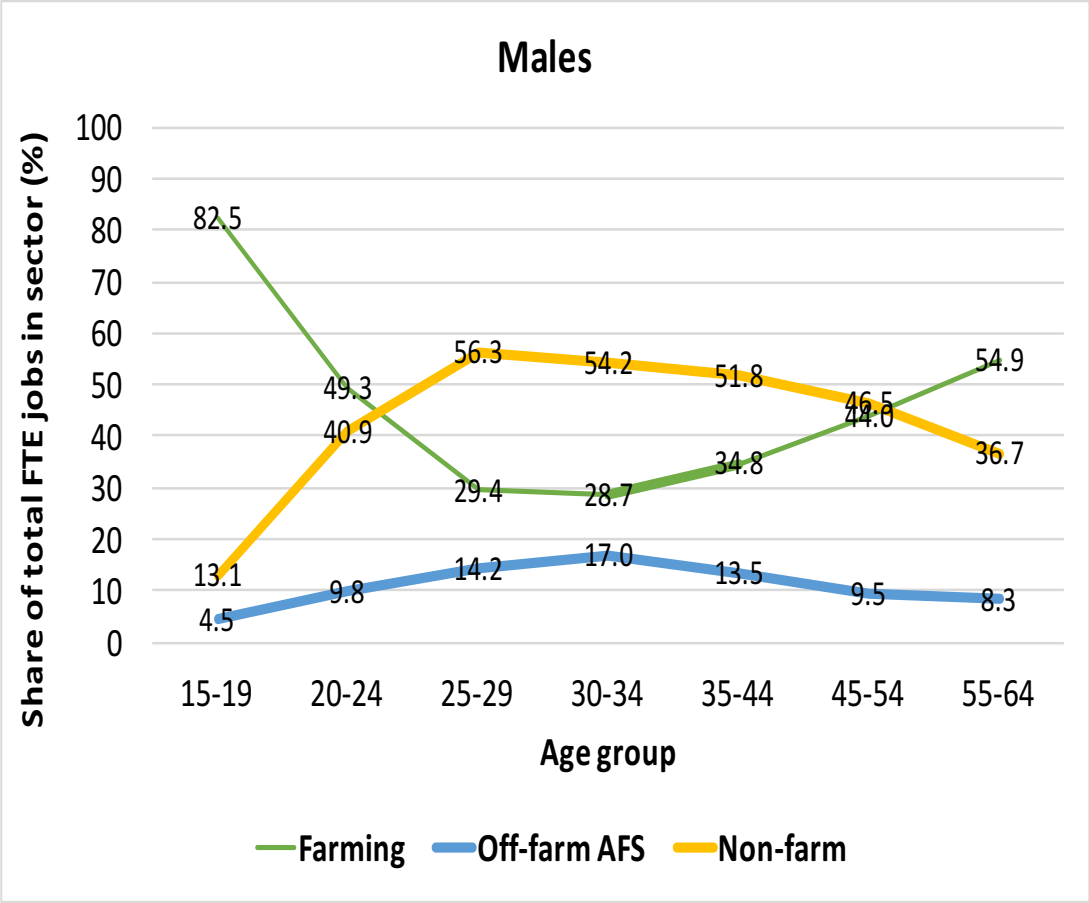
Most economically active youth are engaged in farming

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



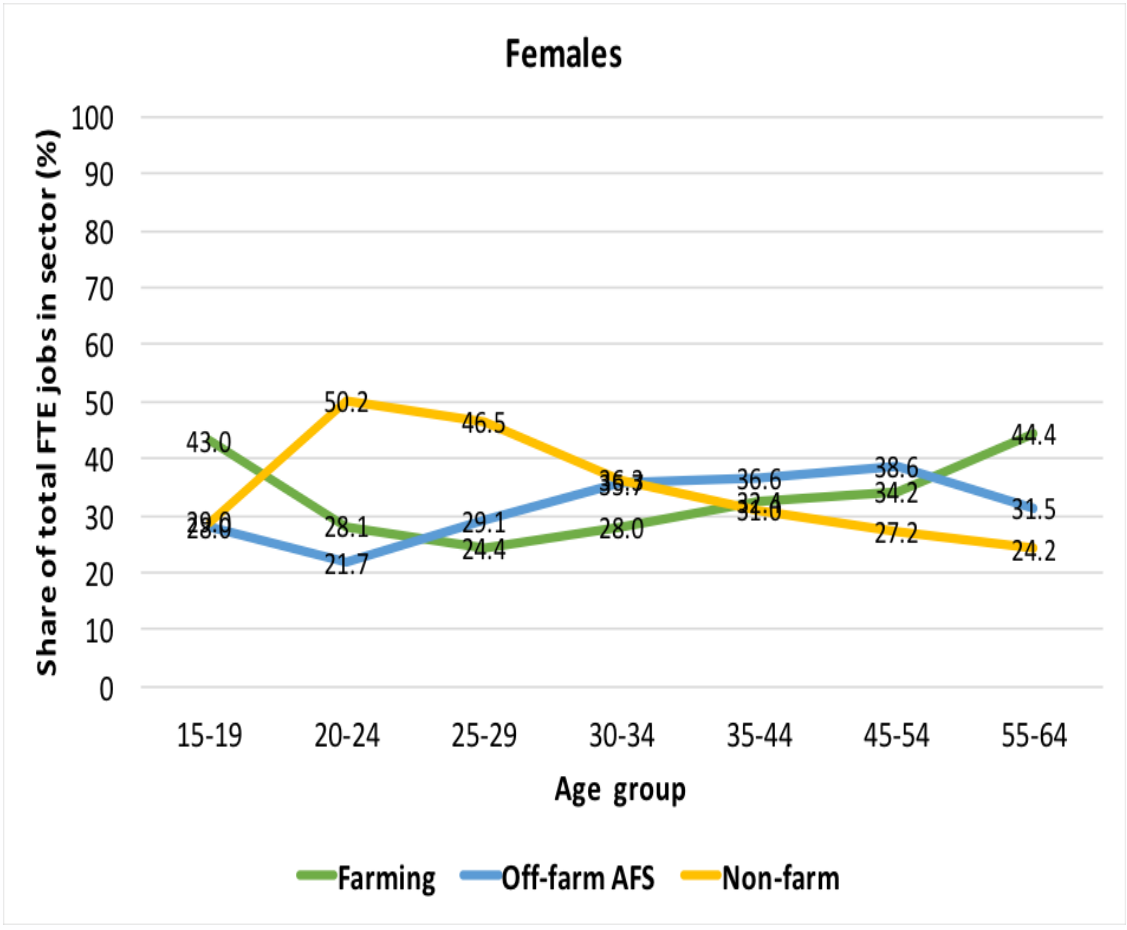
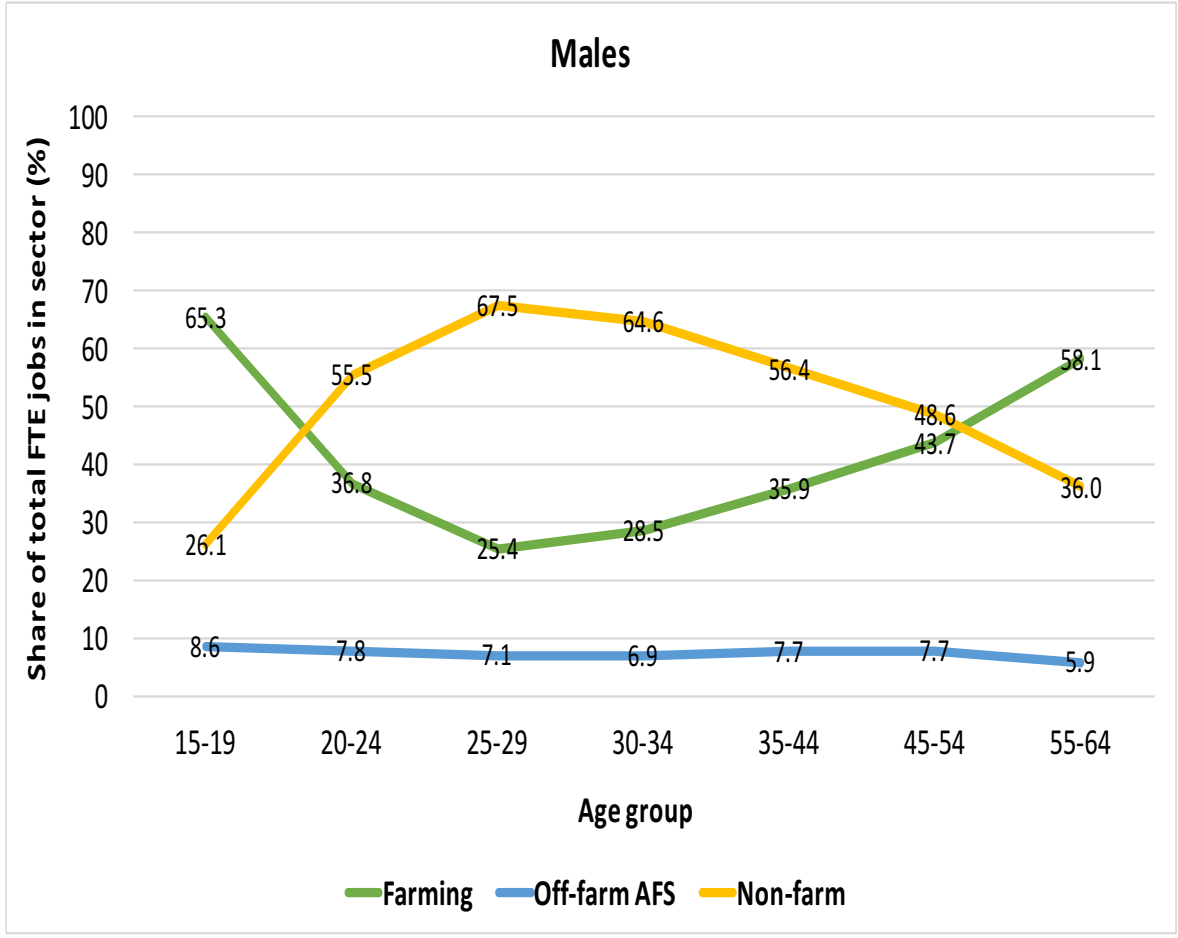
Females in East and Southern Africa spend more time on farming activities than males

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



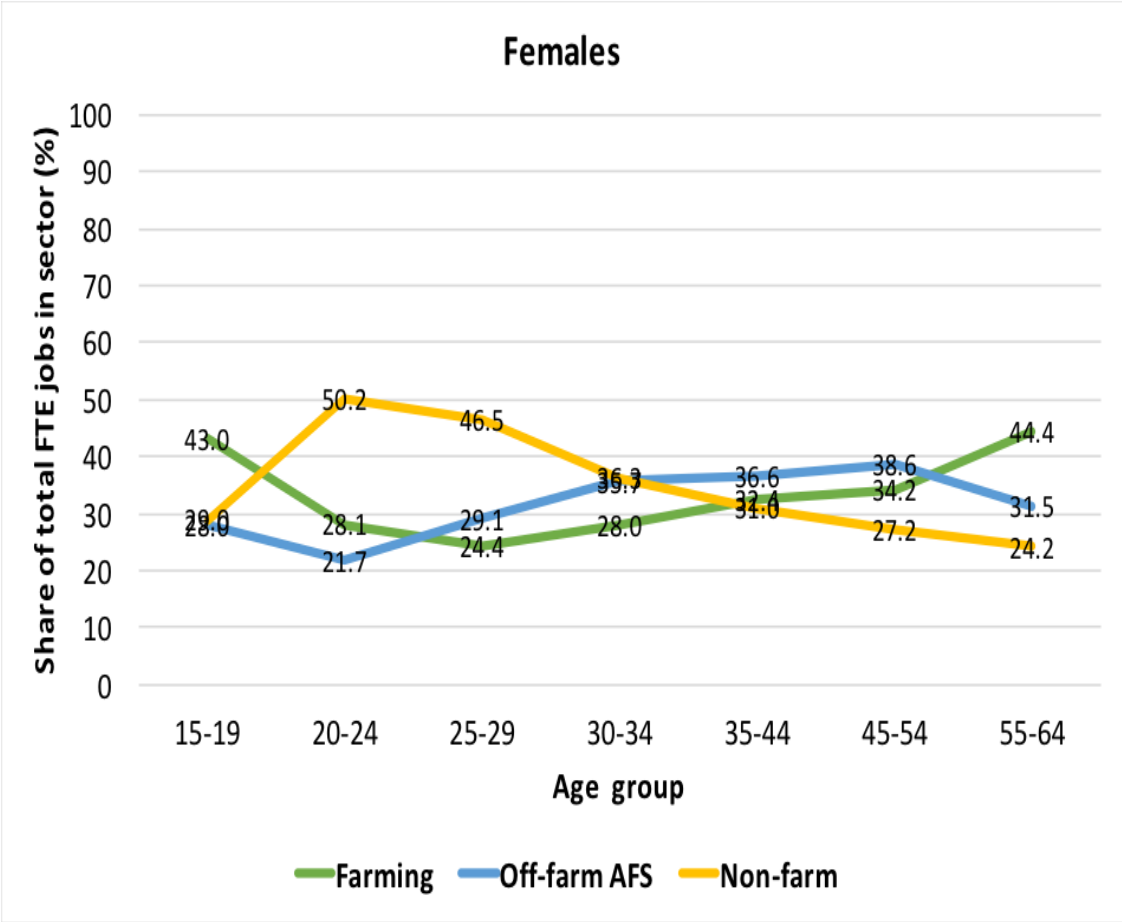
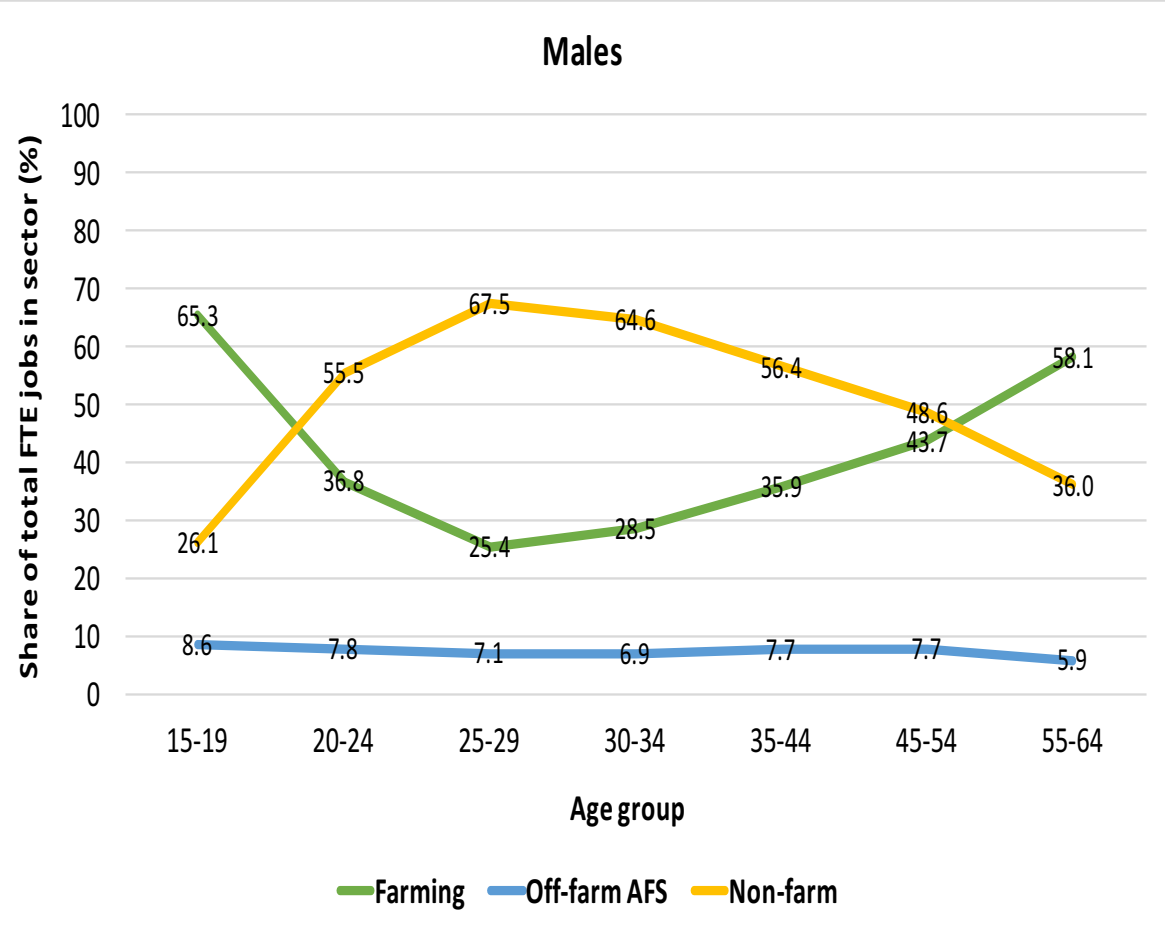
Females in West Africa spend less time on farming activities than males


Proportion of total FTE jobs in farming, off-farm AFS and non-farm employment by gender and age, Ghana (2013)



Off-farm AFS jobs are more important to females than males

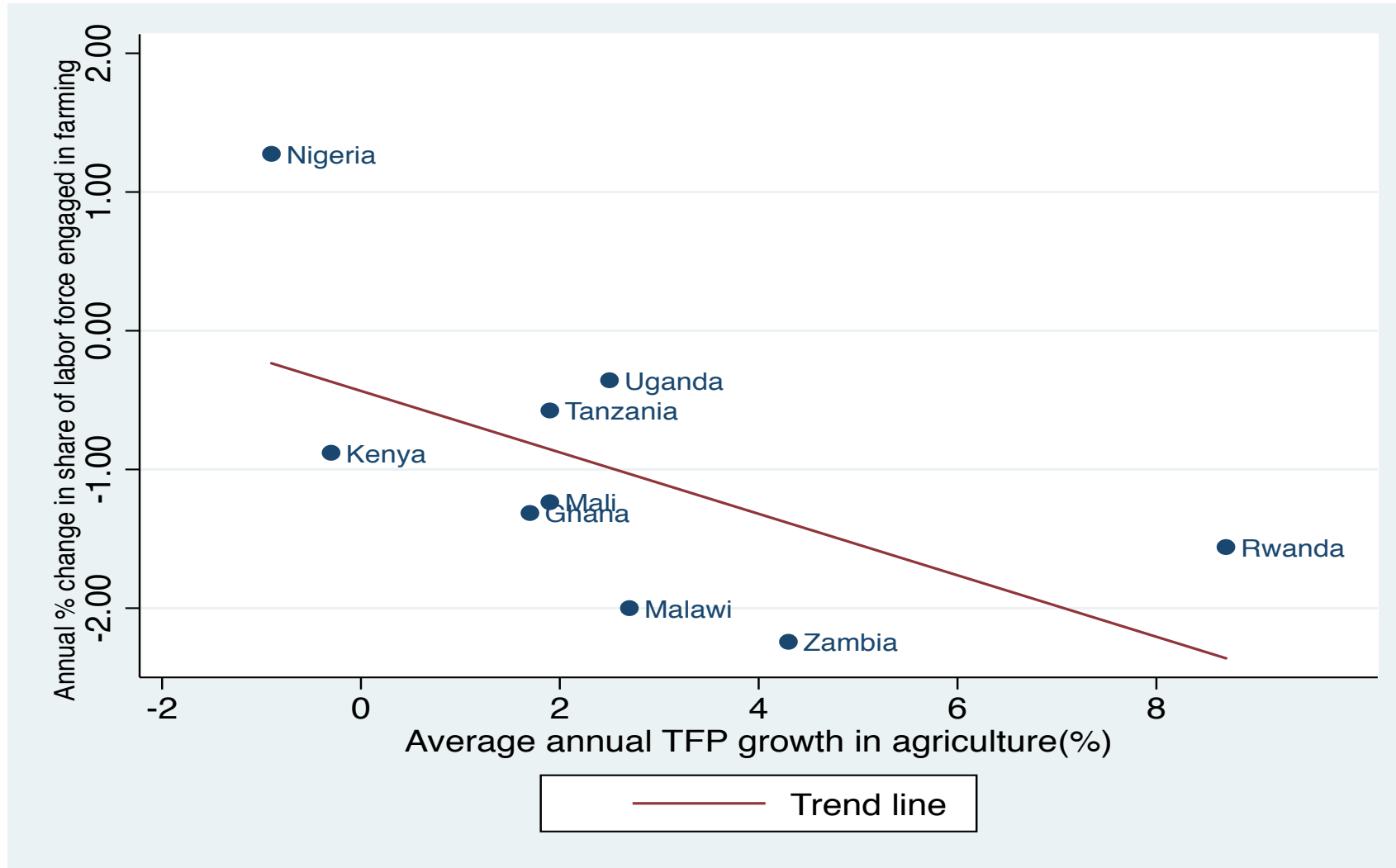
Proportion of total FTE jobs in farming, off-farm AFS and non-farm employment by gender and age, Ghana (2013)



A woman with dark skin, wearing a white t-shirt and a red necklace, is working in a field of green plants. She is looking down at the plants with a slight smile. The background shows a line of trees and a utility pole under a blue sky with some clouds. The overall scene is bright and sunny.

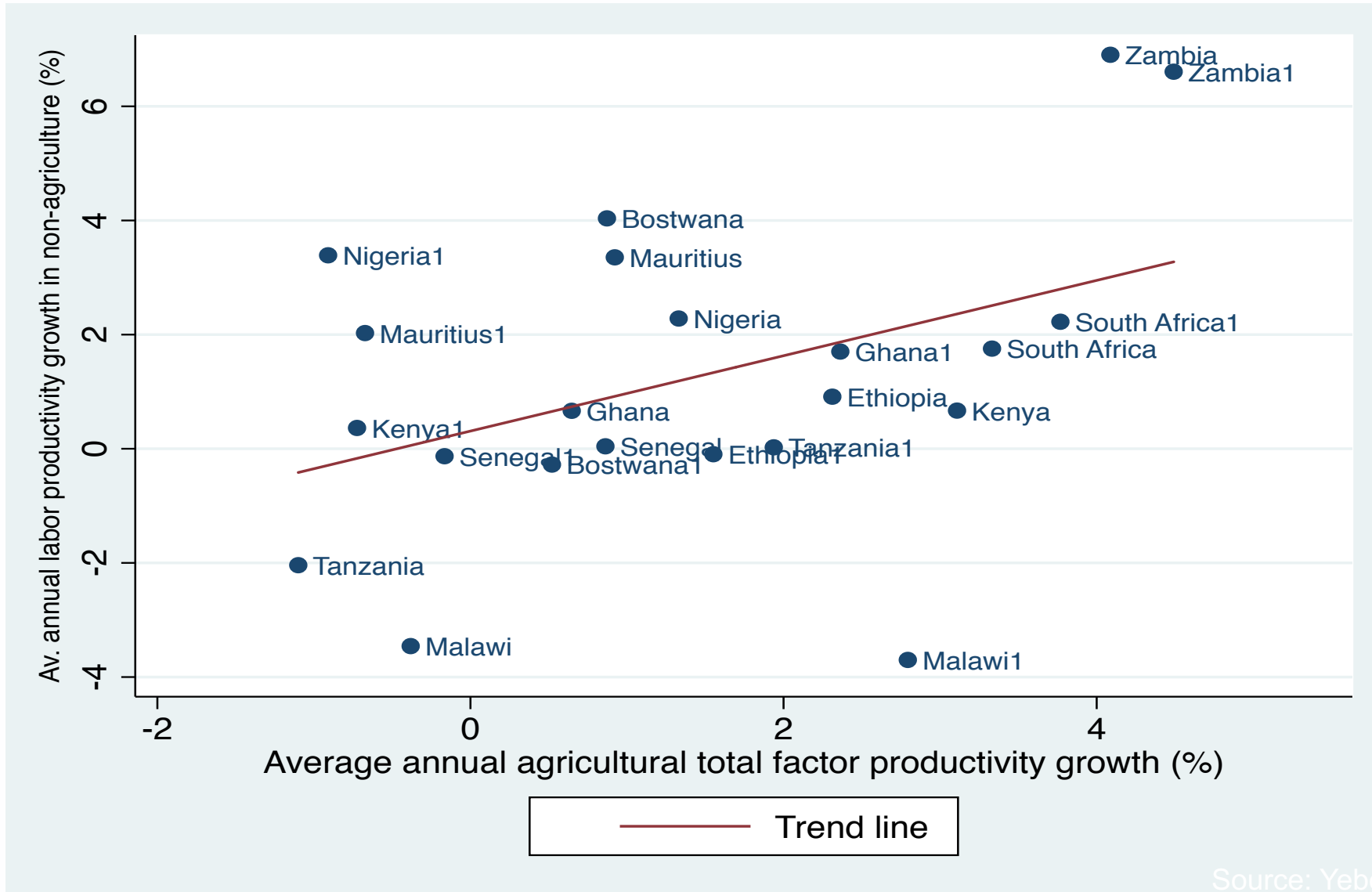
3. Role of agricultural productivity growth in the economic transformation process

What is the role of agriculture in Africa's transformation process?



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

What is the role of agriculture in Africa's 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

1. 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

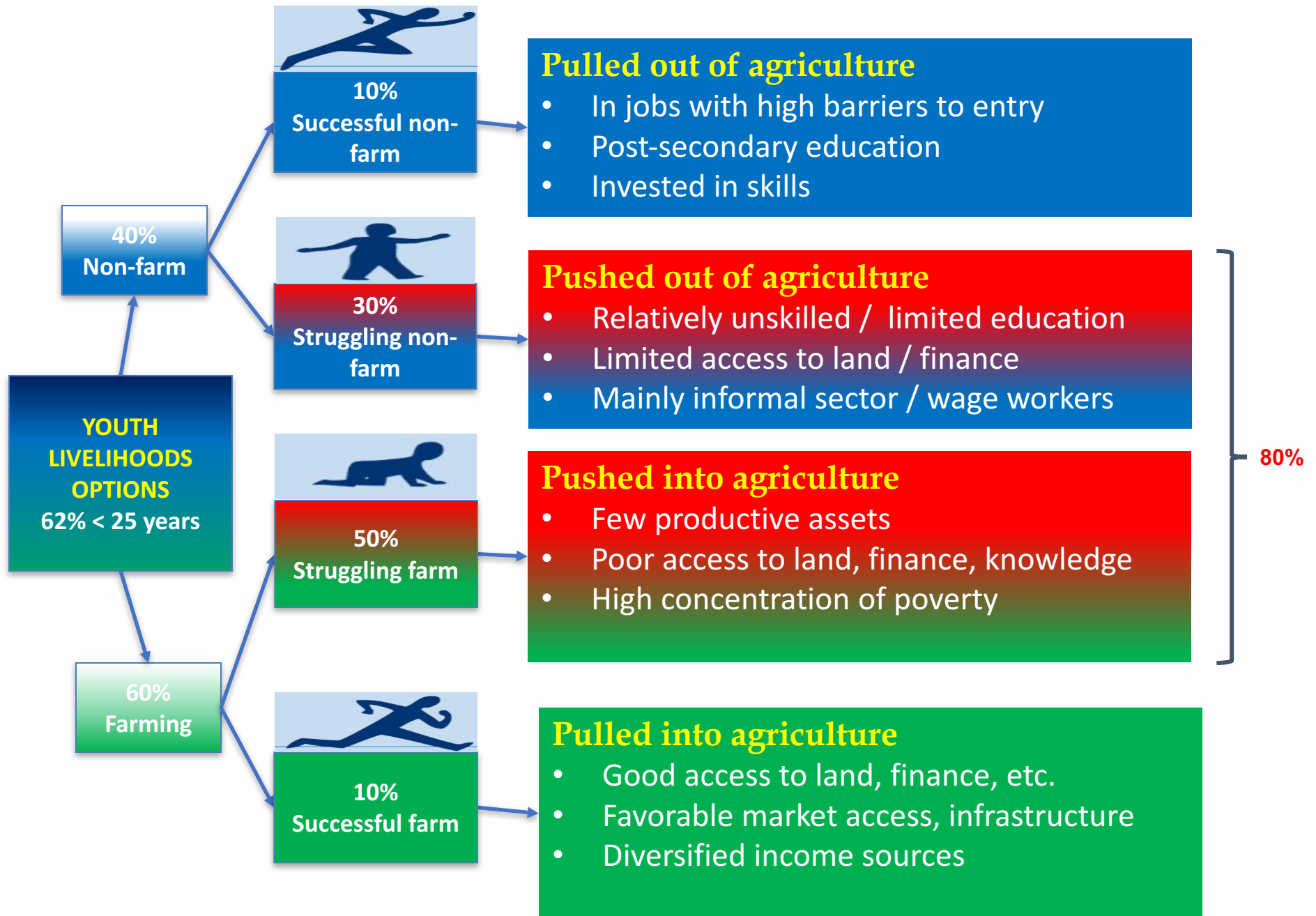
Upshot (continued)

2. Inclusive agricultural growth is needed to generate income and employment multipliers effects in overall economy

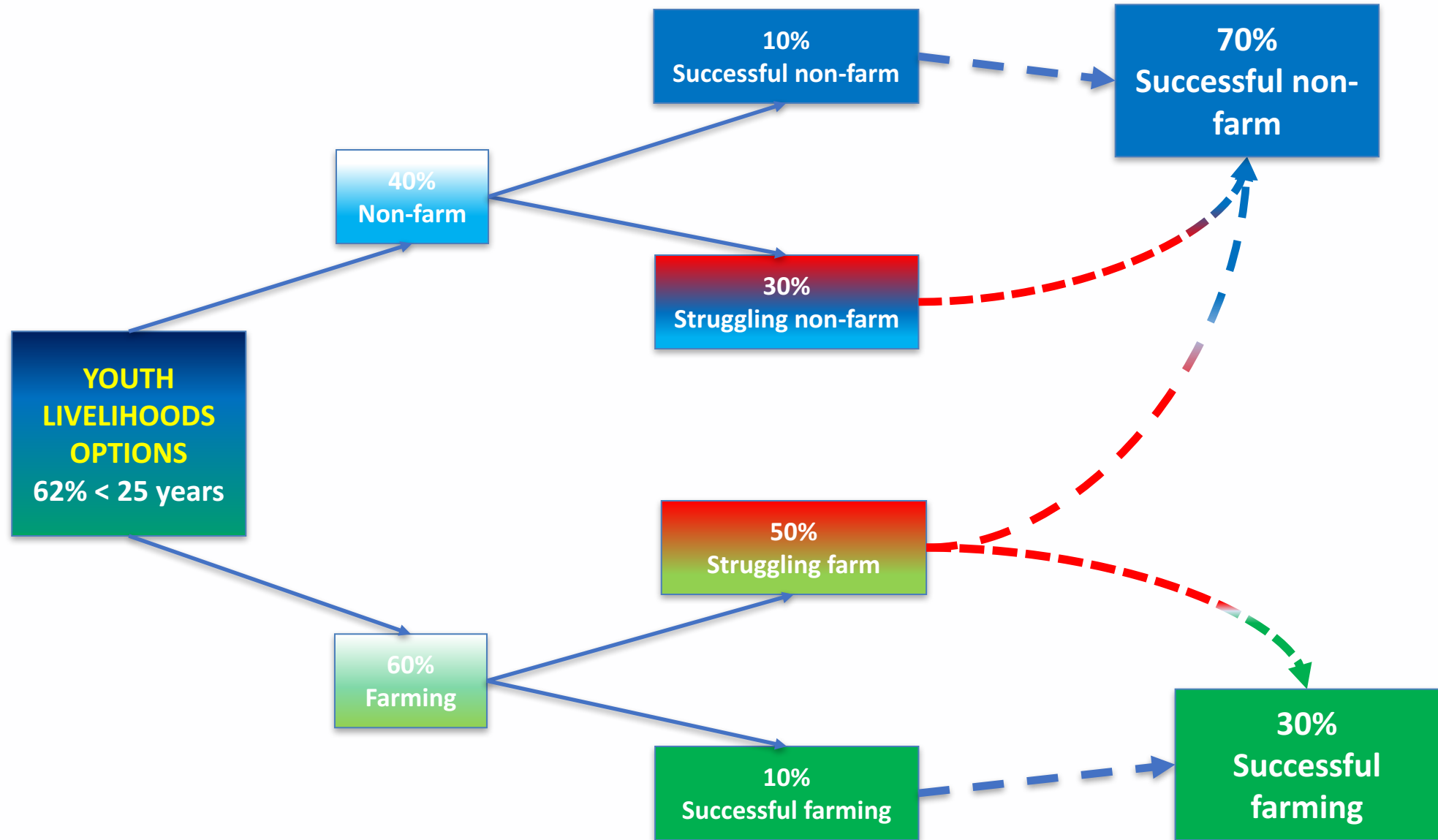
- Given the sheer number of people still engaged in farming, investment to raise on-farm productivity offers the most important vehicle for broad-based and inclusive income growth

A young woman with dark skin, wearing a white t-shirt, a red necklace, and a dark headwrap, is smiling and working in a field of green plants. She is looking down at the plants. The background shows a line of trees and a clear sky. A dark grey semi-transparent box is overlaid on the left side of the image, containing white text.

4. Policy options for promoting youth employment



Structural Transformation Pathway



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
- Strategic policies include
 - Public investments that improve on-farm productivity:
 - Agriculture R&D and extension systems
 - Infrastructure (e.g. irrigation, roads, electricity)
 - Youth-inclusive agricultural development programs
 - Facilitate access to productive assets and services (land, finance, market)
 - Mentoring by successful farmers

Key Areas for Policy Action

2. Education and skill development

- Invest in nutrition programs especially in early years to avert stunting and negative effects on learning abilities
- Invest in people through quality education, TVET, mentoring programs to improve skills and abilities to identify opportunities in VC themselves
- Encourage private sector participation in training and design of educational curriculum to address skills mismatch (e.g., Global Apprenticeship Network)

3. Create conditions for evidence-base and responsive policymaking

- Invest in actionable research on labor market conditions and impact evaluation
- Strengthen youth voice in policy dialogue and program design

Danke

