

Africa's Evolving Employment Structure: Trends and Implications for Youth Livelihoods

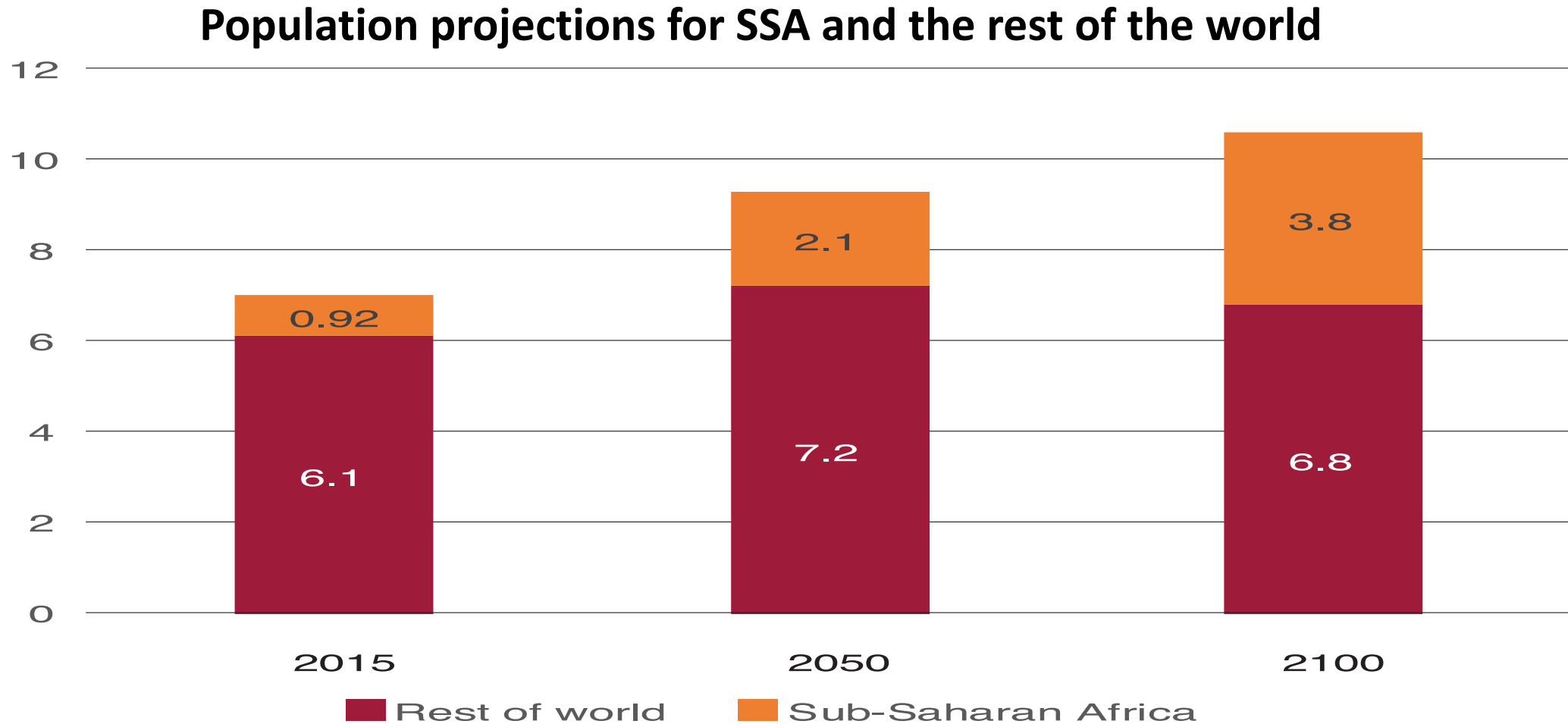


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Sub-Saharan Africa's population explosion



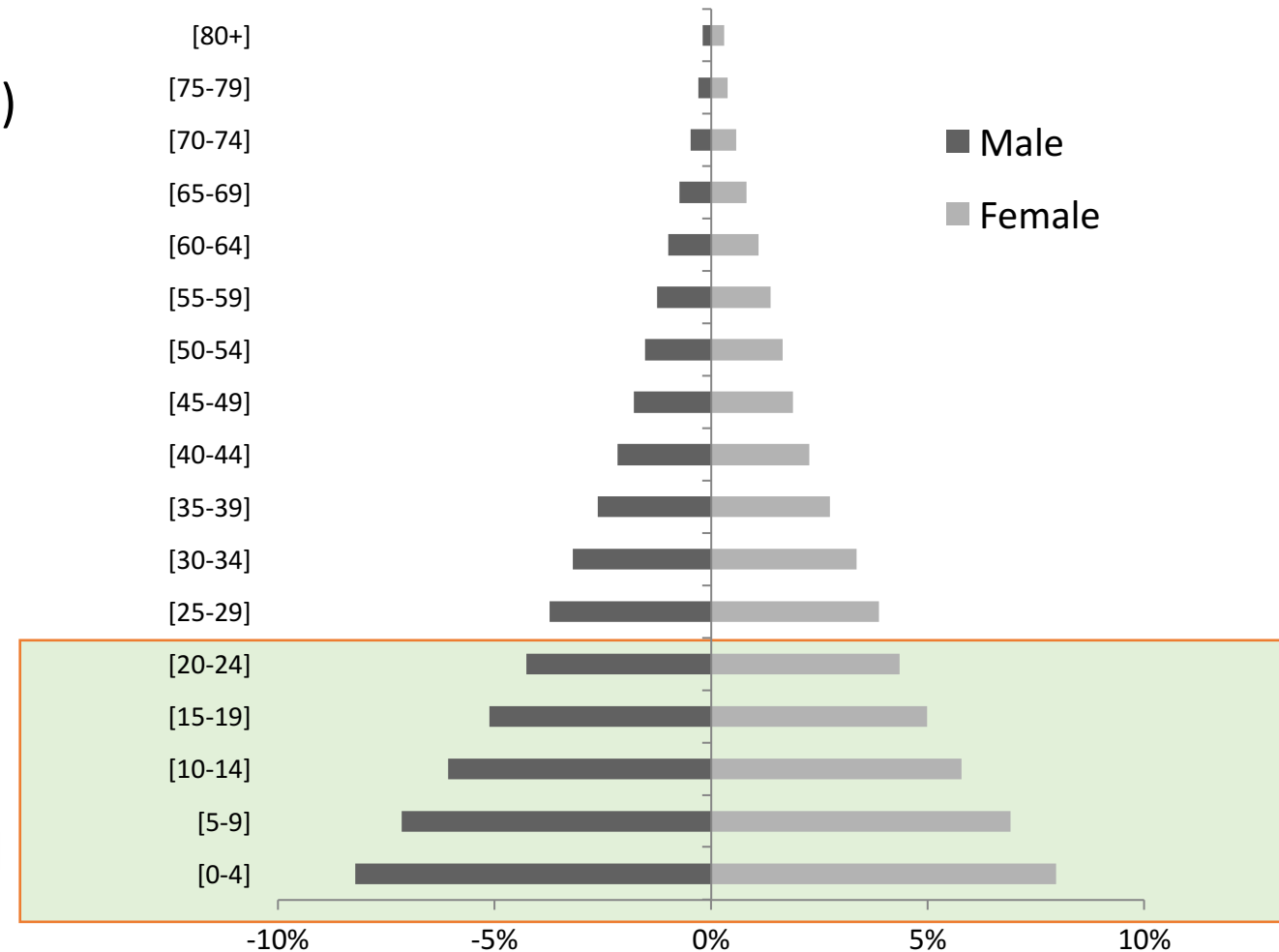
Source: *United Nations (2016)*

Looming employment challenge

11 million people to enter labor market each year

- Slow demographic transition
 - High fertility rates (~ 5.4 children per woman)
 - Low child mortality rates
- “Youth bulge” may not end soon
- 3% growth in labor force per year

62% of people <25 years old

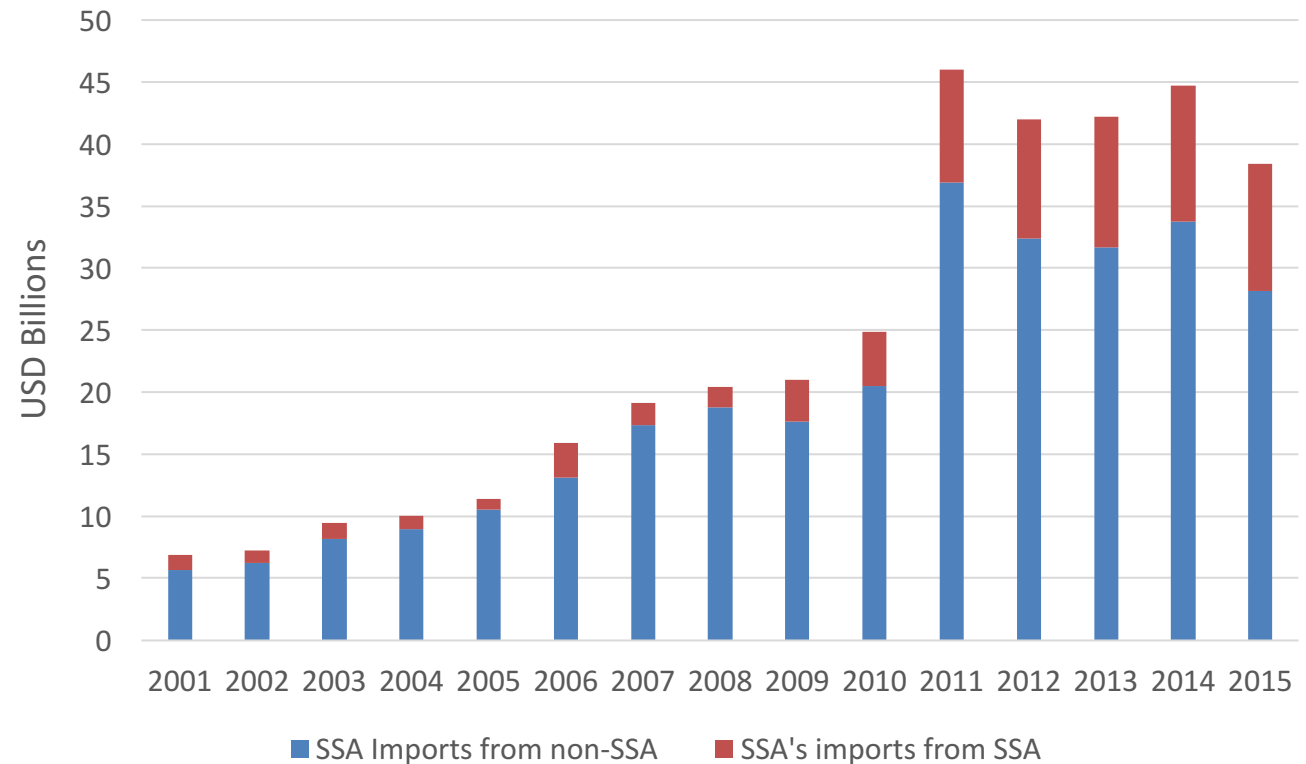


- Will Africa's youthful labor force yield a demographic "dividend" or "time bomb"?
- What can governments do to expand employment opportunities?



Agri-food system – A sector of opportunity

- Growing demand for food
 - Population growth and urbanization
 - Rising incomes and diet transformation (Tschirley et al., 2015; Hollinger and Staatz, 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)

What is the evolving role of agriculture in Africa's employment structure?

Africa's Aging farming population?

- Claims of aging farming population in SSA (Kalu 2013)
 - Youth are not interested in farming

Implications: Future of food production may be in jeopardy

Should African policymakers worry about an aging farming population?



Data

- 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)
- Each of these data sources had multiple waves

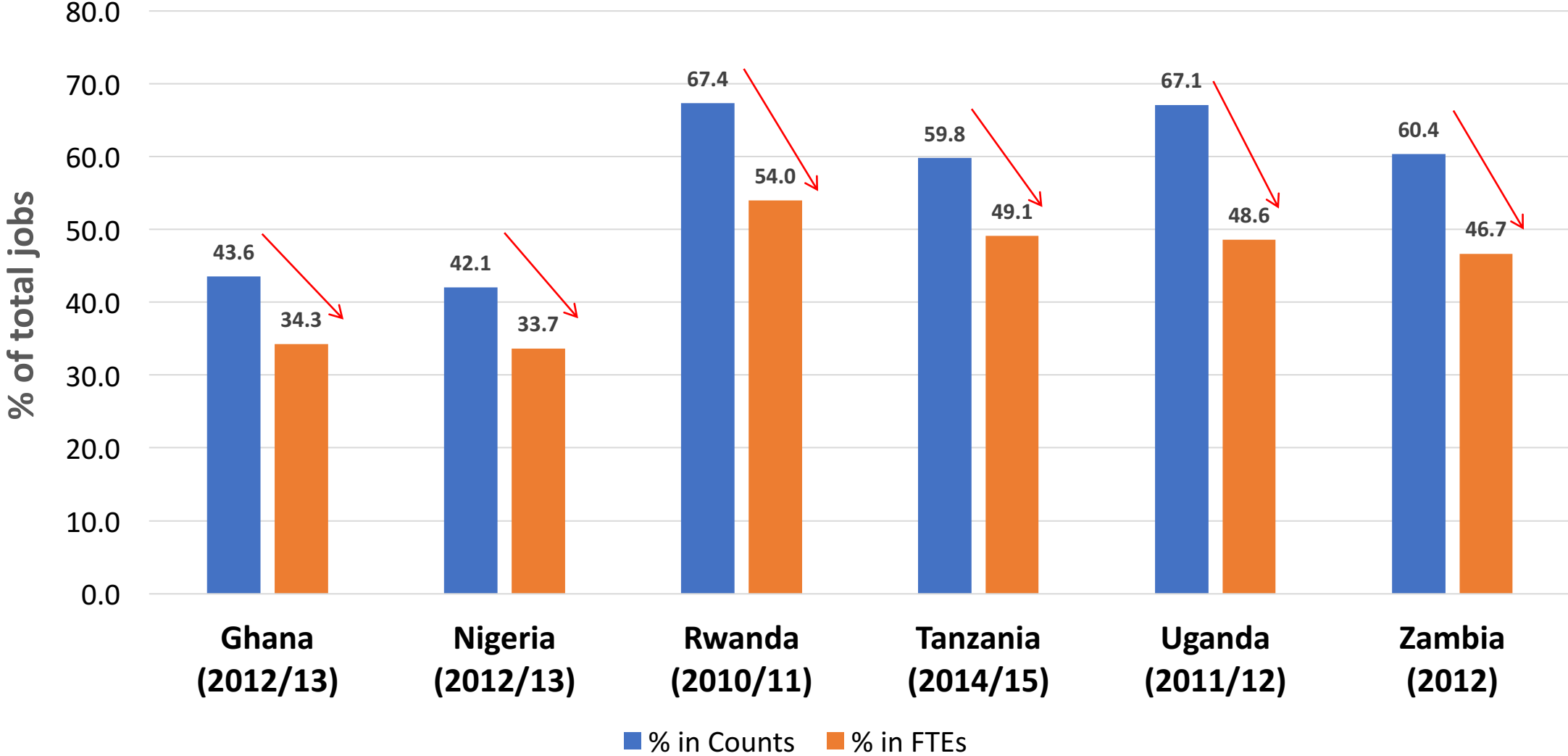
Study Focus

- Examine the “stocks” and “flows” in three employment categories
 - Farming
 - Off-farm segment of agri-food system (e.g. agro-processing, food retailing and services)
 - Non-farm sector (outside agri-food system)
- Explore the role of agriculture productivity in the on-going economic transformation
- Examine the age structure of farming population



Farming's job shares much lower in FTE but employment trends are similar

Farming's employment share in counts vs FTE



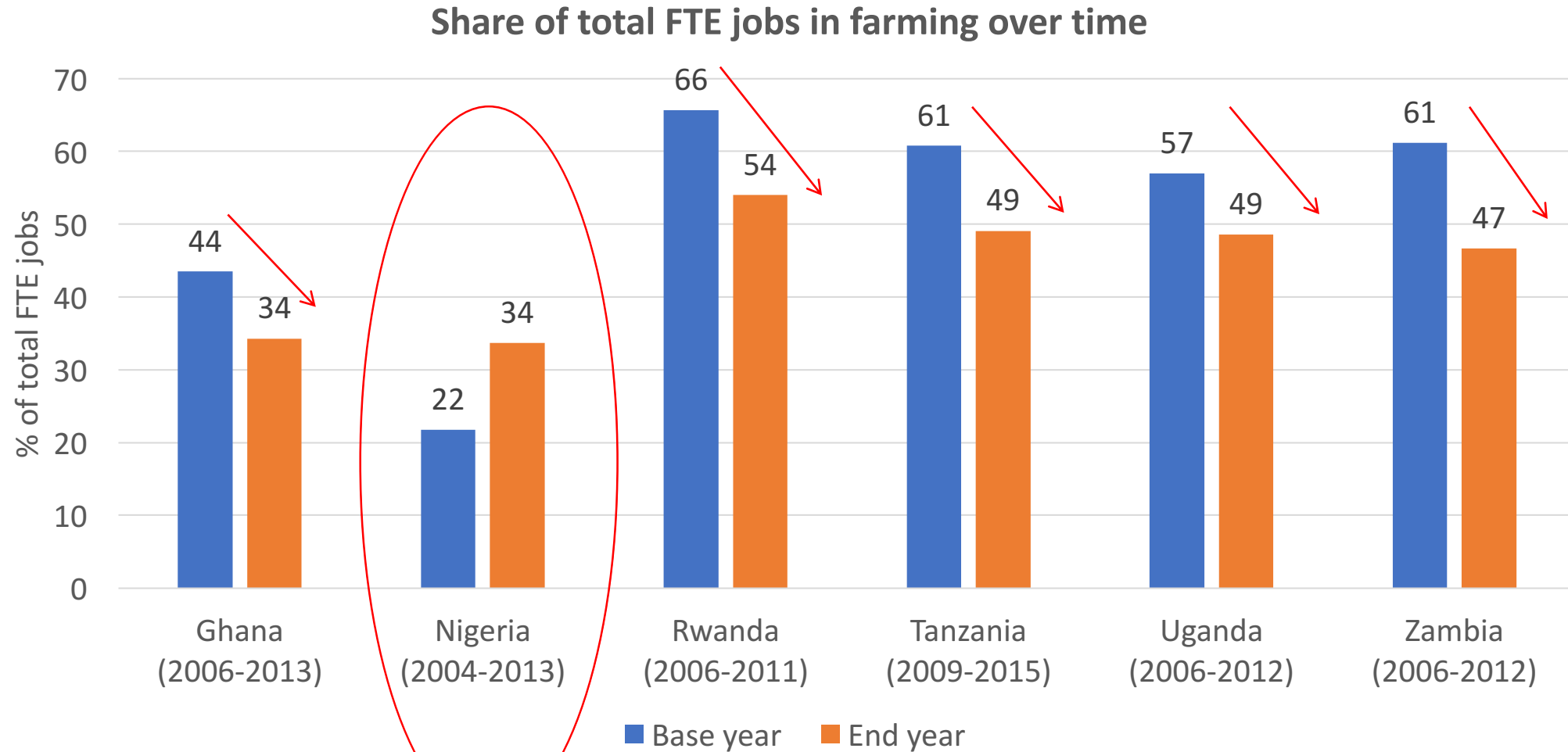
Youth vs. entire workforce

- 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

A 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 utility pole under a blue sky with some clouds. The overall scene is bright and sunny.

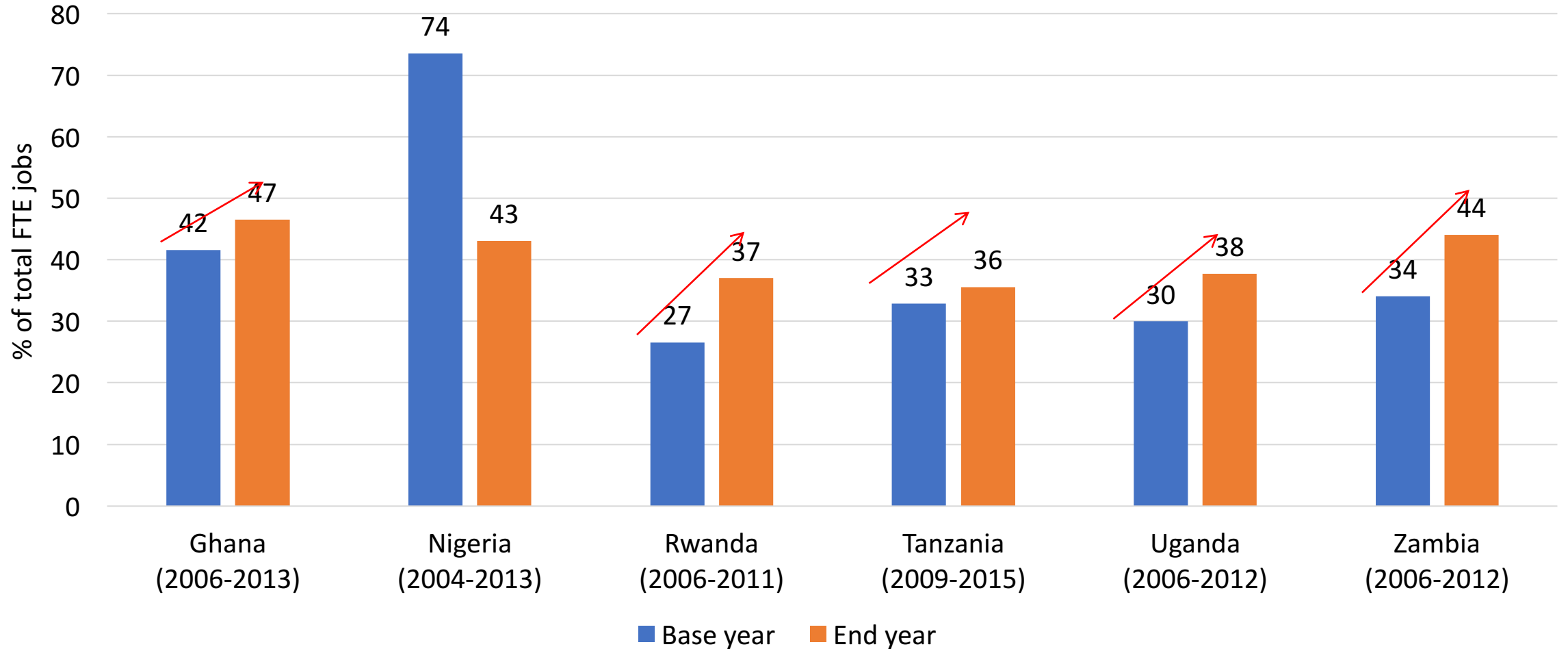
Employment Trends

Rapid but highly variable rates of labor exit from farming to off-farm sectors

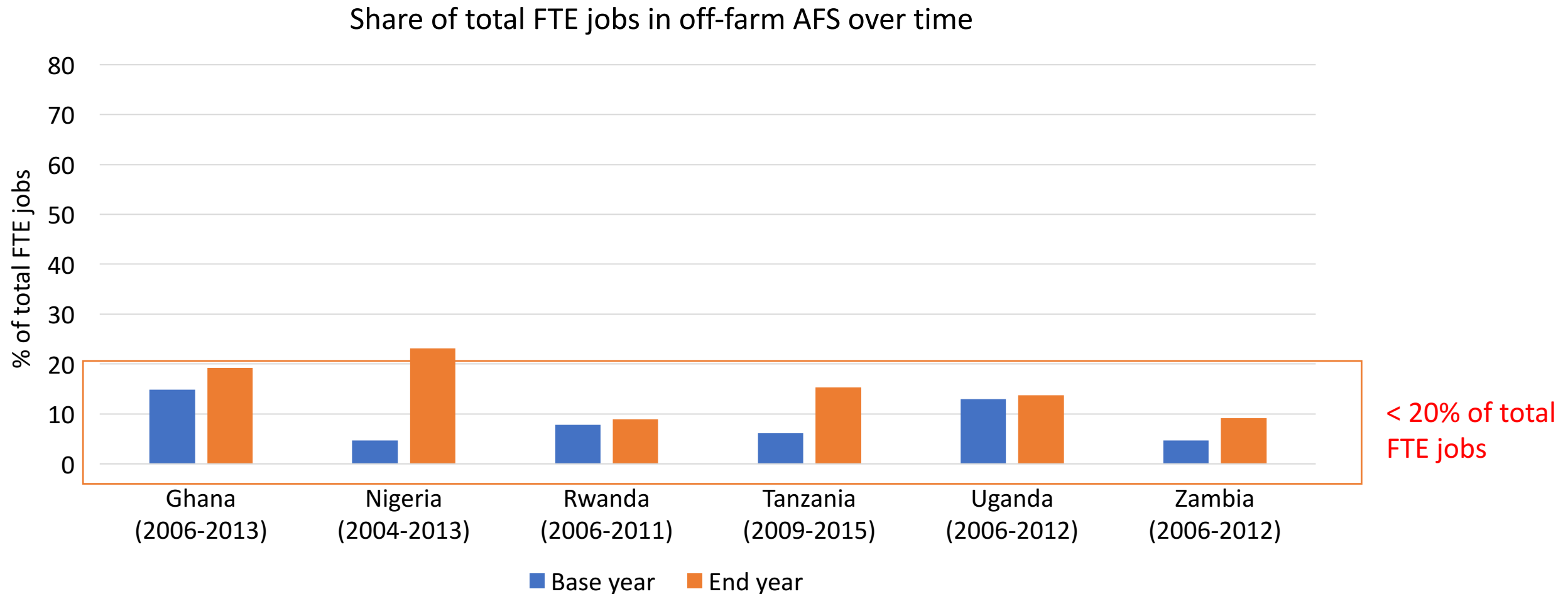


Non-farm outside AFS: Rapid % job growth and major source of jobs outside farming

Share of FTE jobs in non-farm sector over time



2. Off-farm AFS: Rapid rate of growth but from low base and absolute number of new jobs will not match farming

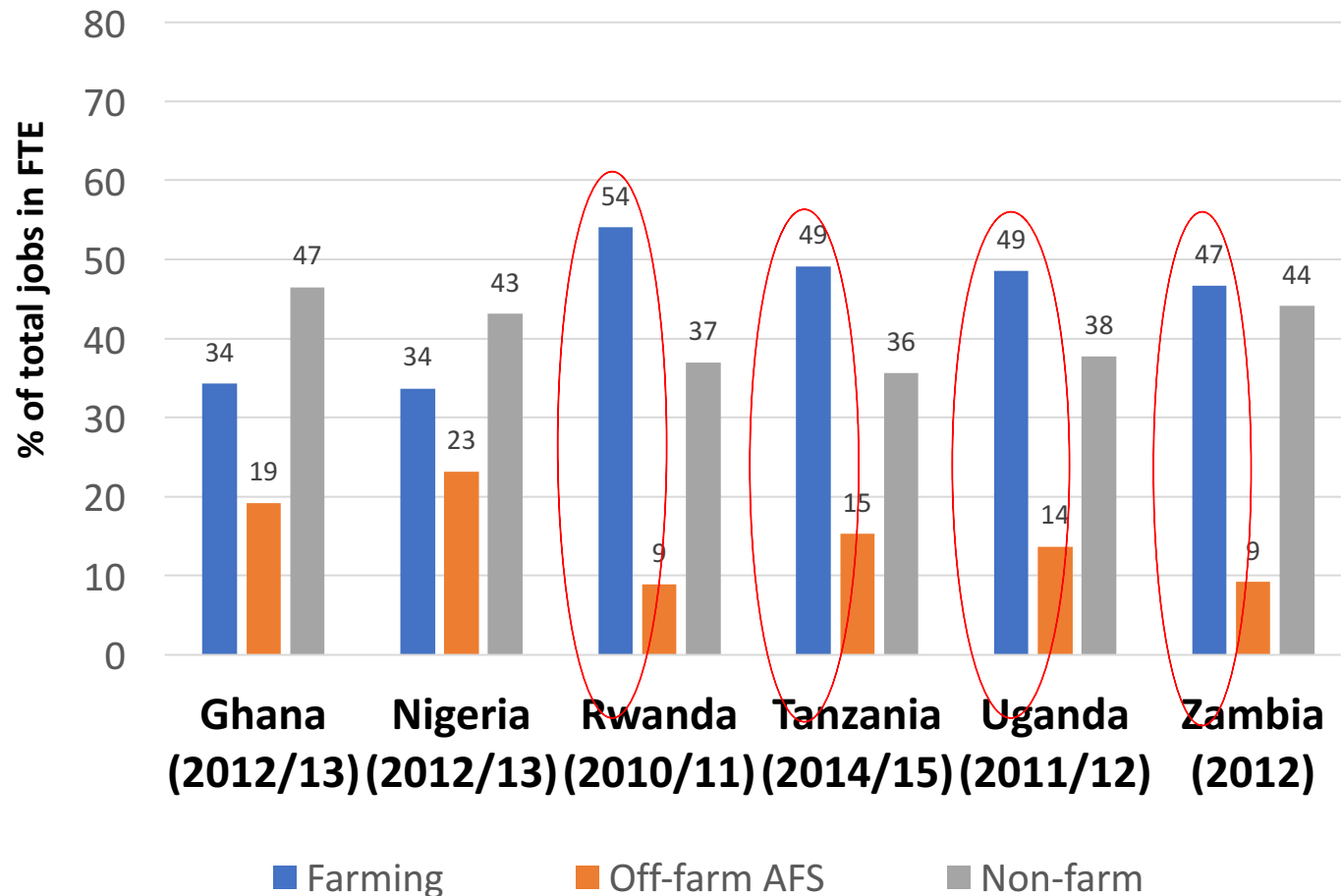


Off-farm AFS jobs largely in commerce and less in agro-processing

Country	Survey years	Farming	Agro-processing	Downstream commerce and distribution	Non-farm
		% of FTE jobs	% of FTE jobs	% of FTE jobs	% of FTE jobs
Ghana	2005/06	43.5	6.3	8.6	41.6
	2012/13	34.3	3.7	15.5	46.5
Nigeria	2010/11	30.6	2.3	18.7	48.2
	2012/13	33.7	4.6	18.6	43.1
Rwanda	2005/06	65.7	0.4	7.4	26.6
	2010/11	54.0	1.2	7.7	37.0
Tanzania	2010/11	47.3	2.5	15.0	35.2
	2012/13	48.3	1.6	15.6	34.5
Uganda	2005/06	57.0	2.8	10.2	30.0
	2011/12	48.6	1.7	12.0	37.7
Zambia	2005	61.2	1.6	3.1	34.1
	2012	46.7	2.1	7.1	44.1

Farming remains the single largest employer

Sectoral employment shares of total jobs in FTE



- Share of total FTE jobs
 - Labor force (15-64 years): **34%-54%**
 - Youth (15-24 years): **40%-63%**
 - Young adults (25-34 years): **25%-49%**
- Investment in farming will affect the greatest number of people and assure broad-based and inclusive economic growth



Type of jobs

Wage jobs remain elusive

Private wage > public wage

Countries		% of employment		
		Wage/salary		Self-employed/ unpaid family labor
		Public	Private	
Ghana	2005/06	5.7	11.9	82.4
	2012/13	5.5	10.0	77.5
Nigeria	2003/04	6.57	3.28	90.2
	2012/13	4.41	6.99	88.6
Rwanda	2005/06	2.2	20.4	86.6
	2010/11	3.6	28.4	77.8
Tanzania	2008/09	2.5	17.4	80.1
	2014/15	3.4	31.8	64.8
Uganda	2005/06	2.7	17.4	79.9
	2011/12	3.9	14.8	81.3
Zambia	2005/06	3.3	3.5	93.3
	2011/12	5.3	6.5	88.2
Malawi	1998		14.1	85.9
	2008		21.6	78.4
Mali	1998		5.7	84.2
	2009		4.5	85.9

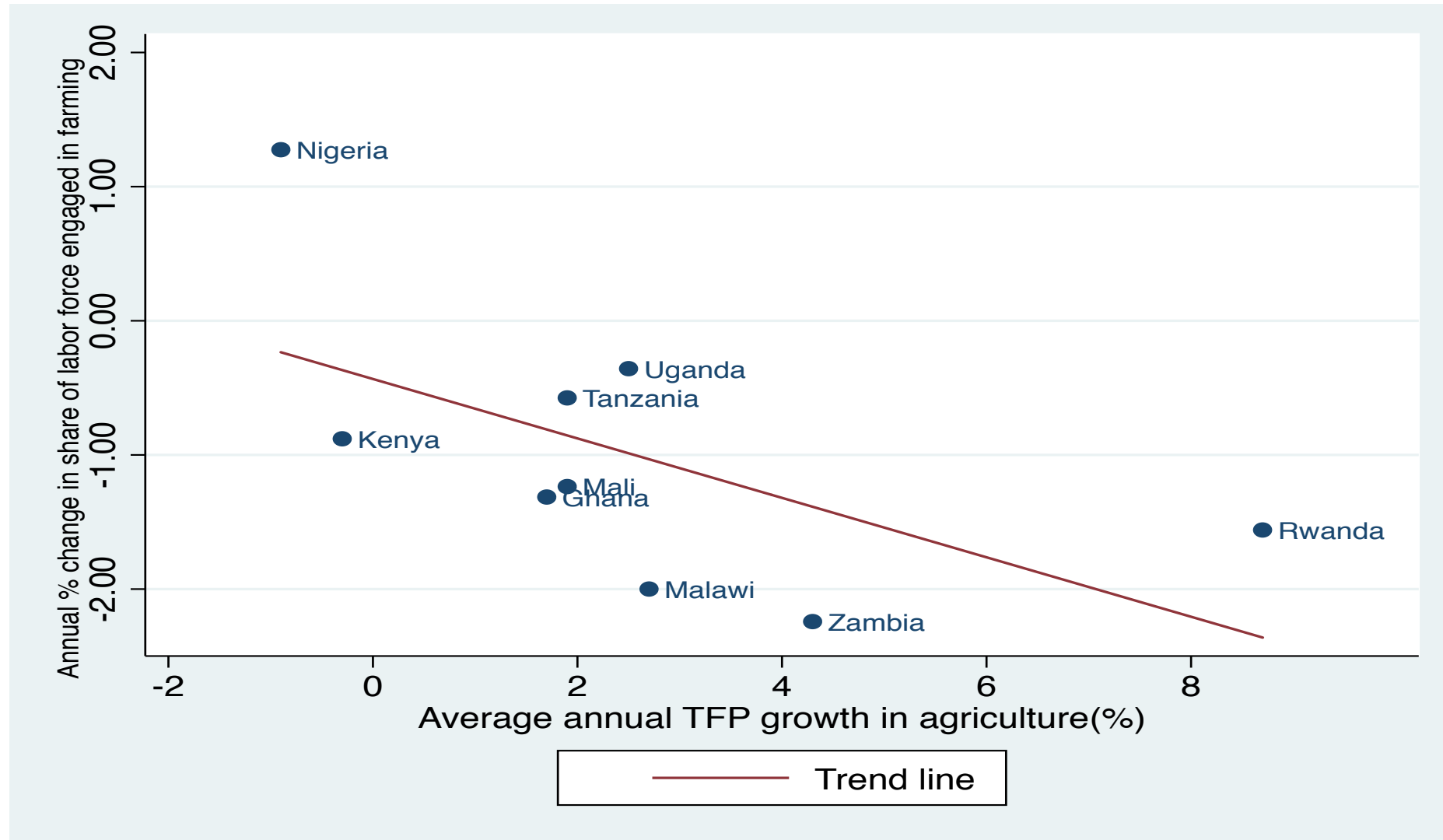
Role of agriculture productivity growth



Role of Agricultural productivity growth

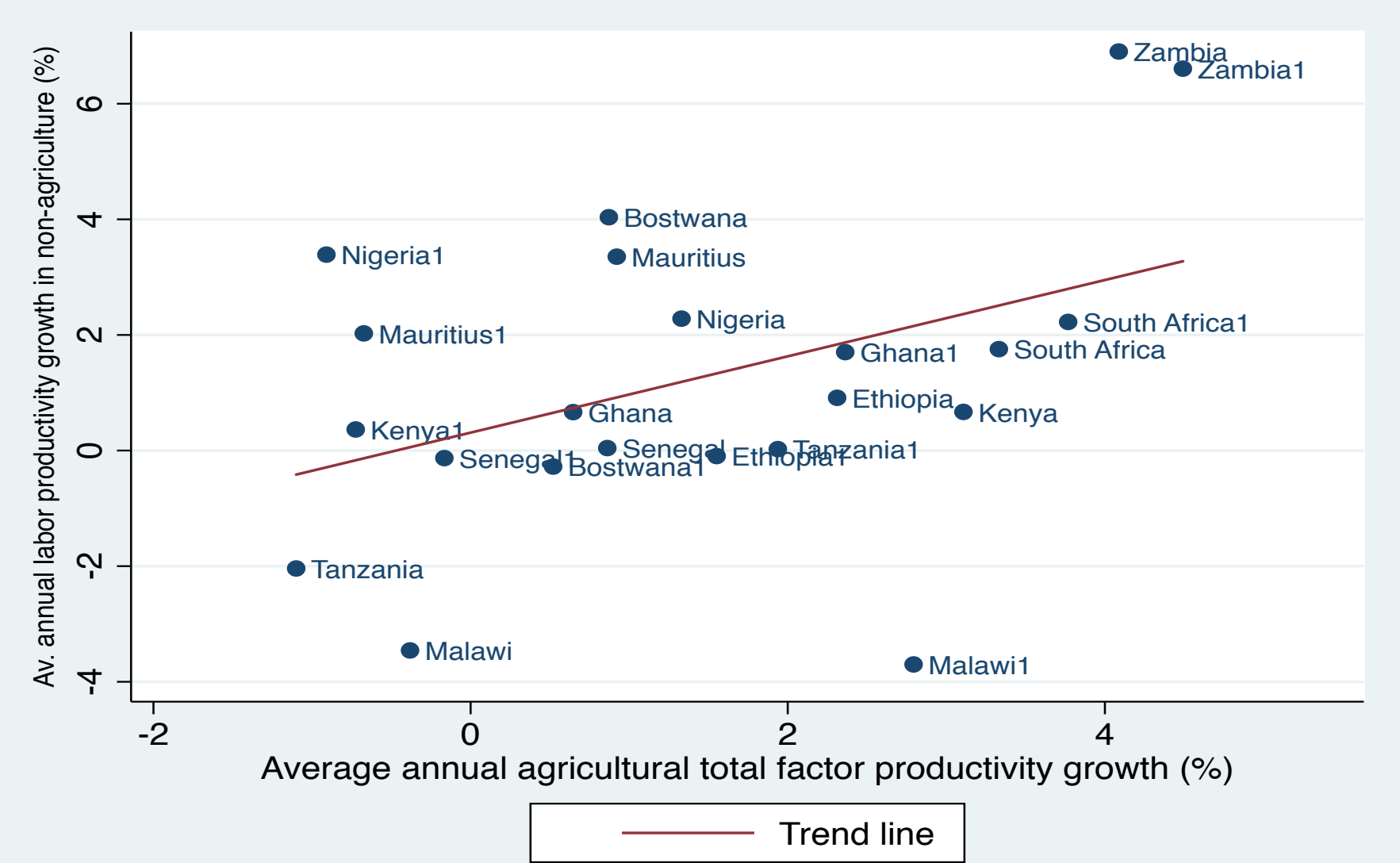
- Sustained agricultural productivity growth arising from green revolution technologies and supportive government policies is credited for increasing the purchasing power of millions of rural families, which stimulated demand for off-farm goods and services, created new jobs in the off-farm economy, and pulled millions of people from the farm into more productive off-farm jobs

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



Source: Yeboah and Jayne, 2016

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



Source: Yeboah and Jayne, 2008

Time series analysis

- Expanded data with additional set of countries (GGDC Africa sector data)
 - Annual data for 11 SSA countries from 1995-2011
- Independent variables
 - Lagged labor productivity in agriculture
 - Lagged labor productivity in non-agriculture
 - Country governance indicator
 - Population density
 - Market access (Road density)
 - Time trend
 - Country fixed effects
- Run series of alternative models for robustness checks
 - Pooled OLS, fixed effect models, first difference

	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

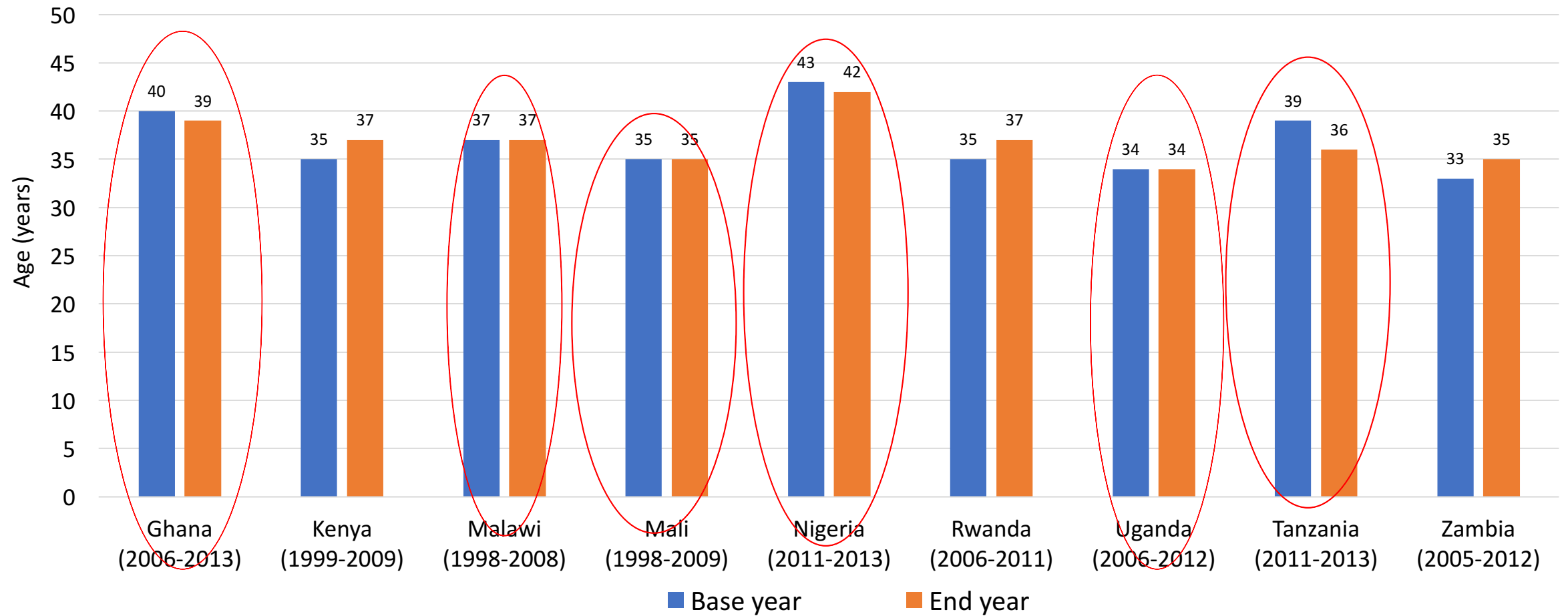
Source: Yeboah and Jayne, 2017

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

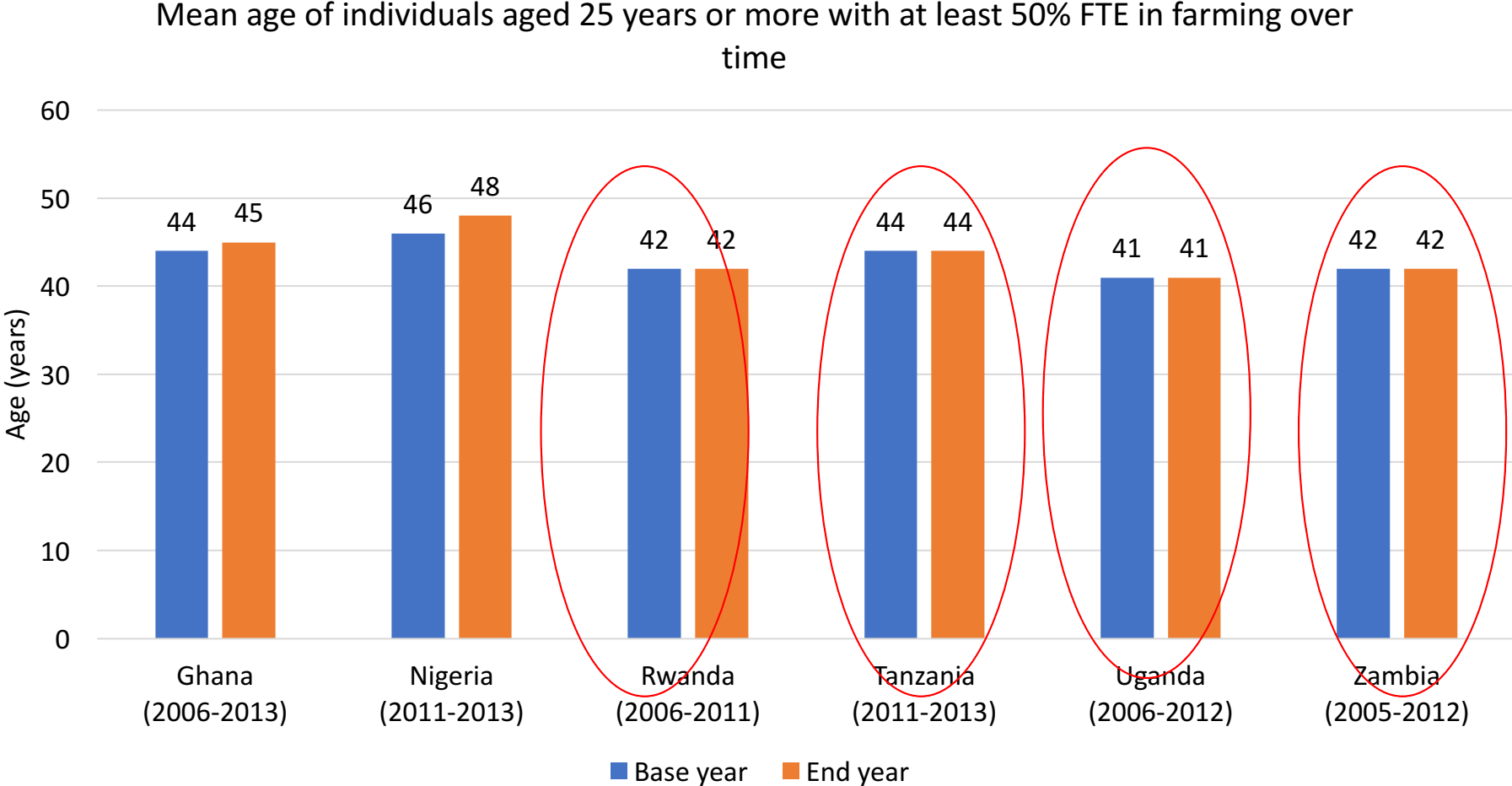
Aging farmer population???

Average age of farmers aged 15 years or more is between 34 and 42 years and has either declined or remained stable over time in most countries

Mean age of individuals aged 15 years or more engaged in farming



Average farmer age ranges from 41 to 48 years when sample is restricted to individuals aged 25 or more and engaged in at least 50% FTE in farming



Recap

1. Significant labor exit from farming in Africa since 2000s
 - Pace more pronounced when jobs computed in FTEs
2. Farming remains extremely important for livelihoods and for economic transformation despite declining job share
 - largest employer and key source of new jobs
3. Rapid % growth in off-farm AFS but from low base
 - May not match farming in absolute level of new jobs
 - Growing off-farm AFS relies on inputs from farming (milk, grains)
4. Performance of farm sector will influence job growth in overall economy
 - Pace of labor exit from farming and labor productivity growth in off-farm sectors linked to agricultural productivity growth

Recap

5. SSA is not yet at risk of the negative effects of an aging farming population
 - Returns to labor in farming will determine whether young people will remain in farming over time

6. Informal enterprises will remain a key feature of the employment landscape
 - African policy makers may thus need to re-orient their policies to recognize informal enterprises as a viable livelihood option and institute productivity enhancing strategies to harness employment gains from this sector.

What should governments do?

- Central plank of a comprehensive youth employment strategy: interventions to raise agricultural productivity growth
 - Create new opportunities in farming
 - Multiplier effects: performance of farming will influence the pace of growth in non-farm and AFS jobs
- Develop youth centered programs to make farming profitable for young people
 - Facilitate access to productivity enhancing inputs (e.g. fertilizer), market, and resources (e.g. land, finance, labor-saving technologies)
 - Promote mentoring by successful farmers (youth mentors)
 - Support value-addition activities for agricultural products

What should governments do?

- Strengthen youth voice on decisions concerning them
- Evaluation of youth employment programs
 - What works well and how?
 - Context specific definitions of youth

Thank you



Questions?