The myth of Africa's ageing farmers

Africa's farming population is widely held to be ageing. However, our authors present statistics suggesting that maintaining a sufficiently dynamic and youthful workforce in farming is not among the many agricultural challenges that the sub-Saharan region faces.

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mong all regions of the world, sub-Saharan Africa has registered the highest rate of agricultural production growth since 2000. Because of agriculture's strong forward and backward linkages with the rest of the economies, agricultural growth has contributed to Africa's rapid expansion of off-farm employment. Indeed, African countries achieving the highest rates of agricultural productivity growth over the past decade generally experienced the fastest growth in off-farm employment and nonfarm labour productivity (Yeboah and Jayne, 2018). These patterns, which mirror East Asia's transformation experience, suggest the performance of agriculture will influence the pace of economic development and diversification in Africa too. However, it is widely believed that Africa's agricultural-led growth trajectory could be jeopardised by an ageing farm population arising from youth disinterest in agriculture (Jöhr, 2012; BBC, 2019). These concerns are succinctly expressed by the Food and Agriculture Organization:

The average age of farmers in the United States and other developed countries borders on 60. In Africa, the average age of farmers is also about 60, despite the fact that 60 per cent of Africa's population is under 24 years of age. So, as farmers are getting older – and as many of them are women with less access to productive resources, especially in developing countries – this raises questions about future prospects for increasing farm productivity. Rural youth are looking for a better livelihood in the cities. Can this pattern fit a sustainable future? (FAO 2014, p. 2)

Despite much conjecture about an ageing farming population, and resulting efforts to encourage greater youth engagement in agriculture, we are unaware of any empirical evidence to support these claims in sub-Saharan Africa. For a region with an average age of 19 years and where, according to the International Labour Organization, more than half of the labour force is engaged in agriculture, it seems implausible for the mean age of the farming population to be around 60 years. However, it is important to examine this issue empirically as we would agree that urgent attention would



Many young Africans continue to work in agriculture – although often on a part-time basis.

Photo: Stephan Bachenheimer

be required if Africa's youth were streaming out of farming so rapidly as to dramatically raise the age of the region's farming population. We therefore utilised available nationally representative survey data from six African countries to examine trends in the age distribution of the labour force in farm and off-farm employment since 2000.

For each country, we examine the trends in average age of the workforce in farming and the off-farm sector, disaggregated by gender and intensity of engagement, as measured by individual's stated primary source of employment and the relative share of their total work time devoted to employment in the sector. Because many Africans in the labour force have more than one job in a given year, we also compute full-time equivalents (FTEs; see Box on page 40) for each individual contained in these nationally representative surveys and report the mean ages according to their shares of time in farming and off-farm activities. We test the robustness of our findings by repli-

cating the analysis for different age distributions, e.g. including vs. excluding youth in the 15–24-year-old category (because their employment patterns often reflect the dictates of their parents rather than long-term employment aspirations) and extending the workforce beyond the standard upper bound of 64 years of age.

Most African adults in farming below 40 years of age

The average age of working-aged individuals primarily engaged in farming ranges from about 32 to 39 years – far less than the widely reported 60 years. Trends over the past decade in the mean age of working-aged adults has in most countries either increased by one or two years or remained constant. These findings are reported in the upper Table on page 41, based on all individuals between 15–64 years of age, and in the lower Table, which restricts the analysis to all individuals aged 25 years to 64 years.

Background

The sources used were the Living Standards Measurement Study – Integrated Surveys of Agriculture (LSMS-ISA) for Nigeria, Tanzania, Rwanda, Uganda, and Labor Force Surveys for Ghana and Zambia. These surveys are conducted by the national statistical services in each country with support from the World Bank. Country selection was based on regional representation across sub-Saharan Africa and the availability of comparable data over two or more periods separated by at least three years. These six countries in the analysis constitute about 34 per cent of the total population of sub-Saharan Africa.

The full-time equivalent (FTE) estimates the share of individuals' work time over the survey period devoted to a particular job. A FTE of 40 hours a week, 4 weeks per month for a 12-month year period was assumed as one FTE. The FTE of any one job is thus computed as the actual number of hours worked as a share of this benchmark 1,920-hour work year.

To provide some illustrations, the most recently available surveys reveal that the mean age of working-age individuals (15-64 years) engaged primarily in farming was 32 years in Tanzania and 39 years in Nigeria. Among individuals devoting at least 50 per cent of their total work time to farming, the mean ages are slightly higher, ranging from 33 years to 40 years (see upper Table). Although farming is generally the primary employment for young people, it is often a part-time activity as youth typically combine employment with education. Hence, restricting the sample to those devoting at least 50 per cent FTE to farming slightly raises the average age of those in farming. Similarly, when excluding the 15-24 year old youth population entirely, the mean age of farmers ranges from 39 years in Zambia to 45 years in Nigeria (lower Table). There are very slight differences in the mean ages of men and women in farming.

These results hold even if the upper limit of the labour force is extended to include all individuals over 64 years of age. Doing so increases the average age of the farming workforce only by 1–2 years because this group constitutes a mere 3.1 per cent of sub-Saharan Africa's overall population (United Nations, 2019).

The age of Africans in farming is hardly rising

Moreover, the age structure of farmers has hardly changed over the past decade or so. Between the first and latest survey periods, which spanned from 6 to 12 years, the average age of the labour force (people between 15 and 64 years of age) in farming increased by less than 2 years in four of the six study countries (Ghana, Rwanda, Uganda, Zambia). Mean farmer age remained unchanged in Nigeria and declined slightly in Tanzania. A similar picture holds when the sample is restricted to individuals over 24 years who spend at least half of their labour time in farming (lower Table). Here,

several countries recorded no change in mean age and none of them experienced more than a 2-year rise in mean age. Although a large number of rural youth are leaving farming as off-farm opportunities continue to expand, the majority of the economically active youth population remains engaged in farming at least on a part-time basis (Yeboah and Jayne, 2018), so that the average age of African adults in farming is hardly rising over time.

People in off-farm jobs slightly younger than those in farming

Individuals in off-farm jobs are generally a couple of years younger than those in farming. As shown in the Tables, working-age individuals devoting at least 50 per cent of their total work time to farming are from one to at most four years older on average than their counterparts in the off-farm sector. But even here the story must be nuanced. For the entire working-age population, the mean age of farmers exceeds that of off-farm workers in only two of the six countries (Ghana and Rwanda). They are roughly the same in three other countries (Nigeria, Uganda, and Zambia). In Tanzania, the mean age of farmers is actually lower than of those in off-farm employment. When excluding the 15-24 year group from the analysis, the farming population is generally older than those engaged in off-farm employment by two years on average. Differences in the mean age of workers in off-farm and farm jobs is expected considering the rapid expansion of off-farm employment opportunities in Africa over the past decade (Yeboah and Jayne, 2018; OECD, 2018). With their relatively higher educational attainment levels and mobility, African youth are taking advantage of job opportunities in the off-farm sector, which further depresses the average age in the off-farm sector relative to farming but in no way implies that few young people are remaining in farming or that the age of African farmers is dramatically rising.

Conclusions

It has become conventional wisdom that African youth's disinterest in farming has induced a large-scale exit of young people from African agriculture, leaving behind an ageing farm population poorly equipped to sustain the region's food needs. However, nationally representative household survey data from every one of the six African countries in which two or more Living Standards Monitoring Surveys with Integrated Agricultural Surveys were conducted show a decidedly more optimistic picture. We highlight three main conclusions. First, contrary to widespread perceptions that most African farmers are elderly, the average age of the agricultural workforce ranges from about 32 years to 39 years. Even when not counting young adults in the 15-24 year old range, the average age of the agricultural workforce is 38-45 years. And even including all elderly people of any age working in farming hardly changes the average age. This is because only 3.1 per cent of sub-Saharan Africa's population are 65 years and over, and only about half of them are economically active and engaged in farming.

Second, the average age of the agricultural workforce in the six African countries examined has either increased by one or two years or remained constant in most of them over the past decade. Considering that roughly 7 to 10 million young people are entering the labour force in sub-Saharan Africa each year, it is easy to understand why the average age of the farming population is not rising, even with large numbers of young people partially or fully moving out of farming. It may be at least several decades before Africa's demographic conditions begin to show increases in the mean age of the overall labour force.

Third, individuals in off-farm jobs are an average one to three years younger than those in farming, especially when the sample excludes the 15–24-year-old age group.

As highlighted in previous studies, farming's employment shares are declining over time as opportunities for off-farm employment expand in Africa's rapidly transforming economies. However, farming still accounts for a significant proportion of the jobs held by working-age individuals and remains the single largest employer of rural youth, although most of these jobs are part-time (Yeboah and Jayne, 2018). While the proportion of young Africans entering farming is certainly lower today than it was several decades ago, a large youth population remains in farming, putting

Mean age of working age individuals (15-64 years), by extent of engagement in farming

Country	Survey years	whose primary employment is non-farm activities			engaged at least 50% FTE in non-farm activities			engaged at least 50% FTE in farming			whose primary activity is farming		
		Total	Males	Females	Total	Males	Females	Total	Males	Females	Total	Males	Females
Ghana	2005/06	36	36	35	37	37	36	38	38	38	37	36	37
	2012/13	35	35	35	36	36	36	39	39	38	35	34	36
	2016/17	36	36	35	37	37	37	39	39	40	37	36	38
Nigeria	2003/04	39	40	38	39	38	40	40	40	40	39	40	39
	2012/13	39	40	38	39	40	39	39	39	39	37	36	38
	2015/16	40	40	39	40	41	39	40	39	41	39	38	40
Rwanda	2005/06	32	32	33	33	32	33	33	33	34	33	33	33
	2010/11	31	31	32	32	32	33	36	35	36	35	34	35
	2013/14	31	32	30	33	33	32	37	37	37	35	34	35
Tanzania	2008/09	35	36	35	36	36	36	36	35	36	35	35	35
	2012/13	33	34	33	34	35	34	35	34	35	33	32	34
	2014/15	35	35	34	35	36	34	33	32	34	32	32	33
Uganda	2005/06	33	33	31	33	33	32	33	33	33	31	31	32
	2011/12	32	33	32	33	32	33	34	33	35	31	30	32
	2013/14	34	35	34	36	36	34	36	35	36	33	31	33
Zambia	2005	33	34	32	33	34	32	31	31	32	31	31	32
	2012	34	34	33	34	35	34	34	35	33	33	34	33

Mean age of individuals in the labour force at least 25 years of age, by extent of engagement in farming

Country	Survey years	whose primary employment is non-farm activities			engaged at least 50% FTE in non-farm activities			engaged at least 50% FTE in farming			whose primary activity is farming		
		Total	Males	Females	Total	Males	Females	Total	Males	Females	Total	Males	Females
Ghana	2005/06	39	39	39	39	39	39	41	42	41	41	41	41
	2012/13	39	38	39	39	39	39	42	43	42	42	43	42
	2016/17	39	39	39	40	39	40	43	44	43	43	43	43
Nigeria	2003/04	41	42	40	40	41	39	43	43	42	43	43	42
	2012/13	41	42	41	42	42	41	44	44	43	43	44	43
	2015/16	42	43	41	42	43	41	45	45	44	45	45	44
Rwanda	2005/06	37	37	38	37	36	37	40	40	40	40	39	40
	2010/11	36	36	36	36	35	36	40	40	40	40	40	40
	2013/14	36	36	35	36	36	37	41	41	40	40	41	40
Tanzania	2008/09	38	38	38	39	39	39	40	41	40	40	40	40
	2012/13	38	38	38	38	39	38	41	41	41	41	41	41
	2014/15	38	39	38	38	38	38	41	41	40	40	41	40
Uganda	2005/06	36	37	35	36	37	35	39	39	38	39	39	39
	2011/12	36	37	36	37	37	37	40	39	40	40	40	40
	2013/14	39	39	38	39	39	38	41	41	41	41	41	41
Zambia	2005	36	36	36	36	36	36	39	38	39	39	38	39
	2012	37	37	37	37	37	37	39	39	39	39	39	39

Source: Author's estimates from Ghana Living Standard Survey 5, 6 and 7; Nigeria's Living Standard Survey (2004) and General Household Survey (2013 and 2016); Rwanda Integrated Household Living Survey (EICV 2, 3 and 4); Tanzania National Panel Survey (2009, 2013 and 2015); Uganda National Panel Survey (2006, 2012 and 2014); Zambia Labor Force Surveys (2005 and 2012).

downward pressure on the average age of the farming population.

Given these nationally representative surveys, it should be clear that maintaining a sufficiently dynamic and youthful workforce in farming is fortunately not among the region's many agricultural challenges. What is missing, however, is a critical mass of skilled young Africans with access to finance and knowhow to drive productivity growth in farming and related value chains. The idea of keeping young people in farming for fear of African agriculture becoming the preserve of the elderly is misplaced. A more effective strategy would prioritise resourcing the millions of rural youth

already engaged in farming to make farming more profitable. Making agriculture "sexy" is not nearly as important as making it profitable. Young people will flock to agriculture if/when it becomes clear that it can make good money. A related priority is for governments to address the many policy, regulatory and financing barriers that inhibit skilled young Africans from starting and expanding agribusiness firms that provide important services to African farmers.

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