CHAPTER 7

Building Livelihoods for Rural Youth: A Gendered Perspective

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Young women and men in rural Africa are coming of age in rapidly changing local and global environments (National Research Council and Institute of Medicine 2005). Across the continent, countries are experiencing structural transformation (ST) as economies shift from labor-intensive and low-productivity activities, such as agriculture, to more productive and skill-intensive ones, such as manufacturing and services. Rural transformation (RT) is also under way in many countries, as rural economies, communities, and social institutions diversify (de Vries, Timmer, and de Vries 2015). Some countries are experiencing the demographic transition, as lags between declines in mortality and fertility rates have led to large youth cohorts (Bloom, Canning, and Sevilla 2003). Against this backdrop, the transition to adulthood has also changed. Compared with their parents, young people are staying in school longer, marrying later, and building their livelihoods from a broader range of economic sectors (Behrman and Sengupta 2005).

There is increased interest in enhancing livelihood opportunities for rural African youth,[2] partly motivated by the desire to harness the increased supply of labor from relatively large youth cohorts (that is, the youth bulge) to fulfill the promise of the "demographic dividend" and contribute to economic growth (Bloom, Canning, and Sevilla 2003). However, these efforts seldom consider how gender affects transitions to adulthood. For many boys becoming men, windows of opportunity begin to open. Meanwhile, as girls become women, many opportunities fail to emerge (Hallman et al. 2015). As young people begin pursuing their own livelihood strategies, they may inherit productive assets (such as land), seek employment, or develop a small business—all of which are experienced differently by gender (Elias et al. 2018). As young people marry and have children, they may experience increased responsibilities, whether domestic responsibilities or the expectation to earn an income.

In this chapter, we examine how rural African young women and men are building their livelihoods. We present a conceptual framework on the gendered development of livelihood strategies during the transition to adulthood in developing countries. We review existing evidence on youth livelihoods in rural Africa and present empirical evidence from our analysis of Demographic and Health Surveys (DHS) data in 25 African countries. We then consider these findings with a synthesis of the current evidence on interventions for rural youth to highlight future directions for gender-sensitive interventions for rural African youth. Such interventions have the largest potential for impact if they integrate needs in the productive and reproductive spheres.

Conceptual Framework

Our approach to examining how gender roles affect livelihood strategies, resources, constraints, and opportunities that young women and men face is based on two complementary conceptual frameworks: the transitions-to-adulthood framework and the Gender, Agriculture, and Assets Project (GAAP) framework. Our exposition of these frameworks draws heavily from Heckert et al. (n.d.) and Doss et al. (2019).

Multilayered Contexts

A fundamental aspect of our conceptual framework is that young people's lives are embedded in interconnected and rapidly transforming contexts influenced by household, local community, regional, national, and global factors. These diverse contexts influence whether and how rural youth study, work, marry, and live. Whether youth live in nuclear or extended or in polygynous or monogamous families is important, as is whether youth are spouses, direct offspring, or in-laws of the household head or household heads themselves.

The effects of structural and rural transformation and the demographic transition are national characteristics that are experienced at the local and household level and affect young men and women differently. For example, RT may not fully benefit women, because social norms and legal frameworks may preclude women from landownership or decision making around production. Gender both determines and is an outcome of these macro-level characteristics. Economies with relatively egalitarian gender norms and a high level of ST may have experienced the demographic transition more rapidly, provided more education and training opportunities for young women, and absorbed more young women into the wage sector compared with a similar economy that started with more restrictive gender norms.

The demographic transition often goes hand and hand with ST (Galor and Weil 2000). Where infant mortality rates have recently declined and fertility remains high, these demographic patterns have led to large youth cohorts relative to the size of the population, often referred to as the youth bulge (Bloom, Canning, and Sevilla 2003). Members of large cohorts experience competition for scarce resources both within their families and with age-mates (Lam and

2 We classify areas as rural according to the definition of each country's national statistics office. We refer to youth as the period between childhood and adulthood. For statistical purposes, the United Nations defines youth as 15 to 24 years old, although many African governments use a higher upper bound (commonly 35). We use the 15-to-24-years-old definition in our empirical analysis.

Marteleto 2008). Although research has examined competition throughout the demographic transition, it has not focused on differential consequences by gender. Girls with many brothers may be less likely to inherit land. Similarly, when competing for limited jobs across a large cohort, more lucrative job opportunities may favor young men.

Transitions-to-Adulthood Framework

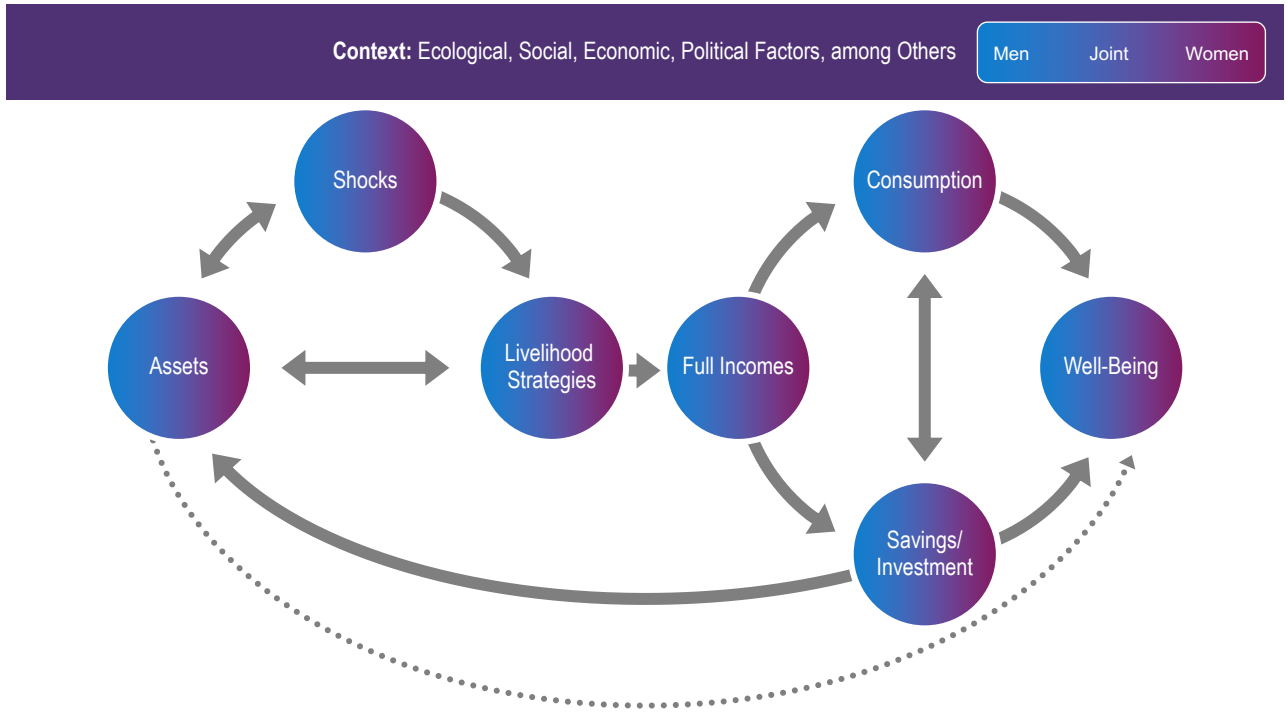
The transitions-to-adulthood framework, developed by the National Research Council (US) Panel on Transitions to Adulthood in Developing Countries, focuses on young people's entry into adult roles in the interrelated areas of work, citizenship, and family (marriage and parenthood). It emphasizes "changes in the acquisition of various kinds of attributes or capabilities and in orientation toward the changing structure of opportunity" (National Research Council and Institute of Medicine 2005, 35). This framework considers the changing contexts at the global, national, and community levels and recognizes the gendered implications at each level.

Three aspects of the transitions-to-adulthood framework are relevant here: (1) it emphasizes change—in the global and immediate environments, in young people themselves, and how the transition to adulthood changes over time; (2) it acknowledges that transitions are shaped by the context of young people's daily lives; (3) it highlights the links between context and individual behavior and considers changes in individual resources (for example, landownership), attributes during the transition (for example, education, employment), and in the timing, sequencing, duration, and nature of the transition to adult roles. The framework recognizes that these transitions occur at different ages depending on culture and context. Context is especially important for rural African youth, given the cultural, tribal, and ethnic diversity of the continent and within countries.

The Gender, Agriculture, and Assets Project Framework

The GAAP conceptual framework, inspired by the Sustainable Livelihoods Framework (Bebbington 1999; DFID 2001) and discussed in the introduction to this report, takes the gendered nature of use, ownership, and control of assets as a starting point (Meinzen-Dick et al. 2011), and links assets, livelihoods, and well-being outcomes (Figure 7.1). Households and individuals—including young men and women—hold a range of tangible and intangible assets. The GAAP framework demonstrates the link between assets and well-being and how gender relations influence rural young men's and women's constraints and opportunities. Each component is shaded, indicating that assets and activities may be individual or joint,

FIGURE 7.1—THE GENDER, AGRICULTURE, AND ASSETS PROJECT CONCEPTUAL FRAMEWORK



Source: Adapted from Meinzen-Dick et al. (2011).

involving spouses, a parent and child, siblings, or others. The GAAP framework (1) accounts for gendered transitions to adulthood; (2) reveals the linkages among domains needed to participate in adult livelihood roles; and (3) captures broad, economic contextual changes that shape youth outcomes. This framework informs our questions on how the contextual characteristics of structural and rural transformation and individual and household attributes are related to landownership, labor force participation, and sector of employment during the transition to adulthood, and how those associations differ for young women and young men. Below, we elaborate on key components relevant to the gendered transition to adulthood.

Assets

Access to and control over assets are key determinants of individual agency that have age and gender dimensions. Within a household, assets are owned or used by women, by men, or jointly (Doss et al. 2014). Although most natural, physical, and financial assets are held by men, young men frequently acquire assets only when they marry and form a separate household (Fafchamps and Quisumbing 2007). In other cases, asset accumulation demonstrates marriage eligibility. Although young women typically own fewer assets than men (Quisumbing and Maluccio 2003), where marriage confers property rights to both spouses, women who marry young may acquire joint assets earlier than men.

Land is the physical asset most relevant in rural areas. Only recently has landownership data been collected at the individual rather than the household level and used to analyze patterns by gender (Doss et al. 2015). In many cultures, marriage signals the beginning of a new family unit, and parents may transfer land to their children. While youth may not yet own land, their expectations of inheritance differ by gender (Berckmoes and White 2014). Gendered social norms also govern access to productive assets. In Ethiopia, young men are expected to farm their own plot (if they have one), work their parents' plots, or work as hired labor while accumulating some assets (Gella and Tadele 2015). Young, unmarried women, however, cannot work independently and can acquire productive assets only jointly upon marriage (Gella and Tadele 2015). Practices of farm labor and land acquisition vary widely across Africa, but often they are gendered.

Education is key for rural youth to capitalize on potential opportunities. Although girls typically have lower educational attainment, gender gaps in education are closing in many places (Behrman and Sengupta 2005). Expectations about girls' contributions to household work, however, may still limit their educational potential (Porter et al. 2011). Education influences livelihood choices, and we account for its effect on livelihood outcomes, but we do not analyze it as an outcome in itself (see instead Glewwe and Muralidharan 2016).

Full Incomes

Full income is the total value of goods and services produced by household members, whether consumed within the household, traded, or sold. It includes the value of time spent on domestic responsibilities and childcare, even if unpaid. Although difficult to measure, it is conceptually important. Labor remunerated in cash is often more visible than labor producing goods for home consumption. The invisibility of women's work, especially that of young women, could affect their bargaining power within their natal and marital households and their livelihood choices.

Livelihood Strategies

Stocks of assets, available strategies to use them, and access to additional inputs or assets belonging to others, in turn, affect livelihood strategies, in ways that differ for young men and women. Such strategies include seeking employment, whether in agriculture or elsewhere, becoming entrepreneurs, or engaging solely in home production. Below we elaborate on gendered aspects of livelihood strategies.

Employment. Both farm and nonfarm work offer rural youth important opportunities. Regardless of sector or country, young men are much more likely to be employed than young women; among unemployed youth, young men tend to become discouraged and cease their job search without initiating additional activities, whereas unemployed young women typically engage in nonmarket activities, such as uncompensated household work (Fares, Montenegro, and Orazem 2006). Education may develop skills required in off-farm activities and transform preferences about desirable types of work. Similarly, gendered social norms affect the acceptability of and preferences for different types and locations of work (Chapter 2 in this report). Additionally, workplace safety is a greater concern for young women, and sexual assault is a common reason for leaving jobs (Hajdu et al. 2013).

Self-employment or entrepreneurship, generally off-farm, is another common youth livelihood strategy that generates employment, increases resilience, and utilizes innovation (White and Kenyon 2007). In Nigeria, young women prefer off-farm entrepreneurship to working on the family farm, because it typically

allows them to control cash earnings (Bryceson 2002). Although women's entrepreneurship is increasing, men remain more likely to be involved in entrepreneurial activities (Vossenberg 2013), and men's businesses are typically larger (Doss et al. 2014). These patterns vary across countries and may not account for age-related differences in entrepreneurship. Our data do not permit the analysis of self-employment by sex and age, but we note this as important.

Migration. When the demand for education or employment is unmet in rural areas, perceived opportunities elsewhere may encourage both young women and men to migrate. Migration offers youth the opportunity to earn and manage income and make decisions independently from their natal households, which may alter transitions related to family formation (Heckert 2015). For example, in Mali, where the early marriage of girls is common, migration allows young women to accumulate more resources prior to marriage and helps delay marriage (Hertrich and Lesclingand 2012).

Not in Employment, Education, or Training. Many youth are currently not in employment, education, or training (NEET).[3] The literature on NEET youth rarely applies a gender lens. A study of eight countries in Africa found that 23.6 percent of rural young women, but only 11.8 percent of rural young men, were NEET (Elder et al. 2015). Notably, studies of NEET youth do not typically account for the contribution of domestic labor, misclassifying those doing unpaid care work as not working. Considering the productive and reproductive roles of young women and men may enhance our understanding of NEET dynamics. For instance, most NEET young women are full-time caregivers and young men are unemployed across North Africa (Abbott and Teti 2017).

Data

To complement the literature on rural youth's gendered resources, constraints, and opportunities, we use DHS data collected between 2010 and 2016 from 25 African countries to describe factors associated with five outcomes related to the development of livelihood strategies for rural youth: any sole landownership, joint landownership only, current employment, NEET status, and on-farm employment. DHS data are nationally representative and include a range of demographic, health, and socioeconomic indicators. In addition to a household survey, individual interviews are generally conducted with all woman of reproductive age (15 to 49 years) in each household and men of similar age in a randomly selected subset of households. We limit our sample to 15-to-24-year-olds in rural areas. Table 7.1 describes the surveys we include. All estimates

TABLE 7.1—COUNTRIES INCLUDED IN ANALYSIS

East Africa		Southern Africa		West and central Africa			
Country	*n* = female/male	Country	*n* = female/male	Country	*n* = female/male	Country	*n* = female/male
Burundi (2010)	3,195/ 1,166	Lesotho (2014)	1,948/ 876	Benin (2011–12)	3,105/ 960	Guinea (2012)	1,958/ 702
Ethiopia (2016)	4,061/ 3,137	Malawi (2015–16)	8,129/ 2,511	Burkina Faso (2010)	4,173/ 1,624	Mali (2012–13)	2,392/ 786
Kenya (2014)	3,441/ 3,126	Mozambique (2011)	3,015/ 773	Cameroon (2015)	3,117/ 1,238	Niger (2012)	2,517/ 629
Rwanda (2014–15)	3,802/ 1,689	Namibia (2013)	1,749/ 895	Chad (2014–15)	4,961/ 1,284	Nigeria (2013)	8,788/ 3,829
Tanzania (2015–16)	3,648/ 1,095	Zambia (2013–14)	3,278/ 2,866	Côte d'Ivoire (2011–12)	1,881/ 871	Senegal (2016)	2,401/ 944
Uganda (2016)	518/ 160			Gambia (2013)	2,490/ 869	Sierra Leone (2013)	3,550/ 1,304
				Ghana (2014)	1,761/ 832	Togo (2013–14)	1,963/ 1,079

Source: Demographic and Health Surveys data, rural youth, 15–24 years

3 Includes youth who may be searching or intending to search for such opportunities or be engaged in unpaid household work.

account for multistage sample selection, and weights are adjusted to account for each country's sample size relative to its population size.

We use the World Development Indicators to construct country-level indicators of ST—the nonagricultural value-added share of gross domestic product—and RT—the agricultural value-added per worker (both in constant 2010 US dollars) (Stecklov and Menashe-Oren 2018). The ratio of youth to working age adults is the ratio of 15-to-24-year-olds to 25-to-64-year-olds from national population estimates at the year of the survey. Although many aspects of the population distribution change during the demographic transition, this ratio reflects the competition for resources (for example, land, jobs) as youth start to develop their livelihood strategies.

Descriptive Analysis

We first describe the country-level characteristics that create the macro-level context of young people's lives. Figure 7.2 is a scatterplot of ST by RT for countries in the sample. Lesotho, Namibia, and Zambia have the highest ST, and Sierra Leone has the lowest; Nigeria has exceptionally high RT. Figure 7.3 depicts the ratio of youth to working-age adults. Smaller values occur for countries, such as Rwanda and Ghana, that experienced an earlier fertility transition, whereas Burundi and Sahel countries have large values. Values are also large where prime-age adult mortality is high (for example, from HIV/AIDS), such as in Malawi and Uganda.

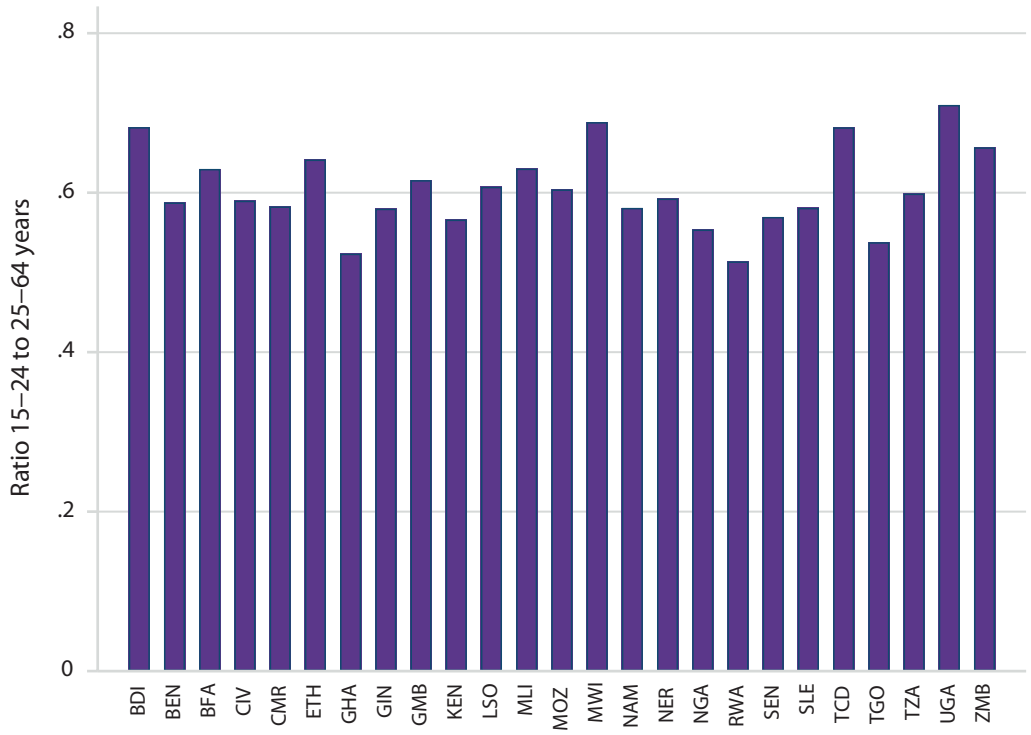
We examine individual and household characteristics by region (Table 7.2). Young men more often own land solely, compared with young women, in all three regions, although the gender gap is small in southern Africa. Joint landownership was higher for young women than for young men in East Africa and southern Africa, whereas it was similar across gender in West and central Africa. These patterns are consistent with land inheritance and transfer practices in which women marry earlier and may gain shared property rights through marriage.

FIGURE 7.2—SCATTERPLOT OF THE LEVEL OF STRUCTURAL TRANSFORMATION BY RURAL TRANSFORMATION

Source: Calculated from the World Development Indicators.

In terms of current activities, in all three regions more young men currently attend school than young women (counting those who are simultaneously employed). Young men are also more often currently employed than young women. Among the employed, in East Africa and West and central Africa, more young men than young women work in on-farm activities. In southern Africa, among employed young men and women, a similar proportion perform on-farm jobs. Overall, young women are more likely to be NEET than young men, but many of them are married or have children, or both, which may mask the large amount of domestic labor that they undertake.

FIGURE 7.3—RATIO OF YOUTH (AGES 15–24) TO WORKING-AGE ADULTS (AGES 25–64), BY COUNTRY



Source: World Development Indicators from the year of DHS data collection in each country.

Although many youth are still attending school, 15 is above-age for primary school progression, and primary school completion is low. In southern Africa and West and central Africa, young men are more likely than young women to have completed primary school, with larger gender gaps in West and central Africa. In East Africa, young women's primary school completion outperforms young men's by a small margin. Both young women and men experience obstacles to educational attainment, which may be related to demands for their labor or fulfillment of domestic responsibilities (Glewwe and Muralidharan 2016).

In all three regions, more young women than young men have ever been married. Early marriage for girls is closely linked to other important livelihood outcomes, such as early exit from school and time to gain labor force experience. Union formation patterns are also reflected in household structure: young women are more likely to be spouses of the household head, and young men are more likely to be household heads themselves or a child of the household head.

Regression Analysis

To strengthen the evidence on youth's gendered transitions to adulthood, we estimate the following set of multivariate probit regressions:

$$Y_{ik} = \alpha + X_i\beta + X_h\gamma + ST_c\delta + RT_c\mu + RY_c\lambda + \varepsilon_i, \qquad (1)$$

where Y_{ik} is the outcome of interest for individual i, with k indexing currently employed, NEET, and on-farm employment (among those currently employed). Using the same specification, we estimate multinomial probit models for our landownership outcomes: any sole ownership, and joint ownership only, with no ownership as the reference group. In all regressions, we control for vectors of individual (X_i) and household-level (X_h) characteristics: age group, educational attainment, ever married or in union, parenthood, presence of a child less than five years of age in the household, relationship to household head, log of household size, and wealth quintile. ST, RT, and the ratio of youth to working-age adults (RY) are defined above and measured at the country level (c); and ε_i is the error term. We estimate equation (1) separately for young women and young men and test whether the coefficients for each outcome differ significantly. All analyses account for stratification and clustering.

We pool the data from all countries because in some regions there was limited variability in the country-level characteristics. The descriptive characteristics of the pooled sample are found in Table 7.A.1.[4]

4 See Chapter 7 Table A.1 (https://www.resakss.org/node/6745?region=aw).

TABLE 7.2—CHARACTERISTICS OF RURAL YOUTH (AGES 15–24 YEARS), BY SUBREGION AND SEX

	East Africa		Southern Africa		West and central Africa	
	Female	Male	Female	Male	Female	Male
	Mean	Mean	Mean	Mean	Mean	Mean
Landownership						
None	0.76	0.82	0.68	0.81	0.85	0.81
Any sole	0.07	0.13	0.12	0.14	0.06	0.12
Joint	0.17	0.05	0.20	0.06	0.08	0.07
Activities						
School	0.24	0.19	0.23	0.28	0.15	0.24
Employed	0.32	0.51	0.31	0.38	0.39	0.49
School and employed	0.07	0.26	0.06	0.18	0.05	0.14
NEET (total)	0.37	0.05	0.40	0.15	0.41	0.14
Married; has children	0.17	0.00	0.19	0.02	0.21	0.00
Married; no children	0.05	0.00	0.05	0.01	0.08	0.00
Not married; has children	0.02	0.00	0.07	0.01	0.02	0.00
Not married; no children	0.12	0.05	0.09	0.12	0.10	0.13
On-farm employment†	0.63	0.77	0.76	0.76	0.32	0.60
Other characteristics						
Age 15–17	0.34	0.37	0.33	0.38	0.32	0.38
Age 18–21	0.42	0.39	0.41	0.42	0.43	0.42
Age 22–24	0.24	0.23	0.25	0.19	0.24	0.21
No education or incomplete primary	0.60	0.68	0.53	0.43	0.61	0.42
Completed primary	0.17	0.11	0.12	0.16	0.07	0.08
Some secondary or higher	0.23	0.21	0.34	0.41	0.32	0.50
Ever married	0.45	0.14	0.52	0.16	0.60	0.12
Relationship to household head						
Respondent is head	0.04	0.11	0.07	0.14	0.04	0.16
Spouse	0.29	0.03	0.32	0.03	0.46	0.01
Son/daughter	0.49	0.73	0.36	0.15	0.33	0.65
Son/daughter-in-law	0.05	0.00	0.05	0.40	0.05	0.00
Other	0.14	0.13	0.21	0.29	0.13	0.18
Not a parent, no children < 5 in HH	0.35	0.54	0.23	0.36	0.27	0.43
Not a parent, child < 5 in HH	0.27	0.38	0.25	0.49	0.25	0.49
Parent, no child < 5 in HH	0.02	0.01	0.02	0.02	0.02	0.01
Parent, child < 5 lives in HH	0.36	0.07	0.49	0.12	0.47	0.06
Household size	5.97	6.20	5.91	6.73	6.65	7.53

Source: Authors' calculations using pooled data from 25 Demographic and Health Surveys collected between 2010 and 2016.
Note: Sample is 15-to-24-year-olds. Weighted estimates are adjusted for country's sample size relative to population size. NEET = not in employment, education, or training; HH = household. † Among currently employed.

Regression Results

Among rural African youth, landownership (any sole or joint) is less common at higher levels of ST for both young women and men (Table 7.3), suggesting that ST may limit young people's ability to own land. These effects are significantly larger for young men than young women. Young women, who often own land jointly (for example, through older husbands), may be protected from the negative effects of ST on youth landownership. In contrast, higher levels of RT, when land is more productive, are associated with young men being slightly more likely to own land solely, whereas young women are less likely to own land at all. Macro-level processes that enhance agricultural productivity coupled with gender norms around individual-level productive and reproductive transitions may facilitate land acquisition for young men but prevent it for young women. A relatively larger youth population is also positively associated with joint and sole landownership for young women and men, with a significantly larger effect for young women compared with young men. A smaller working-age adult population, especially if due to adult mortality, may provide opportunities for youth to acquire land. In the case of sole ownership, this process favors young women.

Among individual and household characteristics associated with landownership, older youth more often own land. Relative to young women with less than a primary education, those with more education are more likely to own land jointly. Young men with secondary or higher levels of education were less likely to own land solely than those without primary education, perhaps because the former are still in school and have yet to accumulate physical assets or are concentrating their capital elsewhere. Meanwhile, early dropouts may have invested in farming. Or parents may allocate land to some children and invest in the education of others (Quisumbing, Estudillo, and Otsuka 2004).

Marriage is positively associated with landownership (both solely and jointly). The effects are larger for young men for sole ownership and larger for women for joint ownership. Both young men and women who are household heads, and young women married to the household head, are most likely to own land. These findings are consistent with inheritance and land acquisition patterns. Young mothers are more likely to own land solely, as are young fathers. Young women who live in larger households are less likely to be the sole owners of land, which is likely the result of living with extended kin or co-wives who have more claim to these resources. Among young men, those in larger households are also less likely to own land solely, but more likely to own land jointly, suggesting that living in extended families may provide some claim to productive resources.

In terms of current livelihood activities, young men and young women in rural African are less likely to be employed at higher levels of ST and RT (Table 7.4). The magnitude of these coefficients differs significantly by gender; young men are less likely than women to be employed at higher levels of ST. In contrast, rural young women are less likely than men to be employed at higher levels of RT. These patterns may occur because youth remain in school longer at higher levels of ST, or because ST creates employment opportunities in the nonfarm sector that require specific training or experience unavailable to rural youth. Young men may be less likely to be employed than young women in higher ST countries because they are less likely to settle for lower-status jobs in rural areas. During periods of rural transformation, rural youth may encounter limited employment opportunities as increased technology and efficiency affords fewer opportunities for unskilled workers and creates more competition for the few jobs available. Additionally, young women, if not given access to training or technology, may be further pushed out of employment opportunities.

The patterns by ST and RT are similarly reflected in NEET outcomes. Higher levels of ST and RT are positively associated with being NEET, especially for young men, suggesting that both young men and women are missing out on valuable education and work experience in countries at higher levels of structural and rural transformation. Among the employed, on-farm employment is more common at higher levels of ST for young women, but the association for young men did not vary by ST. At higher levels of ST, men may be better able to find work off-farm, while women replace men in on-farm work. At higher levels of RT, on-farm employment was less common for young women and men, suggesting that with increased efficiency, there is less demand for (less experienced) youth on-farm labor.

In countries with relatively large youth cohorts, young women are less likely to be employed, whereas young men are more likely to be employed. Meanwhile, both young women and men are more likely to be NEET. During periods when the youth cohort is relatively large, there may be fierce intracohort competition for employment opportunities (or other resources) that may be particularly detrimental to young women. Among the employed, large youth cohorts are positively associated with on-farm employment for both young men and women.

TABLE 7.3—MULTINOMIAL PROBIT RESULTS FOR RURAL YOUTH LANDOWNERSHIP OUTCOMES, BY SEX

	Any sole ownership			Joint ownership only		
	Female	Male	Difference in coefficients	Female	Male	Difference in coefficients
	(1)	(2)	(3)	(4)	(5)	(6)
ST: Share of nonagriculture in GDP (%)	-0.31** (0.13)	-1.20*** (0.16)	***	-0.76*** (0.15)	-1.06*** (0.14)	***
RT: Agricultural value-added per worker (millions, 2016 US dollars)	-0.00** (0.00)	0.00*** (0.00)	***	-0.02*** (0.00)	0.00 (0.00)	***
Ratio of working-age youth (15–24 years old) to adult (25–64 years old) population	0.64*** (0.03)	0.56*** (0.04)	***	0.23*** (0.03)	0.17*** (0.03)	
Age 15–17 (reference group)						
Age 18–21	0.01** (0.00)	0.06*** (0.00)	***	0.02*** (0.00)	0.01*** (0.00)	***
Age 22–24	0.01*** (0.00)	0.08*** (0.01)	***	0.03*** (0.00)	0.03*** (0.00)	***
No education or incomplete primary (reference group)						
Completed primary	-0.00 (0.00)	0.01** (0.01)		0.03*** (0.00)	-0.01* (0.00)	***
Some or completed secondary, or higher	0.00 (0.00)	-0.02*** (0.00)	***	0.01** (0.00)	-0.01 (0.00)	***
Ever married	0.04*** (0.00)	0.08*** (0.01)	**	0.10*** (0.01)	0.04*** (0.01)	**
Child of HoH (reference)						
Respondent is HoH	0.08*** (0.01)	0.10*** (0.01)		0.08*** (0.01)	0.04*** (0.01)	
Spouse	0.03*** (0.00)	0.02 (0.01)	***	0.12*** (0.01)	-0.02 (0.01)	***
Son/daughter-in-law	-0.01** (0.01)	0.03 (0.03)		0.06*** (0.01)	0.02 (0.02)	
Other relationship	-0.00 (0.00)	0.02*** (0.00)	**	0.03*** (0.01)	0.01 (0.00)	
Not a parent and no child < 5 years old lives in HH (reference group)						
Not a parent; child < 5 years old lives in HH	0.00 (0.00)	-0.01 (0.00)	*	0.01 (0.00)	0.01** (0.00)	
Parent; no child < 5 years old lives in HH	0.02*** (0.01)	0.02 (0.01)		0.00 (0.01)	-0.01 (0.01)	
Parent; child < 5 years old lives in HH	0.03*** (0.00)	0.03*** (0.01)		0.01*** (0.00)	0.01** (0.01)	
Log of HH size	-0.01** (0.00)	-0.01** (0.00)		-0.01*** (0.00)	0.01** (0.00)	***
Observations	78,774	34,022		78,774	34,022	

Source: Authors' calculations using pooled data from 25 Demographic and Health Surveys collected between 2010 and 2016.
Note: Sample is 15-24-year-olds. Coefficients are marginal effects from multinomial probit estimates with no ownership as the reference group. Regressions control for household wealth quintile. Standard errors account for multistage survey design. Any sole ownership represents sole ownership only, and sole and joint ownership. ST = structural transformation; RT = rural transformation; GDP = gross domestic product; HoH = head of household; HH = household. * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$.

TABLE 7.4—PROBIT RESULTS FOR RURAL YOUTH EMPLOYMENT OUTCOMES, BY SEX

	Currently employed			NEET			On-farm employment‡		
	Female	Male	Difference in coefficients	Female	Male	Difference in coefficients	Female	Male	Difference in coefficients
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
ST: Share of nonagriculture in GDP (%)	-1.64*** -(0.23)	-2.80*** (0.30)	***	0.88*** (0.21)	1.65*** (0.20)	***	1.50*** (0.37)	0.32 (0.38)	**
RT: Agricultural value-added per worker (millions, 2016 US dollars)	-0.01*** (0.00)	-0.00*** (0.00)	**	0.01*** (0.00)	0.01*** (0.00)	***	-0.06*** (0.00)	-0.02*** (0.00)	***
Ratio of working-age youth (15–24 years old) to adult (25–64 years old) population	-0.46*** (0.06)	0.31*** (0.08)	***	0.52*** (0.05)	0.20*** (0.05)		0.52*** (0.07)	0.68*** (0.09)	*
Age 15–17 (reference group)									
Age 18–21	0.12*** (0.00)	0.16*** (0.01)	***	0.06*** (0.00)	0.03*** (0.00)		-0.02*** (0.01)	-0.04*** (0.01)	*
Age 22–24	0.19*** (0.01)	0.27*** (0.01)	***	0.01** (0.01)	0.05*** (0.01)	***	-0.04*** (0.01)	-0.08*** (0.01)	***
No education or incomplete primary (reference group)									
Completed primary	0.07*** (0.01)	0.01 (0.01)	***	-0.10*** (0.01)	-0.03*** (0.01)	***	0.03*** (0.01)	-0.06*** (0.01)	***
Some or completed secondary, or higher	-0.08*** (0.01)	-0.18*** (0.01)	***	-0.14*** (0.00)	-0.06*** (0.00)	***	-0.08*** (0.01)	-0.12*** (0.01)	***
Ever married	-0.03*** (0.01)	0.15*** (0.01)	***	0.19*** (0.01)	-0.05*** (0.01)	***	-0.01 (0.01)	0.05*** (0.01)	***
Child of HoH (reference)									
Respondent is HoH	0.01 (0.01)	0.09*** (0.01)	***	-0.01 (0.01)	-0.02** (0.01)		-0.06*** (0.02)	-0.01 (0.02)	**
Spouse	0.06*** (0.01)	0.02 (0.02)		-0.06*** (0.01)	-0.02 (0.02)		0.03** (0.01)	-0.07** (0.03)	***
Son/daughter-in-law	-0.00 (0.01)	0.14** (0.06)	**	0.05*** (0.01)	-0.07 (0.04)	**	0.07*** (0.02)	-0.03 (0.06)	
Other relationship	-0.01** (0.01)	-0.01 (0.01)		0.01 (0.01)	0.01* (0.00)		-0.02** (0.01)	-0.01 (0.01)	
Not a parent and no child < 5 years old lives in HH (reference group)									
Not a parent; child < 5 years old lives in HH	0.01* (0.01)	0.01 (0.01)		0.00 (0.01)	-0.00 (0.00)		-0.01 (0.01)	-0.01 (0.01)	
Parent; no child < 5 years old lives in HH	0.07*** (0.01)	0.07*** (0.02)		0.01 (0.01)	0.01 (0.01)		-0.08*** (0.02)	-0.05** (0.02)	
Parent; child < 5 years old lives in HH	0.04*** (0.01)	0.00 (0.02)	**	0.03*** (0.01)	0.02* (0.01)		0.00 (0.01)	-0.03* (0.02)	*
Log of HH size	-0.01*** (0.01)	-0.01 (0.01)		-0.00 (0.00)	0.01*** (0.00)	***	-0.03*** (0.01)	0.04*** (0.01)	***
Observations	81,826	35,233		83,365	35,212		31,253	19,613	

Source: Authors' calculations using pooled data from 25 Demographic and Health Surveys collected between 2010 and 2016.
Note: Sample is rural youth 15 to 24 years old. Coefficients are marginal effects from probit estimates. Standard errors account for the multistage survey design. Regressions control for household wealth quintile. ST = structural transformation; RT = rural transformation; NEET = not in employment, education, or training; GDP = gross domestic product; HoH = head of household; HH = household. † Burkina Faso, Mozambique, and Uganda were excluded because survey did not ask about on-farm employment. ‡ Among currently employed. * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$.

With relatively fewer working-age adults and large demands for resources from the youngest cohorts (less than 15 years old), there may be a high demand for on-farm youth labor.

Older youth are more likely to work and more likely to be NEET. On-farm work, however, is more common at younger ages. Youth with a secondary education or more were less likely to be currently employed, less likely to be NEET, and less likely to work on-farm. Some may still be in school, and those who are working may opt out of farm work.

Ever-married young women (as well as those who were the spouse of the household head) were less likely to be working and more likely to be NEET, while the opposite was true for young men. This finding highlights that married NEET women, who may be occupied with domestic and caregiving activities, are missing out on key training and early labor force activities. Among employed young women, on-farm employment did not vary by marital status, but married young men were more likely to work on-farm than unmarried men, perhaps indicating the expectations placed on young men to earn an income in order to support or attract a partner. Young men who are household heads are more likely to be working, and less likely to be NEET, indicating that labor force and family transitions often go hand in hand.

Despite the role of marriage in young women being unemployed, parenthood may encourage employment. Young women who are parents or who live with a young child, or both, are more likely to be employed, but also more likely to be NEET, highlighting their absence from education/training, and possibly better remunerated labor. Young men who are parents but do not live with a child under five were more likely to be currently employed, which may reflect unmarried parents or suggest rural-to-rural migration employment to support their children. Young women in large households were less likely to be employed or work on-farm, and young men in larger households were more likely to be NEET or working on-farm.

Informing Gender-Sensitive Programming for Rural Youth in Africa

The empirical evidence presented in the previous section highlights how patterns of economic and demographic change create a challenging environment for rural youth as they come of age and seek their own livelihood strategies. Young women are typically transitioning to adulthood with fewer resources. Gender gaps in education are closing, but they still exist, and young men are more likely to remain in school longer. Young women are less likely to own land, especially as sole owners. Family responsibilities frequently limit women's opportunities either to continue schooling or find paid employment. Although the NEET label fails to consider the invisible domestic labor of many young women, NEET young women are missing opportunities in education, training, and early labor force participation, especially in countries with large youth cohorts. Moreover, patterns of global change are working against rural African youth. Both landownership and current employment are lower at higher levels of ST and RT, whereas NEET is higher.

Thus, gender-sensitive programming to build rural youth livelihoods should be a focus of interventions that aim to harness the potential of the demographic dividend (Bloom, Canning, and Sevilla 2003). To guide such programming, we draw on a review of youth-oriented interventions that we undertook for the International Fund for Agricultural Development's Rural Development Report 2019 (Doss et al. 2019). From two recently completed comprehensive reviews on impact evaluations of youth employment programs (Fox and Kaul 2018) and programs addressing the economic empowerment of adolescent girls (Baird and Özler 2016), we identified studies that measured gender-differentiated impacts (regardless of whether differences were found). Herein, we summarize, by program type, the key takeaways from Doss et al. (2019) and highlight select examples to provide insight into the development of gender-sensitive programs for rural African youth.

Vocational Skills Training

Most evaluations of vocational skills training programs occurred in urban or peri-urban areas (often destinations for rural youth migrants). These evaluations offer insights into how vocational training may fall short if it does not consider young people's productive and reproductive roles. For example, an apprenticeship training program in Malawi (Cho et al. 2013) had considerably better outcomes for young men than young women. In that program, young women's success was limited by having fewer economic and human resources upon entering the program, difficulty traveling to the trainings, and the burden of domestic chores, marriage, and family obligations. In contrast, BRAC's Empowerment and

Livelihoods for Adolescents program in Uganda, which integrated vocational and life skills and was delivered through "adolescent development clubs" in a mix of urban and rural communities, appears to have been successful as measured by both livelihoods and sexual and reproductive health outcomes (Bandiera et al. 2014). Programs addressing both productive and reproductive spheres of adolescent girls' lives may have greater impacts than "single-pronged" programs that have focused on economic or reproductive health constraints in isolation.

Credit and Cash Grants for Entrepreneurs

Given the size of the informal sector in rural areas and its potential for youth, programs that provide credit and cash grants to young rural entrepreneurs could help them overcome barriers to entering entrepreneurship. Microfinance programs are one approach, but recent studies, such as Banerjee et al. (2015), cast doubt on the microfinance model. Similar to our findings for vocational skills training programs, our review (Doss et al. 2019) found that failing to consider both productive and reproductive spheres limits the success of cash and credit programs for youth. For example, a study in Uganda (Fiala 2013) found that women entrepreneurs experienced difficulty keeping cash on hand because they were pressured to spend money on school, healthcare, and funerals, whereas men benefited from the labor of family members. Keeping cash on hand may be even harder for young women. The only program included in our previous review that successfully improved economic outcomes for women had limited impacts on social and empowerment outcomes. A program that gave cash grants and business training to women ages 14 to 30 in the war-affected region of northern Uganda led to relatively large increases in income and wealth but no effect on women's independence, status in the community, or freedom from intimate partner violence (Blattman, Fiala, and Martinez 2013). As a whole, these findings point to the limited potential for increasing wage employment and mixed results for making self-employment more profitable, particularly for young women who may start out with lower levels of human and physical capital and face other gender-based constraints, such as domestic responsibilities.

Transfer Programs

Many programs for adolescents and their families do not build livelihoods directly but aim to strengthen the asset base for future livelihoods or provide economic relief to families to delay girls' marriage. Most programming in this area has targeted adolescent girls (Baird and Özler 2016). These programs recognize that parents and other relatives may determine decisions related to human capital investments, preparing for livelihoods, and marriage. Examples of programs that have used cash and asset transfers to delay marriage, with varying degrees of success, include the Zomba Cash Transfer Program in Malawi and the Berhane Hewan program in Ethiopia (see Baird and Özler 2016).

Cash transfer programs may help improve youth livelihoods and are effective in improving food security, productive activities, and secondary school attendance rates (Davis and Handa 2014, cited in Watson and Palermo 2016). Conditional cash transfer (CCT) programs, which are more common in Latin America than Africa, link the cash transfer to the fulfillment of certain conditions, such as schooling attendance or health clinic visits. CCTs have increased schooling participation rates, with larger impacts on children in poorer households and on girls than boys (de Brauw et al. 2015). Unconditional cash transfers (UCTs) are not tied to such requirements, and a growing body of evidence, mostly from Africa, shows their effectiveness in supporting successful transitions to adulthood in multiple domains, including increased secondary school enrollment (Handa et al. 2018) and decreased adolescent pregnancy (Hindin et al. 2016). De Walque et al.'s (2017) review of cash transfer programs found that CCTs generally showed larger effects than UCTs, although it is difficult to generalize because there were far fewer UCTs than CCTs. Moreover, because UCTs are more common in Africa south of the Sahara and CCTs are more common in Latin America, it is difficult to disentangle conditionalities from regional differences.

Youth Groups

Youth groups are a potential platform for reaching rural young men and women. Many such group-based interventions have targeted adolescent girls with both livelihood- and reproductive health–focused interventions. Ishraq, one such program from Egypt, had positive impacts on literacy and reproductive health knowledge (Sieverding and Elbadawy 2016). In Ethiopia, an evaluation of Towards Economic and Sexual Reproductive Health Outcomes for Adolescent Girls (TESFA) found that girls who received only communication and reproductive health information showed larger positive effects on reproductive health knowledge, but girls who also received economic empowerment knowledge experienced greater positive effects on economic empowerment (Edmeades, Lantos,

and Mekuria 2016). These two examples show that youth groups can promote the development of youth livelihoods and facilitate healthier and better-timed transitions into reproductive roles for young women.

Information and Mass Media Programs

Information and mass media programs that emphasize employment opportunities for women have not yet been tested in Africa, but evidence from India provides useful insights. After three years of employment recruiting services in rural Indian villages for the business process outsourcing industry, young women in treatment villages were less likely to marry or have children, choosing instead to start jobs or obtain more training (Jensen 2012). They also wanted fewer children. These results suggest that structural transformation (increased off-farm employment opportunities) can improve schooling and employment outcomes by generating demand for and increasing female labor force participation. However, where structural transformation is lagging, relying on this process without deliberate policy intervention may be misguided.

Recommendations

Many interventions seek to improve youth livelihoods, often by increasing their resources or the opportunities to use them. However, such programs have mixed results because they fail to consider the dual productive and reproductive responsibilities of young women and men. Our empirical findings and reflections on gender-sensitive livelihoods programming for rural youth lead us to three key recommendations.

First, livelihoods-oriented interventions must consider the productive and reproductive responsibilities of young men and young women as they transform. For young women, these new family responsibilities often limit the amount of time available to initiate economic opportunities and the scope of what is deemed suitable work. And although fathers are expected to work, programs that incorporate reproductive perspectives could facilitate a healthier transition to adulthood and provide the opportunity for new fathers to fill caregiving roles. Livelihoods-focused programs that target productive and domestic roles have a greater potential for success.

Second, policies and programs need to be designed to mitigate the potential negative impacts of structural and rural transformation, and to recognize that those impacts may differ by gender. Structural and rural transformation both create challenging environments for youth livelihoods, and outcomes are less favorable for young rural women. Policies need to ensure that both young women and young men can benefit from these processes.

Finally, concerns about marriage, fertility, and parenthood are usually addressed to young women and tend to be ignored by programs focusing on young men. Yet these transitions to adulthood affect both young men and young women, albeit in quite different ways. Household and reproductive responsibilities may pressure young men to find employment, but little work has been done linking marriage and childrearing to men's employment, especially in the long term. Recognizing the importance of both productive and reproductive roles in both young women's and men's lives would be an important first step to developing youth programming that supports the creation of sustainable livelihood opportunities during the transition to adulthood and beyond.