ECONOMIC PARTICIPATION OF RURAL YOUTH: WHAT MATTERS?

Abstract

Employment opportunities (for youth and non-youth) depend on the development of the economy – structural transformation, rural transformation, and employment transformation. In rural areas, employment transformation (to steady, more productive wage employment) takes longer than urban areas. Strategies to facilitate youth’s entry into employment (the youth-specific employment challenge) have to take account of this.

We have limited evidence on how youth handle this challenge in rural areas, nor on effects of targeted programs on this challenge – either the impact of non-targeted agricultural productivity and earnings programs on youth’s challenges, or the impact of targeted youth programs in rural areas. Certainly, the rural-urban gap in education and learning disadvantages rural youth. Anecdotal evidence suggests that when new off-farm opportunities develop in rural areas, youth are able to access them, while entry into farming may be hindered by lack of access to land.

Evidence on programs in urban areas to help youth enter self-employment may hold lessons for program design for rural youth. A key lesson is that lack of technical skills does not seem to be biggest obstacle youth face in entering the labor force. Given that most rural tasks (farm or nonfarm) do not require a high degree of technical skill, we can expect that this would be even truer in rural areas. Microfinance (or cash grants) has been helpful in urban settings to help youth start nonfarm businesses. Evidence on agricultural extension programs suggests that peer-to-peer learning works best, perhaps arguing for youth-specific programs to upgrade farming skills and knowledge, but this needs to be tested.

I. Introduction and why rural youth matter for development

Youth\(^1\) is universally a distinct human developmental stage, a time of transition from dependence to independence, marked by critical decisions that affect the future of the individual and the broader society. A positive youth trajectory concludes with the development of a mature adult who has a positive sense of self, has developed agency and impulse control, and a set of core competencies and skills for engaging effectively with the economy and society. A negative trajectory does not develop self-esteem and agency, and concludes with risky and or destructive behavior such as teen pregnancy, crime and violence, self-destructive health habits, and disengagement from society, all of which can lead to household poverty and lower economic growth (World Bank, 2006). With so much at stake, it is clear why youth development is an important economic development issue.

\(^1\) Youth is the UN definition: 15-24.
Youth constitute a high share of the population in low-income countries, especially in sub-Saharan Africa (SSA), where one-third of the world’s projected youth population will live by 2050 (AfDB, 2015). These individuals represent an enormous opportunity and resource, yet creating the circumstances to realize that potential is a big challenge. For the next 15 years at least, the majority of youth in SSA and South Asia will live in rural areas (including towns and peri-urban areas).

Economic and social development requires youth to be able to find opportunities commensurate with their skills and abilities, allowing them to transition into stable livelihoods. This requires economic growth and diversification of the economy (economic transformation). In rural areas, livelihoods have historically been agriculture-based, but as rural areas transform, this becomes less true. Economic growth and development in rural areas is inextricably linked to growth and development in urban areas. However, rural economies have special features which affect all economic opportunities, including those for youth.

The first step in developing effective youth employment approaches is to diagnose the economy and the employment opportunities, deriving a clear picture of how transformation is occurring and where the future opportunities will appear. In most cases, those opportunities will appear in the same sectors as in the past, with some shifts toward new sectors and emerging activities. Although increased educational enrollment has generated greater aspirations among youth and demand for better paying, more secure employment, the economies of most low-income countries are still structured around production by household farms and firms operating with limited outside labor. Successful interventions must operate within this reality.

The second step is to diagnose the youth-specific challenges within this economic landscape. For the most part, the youth-specific challenge – the challenge youth face that older adults do not – is entry into employment. Youth employment interventions should first diagnose, and then address the actual constraints that youth face in accessing the specific segments of the economy where employment opportunities exist.

This paper reviews the economic development challenges that impede and constrain youth’s transition into employment in low-income countries, and parses the evidence on which programs and policies appear to speed that transition. The paper is structured as follows. In the next section, the conceptual framework of structural and rural transformation and its relationship to employment transformation and the economic opportunities of rural youth are outlined. In section III, the elements of rural youth opportunities and pathways are discussed, with a specific focus on skills youth need to be successful economically in rural areas, and how these skill demands change as the rural economy transforms. Section IV discusses the evidence base for youth employment interventions in rural areas, assessing the quality of the available evidence. Section V concludes by noting that while the rural-specific evidence base is not strong, there are lessons from the urban evidence base for those concerned with rural youth employment. Suggestions for further analysis on the predicaments and pathways of rural youth are offered.
II. Conceptual framework: structural and rural transformation

Structural transformation is the process by which countries, markets, and populations develop and transform into more productive and prosperous economies (Duarte & Restuccia, 2010). Starting from largely agrarian economies, characterized by low-productivity, small-holder farming, the process of transformation is driven by productivity increases in agriculture, declining fertility rates, stronger rural-urban connectivity, and diversification of the economy into non-agricultural sectors. Economic transformation encompasses both horizontal structural change as resources move between sectors, and vertical structural change as labor productivity rises within a sector. Both processes usually involve investment of more capital per unit of labor, adoption of better technology, and more efficient allocation of resources. The rate at which countries can drive structural transformation to lift themselves out of poverty depends on several different factors, including geography and natural endowments, the accumulation of physical and financial capital, and the characteristics of their population and labor force. The pace of transformation, and its characteristics, helps determine the types of economic opportunities available in the labor market.

Structural transformation means more production in enterprises, and less production in households. Demand for labor from the growing nonfarm enterprise sector will increase in rural and urban areas. This labor will be supplied by (a) those about to leave school and enter the labor force and those in the labor force but unemployed; (b) those already in the labor force, engaged in home production (farmers who leave their land or cease other forms of self-employment) or engaged in agricultural wage labor; and (c) those not in the labor force who might be induced to enter it because of new earning opportunities. Movement of labor into enterprises, where wages are earned, is known as the employment transformation.

Structural transformation is thus seen in both output (productivity) and employment space. The structure of employment changes more slowly than the structure of output, because the modern firms must be created, and their creation requires more capital and knowhow than household production. As a result, it is common to find that the share of agriculture in GDP has fallen to 30 percent or less in lower-middle-income countries, while 60 percent or more of the labor force is still working on farms (Timmer & Akkus, 2008), with another 20 percent in HEs. Only in upper-middle-income and high-income countries does most of the labor force find work outside the household sphere of production in formal, modern enterprises or in the public sector, as wage or salaried labor (Figure 1).
The agriculture sector, and rural areas in general, are key pieces in transformation. In low-income countries, agriculture in the largest sector of employment, the largest sector of informal employment, and dominates rural economic life. Agriculture generates 68 percent of rural household income in SSA, half of rural household income in Asia, and 43 percent in Latin America (Townsend, Benfica, Prasann, & Lee, 2017). Agriculture is typically the lowest productivity sector in developing countries, characterized by low-earning and vulnerable employment.

Agricultural transformation (within-sector transformation) arises when labor productivity on farms rises significantly, and is critical for growth and poverty reduction. Increased productivity feeds the household, and allows some on-farm labor to move to more productive activities, either locally in the rural non-farm economy, or in towns and cities. It is usually associated with commercialization of agriculture, as an increasing share of farm output is sold and as more inputs are brought in; more efficient input and product markets are therefore a key part of agricultural transformation.

Rapid agricultural transformation can speed up the overall pace of economic growth and transformation, by providing food to growing urban areas, and earnings from agricultural exports allow the import of capital goods for other sectors. Agricultural transformation creates additional jobs in agricultural supply chains both in provision of inputs and services, as well as in processing, transport and storage of produce. These jobs open up in urban areas near farmers. As farmers spend increased incomes, new employment opportunities may be created in rural areas in providing the goods and services they demand. These effects provide rural households with more opportunities to diversify their income and to earn more. No country has significantly reduced rural poverty without agricultural transformation. However, the converse is also true – the speed and depth of structural transformation in urban areas affects rural transformation. A faster transformation pulls labor out of rural areas into cities through the continuous creation of higher income employment opportunities, and creates local demand for agricultural production. Rural areas benefit from the urban infrastructure and development.
enabling structural transformation such as improved ports, transportation links and trade facilitation, financial sector deepening, and development of economic institutions which reduce enable contracts and reduce transactions costs.

The rate at which the output and employment transformations occur is affected by several factors; one is the speed of labor force growth. If the growth of employment in firms is much greater than the growth of the labor force, then the employment transformation will move with the output transformation, with a slight lag – for example, the case of Vietnam, where labor actually moved out of the agricultural sector into nonfarm (McCaig & Pavcnik, 2013). If the labor force is still growing rapidly (owing to slowly declining fertility, for example) then the employment transformation shown in Figure 1 will proceed more slowly, and the share of the labor force in household production will stay high, despite rising income, as in SSA (Fox & Thomas, 2016). Only if the growth in wage jobs weighted by its share in the labor force exceeds growth of the labor force will the share of employment in nonwage jobs fall rapidly.

During the early years of the transition, most stable wage jobs – full-time, indefinite and part of a subordinate and bilateral employment relationship, not temporary or part-time, often called “casual daily labor” such as construction or temporary agricultural labor – are created in urban areas. Urban areas, through economies of agglomeration, attract the capital needed to start and grow modern enterprises. In the early stages of transformation, rural labor supply without access to land either works in low paid agricultural wage jobs or has to migrate to urban areas to seek wage jobs there. However, the entrance of modern agricultural processing and storage facilities gradually changes this landscape, creating deeper and more remunerative rural wage labor markets, higher returns to human capital and more opportunities for entrepreneurship in rural areas.

Underemployment – working less than full time during a day, week, month or year – is a dominant characteristic of traditional rain-fed household agriculture, and leads to poverty and hunger. Agricultural and rural transformation reduce underemployment through increased access to agricultural inputs such as water, fertilizer, introduction of new crops and improved varieties, development of greenhouses, or additional livestock/poultry activities, for example. Agricultural transformation also generates new off-farm and nonfarm employment opportunities, as noted above.

Unlike in urban areas, however, employment transformation in rural areas takes place within the household production sphere. Family operations dominate farming for a long time, even as production is modernizing and commercializing. New nonagricultural opportunities appear either as farm-related businesses within an agricultural value chain (e.g. input supply; tractor hire; primitive processing) or nonfarm trading and service businesses, responding to demand from households who have more agricultural income. This nonfarm, household-based economic activity initially happens in a household alongside farming, helping to reduce seasonal un- or under-employment and raise incomes. As opportunities for full-time farming activity increases households – or at least individual within households – tend to specialize in one activity or another (although all households in rural areas will still
grow a substantial portion of their own food). This phenomenon of adding income sources is called mixed livelihoods (or pluriactivity).

It takes longer for households to specialize than individuals within households. For example, in Ghana between 1992 and 2005, the share of agriculture income in total rural household income dropped from 71 percent to 55 percent, and the total number of income sources among households dropped as well, indicating that specialization had started (Davis, Di Giuseppe, & Zezza, 2014). In Asia, the abundance of water and irrigation systems, combined with green revolution technology, brought on this specialization among land-owning households, while the development of food processing and other upstream and downstream economic activities offered new nonfarm wage and self-employment activities. For example, in Vietnam, the share of agriculture in total rural household income fell from 57% in 1992 to 39% in 2002; during the same period the share of nonagricultural wage income rose from 11% to 38%. In SSA, rain-fed agriculture still dominates so agricultural activity and employment continue to be seasonal, mixed livelihoods dominate, and specialization has been slow.

**Figure 2: Mixed livelihoods dominate the employment portfolio in rural areas**

<table>
<thead>
<tr>
<th>Share of hours worked by age group, LIC</th>
<th>Share of hours worked by age group, MIC</th>
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<tbody>
<tr>
<td>[Graph showing distribution of hours worked by age group for LIC and MIC]</td>
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</tbody>
</table>

Source: Authors’ calculation from IFAD’s tabulation of household survey data based on full time equivalents (FTEs).
LIC: Ethiopia, Malawi, Nepal, Niger, Tanzania
MIC: Bangladesh, Cambodia, Indonesia, Mexico, Nigeria, Peru

Economic geography conditions the pace of rural transformation, and what types of economic opportunities develop. Transformation happens first in areas with good land, and areas closer to urban centers. Good land raises the return to more productive inputs, land improvement, and use of machinery. Proximity to urban areas means better and more efficient markets and demand for higher value products and processed food. This in turn encourages the development of more efficient and productive value chains through investment by urban entrepreneurs (e.g. cold storage, processing and
packaging, etc.). Meanwhile, remote areas tend to transform slowly, if at all, because of a lack of connective infrastructure. Often the best opportunities require temporary or permanent migration.

These forces – agricultural and rural transformation, urban growth and structural transformation, and economic geography – affect the development of economic opportunities for everyone. When new opportunities arise, they do not discriminate by age. Nor do limited opportunities for employment in remote areas with poor soils – everyone suffers. Agricultural and rural transformation is thus a necessary condition for employment transformation and for better opportunities for youth, their parents, and their children. The youth employment question is: what forces help or hurt youth as they try to seize these opportunities and develop a sustainable and satisfying livelihood in rural areas? This is the topic of the next section.

Box 1: Measuring economic activity – the full-time equivalent (FTE).

In aggregate statistics such as the distribution of employment used in national accounts, someone who reports employment is assigned to one sector, even if they work in several sectors over the month or year. This is a particular problem for understanding rural employment. Many people in rural areas report their primary activity as farming, even though they spend a substantial time engaged, and making money, in other activities off the farm and outside primary production, such as agro-processing, retail trade, etc). As a result, the share of employment in agriculture tends to be overstated, as does the productivity of that labor when based on national accounts data (McCullough, 2017).

To correct for this bias, detailed data from household surveys on economic activities over the year for everyone who is economically active were used to tabulate employment. These data were tabulated using FTE as a denominator. FTE data describe employment based on a 40 hour work week, five days per week, 51 weeks per year in order to calculate the share of hours worked in each activity by each age category. FTEs are computed at annual level, by dividing the total number of hours worked during the year to the full-time labour availability (2016 hours), to control for seasonal underemployment.

III. Youth opportunities, constraints and pathways

The youth-specific employment challenge – the challenge youth face that older adults usually do not – is entry into employment. In rural areas, given the shortage of full-time regular wage jobs, the real challenge for youth is livelihood development – usually gaining a foothold in self-employment in the informal sector, either in farming or non-farm household businesses. This means finding an economic opportunity and exploiting it. To do this youth need to know about opportunities and how to enter them, as well as have the means to enter. As in urban areas, this may require skills and knowhow (e.g. literacy, numeracy, problem solving, how to build networks and relationships), start-up capital, and, unique to rural areas, land. In addition, youth need to be able to access programs designed to help farmers of all ages. Thus, the key questions are:

- Are there characteristics of youth which limit their capacity to take advantage of improvements in the enabling environment for business and earnings in rural areas and towns?
- Are there types of programs to raise earnings which exclude youth, or make it difficult for youth to benefit? If so why?
In many cases, the extent of the constraint and its impact on opportunities differs by gender, and economic and social class. This heterogeneity is not explored in this paper, but it should be considered within country contexts.

**Education and skill development**

Most people enter the labor market in earnest after leaving school. In rural areas, this transition may be more gradual, as children and youth start working on the farm at an early age, usually while going to school (figure 3). This continues more often in rural areas than in urban ones even as countries develop. Often youth must combine activities to earn money to pay for school. For example, in Uganda, 34 percent of males and 32 percent of females nationwide age 15-24 report that they were attending school, but working as well during some part of the year. Late enrollment, more common in rural areas where students must travel longer distances to school, plays an important role as well. For example, the Young Lives study reports that over 50 percent of study participants born in 2001 in Ethiopia were over age for grade, and 40 percent were over age in India.²

**Figure 3: The transition out of school and into work is gradual**

<table>
<thead>
<tr>
<th>Urban, LIC</th>
<th>Male</th>
<th>Female</th>
</tr>
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<tbody>
<tr>
<td>In school only</td>
<td>15-17</td>
<td>18-24</td>
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<tr>
<td>Employed and in school</td>
<td>15-17</td>
<td>18-24</td>
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<tr>
<td>Employed, not in school</td>
<td>15-17</td>
<td>18-24</td>
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<tr>
<td>Not employed and not in school</td>
<td>15-17</td>
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<table>
<thead>
<tr>
<th>Rural, LIC</th>
<th>Male</th>
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<tbody>
<tr>
<td>In school only</td>
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</tr>
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<td>Not employed and not in school</td>
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<td>18-24</td>
</tr>
</tbody>
</table>

LIC: Ethiopia, Malawi, Nepal, Niger, Tanzania, Uganda. Data shown as a percent of age and gender group.

² Calculated from online data. See [https://www.younglives.org.uk](https://www.younglives.org.uk) for data, results, and publications.
In the 25-34 age group, most males have started working, although a small share report neither working nor being in school. At 25, they may not be working full time, however, as the figures below include anyone who reported working any hours during the last 12 months as work. Young women of all ages are more likely to report being out of the labor force. This is not surprising as these are prime childbirth and child-rearing years for young women, but the percent in the youngest age group that report being out of school is unfortunate.

Rural youth in developing countries today are more educated than their parents, but educational attainment in rural areas remains substantially behind urban levels (Figure 4). In part, this represents a legacy effect – education expanded first in urban areas, then into rural areas. But even among the population aged 15-24, those living in urban areas are more likely to be continuing their schooling and are more likely to complete secondary education. Richer countries, and more transformed countries, have a lower rural-urban gap in educational attainment.
Figure 4: Rural education outcomes lag urban ones

<table>
<thead>
<tr>
<th>Median years of schooling by income group</th>
<th>Learning outcomes by area and income group</th>
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<tbody>
<tr>
<td><img src="image" alt="Bar chart showing median years of schooling by income group" /></td>
<td><img src="image" alt="Line chart showing learning outcomes by area and income group" /></td>
</tr>
</tbody>
</table>

Sources: years of schooling: DHS Statcompiler, most recent year. Educational outcomes: (Patrinos & Angrist, 2018).

The gap in actual learning in rural areas is substantially higher because of the poor quality of education rural schools provide. In low income countries, the quality of education in both urban and rural schools is very low. There are also learning gaps between males and females in developing countries, but in the richer and more transformed countries these gaps narrow.

What skills are needed to enter into and be successful at rural economic activities?

At the early stages of rural transformation, most rural occupations are classified as unskilled (skill level 1) in the International Standard Classification of Occupations (ISOC)\(^3\), as they involve simple or routine physical or manual tasks – use of hand-held tools, lifting and carrying materials, sorting and storing – all by hand, or picking crops by hand. They require few cognitive skills; at most basic numeracy or literacy skills developed through attendance or completion of primary education.

Only a few rural occupations would be classified as medium skilled (ISOC level 2) at early stages of rural transformation. This would include driving a truck or other vehicle, operating or repairing electrical or mechanical equipment, or ordering and/or storage of information. These occupations do require education, in some cases completion of lower secondary as more advanced numeracy and literacy skills are required to read and follow instructions; communication skills may be also required, as well as trade or craft skills. These occupations are more likely to be found in the nonfarm sector, and include drivers, mechanics (basic), tailors and dressmakers, welders, hairdressers, and clerks.

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As the transformation proceeds, economic activities such as commercial farming and off-farm processing start to require skills learned in secondary education (higher level numeracy and literacy; problem solving) to use modern inputs and meet quality standards required by downstream economic actors (processors or exporters). Occupations classified at skill level 3 (high skilled) and level 4 (professional), rarely required during the early years of the transformation, become more important as well, as demand increases for teachers, factory technicians and managers, veterinarians and other skilled agro-food specialists. Demand for these skills grows as value chains and markets transform.

Despite the low skill requirements of many rural activities, lack of learning still disadvantages rural youth, as they do not acquire the cognitive and noncognitive skills needed for success as the agricultural system transforms and the economy modernizes. Research has shown that the cognitive skills developed in basic education have high returns in agricultural transformation, as they contribute to increased use of technology in agriculture (Foster & Rosenzweig, 1996) They are also helpful for changing sectors to nonfarm activities (Estudillo, Sawada, & Otsuka, 2008) and have high returns there as well. Transformation of agricultural value chains increases the demand for educated labor in rural areas in support functions such as agricultural extension and quality inspection. Wage jobs in urban areas generally require some secondary education as well (aside from pure “brawn” jobs such as carrying items or other forms of casual labor). As production becomes more capital intensive and quality standards rise, education requirements for urban jobs rise even higher. Lack of education thus hinders youth who may wish to migrate to urban areas for wage work.

Education enables the attainment of other skills important for starting a business and earning income. Research in developed countries on the importance of non-cognitive or “soft” skills found them strongly linked to employment and earning outcomes (Heckman & Kautz, 2013). New research is emerging on the importance of these skills for self-employment and micro-enterprise outcomes in developing countries, including rural areas. For example, (Campos et al., 2017) Campos et al. (2017) found that teaching Big Five noncognitive skills (a standard taxonomy developed by psychologists in the 1960s) applied to business (including customer service and negotiation skills, and persistence) had a positive effect on the profits of household and micro-businesses. (Montalvao, Frese, Goldstein, & Kilic, 2017) found that in Malawi, soft skills such as perseverance increased the probability of adoption of a cash crop and the use of productive inputs including extension services.

When asked about the skills youth lack, employers’ biggest complaint in Africa is the lack of noncognitive behavioral skills (Filmer & Fox, 2014). While most research covers urban employers, research in Nigeria among employers in the agro-food value chains indicates it is a problem in rural areas as well (Adelaja, 2018).

The key characteristics that hinder employers from hiring youth are (a) the poor attitude of youth to work generally, and particularly to work in agriculture, and (b) lack of required skills and

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4 Heckman and co-authors use the “Big Five” scale. See Box 1.
illiteracy. Attitudinal factors perceived by potential employers that make youth unattractive to hire include a lack of initiative and indecision, unreliability, immaturity, poor integrity, and low morals. Employers also described some youth as overly ambitious and suffering from “quick money syndrome,” lacking the patience and commitment needed to succeed as employees. (Adelaja, 2018, p.8)

Good pedagogical methods in schools help can help teach these skills; they can also be learned at home and in the community. Other soft skills useful for earning a living in rural areas are planning, networking, and relationship building. It is not necessary to have developed all these skills prior to entering the labor force. While the work of Heckman and his collaborators has focused on the benefits of developing these skills in the first 5-7 years of life (hence the focus on early childhood development and school readiness programs), more recent brain research and psychological testing indicates that social and other noncognitive skills can be learned at least up to the age of 30 (Bertrand et al., 2013).

Box 2: Noncognitive skill measurement: how universal are the “Big Five” personality traits?

Developed by psychologists in the 1960s, the “Big Five” models a set of personality traits (behaviours) that have been shown to correlate with academic success and earnings⁵. The five dimensions have been shown to contain most known personality traits. The structure was developed using a set of questions about a person’s usual behaviour in various settings (the Big Five Inventory, or BFI), and factor analysis was applied to group the behaviours. The five factors are:

- **Openness to experience** (inventive/curious vs. consistent/cautious).
- **Conscientiousness** (efficient/organized vs. easy-going/careless)
- **Extraversion** (outgoing/energetic vs. solitary/reserved).
- **Agreeableness** (friendly/compassionate vs. challenging/detached).
- **Neuroticism** (sensitive/nervous vs. secure/confident) – note that less is better on this one. It is sometimes called Agreeableness to indicate a positive trait like the others.

The BFI has been translated from English into 28 languages and tested successfully all over the world (Schmitt, Allik, McCrae, & Benet-Martinez, 2007). Some differences have been found across cultures in the median response and the variance. For example, people from East Asia are on average less open than those from North America in cross-country tests (Schmitt et al, 2007). However, researchers have found that the BFI and the structure hold up around the world, across a range of cultures and societies.

There are situations where the BFI may not hold up, for example, in traditional small-scale societies, far removed modern urban culture and history. (Gurven, et al, 2013) tested the BFI in a group of indigenous and remote villagers in Bolivia and did not find all five distinct personality traits. They found that extraversion did not separate from agreeableness or openness, so they were only able to identify two factors: (i) a general prosocial disposition, and (ii) industriousness in the context of subsistence labor (Gurven et al, 2012, p. 365). They suggest that in subsistence agriculture, there may be no payoff to inventiveness or curiosity, so this trait might not develop. Collectivist and or authoritarian norms may also limit the development of openness; gender specific norms could deter females from developing this trait as well.

This evidence does not invalidate the Big Five as a typology, especially as related to the skill demands of a transforming economy and society. If the BFI approach were to become standard in employment-related

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⁵ See Wikipedia for the history and a longer explanation of the different traits and how they are measured: https://en.wikipedia.org/wiki/Big_Five_personality_traits.
studies around the world (such as evaluations), it would be easier to compare results and draw conclusions. The evidence on limitations suggests that measurement needs to be done carefully. Some psychologists argue against the self-reported aspect of the typical BFI inventory, especially in situations where the desired traits may be known, such as in a job-interview situation. Psychologists continue to test alternative measurement approaches, and interestingly, the BFI is now being used by neurobiologists to study the genetic and biological determinants of personality, a fast-developing field.

Sources: Author, and https://en.wikipedia.org/wiki/Big_Five_personality_traits

Noncognitive skills are an example of tacit skills – ones that are learned through observation and practical experience, and impossible to transfer to another person by writing down or verbalizing, because they are not codified. These more intuitive skills are transferred through human interaction and practice and require personal contact and trust. Often people learn (or at least develop) noncognitive skills and demonstrate them on the job, including during job-related training. General youth development programs focus on developing these skills, with some success (USAID, 2017). One reason internships are popular is they support tacit noncognitive skill development.

Industry-specific skills are often tacit skills as well, and usually necessary to enter a level 2 or above occupation. Examples include trade skills such as carpentry or plumbing, professional skills such as the practice of engineering, architecture or management, or medium level skills such as machine operation and maintenance.

Agricultural activities benefit from industry-specific tacit skills. These farming and animal husbandry skills are usually acquired by learning from family or the community. Extension programs aim to expand these skills for specific crops or animals, and may involve some explicit (e.g. written or codified) knowledge as well. When new inputs such as seeds, pest control, or fertilizer are introduced, private dealers may offer training to prospective local agents using written materials as well as demonstration and coaching to build tacit knowledge. This type of training relies on the development of both basic cognitive skills and the ability to learn from observation and practice.

Limited evidence suggests that youth, with higher education levels than older adults, have a better foundation to acquire specific formal and tacit agricultural skills, and actually benefit disproportionately from these opportunities, in part because one of the benefits of formal education is “learning to learn” – also a tacit skill. For example, when the Guatemalan agribusiness company Popoyan recruited and trained lead farmers to demonstrate the integrated pest management techniques their products

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6 See https://en.wikipedia.org/wiki/Tacit_knowledge for examples and references. In some cases, the skills can be learned through observation and experimentation without human interaction; for example, taking an engine apart and putting it back together by oneself, or learning a language just by listening.

7 One hypothesis is that the opportunity to learn these skills is the main benefit of apprenticeships and internships; the technical skills learned may be secondary.

8 Higher skill occupations often require a combination of specific formal skills and tacit skills. For example, a licensed electrician needs to understand the science of electricity (a formal cognitive skill) and well the practice of wiring a building (learned through practical experience).
supported, half of those who were chosen and participated turned out to be under 24. Similar results were found in a USAID-financed program in Nepal.\(^9\)

Technical skills required for level 2 occupations (e.g. hair cutting, tool-making, machinery repair, construction) are usually learned in rural areas, towns and secondary cities through informal apprenticeships (Filmer and Fox, 2014). Youth usually access these apprenticeships through the community (word of mouth); often a fee is paid to the master for some of the training costs, and if accepted, the apprentice may be asked to work for some time under the master’s direction as a condition of the training. There is limited evidence that in urban areas poorer youth may be priced out of this market, (see Hardy, Mbiti, & McCasland, 2016 on Ghana).

Other requirements: land and capital

Entering into farming (including animal husbandry) requires land. Increasingly, youth are finding this to be a constraint. Asia has been a land-scarce continent for decades, while Africa is only now entering this period. The chief obstacle for youth is the traditional, community land tenure system, which does not facilitate land transfer, especially to rural youth (Jayne, Chamberlin, & Benfica, 2018). Where land tenure and transfer systems have been implemented, it is often richer urban families who benefit by acquiring rural land as a portfolio investment (Jayne, et al. 2018). In densely populated countries, especially those with higher fertility, land is simply not available, or plots have become very small and fragmented. As parents live longer (and farm until later in life) they do not transfer land to their children at the point that the children are entering the labor force. This forces the children to work their parents land (losing independence and decision-making authority), rent someone else’s land (which may be poor quality and/or far away), or abandon farming on their own plot. In Nigeria,\(^{[xxxx]}\) found that access to land is a key determinant of youth engaging in farming, controlling for education. Lack of land rental markets in some countries exacerbates this problem, as youth are more likely to rent land than to be able to purchase it (Jayne et al, 2018).

Lack of savings exacerbates the barriers for youth to start up a household farm or firm. Rural areas tend to have weaker financial service options, making it harder for youth to save and borrow. Few banks lend for start-ups anyway; most require at least some savings from the owner to reduce risk. Interventions such as savings groups and microfinance have helped to fill this gap, especially by encouraging youth to save while they do wage labor or other activities. Evidence suggests that increasing the supply of formal and informal savings options do increase savings among people of all ages (Steinert et al., 2018). Mobile money, enabled by the rapid expansion of cell phones, has extended the reach of both traditional banks and microfinance, enabling youth to save more safely than if the money is kept at home.

Economic networks and social capital

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Networks and know-how are particularly important for urban youth seeking to land their first real job in a factory or business. For example, job seekers need to know how to present themselves to a potential employer – arrive on time, dress properly, be polite. They need to know how to find out about vacancies, what jobs they might qualify for with their skills (and what might be the benefits of skill upgrading), and what to expect in terms of hours of work, pay, and benefits. They need perseverance – which sometimes means the funds to travel the city every day to seek information from formal and informal sources (Franklin & others, 2015). And they need to know who to trust – which employers will engage in abusive relationships and which ones will be honest and pay the wages promised. As wage-earning opportunities expand in rural areas and towns with agricultural transformation, this local knowledge may become important for rural youth (although there is little evidence for this now).

While the type of know-how described above is not as important for start-up household farms and firms in rural areas and towns, similar types of tacit knowledge and skills are still relevant, as is trust. Knowledge about, for example, how to find out the prices in different markets, which suppliers are trustworthy and have the best products, how to get a market stall or a place to do business, what delayed rains mean for a new seed variety, etc. is necessary, and may be hard or easy for youth to acquire, depending on their social capital or the traditions where they live. Social frictions between youth and elder elites may prevent this information transfer; gender discrimination often acts in the same way, or even multiplies the difficulties for young women to acquire tacit knowledge. Contract farming organizations or potential employers may require a reference, which youth have to extract from their elders. Likewise, they may have to depend on networks to mediate for them with local governments or traditional authorities.  

Agricultural extension is important for diffusion of new technologies. Most methods rely on a lead farmer or demonstration plot. Yet new evidence suggests that farmers learn the most from (a) self-experimentation, and (b) from networks of those closest to them (peer to peer learning; see Kondylis, Mueller, & Zhu, 2017). Social frictions may cause youth to be excluded from programs. To the extent that research on learning in rural settings focuses on demographics of program effectiveness, it has looked at gender differences. Results highlight the importance of having women as extension agents to reach other women as well as to provide income earning opportunities for women (Kondylis et al 2017). Similar results may hold for youth, especially if their social capital is limited, but this research has not been done.

Households in agricultural communities tend to rely on each other for economic support. This can take the form of farmers’ cooperatives, savings groups, or informal borrowing/insurance support. Households also rely on word of mouth within the community to learn about new programs or initiatives, including how to access them. These informal networks and institutions are especially important for youth seeking to establish themselves.  

Youth need to tap into these networks to start

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10 The MasterCard Foundation project, “Invisible Lives” provides evidence on this point. See https://mastercardfdn.org/research/invisible-lives-five-takeaways-from-new-research/
11 Ibid
their own livelihood. Often this means having a mentor or patron in the village or town. Traditional leaders sometimes limit the participation of youth in community social or economic organizations, and youth can be sensitive to this. These traditions and practices can be a hindrance to youth’s participation in rural income generation programs, obstructing efforts to develop a livelihood.

Making the transition to a rural livelihood

How do youth make the transition to a stable rural livelihood? What skills do they deploy, and how important are challenges such as weak skills, incomplete land markets, lack of financial inclusion, or social frictions and traditions? Actually, we know very little about youth pathways and how the economic forces described above affect them. We have some cross-sectional evidence from SSA that youth have different employment patterns than adults. Youth are less likely to work full time (Figure 5), even when out of school. In richer countries, adults can find full time employment, especially in urban areas. LSMS data, in Figure 2 above, show that rural youth are more likely to be farming and less like to have a rural nonfarm enterprise than adults, perhaps implying that they need to make some money in farming or working as farm labor before they can open a business. However, it may also reflect a bias toward those with lower education (and therefore out of school during most or all the youth age range), who are less likely to have the skills to start a business. In other countries, where land is scarce (e.g. Latin America), youth seem to be more likely to enter the labor force as agricultural laborers to build up capital for another livelihood.

Figure 5: Youth report working fewer hours than older adults

<table>
<thead>
<tr>
<th>Rural</th>
<th>Urban</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-work hours</td>
<td>Work hours</td>
</tr>
<tr>
<td>100%</td>
<td>75%</td>
</tr>
</tbody>
</table>

October 26, 2018
Limited evidence about youth pathways indicates that youth are not very satisfied with their outcomes. Evidence from the School to Work (S2W) studies conducted under the auspices of the ILO, surveying people aged 15-24 years, indicate that rural youth have high aspirations for their future job, but the reality is much different, and as a result, they are not very satisfied. Three-fourths of survey participants still in school at the time of their interview reported that they hoped to work in high skill occupations (manager, professional, or skilled technical), but only 12.5 percent of those working reported that they were working in these occupations. In part, this result reflects that fact that those still in school were mostly completing secondary or in post-secondary education and thus are likely to attain a higher qualification than those youth who were out of school and working. Nevertheless, the gap is striking. A surprising number of the rural participants who were out of school and working in middle skill (level 2) occupations aspired to higher paying, higher skill jobs as well. As a result, almost half of rural participants, and even more from upper middle income countries such as Jordan and Ukraine wanted to change jobs, hoping for a better employment outcome (OECD, 2018).

A qualitative study of 240 rural youth in Ghana and Uganda (including activity diaries and interviews) documented the efforts youth are making to navigate their transition. They found that almost all youth were engaged somehow in family agricultural production, but did not get much income from it. For income, youth relied on odd jobs, including casual agricultural labor during peak times such as harvest and minding livestock, and odd jobs in someone else’s informal business – helping out in the market stall on weekends, for example. Some youth had started self-employment businesses, but these were low productivity and low capital. In the words of one study participant:

“I ride a motorcycle for hire. I also blast some stones, I do farming, I look after animals, and I do business. That is how it is. You earn money here and there.” (MCF, p.21)

Their key reported constraints were:

- In agricultural livelihoods, lack of access to land and capital, unstable markets, and risk, including weather risks. Youth usually did not specialize, but rather grew food for own consumption and

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one or two cash crops – fruits or vegetables or a traditional nonfood crop. But they had no money to invest in upgrading their technology, and they perceived the risk to be too high to invest.

- For self-employment, lack of capital. Youth generally did not report a lack of skills, although this is not an indication that they had all the skills they need,
- For wage employment, lack of demand. Young women also reported discrimination in favor of men.

These constraints are mostly not youth-specific (e.g. lack of labor demand), but reflect the slow employment and agricultural transformation. Youth also noted the importance of a mentor or adult guiding them, suggesting that tacit knowledge and social networks are perceived to matter in their success.

Qualitative work in rural and peri-urban southwest Nigeria echoes these results (Adelaja, 2018). Youth described themselves as lost after leaving school. They did not know how to connect with employment and entrepreneurial activities, nor how to signal to employers that they have the skills (cognitive and noncognitive) that employers want. At the same time, youth with secondary degrees did not want to take unskilled farm jobs as a way to enter the sector. Whether taking a less skilled job really is a good pathway was not addressed in the research.

In sum, rural youth generally receive fewer years and poorer quality education than their urban counterparts, but they usually have more education than their parents. Overall, this tends to help them in finding and taking advantage of new opportunities which emerge in the agricultural transformation. However, many rural youth are still not getting the education they need to be successful in the urban, full time, regular wage job environment, or in a transformed agro-food system. There is limited data on the noncognitive skills youth possess, but educational reviews as well as qualitative evidence suggest that youth are not gaining these skills in school (World Bank, 2018). If youth want to enter farming, land can be an obstacle. Lack of savings can be an obstacle for youth to start a business, and low financial inclusion in rural areas exacerbates this problem. Traditional networks can be a help or a hindrance to youth in acquiring tacit knowledge and building up the networks they need, whatever sector they enter. Limited qualitative evidence suggests that in rural Africa, rural youth may undertake multiple activities before settling into one major one.

**IV. Youth needs and evidence base**

In any developing country with a large youth population, one can find literally hundreds of individual programs that target youth and promise employment outcomes. This is because in many parts of Asia and SSA, the absolute number of youth entering the labor market is large and still growing, even if youth’s share of the labor force is declining. For economic, social, and political reasons, stakeholders (governments, NGOS, donors, communities) in lower-income countries fear the ‘youth bulge’ and are increasingly looking for ways to improve youth employability and earnings. However, most of the programs implemented are local, and reach a small fraction of youth seeking to enter the labor market.
They often fail to scale beyond a local area because they (i) are implemented by a charismatic leader who has learned by doing, and thus do not have a scalable approach, or (ii) they are too expensive to bring to scale. While many programs track and report program outputs and outcomes, few have been rigorously evaluated to really test program impacts. Even fewer have rigorously evaluated the constraints to employment and economic opportunity locally, and checked to see if these are indeed youth specific.

Of the larger programmatic interventions to help youth enter the labor force or secure a better job which have been rigorously evaluated, almost all have taken place in urban areas. This is primarily because idle urban youth have been an important political concern, and idleness is believed to be more common in urban areas than in rural ones. Meanwhile, of the rural program interventions to improve employment outcomes that have been rigorously evaluated, most tend not to target youth, or to address youth specific constraints, and do not report age-specific data on participants. As a result, the evidence base on both rural youth needs, and what works to help them attain a stable livelihood, is weak. This section discusses what is known about the success of programmatic interventions for youth employment, and how this applies to rural youth.

**Box 3: Why use impact evaluation research to understand the effects of employment programs?**

Attributing outcome changes observed among a group of people following their participation in a targeted program (i.e. the program caused or contributed greatly to the outcomes observed) requires two key conditions to be satisfied.

- **(i) Other possible causes** (e.g. economic growth or other exogenous factors) for the observed participant outcomes must be excluded. For example, if most participants in a youth employment project got a job afterwards, was that because of the project? Or was it because of overall economic growth which created more job opportunities?
- **(ii) Knowledge of what participants would have achieved if the program had never been available** (called a counterfactual). Observed participant outcomes may be related to unobservable differences between themselves and other members of the target population. For example, are those youth who were selected to go to a highly selective college such as Harvard the same as all college-bound youth? Presumably not, so the fact that Harvard graduates earn high incomes cannot be attributed entirely to the Harvard education. This is called *selectivity bias*.

Experimental research strategies, increasing involving randomized control trials, have been developed to address these problems.

The essence of an experimental technique is the treatment and control groups. After a target group is identified, random allocation means the group of people who get the treatment will be very similar in other aspects of their lives to those who don’t (the control group). Because of this, any subsequent differences between the two groups will very likely have been caused by the treatment alone. Both the effect of the external environment and the specific unmeasured characteristics of the participants can be excluded as factors causing the result.

Impact evaluations have shown much lower benefits from training programs designed to create positive employment outcomes than nonexperimental methods such as participants’ satisfaction measures or observational research techniques. For example, regression analysis for a population in Western Kenya showed high returns to vocation training. To check these results, researchers found youth in the same area who wanted to go to vocational training. Half of these were provided with vouchers allowing them to attend the vocational...
training program of their choice (plus a stipend to help finance their expenses such as travel and food), and half were told they did not win the voucher lottery and were sent home. Even after seven years, there was no difference in employment or earnings outcomes between those who received the vouchers and those who did not (Hicks, Kremer, Mbiti, & Miguel, 2015). This implies that the positive return to vocational training found in the regression estimate was probably completely attributable to their unobservable characteristics, not the vocational training – in other words, it was mostly a selectivity effect.

Impact evaluation evidence does have shortcomings. The two most notable ones are external validity and general equilibrium effects. External validity issues arise from multiple sources.

- **Is the group included in the experiment somehow different from the general population?** Such differences can be both an advantage and an intended feature of the program. Programs seeking to encourage entrepreneurship, for example, are more effective when participants have an entrepreneurial ability or mind-set and will recruit such people. But just because these participants benefit, it is not possible to conclude that the average person would benefit from an entrepreneurship program.

- **Is the situation unusual?** A rigorous RCT evaluation showed strong results when youth in post-conflict Northern Uganda were given a grant to purchase vocational training and equipment to start a business. Could this result be explained by the fact that the economy was rebounding after a long period of decline and there were more opportunities for business start-ups to be successful? Would youth groups in other parts of the country which did not have the same economic climate but given the same intervention show similar good results? The impact evaluation cannot tell us the answer; the intervention and evaluation would have to be repeated in a different setting (or several different settings) to know the answer.

- **Another external validity issue is whether the program implementers are somehow different than the general population of implementers.** Evaluations done by academics, for example, often use graduate students and NGOs as program staff rather than public employees or local hires. The strength of the results may depend on the special characteristics of the staff used in the evaluated programs and may not be generalizable to a locally operated or national public program.

A second serious problem is the general equilibrium effect, which in employment programs shows up as displacement. Youth in the treatment group might get better results than the control group, but not because the intervention created more jobs (or filled jobs that would not have been filled). The intervention simply pushed those youths in the program to the front of the queue for jobs. If all youth got the treatment, then nobody would benefit. Crépon, Duflo, Gurgand, Rathelot, & Zamora, (2012), showed that this was exactly what happened in France in a youth employment services program – the more youth who participated, the lower the employment rate.

The majority of studies in the youth employment impact evaluation literature (and the range of programs being implemented) focus on helping youth enter wage employment. Project design has assumed that wage opportunities exist which are not being filled and the problem is with the characteristics of youth. Interviews with potential employers do highlight youth’s lack of experience in a stable job as an issue when they start working. However, it is not clear that there are a lot of entry level job vacancies for youth without high levels of education – completed secondary, for example – or that these entry level vacancies go unfilled for months at a time. Surveys of employers do find shortages of trained engineers, for example, or trained health workers, but these are not the skills that most youth gain even if they do attend post-secondary education. Youth with IT skills are also in demand in developing country labor markets. But firm
surveys rarely find shortages of candidates for entry level jobs on the factory floor, or in retail or other service sectors.

What studies do find is a shortage of wage jobs relative to the number of youth who want them (OECD, 2018). This is a structural problem, as discussed above. Poorer countries are poor in part because of the shortage of enterprises producing goods and services. This means that not everyone who wants a wage job could possibly get one. Programs that succeed in placing youth participants in jobs may have simply excluded someone else from the stable wage job sector (displacement – see French example above). This is what happened in Uganda, when a youth employment program evaluated with an experimental design sent participants to a special vocational training program. Endline data showed that the participants had higher earnings than their control group, but also that the manufacturing firms that hired them would have hired someone else anyway. This means that the training program succeeded in building the human capital of the participant, probably allowing them to get higher wages on entry, but did not create any new jobs, so someone else lost an opportunity.

Most impact evaluations of youth training programs for wage employment do not look for this displacement, so we don’t know how big the issue is. What we do know, however, is that after 10 years of evaluating these programs:

- employment outcome success (earnings, formal employment) relative to control group tends to be small,
- significant success only happens about one-third of the time – which may reflect heterogeneous quality, heterogeneous participants, or lack of need, and
- success fades over time (e.g. after about 3 years, the control group catches up). This suggests that these youth training programs are indeed more about giving one set of job seekers a boost in the labor market – which is mostly displacement – than about raising productivity or creating new employment.¹²

Why are results so mixed from these programs? Poor basic education systems may be part of the answer. In SSA, even secondary school graduates have not mastered key foundational cognitive skills, and school systems do a poor job of teaching noncognitive skills that matter for employment and earnings. One hypothesis is that vocational programs that do not address these deficits may have less success teaching industry-specific skills; programs that do address these deficits (through internships or other on-the-job learning programs plus mentorships) are more successful but at a high cost. This would also explain why “comprehensive” programs that address a variety of skill deficits are more successful – but these are also more expensive. Costs range from US$1500 to US$5000 or more per participant, a lot of money in a country where the per capita income is only $1000 or less. There might be cheaper solutions – such as

¹² These conclusions, and the evidence underlying them, are further developed in Fox and Kaul, (2018). It should be noted that shortening job search time does have value. The question remains, at what price?
keeping kids in school longer and improving instruction, or after-school programs for noncognitive skill development and information about opportunities.

Another hypothesis is that urban labor markets are already doing a good job of matching employers and job seekers (McKenzie, 2017). It is just that in many countries, there are too many job seekers relative to the number of firms. In other words, the real issues relate to economic policies which do not encourage new firm entrance and expansion to create jobs, and to lack of capital from domestic or foreign sources for productive investment in labor-intensive production of goods and services.

An additional wrinkle is that many firms do train new entrants in needed industry and sector-specific technical and vocational skills. They are also happy to have someone else do it for them, in part because it ensures that no firm can shirk from paying this cost. In this case, cooperative arrangements among firms to boost the supply of trained workers could be helpful, combined with regulations that permit the payment of a training wage or similar-type of contract. Firms have reported that they use attendance at TVT programs as a signaling device that potential workers might be interested in the jobs on offer, and more likely to stay in the job, justifying the training a firm would provide a new employee.

Impact evaluations have also researched the effectiveness of interventions to help youth enter nonfarm self-employment (Fox & Kaul, 2018). Although most of these studies also focused on urban programs, these results may have more relevance in rural settings. Most programs were supply-driven, meaning they did not do a serious investigation of the key obstacles not related to individual characteristics. Evaluations usually focused on a specific outcome, and did not measure intermediate results such as skills learned.

In terms of skill development, programs have focused on:

i. remedying deficiencies of rural basic education programs (or increasing household demand for these programs) to develop cognitive skills
ii. development of noncognitive skills through PYD or “soft skills” components of technical skills programs, and
iii. development of industry-specific skills – technical and business skills.

Programs have also tried to address the savings/credit constraint through savings groups and cash grants. Table 1 provides a summary of the available evidence; see Appendix table and Fox and Kaul, (2018) for details on studies.

Table 1: Summary of evidence on interventions to help youth enter employment

<table>
<thead>
<tr>
<th>Constraint</th>
<th>Possible interventions</th>
<th>Evidence on success</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of foundational cognitive skills</td>
<td>Second chance education for out-of-school youth</td>
<td>Effective: Mixed outcomes depending on quality, but generally recommended</td>
</tr>
<tr>
<td></td>
<td>Programs to prevent dropout – conditional cash transfers; messages and information</td>
<td>Effective:</td>
</tr>
</tbody>
</table>
| Lack of noncognitive skills | Positive youth development programs (PYD) including mentorships; after school programs for young women | **Promising**
- Broad evidence on building skills and on nonemployment outcomes;
- Limited evidence on youth employment outcomes; quality is an issue
- Afterschool program for adolescent females successfully encouraged employment in Uganda; other important outcomes as well (see below). |

| Lack of industry specific skills | **Farming:** range of extension programs; quality and outcomes vary
Program to help youth re-enter farming after period outside rural area  

**Nonfarm:**  
Vocational training; help private firms train on products  
Business skills: “financial literacy” training | **Promising:**
- Programs to help youth re-enter farming by teaching skills, providing inputs (effective with ex-combatants in Liberia)  
- Use effective extension to reach youth with new technology  
- Connect private sector input companies with rural youth  
**Not effective:**
- Traditional vocational training produces few results; not clear programs are appropriate for rural areas  
- Business skills training not well evaluated in rural areas; urban evidence suggests may not be effective but short, practical courses best |

| Lack of land | Few formal programs to help youth acquire land; none have been rigorously evaluated. | **Promising:** overall efforts to improve land tenure and land rental and transfer markets. |

| Lack of savings/start-up credit | Microfinance; savings groups (VSLA); Cash transfers | **Effective:** Microfinance does help people save and start businesses; cash does as well |

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The expansion of access to cheap formal finance led to more savings in rural Malawi. Provision of cash grants in urban areas in Africa and in rural Nicaragua were effective in helping youth start own HE. Not promising: VLSA; neither microfinance nor VLSAs have youth-specific evidence. Overall, access to credit has little impact on small holder farmer incomes.\footnote{See \url{https://www.povertyactionlab.org/policy-insight/credits-limited-impact-smallholder-farm-profitability}}

<table>
<thead>
<tr>
<th>Lack of networks</th>
<th>Some PYD have addressed</th>
<th>Promising but no clear evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of social capital/inclusion</td>
<td>Youth inclusive or youth-targeted rural development projects</td>
<td>Promising but no evidence; context matters</td>
</tr>
<tr>
<td></td>
<td>After-school programs for adolescent girls</td>
<td>Effective: After school PYD programs for adolescent girls in rural Uganda increased agency and ambition, improved reproductive health, and helped develop networks at a low cost.</td>
</tr>
</tbody>
</table>

Source: author

Skill development programs have mixed or uncertain results. Programs to remedy basic educational deficits – for in-school youth or out-of-school youth – sometimes succeed in realizing this objective, but subsequent employment and earnings outcomes have not been measured. Programs to develop noncognitive skills (including networks and an understanding of opportunities) have also realized results in this space, but rarely measure subsequent employment outcomes either (USAID, 2017). These are usually the cheapest programs; one famous BRAC program in rural Uganda for adolescent females cost less than US$100 per participant and delivered excellent results, including on employment outcomes (Bandiera et al., 2014). In urban Uganda, the Educate! program in secondary schools also succeeded in developing business-related noncognitive skills, including leadership skills, and achieved employment outcomes (primarily self-employment or MSE). As noted above, traditional TVET programs have had poor results. One program to teach ex-combatants farming in rural Liberia did succeed (in terms of employment and earnings outcomes); this approach needs more testing. Finally, there is a general narrative that youth (and other SE people) need business skills. Evidence for this narrative is weak, in that most programs of this type have not had an employment or earnings effect. Alleviating capital constraints seems to have the best results for helping youth start a nonfarm business.

Multiple programs providing cash to youth to start a business have shown positive results in urban and peri-urban areas. In Nicaragua, cash was combined with a one-day business plan training course; other programs did not include this component but had good results. Medium term follow-ups do suggest that outcomes from pure cash interventions fade over time, so cash should be thought off as a boost rather...
than a silver bullet. Evidence shows that microfinance also helps people start businesses, although it does not help them expand (Banerjee, Karlan, & Zinman, 2015).

Impact evaluations research has also addressed the question of what works to raise small-holder farmers’ earnings, including effective extension techniques and credit. As noted above, none of this research has focused on youth populations, but some insights can be drawn. Importantly, peer-to-peer learning has emerged as one of the most effective ways to pass on information and teach tacit skills. This suggests that there may be scope for youth specific interventions. The results from impact evaluations of schemes to increase credit to smallholder farmers indicates that these schemes are less effective, implying that credit is rarely the binding constraint. But this research, and the projects analyzed, have not targeted youth. Youth-specific farm credit interventions might be worth testing if this is indeed a youth-specific constraint.

The dearth of research on the impact of programs to help rural youth develop stable livelihoods could be interpreted as evidence that such programs, and research on their impacts, are needed. However, another interpretation of the research on both non-youth targeted programs for farmers, and youth targeted programs for nonfarm livelihoods, is that we already know a lot.

- Evidence suggests that technical skills do not seem to be the biggest obstacles for youth to enter employment in low income countries. In head-to-head trials, cash seems to win out over technical and vocational education. If they know how to learn, and have adequate noncognitive skills, youth (and adults) can learn technical skills on the job, through private sector training or informal apprenticeships. This may be why technical programs for youth mostly don’t have much impact in urban areas.
- We do know that basic, transferable cognitive and noncognitive skills are critical as the agro-food system transforms and earn positive rates of return. Anecdotal evidence outside of OECD countries, and studies inside OECD countries, shows that mastery of these skills increases development of industry and job-specific skills.
- The rural basic education system performs poorly in many low and lower-middle income countries. Attainment and learning outcomes lag, to the detriment of rural youth. This situation needs urgent action.
- Community-based youth development programs of various types have had positive outcomes on variables related to employment and earnings, including educational attainment, health outcomes, positive attitude and good mental health, empowerment and agency, networks and social capital, etc.
- Targeted approaches seem to work when peer-to-peer learning is effective (e.g. extension or other agricultural training).
- Specific norm-related or culture-related constraints cause social frictions and affect the opportunities of young women. Separate, female only, noncognitive skill development and mentoring support is probably warranted in most cases.
Ineffective youth-targeted programs have an opportunity cost. If it is not possible for a government or donor to spend money on effective skill-building programs in rural areas such as increasing the quantity and quality of primary and secondary education and insuring retention through completion, addressing other rural income-generation constraints could be the most effective intervention. After all, youth and their parents need roads, and markets, and quality inspections and cheap ways to get a business up and licensed too.

V. Conclusion and future areas for research

Employment opportunities (for youth and non-youth) depend on the development of the economy – structural transformation, agro-food system transformation, and employment transformation. In rural areas, employment transformation (to steady, more productive wage employment) takes longer than urban areas. Youth’s entry into employment (the youth-specific employment challenge) must take account of this. When opportunities expand in urban areas, youth usually benefit (Filmer and Fox, 2014). We have limited evidence on how youth handle the employment challenge in rural areas as the rural economy transforms, but we have anecdotal evidence that they benefit there as well. We don’t have much evidence on the effects of targeted programs on this challenge – either general agricultural or non-agricultural productivity programs or targeted youth programs.

Evidence on programs in urban areas to help youth enter wage and self-employment may hold lessons for program design for rural youth. In general, the evidence on the lack of success of youth-targeted programs in urban areas suggests caution with respect to supply-driven, youth-targetted approaches to address perceived supply-side constraints. But it does suggest that there may be scope for youth-targeted programs to develop skills not specific to farming or the agro-food system, but rather specific to a range of activities related to being an independent person – in the family, in the community, and in the economy. Obviously, education is one such program, but it does not seem to be succeeding at building even basic cognitive skills in rural areas. Positive youth development programs which operate outside of education, in the community, often as after-school programs, may be a more cost-effective approach. Evidence on programs to help rural youth address other constraints, such as lack of available land or lack of capital, or social frictions within the community, or is also lacking.

We currently lack evidence in a variety of contexts on what are the pathways youth follow into stable livelihoods and what are the common bumps in the road. Our evidence is limited to a few small scale, mixed-method surveys. The best way to study how youth progress, and who progresses, is through panel data – repeated observations on the same people. Collecting these data on youth is difficult, not the least because youth are quite mobile, so it is hard to follow them over time. New data collection techniques are reducing these challenges. As these data become more available, it may be possible to glean new insights on youth’s journey, and the different paths available. As we have seen above, qualitative data on youth’s perceptions are also helpful, especially if they can be combined with quantitative data (mixed methods research). While sometimes quite expensive, mixed methods research can provide powerful insights; this route could be pursued more aggressively in the future.
# Appendix: IMPACT EVALUATION RESULTS FOR HOUSEHOLD ENTERPRISE & SELF EMPLOYMENT INTERVENTIONS

<table>
<thead>
<tr>
<th>Author</th>
<th>Country</th>
<th>Input</th>
<th>Intervention</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hicks, Kremer, Mbiti, &amp; Miguel, (2016)</td>
<td>Kenya (western)</td>
<td>TVT only</td>
<td>Vouchers offering choice of Public and Private trainers</td>
<td>No effect</td>
</tr>
<tr>
<td>Charkarvarty et al (2016)</td>
<td>Nepal</td>
<td>Vocational + Business training</td>
<td>Private trainers, mix of vocational and business skills training (2/3 already had businesses)</td>
<td>Positive effect</td>
</tr>
<tr>
<td>Blattman, Fiala, &amp; Martinez (2014)</td>
<td>Uganda (north)</td>
<td>Finance + TVT</td>
<td>Post-conflict, NUSAF program of cash grant for groups of youth; groups could purchase training if desired</td>
<td>Positive effect</td>
</tr>
<tr>
<td>Premand, P. et al. (2012)</td>
<td>Tunisia</td>
<td>Business skills</td>
<td>Targeted University youth</td>
<td>No effect</td>
</tr>
<tr>
<td>Banerjee, Karlan, &amp; Zinman, (2015)</td>
<td>Bosnia, Ethiopia, India, Mexico, Morocco, Mongolia</td>
<td>Microcredit</td>
<td>Microcredit</td>
<td>Slight effect on entry into business</td>
</tr>
<tr>
<td>Blattman &amp; Dercon (2016)</td>
<td>Ethiopia</td>
<td>Finance + Training</td>
<td>Cash Grants ($300 USD) + Limited training</td>
<td>Positive effects</td>
</tr>
</tbody>
</table>

*Source: Fox and Kaul, 2018; see this paper for specific citations.*
References


Hardy, M., Mbiti, I., & McCasland, J. (2016). Do apprentices alleviate firms’ labour constraints?


