Chapter 5

EMPLOYMENT IN AGRICULTURE

# Jobs for Africa's Youth

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Africa south of the Sahara has the world's fastest-growing population and the youngest. By 2050 the subcontinent, with its projected 1.7 billion people, will be the second most populous region in the world, after South Asia, and the only region in which the rural population will still be growing. Between 2010 and 2050 other regions will experience a significant decrease in rural population (which will fall by 50 percent in East Asia, 45 percent in Europe, and 10 percent in South Asia), while Africa south of the Sahara will add an estimated 150 million people in rural areas (an increase of nearly 30 percent). The young people yet to be born are in addition to the 330 million already present and about to enter the labor force, of whom 195 million live in rural areas.[1] As Figure 1 shows, the number of people entering rural labor markets each year is projected to increase until at least 2035.

Young people bring energy, vitality, and innovation into the workforce.[2] When their willingness to contribute is matched with opportunity, they can have a transformative impact on economic growth and social development. This impact is often referred to as the "youth dividend." African leaders know that the youth dividend will not be deposited automatically into national accounts; they will have to take proactive steps to collect it, and most are ready to do so. The past year has provided graphic evidence of the twin needs for agricultural growth and jobs. Yet again, global food prices have spiked; since June 2010, higher food prices have pushed nearly 44 million people into poverty.[3] Opportunities to create jobs and simultaneously lower food prices have been the subject of a number of recent events. For example, the "Young People, Farming, and Food" conference in Accra in March 2012[4] and the Fourth Conference of the African Union Ministers in Charge of Youth, held in Addis Ababa in September 2012,[5] focused specifically on these topics. At a special

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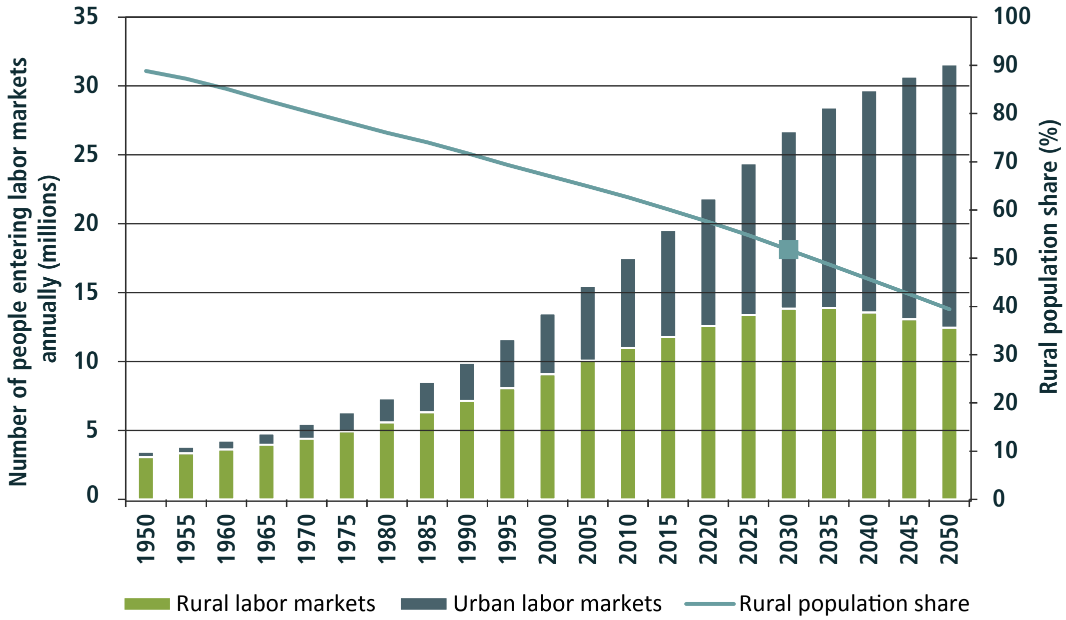
**FIGURE 1** Rural population share and number of people entering rural and urban labor markets annually in Africa south of the Sahara, 1950–2050




**Source**: B. Losch, S. Fréguin-Gresh, and E. T. White, *Structural Transformation and Rural Change Revisited: Challenges for Late Developing Countries in a Globalizing World*, Africa Development Forum Series (Washington, DC: World Bank, 2012).

session on youth in agriculture during the 2012 Farmers' Forum of the International Fund for Agricultural Development (IFAD), IFAD's president "emphasized the need to invest in the rural youth of today, the farmers of tomorrow."[6] Further, the United Nations' April 2012 Annual Ministerial Review recognized rural employment as the key to reducing poverty and food insecurity.[7]

Despite this recent attention, many may still perceive the topic of youth employment only in terms of formal jobs in the urban wage sector. Efforts to accelerate agricultural growth and improve food security are separated conceptually from efforts to create jobs for young people. This is a damaging compartmentalization, and if continued will likely result in the forfeit of Africa's youth dividend. Efforts to enhance agricultural growth and those to create employment for young people are complementary, and must be so understood.

## BUT AS AFRICA DEVELOPS, WON'T AGRICULTURE DECLINE AND LABOR LEAVE RURAL AREAS?

Agriculture contributes one-quarter to one-third of African gross domestic product (GDP) but employs 65–75 percent of the labor force.[8] These data roughly replicate the historic experience elsewhere. A gap in labor productivity between the nonfarming and farming sectors on the order of two to one ordinarily draws people out of agriculture and into other sectors, such as manufacturing and services. Young people are leaving Africa's farms in large numbers. Forty percent of Africa's population already lives in cities, and urbanization is proceeding apace. But this surface similarity with historical experience belies a fundamental difference between Africa's experience now and that of elsewhere and earlier.

Africa's structural transformation (that is, the growth in incomes and resulting diversification of the economy) is taking place at a time of high global food prices and growing recognition of Africa as a reservoir for growth in agricultural production. Elsewhere and in the past, workers left farms for factories producing goods for local consumption; factory goods are now produced largely in Asia, and this will change only gradually. But the number of young Africans that can be absorbed into jobs in manufacturing and services even under optimistic assumptions is likely to be much less than the cohort of people now entering the labor force in rural areas.[9] Agriculture will likely continue to be the dominant sector of employment for most young people over the next few decades.[10] Even if all who can leave agriculture do so, high birth rates create a constant and growing pool of young people who will apply their energies and talents on the farmsteads and in the villages of their birth.

Fortunately, the high demand for agricultural products regionally and globally creates good opportunities for them to do so. Significant incremental growth can be achieved by improving the productivity of both land and labor without displacing labor. Average yields (and thus land productivity) in Africa are low compared with average yields in other regions and with estimated potential yields in Africa; increases can generate economic growth for many years to come.[11] Better management practices can increase resilience and reduce risk. Land can be brought into cultivation without encroaching on forests, and modest increases in mechanization can increase labor productivity. This is fundamentally different from the historical experience elsewhere.[12] With greater availability of tools and machinery, households now limited to working holdings of 1 to 2 hectares could manage more. With improved seed, fertilizer, plant protection agents, and timely advice, yields and profitability can increase enough to allow households to reduce their area devoted to staples consumed at home and expand into more lucrative crops and livestock products. And with higher profitability, the machinery and additional purchased inputs become affordable. Thus the availability of underutilized land in many places and substantial gaps in yields relative to their potential offer opportunities for agriculture to simultaneously raise labor productivity and absorb additional workers.

## OPPORTUNITY IS REAL, BUT NOT YET RECOGNIZED BY YOUNG PEOPLE

According to the World Bank, the value of food on domestic markets in Africa is projected to increase from US$313 billion in 2010 to US$1 trillion in 2030.[13] World prices are high and expected to remain so for at least the medium term. Income growth, population growth, and urbanization in Africa are increasing the demand for imported food faster than the supply of domestically produced substitutes; food imports surged ahead of exports as recently as 2003 and continue to climb. Denser patterns of settlement are causing marketing costs to fall and returns to investments in primary processing of raw products to rise. This is the opportunity before African producers.

Local producers can capture thriving domestic and regional markets only if they become more competitive. Measures that reduce the costs of production (such as dissemination of improved technology) and the costs of marketing (such as investment in transportation and infrastructure) will enable increased profitability and reduce food costs. Even in countries that are relatively well linked to world markets, increased local production can bring down food prices because of friction in the transmission of international prices into local markets.[14] Improved agricultural productivity will thus benefit both producers and consumers (many of whom spend half or more of their budgets on food).[15] Lower food prices offer a secondary benefit by tempering demands for higher wages in the nonfarm sector, thus attracting new investment in manufacturing and services. New investment creates new jobs, fueling a virtuous cycle.

Opportunities on Africa's farms abound, but they are still unrecognized by or inaccessible to most young people. Agricultural employment is often not seen as a viable career, especially by young people in villages who see the reality of their families' situation. For example, for some countries, available statistics suggest that the typical farm is usually no larger than 1 to 2 hectares, and the most common implements are still the short hoe and machete.[16] In recent focus group discussions conducted for the World Bank, young, rural Africans

## India's New Deal: Public Works and Rural Jobs

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The Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) in India—one of the largest and most ambitious social security and public works programs in the world—guarantees participating adults in rural households 100 days of paid manual labor each financial year. The government program was initially launched on a limited scale in 2006, a time of serious agrarian distress in India, to achieve inclusive growth by generating employment and reducing poverty in rural areas.[1] Its main objectives are to (1) provide livelihood security to the rural poor through guaranteed wage employment, (2) rejuvenate the natural resource base, (3) create a productive rural asset base, (4) stimulate the local economy, and (5) increase women's empowerment. A series of studies evaluating the program was published in 2012, and the findings demonstrate its success.

Since the program began in 2006, the government has spent a massive amount of money—about US$22 billion—on laborers' wages to remunerate the approximately 12 billion person-days of employment generated in rural areas. Since 2008, the public works program has existed in every district in the country and provides 50 million households with employment annually. In 2011–2012, the budget reached nearly US$8 billion.

The evaluation of the program, which itself is a result of the coordinated efforts of several Indian ministries to create productive assets in rural areas, found that nearly 866 million projects have been completed since 2006 and more than 1 billion are still underway. Public works projects include village roads, water conservation and harvesting systems, irrigation canals, renovation of traditional water bodies, and land development.

Most notably, the employment program provides many jobs to women: about 47 percent of people who received employment under the program were women, far exceeding the targeted 33 percent. Other major benefits include increased rural wages, reduced distress migration, barren and uncultivated land use, and empowerment of the weaker section of society. In some Indian states, microlevel evidence shows that groundwater levels have risen as a result of the program's public works.

Among beneficiaries, the program contributed to the consumption of more and better food, which leads to food and nutrition security, especially in underprivileged households.[2] Participants also spent more on nonfood items, and this growing demand is expected to trigger growth in the manufacturing and service sectors of rural areas.

There are three main reasons for this success of the guaranteed employment act: (1) strong government commitment, (2) proper targeting of the rural poor and underprivileged, and (3) employment opportunities during the lean season. To ensure its sustainability in the long run, the Indian government needs to converge and link this flagship program with rural development programs and other social protection programs, which would reduce spending without compromising efficiency, food and nutrition security, or progress in rural infrastructure.

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asked about the best and worst ways to earn a living rarely mentioned agriculture as a "best job," although they did not consider it to be the "worst." Good jobs are those that command good pay and respect, features not typically associated with farming in Africa now.

Young Africans already work on farms; 89 percent of rural young people are employed by their families or are self-employed, as are 71 percent of their urban peers, according to a recent large-scale World Bank survey of 10 African countries. And young people on farms are poorly educated—just over 30 percent have completed primary school.[17]

This quick sketch lays out the policy challenge for African leaders. Agriculture represents the sector of most immediate opportunity to realize gains in growth and to create employment for young people. The farming that can accomplish this must shift rapidly from low productivity and status to technical dynamism with recognized opportunity. The labor force that can best implement this transition is one that knows traditional agriculture and is young and full of aspirations, but this same group is poorly educated. What can African leaders do?

## NOT OUR GRANDMOTHERS' FARMS…

Four basic employment options exist in agriculture for young entrants to the labor market, and each requires a different mix of capital, land, and skills (Table 1).[18] Policymakers seeking to accelerate job creation while raising productivity will need to adjust current agricultural programs so that large numbers of young people can transition into the most viable option for their circumstance. These options are compatible with those described by Felicity Proctor and Valerio Lucchesi in *Small-Scale Farming and Youth in an Era of Rapid Rural Change*. The authors note that 51 percent of households in a 2008 survey of nine countries in Africa south of the Sahara (SSA) reported that inheriting land already under cultivation was the most common means for their young people to obtain land, while 16 percent would be allocated land not previously cultivated, 9 percent would rent or borrow land, and 12 percent would buy land.[19]

OPTION 1. As already noted, more than half of young people will likely remain on the holdings of their families. They will need skills to manage higher-valued agriculture and some capital, but they already have land. These families could adopt a corporate approach to management of the household as an enterprise, as the additional skills and labor of multiple young adults in the household allow specialization. A combination of pooled off-farm earnings, a shift to higher-valued and more commercial products, and aggregation of household labor at peak periods could allow small farms to absorb young adults constructively. Many of these individuals could benefit from taking part-time off-farm work (eventually transitioning to option 3).

OPTION 2. A second group of young people will leave their childhood farms and establish new holdings, ideally larger than the parcels they left. These farmers have the greatest need for land, capital, and advisory oversight, and the highest potential for increased productivity. Few young farmers will be able to assemble the elements required to establish a new farm without assistance. New holdings may be in the localities where the young people already live and on land newly available for cultivation through clarification of ownership, conversion of marginal or grazing land, or public investment in irrigation and improvement. Alternatively, new holdings could be farther away, in which case establishment of the new farmsteads would require relocation. Resettlement is often controversial. Experience in Africa and around the world attests to the importance of strict adherence to voluntary decisionmaking on the part of participants, careful selection, full information for all stakeholders, effective support services for the new arrivals, and adequate investment in infrastructure. An assessment of several decades of public support for resettlement in Indonesia shows mixed results tending toward the negative. Improvements in settlers' incomes and access to public services were offset by disappointing outcomes in agricultural production, environmental degradation, and resentment against the newcomers by indigenous inhabitants.[20] Preliminary results regarding a program of market-assisted land reform in Malawi, in contrast, indicate that it may have had more positive outcomes.[21] The Government of Ethiopia has operated a substantial program of voluntary resettlement for a targeted group of vulnerable residents in densely settled parts of the country. The program has generated much attention and controversy, but a rigorous assessment is not yet available. If local young people can secure access to land in or near their communities, this is clearly the simpler approach. If relocation is required, lessons of past experience should be fully weighed.

OPTION 3. Higher-valued agriculture will use services more intensively, creating employment opportunities. Demand for transport, plant protection, veterinary services, mechanized field operations, and advice can be met by young people with skills and enough capital (or leased machinery) to start small businesses. Many of the individuals in this

**TABLE 1** **Options and requirements for agricultural employment**

| Employment option | Need for land | Need for capital | Need for skills |
|---|---|---|---|
| Option 1: Full-time on existing family holding | None | Medium | Medium |
| Option 2: Full-time on new holding | High | High | High |
| Option 3: Part-time combined with household enterprise | Low | Medium | High |
| Option 4: Off-farm wage work | None | None | Medium/high |

Source: Authors.

third group may be part-time farmers, with small allotments of land and enough capital and skills to establish themselves as sellers of services.

OPTION 4. A fourth group will take formal or informal wage work on large commercial farms, in the processing and service sectors, or seasonally on small farms during peak periods. These young people need skills to handle a range of tasks and equipment. Wage work varies from low-skilled and low-paid day labor to jobs in primary production and processing that require and reward higher skills. Drivers, machine operators, mechanics, quality-testing technicians, and others will be in increased demand, and these jobs are better paid than unskilled day labor.

## FINANCIAL SERVICES FOR MORE DYNAMIC AGRICULTURE

Access to capital and credit for smallholders has been a perennial problem, and the problem is magnified for young people. Various innovations to overcome the barriers and achieve sustainable outreach to smallholders have been developed, but the problem is far from solved, and risks and costs remain high.

Self-help groups, savings and credit associations, community-based financial organizations, rural and community banks, and cooperatives are among the organizational innovations developed to address the high costs and risks. Allowing alternative forms of collateral (such as chattel mortgages, warehouse receipts, and future harvests) can reduce the cost of credit. Leasing can be particularly helpful for young farmers, as it opens access to equipment with less collateral than is the case for purchase.[22] Linking agricultural credit to extension services can address the needs of young farmers for simultaneous finance and information.[23] Similarly, bundling credit with insurance may force farmers to purchase more insurance than they would otherwise wish, but at the same time opens new opportunities for borrowing. Matching grants are used in many programs supported by governments and nongovernmental organizations to promote improved technologies, empower farmers to hire service providers, build linkages with private firms through productive partnerships, and provide rural infrastructure for common use.[24] Many of the innovations in rural finance discussed here and below are still being tested, and their performance and sustainability on a large scale are not yet known. They nonetheless warrant close attention in the future, as successes are identified for replication and scaling up, while failed designs are avoided.

Outgrower arrangements can offer prefinancing of inputs and assured marketing channels. For example, contract farming with financial arrangements that limit risk of default or side-selling has proven effective in Mozambique, Rwanda, Tanzania, and Zambia.[25] Similarly, provision of credit through supply chains in Kenya has benefited more than 3,000 farmers. The program reduces the risk of default through cashless bank transfers.[26] The Alliance for a Green Revolution in Africa's Innovative Finance Initiative has achieved low default rates on partial guarantees in Kenya, Mozambique, and Tanzania. Rabobank's Rabo Sustainable Agriculture Guarantee Fund issues partial credit guarantees and other financial products to mitigate financial intermediaries' risks.[27] Even without partial guarantees, banks are sometimes interested in providing services to farmers if they have help training their staff to work with these clients.[28] Technology that brings banking services to rural areas is spreading quickly. Kenya's M-Pesa service has transformed rural banking there, and young people are especially quick to adopt innovations based on mobile phones.[29] Biometrics is being explored in the context of credit markets to protect banks from serial defaulters.[30]

Programs that combine access to financial services with advice or mentoring are likely to be especially suitable in light of the limited experience of young people. Those that start by offering grants and systematically transition to offering savings and ultimately credit may be promising. Young people should be integrated into the financial system rather than sequestered; young participants will eventually cease to be young but will probably remain farmers. They need to enter their middle years with good linkages to sound financial institutions and knowledge of how to use their products.

## LAND FOR THE YOUNG

Population growth puts pressure on land. Many African societies are hobbled by ambiguities in transactability of land through purchase, sale, leasing, inheritance, assignment under traditional rules, and mortgage.[31] The fact that many young people are trapped on diminishing holdings while their governments seek to attract outside investors argues for urgent attention to easing constraints to transfer of land. Africa has room to accommodate its young people, especially if land allocations are accompanied by public investment in infrastructure to allow more profitable farming and simultaneously attract new ideas and investment from abroad.

Only about 10 percent of occupied land in SSA is formally registered.[32] Many countries have made recent progress in formally documenting individual landownership. For example, by the end of 2012, Rwanda had demarcated all 10.5 million land parcels in the country and registered and prepared leases for at least 83 percent of them. Ethiopia has awarded certificates for more than 25 million parcels in its rural areas. Madagascar has issued 75,000 certificates akin to traditional land titles, while in Tanzania about 27,000 certificates of customary rights of occupancy have been issued in two districts. Benin, Burkina Faso, and Côte d'Ivoire have piloted rural land use plans as another way to establish individual land rights.[33] Not all attention to registration need be for individual holdings. Registration of communal land can be an important step to improve security of tenure, particularly if an agreement with an outside investor or allocation of communal land to young people for new farm starts is contemplated.

African agriculture can absorb large numbers of new job seekers and offer meaningful work with public and private benefits.

Young entrants to the labor force, even those with little need for additional land, may benefit from improved security of tenure, the ability to engage in transactions, and relaxation of controls on rental. The very poor, the landless, the young, and migrants usually obtain land through rental if they do so at all, and constraints on rental transactions can hurt them in particular. Short-term rental or long-term leasing can facilitate labor mobility and can transfer land to more productive users. Rental can be particularly helpful in easing the intergenerational transfer of land; at present, elderly people hold most of the land even though in many cases younger family members or neighbors might be able to farm it better. The most common restrictions on rental markets, such as ceilings on rental rates or prohibitions against absentee landownership, are often introduced in an effort to safeguard the interests of smallholders. They may instead lock land into inefficient patterns of use and can greatly disadvantage young potential users.[34] In addition to regulatory barriers, the absence of an effective land tax allows those who hold land for speculative purposes to do so at little cost. An effective system of land taxation coupled with active rental markets could put idle land to work, often in the hands of young people.

Governments could take additional measures to open land to their young people. The extent of state landownership in SSA is largely unknown, as most lands have not yet been surveyed and registered.[35] Underutilized state land, once properly identified and surveyed, can be auctioned to the private sector to combine large-scale operators and small and medium farmers in innovative ways (although care must be taken not to disenfranchise indigenous users such as herders and subsistence communities). Special efforts can be made to accommodate young people who show promise in farming. Such programs would be most useful for people pursuing option 2, although benefits can be envisaged for others as well. Several programs of redistribution have been tried with a mixed record of success. South Africa's program has fallen short of its ambitious targets, probably in large part because access to land was not coupled with improved advice or mentoring and because a prohibition on subdivision meant that farmers could not secure the land in holdings of the size that they preferred.[36] Malawi's distribution of underutilized land from former tea estates seems to have met with greater success.[37] New pilot efforts are underway in Senegal and Zambia and should provide useful lessons.

## BETTER EDUCATION AND ENHANCED MODERN SKILLS

Modern agriculture requires a wide range of specific skills. The rapid spread of mobile phones, and other information and communication technologies more generally, alters the nature of the skill set required, but it does not remove the handicap that incomplete primary schooling represents. To equip young Africans for success in the four options for agricultural employment, schools must do a better job of teaching them basic skills for any endeavor. Foremost among these are reading, writing, numeracy, and the ability to use digital technology and to access and interpret information.

In addition, a growing and diversifying agricultural sector will create nonfarm employment opportunities. Existing agricultural vocational schools can play a constructive role in training skilled personnel for jobs in processing, marketing, machinery operation and repair, transport and logistics, and quality control.

New agricultural extension programs can empower farmers to specify the information they require and to select the extension provider.[38] In these programs, information is recognized as a public good, with the government assuming a share of the cost, particularly for small farmers and the poor. Participatory and group-based approaches to extension (such as farmer field schools and farmer study circles) are gaining ground, and many of these models have application outside of the agricultural sector. While still imperfect in their execution, these newer extension models are likely an improvement over earlier, supply-driven models.

Other specific training and learning opportunities currently exist in many forms, such as competence-based training, local agribusiness development services, business incubators, rural productive alliances, and public-private partnerships.[39] Like some of the finance mechanisms discussed earlier, many of these programs are small in scale and experimental and have not been rigorously evaluated or tested for their effectiveness or sustainability on a larger scale.

The key objective of public policy should be to facilitate the access of rural people to information rather than specifying a rigid new agricultural curriculum. As dynamism in the agricultural sector picks up, returns to investments in skills will grow, providing people with incentives to acquire needed skills. An education sector that delivers quality at the basic level coupled with demand-driven agricultural advisory services and flexible short-term training will best serve the evolving needs. To foster such a system, Africa will need to reinvest in agricultural higher education. How best to do so under severe resource constraints requires careful thought and planning, which are already underway at the regional level.

## STRATEGIES ALREADY EXIST AND SHOULD BE ENHANCED, NOT REPLACED

African leaders recognize the renewed importance of agriculture, and most are devoting resources to it. The African Union and the New Partnership for

Africa's Development have helped by developing the Comprehensive Africa Agriculture Development Programme (CAADP).[40] CAADP provides a conceptual framework to guide countries in their investment planning and a mechanism to share experience and mobilize support. The CAADP agenda centers on four key areas: land and water, access to markets, vulnerability and risk, and agricultural technology. None of these addresses an agenda uniquely for young people, but they all include specific issues that are particularly relevant to young people's needs. For example, in the area of land administration, as already noted, young people will benefit from policies that make rental and intergenerational transfer easier. In the area of agricultural technology, programs of mentorship and voluntary groups of people working with the same technologies can provide useful advice that compensates for young people's lack of experience. CAADP's experience-sharing mechanism allows countries to evaluate ways of relieving constraints to land, capital, and skills that hold young people back. CAADP can also use its advocacy work to help African leaders see how the agendas of agricultural growth and youth employment complement one another.

A number of initiatives point to the attention already being paid to the issue of youth employment: the Millennium Development Goals' Target 1.B; the African Union's African Youth Decade 2009–2018; the UN General Assembly's call for member states to prepare a "National Review and Action Plan on Youth Employment"; and the recent joint proposal among the African Union, the UN Economic Commission for Africa, the African Development Bank, and the International Labour Organization for a Joint Initiative on Job Creation for Youth in Africa.[41] Efforts to create opportunities for young people in agriculture thus do not require a new strategy. Attention should instead be trained on getting governments and their development partners to deliver on existing commitments, implementing investment programs, and making continued progress on policy and regulatory reform. Modest adjustments to meet the specific needs of the large group of young people can capture the complementarities of the agricultural and youth agendas.

## CONCLUSIONS

Agriculture in Africa is now recognized as a source of growth and an instrument for improved food security. It is not yet seen as the major employer of the continent's young people, although in fact it is. This oversight must be remedied if Africa's leaders are to be able to design and implement the measures needed for the sector to deliver its potential. African agriculture can absorb large numbers of new job seekers and offer meaningful work with public and private benefits. For this to happen, constraints to land, capital, and skills must be addressed, and features to make programs friendly to the needs of the young enhanced. Existing programs in finance, land, and education and extension can be adjusted to address the specific needs of rural young people. The agriculture that attracts young people will have to be profitable, competitive, and dynamic. These are the same characteristics required for agriculture to deliver growth, to improve food security, and to preserve a fragile natural environment. Agriculture offers a handsome youth dividend that will benefit young people themselves, their wider societies, and the global community. With clarity of vision and political commitment from Africa's leaders, that dividend can be collected and widely shared. ■