

Youth in Extension and Advisory Services: Rwanda

Developing Local Extension Capacity (DLEC) Project

August 2019

Suggested citation: Franzel, S., Kinyua, H., Rucibigango, M., Davis, K., and Makh, S. (2019). Youth in Extension and Advisory Services: Rwanda. Developing Local Extension Capacity Project. USAID, Washington D.C.

Acknowledgements

This analysis was compiled for the DLEC project under USAID Cooperative Agreement No. AID-OAA-L-16-0002.

This report is made possible by the generous support of the American people through the United States Agency for International Development (USAID). The contents are the responsibility of Digital Green and do not necessarily reflect the views of USAID or the United States Government.

CONTENTS

Contents	4
Acronyms	5
Background and Context	6
Purpose and Methodology	7
Introduction	7
Findings	8
Rules	8
Roles	10
Relationships	17
Resources	18
Results	20
Conclusion and Recommendations	22
Recommendations for USAID Rwanda’s CDCS	25
Recommendations for New Initiatives	26
National Policy and Strategy Recommendations	26
Education and Training Recommendations	27
Recommendations for USAID-DLEC Collaboration	27
Next Steps	28
References	30

ACRONYMS

AFR	Access to Finance Rwanda
CAHW	Community Animal Health Worker
CDCS	Country Development Cooperation Strategy
DLEC	Developing Local Extension Capacity
EAS	Extension and Advisory Services
FAO	Food and Agriculture Organization
FFS	Farmer Field School
GoR	Government of Rwanda
HDAK	Huguka Dukore Akazi Kanoze (Get Trained and Let's Work!)
HoReCo	Horticulture in Reality Cooperative
ICT	Information and Communication Technology
ICT4RAG	Information and Communication Technology for Rwanda in Agriculture
MINAGRI	Ministry of Agriculture and Animal Resources
MYICT	Ministry of Youth and Information and Communication Technologies
NAEB	National Agricultural Export Board
NGO	Nongovernmental Organization
NYC	National Youth Council
PSDAG	Private-Sector Driven Agricultural Growth
PSTA-4	Strategic Plan for Agricultural Transformation, Phase 4
RAB	Rwanda Agricultural Board
RDCPII	Rwanda Dairy Competitiveness Project, Phase 2
RYAF	Rwanda Youth in Agri-business Forum
SILC	Savings and Internal Lending Communities
TI	Twore Inkoko, Twunguke (Let's Raise Chickens, and Make a Profit)
TVET	Technical and Vocational Education and Training
USAID	United States Agency for International Development

BACKGROUND AND CONTEXT

Approximately 88 percent of the world's 1.2 billion youth (ages 15-24 as defined by the UN) live in developing countries. By 2050, the global population of youth is projected to rise to 1.8 billion, with 35 percent of that estimated to live on the African continent. This presents a challenge to many developing countries given the need to create economic opportunities for this growing segment of the population. According to the World Bank, even if countries had suitable conditions for growth and economic transformation, the job market in developing countries could not absorb the growing number of young people projected to become eligible for jobs. In addition to the youth bulge, meeting the growing global demand for food and nutrition also presents a challenge, with some estimates citing a need to increase food availability by 70-100 percent. At the same time, factors such as an increasingly globalized and connected world, higher global incomes, urbanization and widespread access to digital tools are creating new opportunities in agri-food systems for youth and other rural actors. Tapping into the potential of youth and creating opportunities for them in agriculture, including in extension and advisory services (EAS), will be key to meeting global food and nutrition needs as well as achieving the Sustainable Development Goals (SDGs) and Feed the Future's Food Secure 2030 vision. Rural extension and advisory services are defined as all the different activities that provide the information and services needed by farmers and other players in the agri-food system and rural development to develop and build their technical, organizational and management capacities, so they can improve their quality of life and well-being (Christoplos, 2010).

Governments, bilateral and multilateral aid agencies, the private sector agri-food companies and educational institutions have all recognized and emphasized the importance of youth in the global economy, and especially farming and food systems, as a major driver of the economy and contributor to agricultural transformation. Some 32 African countries have policies on youth, including Ethiopia, Nigeria, Rwanda and Uganda. However, young people face many barriers within agriculture such as access to land, finance, education and adequate skills. Additionally, climate change, rural to urban migration trends and increasing population pressures on land will make agriculture even more challenging in the future.

Agricultural extension and advisory services present a unique opportunity to engage youth as both recipients and providers of these services. EAS has an important role to play in youth and leadership development throughout the education system, not just when young people enter the job market. The United States Agency for International Development (USAID) funded Feed the Future Developing Local Extension Capacity (DLEC) to target Feed the Future countries to measurably improve extension programs, policies and services by creating locally-tailored, partnership-based solutions and by mobilizing active communities of practice to advocate for scaling proven approaches. The five-year (2016-2021) project is designed to diagnose, test and share best-fit solutions for agricultural extension systems and services across the Feed the Future countries. Led by Digital Green in partnership with Care International, the International Food Policy Research Institute and the Global Forum for Rural Advisory Services, DLEC is an action-oriented, evidence-based learning project that generates evidence through diagnostic studies and engagement activities, which in turn are used as a catalyst for mobilizing global and country-level communities of practice to advocate for improved EAS. This report on youth in extension and advisory services in Rwanda is one such diagnostic study.

PURPOSE AND METHODOLOGY

The overall objective of this youth in extension diagnostic study is to design a pilot engagement in Rwanda to support and strengthen the inclusion of youth in extension – both as providers and recipients of extension services – as a mechanism to both improve the economic opportunities and livelihoods of youth and increase the effectiveness of extension and advisory service systems.

In Phase 1, DLEC engaged with USAID country missions that identified engaging youth in agricultural extension as a strategic priority for economic growth and investment. DLEC then identified several countries in which there was buy-in and support from USAID missions to conduct a diagnostic to develop concrete recommendations for a youth-focused engagement. These countries included Guatemala, Niger and Rwanda.

For Phase 2, the output is this report. DLEC conducted a landscape analysis, employing a local systems approach and utilize USAID’s “5Rs Framework” (Gray et al., 2018) to analyze the *roles* of certain actors that form a network of *relationships* whose interactions depend on *resources* and produce *results* for youth in EAS. The process of transforming resources into results via interactions of system actors is governed by *rules*.

Methodologies for obtaining the information for this report included: A literature review, key informant interviews, and field and site visits to view programs and talk to stakeholders. Key informants included USAID country partners, government agencies, private sector and civil society that focus on youth in extension. USAID Mission representatives were interviewed to understand Mission priorities for current projects and the Mission country development cooperation strategy (CDCS) as they relate to youth engagement in extension and ongoing or planned programs addressing youth in extension. The report is not meant to give an account of all initiatives in youth and agricultural extension but rather to present a sample of such initiatives, including ones from all the main different types of actors: donor-funded projects, government agencies, educational institutions, international organizations, national and local NGOs, producer organizations and the private sector.

Finally, in Phase 3, DLEC will co-design and launch an engagement with the Mission that is customized to the country contexts to meet the Mission’s needs and DLEC’s strategic objectives.

INTRODUCTION

Rwanda’s economic growth over the last two decades has been very impressive. Over the period 2000-2016, the economy grew by an average of nearly eight percent per year, GDP per capita increased from \$242 to \$729 and the poverty rate fell from 60 to 39 percent (MINAGRI, 2017). Yet a major concern of policymakers and donors is the ability of youth to participate in the country’s economic growth. Youth, defined by the Government of Rwanda as those aged 16-30 (New Times, 2015), number 3.2 million, comprising about 27 percent of Rwanda’s population of 11.9 million as of 2016/17 (NISR, 2018). Each year, about 300,000 youth seek to enter the workforce (Ntiringanya, 2017).

The challenge is particularly great for rural youth, who comprise about 79 percent of the total youth population (GoR, 2015). Young people’s main job is farming (45 percent), or wage labor on farms

(16 percent), highlighting the importance of agriculture as an economic activity for youth (NISR, 2018). About 54 percent of young men in Rwanda work in agriculture; 79 percent of young women work mostly on family farms (NISR, 2016). Rural youth have a relatively high literacy rate (82 percent in 2016/17), but mobile phone ownership (48 percent) and computer literacy (8 percent) were much lower. Only four percent of youth have attended a technical or vocational school and less than two percent a university (NISR, 2018).

Youth face major challenges in agriculture; they lack access to land, capital and knowledge, and employment opportunities are scarce. They often lack interest in agriculture, hoping to secure jobs in other sectors, and are often viewed as not mature enough to farm or run businesses (PSDAG, 2018). Female youth face even greater challenges because unequal power relations leave women with limited decision-making powers and fewer resources. Few youths will inherit enough land from their parents to make a living as farm size averages only 0.6 ha. The economic problems that youth face also have important social consequences, as young people are unable to advance into adulthood, marry or start families (Sommers and Bertsch, 2012).

Rwanda is one of the few countries in Africa that is committed to full national extension coverage. Its main means for reaching all the country's 14,837 villages is through its Twigire Muhinzi program, managed by the Rwanda Agricultural Board (RAB), which focuses on improving production of the country's main food crops and uses paraprofessionals (2,500 farmer field school (FFS) facilitators and 14,500 farmer promoters) to host demonstrations and train farmers. FFS facilitators are selected based on competency and experience and undergo a six-month residence training. In contrast, farmer promoters are selected by their peers and receive periodic trainings ranging from a day to a week. RAB also manages livestock extension services and the National Agricultural Export Board (NAEB) manages extension services for coffee, tea and horticultural export crops. As in other countries, NGO and private firms are active extension providers and use professional staff as well as paraprofessionals.

FINDINGS

The diagnostic employs a local systems approach and utilize USAID's 5Rs Framework (Gray et al., 2018)

Rules

The first "R" asks what are the *rules* under which the system functions such as national policies and strategies that serve to enable or prevent youth's inclusion in EAS, and are the key actors able to modify the rules that affect them in a way that make their programs more impactful?

Rwanda's various policies and strategies concerning youth and agriculture developed fairly independently during the early 2000s but have been effectively integrated during the past decade. Rwanda's National Youth Policy, issued in 2005, has an overall objective to promote the economic, social, cultural, intellectual and moral welfare of youth (GoR, 2005). It focused on nine areas, including education, employment, gender and training but gave little attention to agriculture or agribusiness. Rwanda's Ministry of Youth and Information and Communication Technologies (formerly the Ministry of Youth, Culture and Sports) was responsible for implementing the policy.

The Strategic Plan for the Transformation of Agriculture in Rwanda – Phase II (PSTA II) (MINAGRI, (2009b) mentioned youth only seven times in 127 pages and offered only broad guidelines concerning youth in agriculture, calling for the strategies and programs to be sensitive to youth, to prepare youth for agricultural business opportunities and for a practical agricultural education curriculum. The National Agricultural Extension Strategy, issued in 2009, noted the importance of youth participation in planning extension programs. It called for youth to be represented in District and Sector Agricultural Platforms and in Cell Agricultural Committees.

In contrast, more recent policy documents were much clearer and more specific on integrating youth and agriculture. The Youth Sector Strategic Plan 2013-2018 (GoR, 2013) focused on three priority areas: youth economic empowerment; youth mobilization; and sector coordination. Acknowledging that coordination among stakeholders was a major challenge, the plan detailed mechanisms for improving coordination including inter-ministerial partnerships, public-private partnerships, decentralization of youth programs and monitoring and evaluation of coordination mechanisms (GoR, 2013). An update of the current Youth Sector Strategic Plan is currently under preparation. The revised National Youth Policy (2015) gave increased attention to economic empowerment, job creation, entrepreneurship and business development for youth and recognized that opportunities for these were through linking to and improving farm value chains (GoR, 2015).

The National Youth Council (NYC) is a platform that provides opportunities for the youth to share ideas and participate in self- and national development. Founded in 2003, the NYC has youth centers in major towns and operate at all administrative levels, including villages, sectors and districts. They do not have activities dealing directly with agriculture.

The Information and Communication Technology for Rwanda Agriculture (ICT4Rag) Strategy (2016-2020) was developed under the auspices of the Ministry of Agriculture and Animal Resources (MINAGRI) but involved a taskforce including membership from the Ministry of Youth and Information and Communication Technologies (MYICT) among other bodies (MINAGRI, 2016). One of the strategy's five objectives was to increase agricultural productivity through the use of information and communication technology (ICT) by spurring job creation among youth in the agricultural sector and peripheral services. The strategy recognized that increased productivity and profitability were not sufficient for attracting youth to agriculture. Rather, initiatives were needed to “change the youth mindset towards agribusiness” (p. 32) and to enhance youths’ “social status in their communities” (p. 31). Specific ideas identified in the strategy included a “Farming is Cool Rwanda” initiative (p. 32), e-learning programs and online diplomas in agro-technology and use of social forums to encourage youth to engage in agriculture.

The Strategic Plan for Agricultural Transformation 2018-2024, Phase IV (PSTA-IV) mentioned youth 59 times and had a section on youth and agribusiness development (MINAGRI, 2017). A new initiative is to strengthen dialogue with relevant youth civil society organizations in agriculture, such as The Rwanda Youth in Agribusiness Forum (RYAF). The plan also called for increasing the capacity of MINAGRI to cooperate and coordinate with local government and other ministries, moving toward joint planning and budgeting, and collecting data for improved monitoring and evaluation. Curriculum development and skills training were planned for women and young people with minimal formal education.

The 2018 National Agricultural Policy mentioned youth 28 times and several sections had headings with the word “youth” in them (GoR, 2018). The policy committed to generating jobs and ensuring

the participation of women and youth in the workforce. It highlighted off-farm work opportunities for women and youth while establishing forward linkages to urban and foreign markets. It also noted that technologies and programs need to be adapted to local conditions and to consider specific needs of women, the youth and vulnerable households. Women and youth are to be given priority in financial literacy campaigns; savings groups and cooperatives; and support to entrepreneurs to create bankable business plans. Plans for enhanced agribusiness training for youth included developing learning curricula that were accessible and relevant to women and young people with minimal formal education, implementing incubation programs for youth start-ups, assisting youth with developing bankable business plans and allocating unused land to youth groups interested in cultivating.

Performance contracts (“Imihigo” in Kinyarwanda) are another important feature of Rwanda’s policy framework. Performance contracts are annual contracts between the President of Rwanda, on the one hand, and local government (District Mayors) and line ministries detailing what the respective institution commits to achieve on a number of indicators. It is important to note that the contract is between the institution and the president himself, not his office. The personal nature of the contract highlights its seriousness and the importance of fulfilling its requirements. Local authorities are held accountable for their targets, and civil servants can be fired for below-average performance. Performance contracts were intended to improve the speed and quality of execution of government programs, thus making public agencies and their planning, accountability and monitoring and evaluation processes more effective (Versailles, 2012).

It is evident from the policy review that youth features prominently in Rwanda’s agricultural policies, as do gender and ICT. But in contrast to gender and ICT, youth in agriculture has not been mainstreamed into policy strategies and implementation. For example, no such document as the ICT4RAg Strategy (MINAGRI, 2016) or the Agriculture Gender Strategy (MINAGRI, 2010) exist. These strategy documents include specific results and outcomes to be obtained, activities for achieving them, and indicators for monitoring progress. The plans are then fed directly to line ministries and districts, who incorporate them into their own plans. As a result, whereas district performance contracts routinely refer to gender and ICT indicators, the contracts rarely include youth indicators. In fact, many organizations do not collect data on youth indicators. For example, RAB did not have data on the proportions of young farmer promoters or farmer field school facilitators in its Twigire Muhinzi program. In contrast, RAB had data on proportions of promoters and facilitators by gender.

A second important gap in the policy documents reviewed was that there was no mention of youth as providers of extension, either as extension staff or paraprofessional staff (e.g., farmer field school facilitators or farmer promoters). Recruiting and equipping more youth as extension providers is generally regarded as an important way to improve youth engagement in agriculture (McNamara and Bohn, 2017).

A third major gap is the lack of an updated National Extension Policy and accompanying implementation framework and strategy document.

Roles

The second “R” examines what *roles* government ministries and agencies, educational and research institutions, private sector and civil society play in engaging and employing youth in agricultural extension.

We reviewed the involvement of 22 programs in youth in agriculture initiatives, including USAID projects, other donor-funded projects, international organizations, government agencies, international and national NGOs, private companies, producer organizations and educational institutions (Tables 1 and A-1 in the Annex). There was considerable variation in how the different organizations addressed youth in agriculture, but approaches fit into five categories (Table 2 and A-1 in the Annex). Further information is found in Tables A-2 and A-3 in the Annex.

Table 1. Types of Organizations Assessed

Organization type	Number
USAID projects	6
Other donor or multi-donor projects	3
Government agencies	4
Private-sector companies	2
National NGOs	2
Producer organizations	2
Educational institutions	2
International NGOs	1
Total	22

Table 2. Main Approach that the Initiative Used to Address Youth in Agriculture Issues

Approach	Number
Initiative focuses entirely on youth and agriculture	3
Initiative focuses entirely on youth but includes sectors outside agriculture	3
Initiative has a youth in agriculture component	6
Youth in agriculture is a cross-cutting issue	7
No particular focus on youth though youth are among the beneficiaries	3
Total	22

- **Focused entirely on youth and agriculture.** Three organizations focused entirely on youth and agriculture issues. Two were national NGOs, RYAF and Horticulture in Reality Cooperative (HoReCo). HoReCo was dedicated to promoting the interests and increasing the incomes of youth in agriculture. A third was a project managed by RAB's Department of Animal Resources that helped youth develop small stock enterprises, particularly poultry for egg production.

- **Focused on youth but across many sectors.** Two were educational institutions: The University of Rwanda and Rwanda Polytechnic, which was created in 2017 uniting eight integrated polytechnic regional colleges and a teacher training institute. One project, USAID's Huguka Dukore Akazi Kanoze (HDAK) improved youth workforce readiness and employment opportunities for youth in agriculture as well as other sectors. While it is difficult to quantify the effort given to agriculture relative to other sectors in HDAK, one indicator is that 35 percent of the 7,827 youths receiving technical training in the project's first two years were trained in agriculture and agribusiness (EDC, 2018).
- **Had a youth in agriculture component.** Five programs had a broader clientele than youth but had youth in agriculture components or components that benefitted youth in agriculture. The Capacity Development and Employment Services Board (CESB) had an internship program for unemployed university graduates, placing them in public institutions and private companies and paying the interns a stipend for six months. The Rwanda Private Sector Driven Agricultural Growth Project (PSDAG) aimed to improve the conditions for investment mobilization and to increase value chain market integration. In partnership with CESB, MINAGRI and RYAF, the project had a youth internship program that included more and longer support for interns than the CESB program. The internships were intended to demonstrate to youth that there were fulfilling careers in agriculture and to help them find full-time employment (McGill, 2018). Holland Greentech, a private company, was one of the companies using such interns. The interns established demonstration plots, gave extension advice and sold inputs.

RAB's Department of Animal Resources had a network of community animal health workers (CAHWs), 95 percent of whom were youth. The CAHWs were equipped and trained by RAB and based in dairy cooperatives throughout the country. Impuzamashyirahamwe y'Aborozi ba Kijyambere ba Byumba (IAKIB), a dairy cooperative in Gicumbi District, had a grand assembly of young people, a parallel management structure, to encourage youth to participate in the cooperative, provide advice to the board of directors and prepare themselves for future management positions. Iterambere ry'Abahinzi-Borozi ba Makera (Farmers Development Cooperative of Makera (IABM) a maize cooperative in Muhanga District, had a youth council that served similar purposes (Flink et al., 2018).

- **Had youth as a cross-cutting issue.** For seven programs, youth was a cross-cutting initiative, that is, they supported youth in a number of activities at the same time that they supported other clientele, such as a program offering services to farmers, many of whom were youths. For example, in Hinga Weze, a USAID Feed the Future project aiming to increase smallholder income, improve nutritional status and increase resilience of food systems in 10 districts, youth engagement was promoted in regard to staff, paraprofessionals and beneficiaries across project activities (CNFA, 2018a). The same was true for two other USAID Feed the Future projects: Tworore Inkoke, Twunguke (TI) which helped smallholders, one-third of whom were youths, to increase the capacity of smallholder poultry producers (University of Tennessee Institute of Agriculture, 2018) and Orora Wihaze, a new livestock project about to start, that aims to increase the availability of and consumption of animal-source foods (USAID, 2019). Access to Finance Rwanda was a multi-donor program promoting access to financial services, particularly for women and youth. FAO's Agricultural and Digital Inclusion Program in partnership with RYAF was piloting the provision of weather and agricultural information to farmers, and aimed

to engage youth as both providers and beneficiaries. Zamora Feeds, a feed supply company, relied on youth as both staff and interns to promote its products.

- **No particular emphasis given to youth in agriculture.** Three of the programs gave no particular emphasis to youth in agriculture though youth were among the project's beneficiaries. These include (1) RAB's Twigire Muhinzi model, which the government's main program of agricultural extension uses to promote increasing crop production and productivity, (2) One-Acre Fund, an international NGO that supports RAB's Twigire Muhinzi model and (3) the European Union funded TECAN project, a project under review in MINAGRI aimed at improving the effectiveness of agricultural extension. All of these programs benefitted or are benefitting youth but none had targets for or data available on youth engagement.

The 15 programs/projects working to engage youth in agriculture were using 12 different interventions (Table 3 and Annex 2): All of these interventions involved youth as beneficiaries of extension, hence, our use of the terms 'youth in agriculture' and 'youth in agricultural extension' as interchangeable in this report. In over half, youth were also providers of extension.

- **Strengthening capacity of youth.** This was the most common intervention used by 14 programs/projects. Most organizations trained youth in both technical skills (such as agribusiness) as well as soft skills (such as leadership). Some trained across a broad range of subjects whereas others focused on a single enterprise, such as raising poultry.

HDAK and its 22 institutional partners trained young entrepreneurs in its "Work Ready Now!" training, which involved critical soft skills to transform youths' knowledge, attitudes and behaviors. Topics included personal development, interpersonal communication, work habits and conduct, leadership, safety and health, rights and responsibilities, financial fitness and entrepreneurship. HDAK and its partners also trained youth in agribusiness. PSDAG and its partners provided training in ICT applications to participants in its Young Entrepreneurs Fellowship Program. TI and the Department of Animal Resources in RAB trained youths in poultry production; TI in Northern Region and the Department of Animal Resources in Western Region LAKIB, as mentioned above, trained its young members in cooperative management in Northern Region as did IABM in Southern Region.

RAB, Hinga Weze and One Acre Fund trained young farmers in improved agricultural practices, including adaptation to climate change, agroforestry, post-harvest handling and small-scale irrigation. Hinga Weze also trained youth in financial mobilization and use of financial services, gender, social inclusion and nutrition. Young agro-dealers were also an important target for Hinga Weze training. RYAF trained youths in agroforestry, HoReCo in horticulture and FAO in digital tools for accessing information on weather, crop calendars and market prices. RYAF was about to launch a new project with Emerging Leaders, a UK-based NGO, that will train 12,000 young professionals, 75 percent of whom will start businesses.

The University of Rwanda trains young agriculturalists at the BSc and MSc levels and Rwanda Polytechnic at the BSc level. There are three institutes offering technical and vocational education and training (IVET) in agriculture, one each in Western, Eastern and Southern Region. PSDAG trained youths to use N-Frnds, an ICT platform for accessing agricultural information via their mobile phones.

Table 3. Main Interventions that the Initiatives Used to Address Youth and Agricultural Extension and More Specifically, Youth as Providers of Agricultural Extension

Interventions	No. initiatives involving youth as beneficiaries of agricultural extension	No. initiatives involving youth as providers of agricultural extension
Strengthening capacity of youth	14	0
Hosting interns	8	8
Coaching and mentoring young entrepreneurs	5	5
Strengthening capacity of young extension staff	6	6
Recruiting and strengthening capacity of young paraprofessional extension staff	5	5
Policy advocacy and supporting networks/platforms	5	0
Strengthening capacity of local implementing partners	4	4
Providing credit, supporting savings and loan groups or linking youth to credit facilities	4	0
Organizing internships for other institutions	3	2
Facilitating formation of and support to youth groups	3	3
Gender and social inclusion grants	2	0
Total	62	36

- **Recruiting interns.** Eight organizations recruited young interns, which were nearly always university or polytechnic graduates. In all eight organizations, interns were involved in extension activities. Hinga Weze, TI, RAB and One-Acre Fund all hosted interns, who played an important role training farmers in extension programs as well as other functions. Private companies using interns included Holland Greentech and Zamora Feeds. The interns established demonstration plots, gave extension advice to farmers, and sold inputs.
- **Coaching and mentoring young entrepreneurs.** Five programs involved in training young entrepreneurs also had programs coaching and mentoring them following training. These could also be considered extension activities. In HDAK, staff of implementing partners coached and mentored young entrepreneurs. In addition, the project used a peer-to-peer methodology called

“youth accompaniment” in which youth leaders received training to coach and mentor members of their common interest groups (EDC, 2018). TI and the Department of Animal Resources in RAB coached and mentored young poultry farmers.

- **Recruiting and strengthening capacity of young extension staff.** RAB, Hinga Weze and One-Acre Fund trained extension staff in RAB’s Twigire Muhinzi program. In Hinga Weze, training content for young staff included climate smart agriculture, nutrition and improved crop management practices. Several agencies preferred to hire young extension staff rather than older experienced ones. Three reasons were given: youths learn faster, youths were more skilled in ICT and youths had lower costs. Other agencies preferred older extension staff, because they were more experienced and had greater credibility among farmers.
- **Recruiting and strengthening capacity of young paraprofessional extension staff.** RAB, Hinga Weze and One-Acre Fund trained farmer promoters in RAB’s Twigire Muhinzi program. The farmer promoters, in turn, trained their peers in Twigire Muhinzi groups. In Hinga Weze, training content for farmer promoters included topics similar to those mentioned above for staff: climate smart agriculture, nutrition and improved crop management practices. Hinga Weze has also trained “Youths for Change” to inspire and promote gender transformation among their peers. Specific topics they deal with include gender equality, female empowerment and the division of labor within the family on farm and household activities. RAB’s Department of Animal Resources trained CAHWs as mentioned above. HoReCo trained farmer promoters in irrigation schemes in operation of irrigation infrastructure, crop management and in soft skills such as financial management and conflict resolution.
- **Policy advocacy and supporting networks/platforms.** Two organizations were actively involved in youth policy discussions. RYAF lobbied the government and MINAGRI for a Youth in Agribusiness policy to be drawn up. It also lobbied district governments to allocate land to youth for farming and several (e.g., Kamonyi District) have done so. FAO organized an international conference on youth employment in agriculture. The conference proceedings recommended that governments make greater investments in agricultural advisory services for youth, and invest specifically in agribusiness advisory services for youth, including training and mentoring (FAO, 2018).

Concerning networking, RYAF was developing a platform of youth professionals in agribusiness and invited them to register on their website. Currently, 460 have registered. RYAF was also making the list accessible to services that wish to support young entrepreneurs.

- **Capacity strengthening for local implementing partners.** Three USAID development projects (HDAK, PSDAG and Hinga Weze) strengthened the capacity of local implementing partners to train youths in agriculture. HDAK provided capacity building for 22 local partners in areas such as delivering youth employment training, monitoring, evaluating and reporting, quality assurance, finance and grant management. PSDAG promoted youth and women participation and leadership in its cooperative professionalization program working with 60 cooperatives. PSDAG also trained and coached 28 small and medium enterprises on developing curriculum for training their staff on gender and social inclusion. Hinga Weze assisted RAB in the Twigire Muhinzi program to work with youth groups to help them improve cropping practices and marketing.

- **Providing credit or linking youth to credit facilities.** One organization, Access to Finance Rwanda (AFR), provided credit facilities for youth and three others linked youth to credit facilities. AFR had a target that 20 percent of its loan portfolio should benefit youths. Some examples of programs helping youths included loans to beekeepers, who were mostly youths, and a program to help female school leavers start savings and loans groups. Other organizations helped young agriculturalists link to credit facilities. Hinga Weze trained young farmers in financial literacy and helped them to get credit for inputs in partnership with an agro-dealer in Nyabihu District. HDAK promoted formation and strengthening of Savings and Internal Lending Communities (SILCs), an innovative group savings and loan approach pioneered by HDAK partner Catholic Relief Services.
- **Organizing internships for other institutions** Rwanda's CESB sponsors internships for unemployed university graduates. PSDAG organized internships with CESB, MINAGRI and RYAF for PSDAG-funded agro-enterprises and cooperatives. RYAF also contracted with private companies in the coffee sector to supply them with interns.
- **Linking youth to job opportunities.** HDAK partner Connexus Corporation conducted a youth-focused agribusiness promotional campaign to highlight potential employment opportunities in agriculture and agribusiness for youth. PSDAG's 16 small and medium enterprise partners pledged to focus on integrating youth in their business models, hiring youths and giving priority to youths as raw material suppliers. The Rwanda Dairy Competitiveness Program (RDCPII) reported that the cumulative total of new jobs created following direct interaction with project activities rose to 10,745 during 2014/15, and that 89 percent were taken by those between the ages of 18 to 35 (RDCPII, 2015).
- **Facilitating formation of and supporting youth groups.** RAB's Department of Animal Resources, in partnership with district staff, helped young poultry farmers in Western Region to form producer groups to access start-up capital through the Department's Supporting Youth Cooperatives with Small Stock Project. The Ministry of Finance gave the groups small grants to help them start their poultry businesses. Hinga Weze provided training and inputs to youth producer groups, such as Let's Work with Passion, a youth group in Nyarugenge cell, Bugesera District.
- **Gender and social inclusion grants.** Two USAID projects, PSDAG and Hinga Weze, awarded gender and social inclusion grants to local partners led by women, youths or disabled persons or organizations seeking to benefit these groups. PSDAG grants were awarded to three youth-owned enterprises including two owned by youth cooperatives. Grants were also provided to 16 small and medium enterprises with youth employment programs. For example, DEYI Ltd. provided training to 620 youths (412 female) on mushroom production. Based on the success of the PSDAG grant program, Hinga Weze launched a youth inclusion grant program in 2018/2019. The objectives were to facilitate investment in youth farmer groups, cooperatives or enterprises and to increase income and employment of youth in agribusinesses. Youth-led farmer groups, cooperatives and enterprises were encouraged to apply as well as entrepreneurs or local NGOs targeting large numbers of youth.

The above assessment showed that many organizations were aware of the importance of youth issues and were taking steps to integrate youth initiatives into their programs. A major weakness, however, was that none of the organizations were tackling the youth in agriculture issue in a holistic manner, that is, developing an understanding of the various segments of youth and designing comprehensive programs to address each major segment. Moreover, none extended their activities from diagnosing the problem, through foundational training, to wage employment and self-employment, and provided the self-employed with services they needed to grow their businesses such as further technical training, coaching and mentoring. HDAK came closest to this model but since it covered both rural and urban Rwanda and all sectors, not just agriculture, it could not give the youth in agriculture issue the attention it needed.

RYAF was also an important actor in youth in agriculture and devoted its full attention to the issue. But it was still very young, having started in 2017, and needs substantial support. Most other organizations addressed the youth in agriculture issue in a piecemeal fashion, identifying low hanging fruit, such as internships for university graduates. This is not to denigrate PSDAG's excellent youth internship program. Rather, we are simply calling attention to the fact that a youth internship program for university graduates can only address a very small part of the youth in agriculture problem, given that university graduates make up less than two percent of rural youth, that university graduates have far lower unemployment rates than other youth and that university graduates are not among the most vulnerable segments of youth.

An important gap in the above activities is that there was relatively little use of ICT in extension programs, despite the existence of an ICT4RAG strategy. One Acre Fund used radio drama as an extension approach and much of the monitoring and evaluation was digitized. FAO was partnering with RYAF to pilot helping young farmers to access and use data on weather, prices and other agricultural information via their cell phones. CNFA (2018a) reported 19 active mobile and web platforms for farmers but none appeared to be widely used. MAHWI Tech managed M-LIMA (formerly called AGRO FIBA), a mobile and web-based platform providing information on weather and prices to 10,000 farmers in six districts in 2018, the same number of farmers it had reported serving two years previously (MacNairn and Davis, 2018; M-LIMA, 2018). In 2018, Hinga Weze provided technical assistance to MAHWI Tech to improve the functionality, effectiveness, and ease of monitoring of M-LIMA. Hinga Weze and MAHWI Tech then partnered in a campaign across seven districts publicizing the platform, which resulted in 3,104 farmers registering to use it (CNFA, 2018a). Two recently completed USAID Feed the Future projects used videos in extension, the International Potato Center's Orange-fleshed Sweet Potato Project and the International Center for Tropical Agriculture's High-iron Beans Project. But video use in extension does not appear to be institutionalized in any local extension and advisory service. Lack of expertise in this area appears to be the main constraint. ICT is often mentioned as an important mechanism for attracting youth to agriculture. But with only limited use of ICT in youth-in-agriculture activities, this opportunity for engaging youth is under-exploited.

Relationships

The third "R" from the framework looks at the *relationships* between players and to what extent do they collaborate or overlap their programs.

We witnessed solid partnerships in youth in agriculture programs at various levels: among donors, among government agencies and among the various development partners working at the district

level. Strong partnerships at the government level are said to emanate from the urgency that local government authorities and line ministries have in achieving the commitments made in their annual performance contracts. HDAK has developed youth support networks among local government, private sector and development partners to ensure that high quality youth training services are available and maintained at the community level.

Inter-ministerial coordination is also strong. RYAF is an important coordinating mechanism in the youth in agriculture area because it operates in all five of Rwanda's regions and is accountable to five ministries: MINAGRI, MYICT, and the Ministries of Education; Public Service and Labor; and Trade and Industry. A number of public and private agencies contributed to MINAGRI's National ICT4RAg Strategy: MYICT, RAB, NAEB, the Rwanda Development Board and the Private Sector Federation (MINAGRI, 2016).

PSDAG's internship program is a good example of partnerships that exist at the project level, permitting organizations to achieve more together than would be possible if they were acting individually. PSDAG and MINAGRI coordinated the program, RYAF led the selection of interns, monitoring and reporting, RYAF and MINAGRI handled placement and training, CESB provided interns with a monthly stipend and PSDAG topped up the stipends and facilitated the orientation program for the interns. HDAK worked with 22 local implementing partners in youth employment training and had trained 89 private sector companies in how to deliver work-based learning programs to their employees. Hinga Weze's record of "aggressive collaboration" has led to many effective partnerships with district mayors, government agencies and other stakeholders.

Two areas of concern in relation to partnerships were noted. First, several partners reported difficulties collaborating with RAB following their recent restructuring. RAB leads the implementation of the government's Twigire Muhinzi crop extension model so its ability to partner with other agencies is an important prerequisite to the program's success.

Second, while USAID projects such as HDAK, PSDAG and Hinga Weze have stellar records of partnerships with national and local stakeholders, they could achieve more by working together more frequently than at present. While it is understandable that the projects prioritize partnerships with permanent entities higher than partnerships with temporary ones such as other donor-funded projects, they may be missing some easy win-win opportunities by not collaborating more effectively. Ideas for promoting closer collaboration between HDAK and Hinga Weze are presented in the Recommendations section.

Resources

The fourth "R" is concerned with what *resources* such as programs, institutions and budgets exist to support youth in extension programs and what are the capacities to engage youth?

It was not possible to estimate the financial resources attributed to youth and agricultural extension. For most of the organizations operating in the youth and agriculture area, youth was a cross-cutting issue or their activities extended beyond agriculture, making it problematic to estimate how much was being spent on youth and agricultural extension. No data were available on the proportion of resources devoted to youth and extension relative to other areas.

It is possible to elaborate on the institutional and infrastructural resources available for youth and agricultural extension initiatives to draw on. RYAF was an important resource for any initiative working in the youth in agriculture area. Launched in 2016 and legalized in 2017, RYAF provides a platform to bring together different youth organizations, individual youth farmers and other entrepreneurs in the agricultural sector. RYAF was registered at the Ministry of Public Service and Labor to promote, coordinate and advocate for youth agro-entrepreneurs. Hosted by MINAGRI, 10 of its staff were paid by them and the other 20 by different donor-funded projects. RYAF also contracted with different organizations to provide youth interns. RYAF had 12,000 members in early 2019 and operated in all five of Rwanda's regions. RYAF has partnered successfully with several USAID projects including RDCPII, PSDAG and Hinga Weze. RYAF also reported that they had managed to lobby for their members to be allocated land in various districts that they use to carry out agricultural production activities.

Two other youth organizations implemented youth in agriculture programs: HoReCo and the Rwanda Youth Initiative for Agricultural Transformation (RYIAT). HoReCo was a cooperative of 67 young entrepreneurs that provided extension services and inputs to horticultural farmers and helped them link with markets. They managed two projects, one training farmer promoters in small-scale irrigation and another supporting vegetable production in Nyanza District. RYIAT is a small NGO that recently won the Resolution Social Venture Challenge in Johannesburg, South Africa, and is starting sustainable model farms/training centers in Kigali and other towns.

Rwanda's Twigire Muhinzi extension model was another important resource for Rwandan youth in agriculture initiatives. Managed by RAB and supported by One-Acre Fund and Hinga Weze, Twigire Muhinzi operates in nearly all of the country's 14,837 villages, focusing on the country's main food crops. In addition to extension staff, the program used 2,500 paraprofessional farmer field school facilitators and 14,500 farmer promoters to host demonstrations and train farmers. FFS facilitators were paid fees for conducting training whereas farmer promoters served as volunteers. The government appeared to be giving more emphasis to the farmer promoters because of their greater numbers and reach and lower costs. Funds to pay FFS facilitator cooperatives for training farmers have been held up since 2018 by the Rwanda Public Procurement Authority, which is insisting on a bidding process in which FFS facilitator cooperatives compete with other entities for government contracts. Twigire Muhinzi did little to target youth directly; it did not track numbers of youth providing or benefitting from extension. But it had the potential to be an important partner in youth in agriculture programs given its broad coverage, its effectiveness in training farmers and the fact that it has already benefitted many young farmers.

Local government authorities, particularly district mayors and their staff, were a strong and willing partner in youth in agriculture initiatives and thus an important resource. The performance contracts they sign with the president each year were an important motivation to achieve the goals specified in the contracts.

Rwanda's ICT infrastructure and strong promotion of ICT were also important resources for promoting youth in agricultural extension. Rwanda's ICT4Rag Strategy is probably unique in Africa as is the country's strong inter-ministerial coordination and support in the ICT area.

The University of Rwanda and Rwanda Polytechnic are important resources for training young Rwandan agriculturalists at the BSc and MSc level. However, there were two important gaps in their programs. First, neither had outreach programs providing services to farmers, which could also

serve as an important training ground for faculty and students. Second, there is no department of agricultural extension in the University of Rwanda, though a course in extension is offered.

A new resource, commencing in 2019, is the Rwanda Institute for Conservation Agriculture (RICA), an accredited higher education school for Rwandan college students built on the US Land-Grant model approach. RICA combines research, education, and extension services to train Rwanda's next generation of leaders in agriculture, while supporting national priorities for agricultural development. Curriculum emphasis is on building communication, leadership, and entrepreneurship skills, while students gain hands-on experience in smallholder farming and are exposed to six different enterprise-scale agribusinesses.

Results

The final “R” looks at what has worked thus far from existing *results* that could be addressed by a DLEC engagement (pilot activity) in the country.

The results of youth and agriculture initiatives in Rwanda were often expressed in terms of outputs, that is, products and services which were the initiatives' direct results, such as numbers of youth trained. Few results were expressed in terms of outcomes, that is, effects of outputs, such as numbers of youths who got jobs or started enterprises following training. No data were available on impacts, that is, the longer-term effects of outputs and outcomes on youths' incomes or livelihoods. This section gives examples of some of the results obtained by type of intervention.

- **Strengthening the capacity of youth through training and accompaniment**

HDAK's objective was to equip 40,000 youths with skills for employment and by the end of its second year, it had trained 15,850 youth in soft skills (Work Ready Now! Training). The proportion who are employed in agriculture is not available but 2,236 had received training in agribusiness. About 6,149 reported new or better employment after completing HDAK skills training and accompaniment support and 3,321 were youth with new businesses linked to agricultural value chains. Sixty-four youth leaders provided much of the accompaniment support, that is, coaching and mentoring, helping 34 groups start income-generation activities and 277 members start businesses in four districts (EDC, 2018).

About 17 percent of Hinga Weze's extension beneficiaries are youths and the project plans to raise this proportion to 27 percent. The target for Year 2 (2019/20) beneficiaries from agricultural productivity interventions is 350,000 farm households (CNFA, 2018b). Therefore, if the 27 percent target can be reached, 94,500 youths would benefit.

TI and the RAB's Department of Animal Resources trained 350 farmers (30 percent youths) and 1,356 farmers (all youths) respectively for starting poultry enterprises. The proportion of women was about 40 percent in both initiatives. The two organizations supported the entrepreneurs in other ways, providing chicks and equipment, helping them access credit and coaching and mentoring them. Many farmers in both programs are performing well but weaning them off of project support will be challenging.

PSDAG trained 120 young entrepreneur fellows (58 women) to use N-Frnds, an ICT platform for accessing agricultural information via their mobile phones. No information was available on the impact of the training.

- **Organizing internships programs and hosting interns**

Internship programs have many potential benefits: exposing young graduates to the challenges of the workplace, to job opportunities and helping them gain practical experience (PSDAG, 2018). They also benefit the enterprises that give them internships, as many interns make important contributions. Internships may increase overall employment as companies may hire high-performing interns even if they did not have plans to hire new staff. There also may be negative aspects to internship programs if the enterprise uses interns as substitutes for hiring employees. We were not able to find any systematic assessments of these issues in Rwandan agriculture but case studies drawn up by PSDAG and anecdotal evidence from others seems to confirm the positive aspects of internship programs. One-Acre Fund reported hiring half of the 40 interns they had hosted. Holland Green Tech hosted 60 interns and trained and equipped them to sell inputs and provide extension advice to horticultural farmers. Zamora Feeds reported having four interns as broiler technicians and then hiring two of them when they completed their internships. PSDAG facilitated the placement of 328 youth interns (70 percent women) in 60 companies, cooperatives and other organizations (McGill, 2018).

- **Recruiting and strengthening capacity of young extension and paraprofessional extension staff**

Several extension agencies and projects worked with young paraprofessionals to increase the numbers of youths engaged in agriculture. They also believed that young paraprofessionals would train more youth than older ones would. Hinga Weze worked with 328 agricultural paraprofessionals: 278 farmer promoters and 50 farmer field school facilitators, all of which were recruited by RAB before Hinga Weze started. About 12 percent of farmer promoters and 17 percent of farmer field school facilitators were youths. The project aims to raise these figures to 27 percent in line with their goal that 27 percent of project beneficiaries be youths. About 20 percent of farmer promoters and 28 percent of farmer field school facilitators were women. The project also has 100 “Youths for Change” (47 female and 53 male) who train their peers on gender issues (CNFA, 2018a).

RAB’s Department of Animal Resources has 1,152 paraprofessionals, called community animal health workers. About 95 percent of these were youths but less than 10 percent are female. RAB finds that the CAHWs were very effective, in part because they were able to earn income by providing services to farmers at the same time they were training them or providing information. Income-earning activities included clipping hooves, deworming and spraying acaricide. One Acre Fund, in partnership with DLEC, was assessing the feasibility of offering incentives to the farmer promoters they worked with. The incentives were to provide them with inputs for their demonstration plots and to allow them to keep the revenue from produce sales from the plots.

- **Providing credit, supporting savings and loan groups or linking youth to credit facilities.**

No data on AFR loans benefiting youth were available. Whereas AFR has a target that 20 percent of its loan portfolio should benefit youth no data were collected on the proportion actually benefiting youth. Hinga Weze helped 972 farmers, including 96 youths, to access input credit from KOABUNYA cooperative in Rutsiro District. HDAK helped 7,861 youth organize 378 SILC groups in the project’s first two years, 2017-2018. The youths started 1,719 income generating activities, 58 percent in agribusiness, using loans from SILCs. Another 102 youths received loans from banks and other financial service providers.

- **Linking youth to job opportunities.**

PSDAG's 16 small and medium enterprise partners developed youth employment programs or created opportunities targeting over 1,300 youths in 2018.

- **Facilitating formation of and support to youth groups.**

RAB's Department of Animal Resources has helped young poultry farmers form 63 groups with about 12 farmers per group. The groups are proving important for accessing finance and inputs, for exchanging information among members and for marketing their eggs. The groups have obtained provisional allowance licenses as a prerequisite for forming cooperatives.

- **Gender and social inclusion grants.**

These seem to be an effective means to help private enterprises cover the extra costs and risks of creating more youth employment opportunities. For example, PSDAG grant recipients such as DEYI are providing training and coaching to 620 youths (412 women) on mushroom production. Panovita, another recipient, is recruiting six youth on their staff and works with 135 young cereal outgrowers. About 100 young women collect cassava leaves and prepare them for processing by Shekina Enterprise, another grant recipient. It was too early to assess the sustainability of these initiatives.

CONCLUSION AND RECOMMENDATIONS

The above review documents the Rwandan government's strong support for youth and agricultural initiatives and the many other resources available for building effective youth and agriculture programs: Twigire Muhinzi, RAB's crop extension program that reaches nearly all of Rwanda's villages; RAB's livestock extension program, Rwanda Youth in Agribusiness Forum (RYAF), a platform for youth and youth organizations; strong district governments eager to deliver on their performance contracts with the president; and a growing ICT infrastructure. The review identified many exciting, innovative initiatives in the youth and agricultural extension area that include youth as both providers and recipients of extension. The initiatives involve capacity strengthening, internships, coaching and mentoring, professional and paraprofessional extension and advisory services, policy advocacy, support for networks and platforms, providing credit or linking farmers to credit facilities, linking youth to job opportunities and strengthening local organizations conducting such activities. All of these initiatives address youth as recipients of agricultural extension and over half as providers of extension.

Nevertheless, there were also several important gaps and weaknesses identified:

1.  In the policy area, youth in agricultural extension, either as providers or recipients of extension, has not been mainstreamed into the government's implementation strategies. As a result, there is little mention of youth and few youth-in-agriculture indicators in implementation programs or in the performance contracts between the president and line ministries or district mayors. With the exception of the National Extension Policy (MINAGRI, 2009a), there is no mention of youth and agricultural extension in policy documents. Nor does the National Extension Policy mention the role of youth as providers of extension, either as professional staff or as paraprofessionals.

2. Gaps in tertiary agricultural education include: (1) the lack of university and TVET outreach programs providing services to farmers, which could also serve as an important training ground for

students and (2) that the University of Rwanda lacks a department of Agricultural Extension. A department of Agricultural Extension would be useful not only for training students in the most effective extension approaches but also for conducting research and advising government, NGOs and the private sector on the best extension approaches to use and how to use them.

3. An important gap in the initiatives reviewed is that only three of 22 were focused on youth and agriculture alone. In the others youth in agriculture was a cross-cutting issue without specific metrics, a special component of a larger project or part of a program that involved sectors outside of agriculture. The result was that most of the initiatives address the youth and agriculture issue in a piecemeal fashion, addressing only a small part of youth and agriculture problems. For example, one of the most common initiatives, organizing and hosting youth interns, addressed only the segment of youth who had completed university training, a group representing less than two percent of youth. In contrast, few programs focused on poor, rural youth who had not completed secondary school, a group making up the majority of rural youth.

4. There was also relatively little use of ICT in agricultural extension, which has been proven to be an entry point for youth. Approaches that have been effective in other countries, such as video, are not widely used in Rwanda and hardly at all by local organizations.

5. Another important gap is the failure of most organizations to differentiate among youth. Most simply talk about programs they have for youth, implying that youth are a homogenous group. A result of this gap is that a disproportionate number of youth programs focus on the segment of youth that is most visible and easiest to help -- those youth with university education, who make up less than two percent of Rwanda's youth. The vast majority, most of whom live in rural areas, are largely ignored. Differentiating among youth for planning interventions is discussed in the section, Recommendations for New Initiatives.

6. An additional gap, not yet mentioned in this report, concerns the lack of support for young village agents, that is, youths who work for input suppliers managing demonstrations and selling inputs or taking orders for them in their home areas. The village agents are compensated for their work by receiving salaries or commissions. The main objective providing support for village agents could be to help or promote private input suppliers to recruit such agents and provide training to improve the agent's sales performance, thus increasing the demand for their services among both agro-dealers and farmers. Hinga Weze is currently seeking resources to support and spread the village agent model with the aim to increase youth employment and to increase farmers' purchases of improved inputs such as seeds and fertilizer.

New initiatives to benefit poor rural youth should be based on the [HDAK Youth Options Pathway](#) model. This model starts with needs assessments followed by foundational trainings (such as leadership and financial literacy), technical training, youth leadership accompaniment support, internships and financial support leading to self- or wage-employment (EDC, 2018). Monitoring and evaluation are useful for generating feedback to strengthen the interventions. An advantage of the model is that it forces users to define the pathway from a particular intervention, e.g., training, to an outcome such as self- or wage-employment. Interventions will vary according to the needs, preferences and circumstances of youth in different contexts (e.g., with varying levels of education).

The integration of different interventions along the Youth Options Pathway is essential. For example, a recent review of youth engagements in agribusiness found that interventions that integrate capacity development, financial support and mentorship proved successful in enhancing

youth engagements in agribusiness. Focusing on one of these three elements without addressing the other two may lead to failure (Yami et al., 2019).

Interventions will likely include many of those mentioned in Table 3. ~~It is important that interventions be integrated, using a model such as the HDAK Youth Options Pathway, for ensuring that interventions produce outputs that result in the desired outcomes and impacts.~~ We see the following interventions as being especially geared toward benefitting poor, rural youth: (1) TVETs; (2) training young para-professionals, particularly farmer promoters, CAHWs and village agents working for agro-input suppliers; (3) strengthening youth groups involved in savings/loans/agricultural production/marketing; and (4) improving access of youths and youth groups to credit. Initiatives should not be focused on food crops alone, as Twigire Muhinzi and Hinga Weze are, as many opportunities for benefitting poor rural youth exist in the livestock, coffee, fisheries and forestry sectors.

Initiatives should also focus on engaging youths to provide extension, both as staff and para-professionals, including FFS facilitators, farmer promoters, CAHWs, village agents and youth leaders in accompaniment programs.

The following recommendations for engaging youth in agriculture in Rwanda and more specifically agricultural extension are grouped into three broad categories: (1) recommendations for USAID Rwanda's CDCS; (2) recommendations for new initiatives; and (3) recommendations for USAID-DLEC collaboration. The recommendations are outlined in more detail following the graphic to illustrate the structure of the recommendations.

Summary Recommendations for Engaging Youth in Extension in Rwanda

Recommendations for USAID Rwanda's CDCS

Incorporate youth focus as cross-cutting pillar in 2020-25 CDCS
New investments to report on youth beneficiaries disaggregated by gender
Youth definition to follow GoR definition as those aged 16-30 years

Recommendations for New Initiatives

National Policy & Strategy

Develop a youth in agriculture strategy
Update National Ag Strategy to highlight role of youth

Education & Training

Launch outreach with extension agents, paraprofessionals & farmers
Set up Dept of Ag Ext at Univ of Rwanda
Integrate activities with RICA

Recommendations for USAID - DLEC Collaboration

Support Hinga Weze & other partners integrate youth focus in Twigire Muhinzi and support and private sector extension

Funded
by

DLEC engagement: co-funded by
DLEC Core + Mission buy-in +Hinga
Weze

Associate award: funded by Mission for
large scale

Recommendations for USAID Rwanda's CDCS

As USAID is currently developing a new country development cooperation strategy for Rwanda, our first section of recommendations addresses how to incorporate youth into the CDCS and into USAID's current investments. While youth is addressed under Development Objective 4 in the current CDCS, the focus is primarily on literacy and numeracy. There is an opportunity to leverage the strong Rwandan infrastructure and policy support for youth in agriculture.

We recommend that the 2020-2024 CDCS incorporate youth as a cross-cutting pillar. We suggest the following as a starting point for the cross-cutting pillar: "To take a youth-sensitive approach to development with an emphasis on agricultural education and agribusiness opportunities." This cross-cutting pillar is essential considering the impact potential of engaging youth in agriculture since 27 percent of Rwanda's population comprise of youth, 45 percent of whom are engaged in farming and face significant challenges (e.g., lack access to land with farm size averages only 0.6 ha, capital and knowledge).

We also recommend that USAID defines youth as those aged 16 to 30 years and use any other youth segment differentiations as defined by the Government of Rwanda to ensure synergies and comparability in reporting on youth beneficiaries. A cross-cutting pillar will enable each development objective to be viewed and implemented via a youth lens, thus laying the foundation for economic opportunity, socioeconomic stability and health for the youth of Rwanda.

This approach of viewing youth as a cross-cutting pillar has been successfully used before with gender, even within the current CDCS. Treating gender as a cross-cutting issue has encouraged many development organizations and governments to disaggregate results by gender within their programs to evaluate progress and highlight effective strategies. These efforts have elevated the importance of addressing gender inequality and gender-based violence as key obstacles to development and growth. Given the youth bulge and the importance of engaging youth in economic growth, there is a similar opportunity to elevate youth as a target population in strategies and projects.

The results of our research indicate that strengthening support for youth-focused initiatives in agriculture and extension necessitate setting targets for youth beneficiaries and collecting data on youth engagement disaggregated by gender. A youth-focused crosscutting pillar will enable USAID-funded projects and partners to establish indicators to support these efforts. On a tactical level, we recommend that indicators on youth engagement include both youth as providers of extension (e.g., extension staff and paraprofessionals such as farmer promoters and farmer field school facilitators) as well as youth beneficiaries. In cases where youth targets are not being met, program adjustments will need to be made to improve effectiveness. A common way of reporting on youth and gender is to give the number or percentage of youths benefitting and the number or percentage of women benefitting. While this information is useful, it is not clear the extent to which young women or young men are benefitting. For that, we need data on youth to be broken down by gender, that is, to show the number and percentage of young men and the number or percentage of young women benefitting. Refer to the section below on differentiating youth segments under National policy and strategy recommendations, since differentiating youth segments is as important for the CDCS as it is for national policies.

Key USAID partners to leverage the many job and entrepreneurial opportunities available should include the RAB's Department of Crop Production and Food Security and its Twigire Muhinzi program, RAB's Department of Animal Resources, and the National Agricultural Export Development Board. In addition to the crop sector, USAID needs to work with partners in the livestock and coffee sectors. RYAF is another key partner due to its strong role as a nationwide platform for youth in agriculture. The Rwanda Institute for Conservation Agriculture will also be an important partner for USAID's strategy due to its focus on multi-disciplinary approaches to help build Rwanda's next generation of leaders in agriculture. The Ministry of Agriculture's Center for Information and Communication in Agriculture which produces extension training materials should also be a partner.

Recommendations for New Initiatives

The following recommendations are broadly categorized under (1) national policy and strategy recommendations; and (2) education and training recommendations.

National Policy and Strategy Recommendations

Based on the analyses outlined in previous sections of this report, we recommend the following to be led by the Government of Rwanda:

- **Develop a youth in agriculture strategy.** It is evident from the policy review that youth features prominently in Rwanda's agricultural policies, as do gender and ICT. But in contrast to gender and ICT, youth in agriculture has not been mainstreamed into strategies to implement those policies. For example, no such document as the ICT4Ag Strategy or the Agriculture Gender Strategy exist. These strategy documents include specific results and outcomes to be obtained, activities for achieving them and indicators for monitoring progress. The plans are then fed directly to line ministries and districts, which incorporate them into their own plans. As a result, whereas district performance contracts routinely refer to gender and ICT indicators, the contracts rarely include youth indicators. An additional idea to consider is that the strategy be for youth in agribusiness rather than youth in agriculture. This would highlight the importance of a business perspective which is critical for making agriculture a profitable activity as well as a socially-attractive one.
- **Differentiate youth segments in national strategies and policies.** Youth are heterogeneous, so strategies and policies should begin by characterizing the roughly 2.5 million rural Rwandan youth and defining the different segments, that is, groups of youth with similar characteristics, needs and preferences such that a particular type of intervention would be appropriate for most persons in that segment (USAID Youth Power Program, 2018). Such an exercise will be useful for all initiatives having youth as beneficiaries. Some hypothesized key distinguishing features among the segments are
 - a. Demographics: gender, age and marital status
 - b. Education level (tertiary level graduates, secondary school leavers, primary school leavers, others with little or no education)
 - c. Access to resources: land, finance and location (access to markets)

This segmentation will encourage donor-funded initiatives aimed at benefiting youth to be specific regarding which categories of youth they are benefiting. Such specificity will help avoid overlap and redundancy among initiatives as well as to identify gaps in coverage. For

example, even though many programs may assist youth, segmentation can help policy makers to identify which segments of youths are receiving the most support and which are the most neglected.

- **Update the National Agricultural Extension Strategy to increase the role of youth as recipients and providers of extension.** The process for revising the policy was started in 2015 with assistance from the African Forum for Agricultural Advisory Services but has not yet been completed. A draft that DLEC reviewed made little mention of youth, either as providers or as recipients of extension. Hinga Weze will be assisting RAB on revising the strategy and they need to ensure that the role of youth as providers and recipients of extension receives emphasis. Indicators are needed on both aspects so that, for example, progress in increasing the numbers of youth engaged in extension as staff, paraprofessionals and as beneficiaries can be tracked.

Education and Training Recommendations

There are a number of opportunities for innovation in youth education and training in agricultural extension as well as connecting youth with job and business opportunities in the sector.

- **The University of Rwanda should launch an outreach program working with young extension agents, paraprofessionals and farmers.** Such a program could help these groups while also providing important educational and job training for agricultural students. This would be assisted through **creating a Department of Agricultural Extension at the University of Rwanda.** Such a department could play an important role in Rwanda's agricultural development, just as such departments do in neighboring Uganda and Tanzania, by training students, conducting research on extension approaches, supporting extension efforts nationally, and advising policymakers.
- **Integrate activities with the Rwanda Institute for Conservation Agriculture.** There is an opportunity to integrate the University of Rwanda's training initiatives with RICA as the institute is just being set up and will support youth in agricultural extension across multiple touchpoints in research, education and advisory services while simultaneously supporting national economic development priorities.
- **Strengthening training for rural poor youth:** More training opportunities are needed for poor, rural youth, particularly the many who did not complete secondary schools. HDAK's efforts to strengthen the capacity of its 22 local implementing partners targeting poor, rural youth are laudable and need to be intensified. In addition and as mentioned above, training needs to be integrated into more holistic initiatives such as the HDAK Youth Options Pathway Model.
- **Support and promote young village agents.** As mentioned above, we were unable to identify any programs assisting young village agents, that is, youths who work for input suppliers managing demonstrations and selling inputs or taking orders for them in their home areas. Possible training areas to help them could include foundational skills (such as financial literacy), sales, business, and agronomic skills. A youth accompaniment program, such as those promoted by HDAK, could help provide coaching and mentoring in these areas following the training. Programs could help input suppliers recruit such agents as well as

improve their sales performance and the quality of the information they provide. The activity may be as appropriate for the livestock and coffee sectors as it is for the crop sector. A pilot study and initiative to investigate how best to support and promote young village agents is needed.

Recommendations for USAID-DLEC Collaboration

The Feed the Future Developing Local Extension Capacity project is a Leader with Associates award that offers significant flexibility to design and launch innovative initiatives to strengthen agricultural and extension services, build evidence for what works and influence key stakeholders to take up learnings at scale. We highlight opportunities for collaboration with USAID Rwanda below. In addition to some funding available from the DLEC core award, opportunities will need additional financial support to be implemented in a sustainable and scalable manner.

The engagement would aim at improving youth livelihoods, income, and economic opportunities through agriculture in Rwanda by strengthening or supplementing Twigire Muhinzi's programming as well as private sector extension and more intentionally integrating youth-centered activities in the agricultural sector. We would do this by working with organizations and projects like the Hinga Weze program, HDAK and One Acre Fund that are currently partnering with Twigire Muhinzi and/or establishing private extension initiatives to integrate a youth focus. The engagement would:

- **Develop a recruitment strategy for Twigire Muhinzi to increase the number of youth extensionists and farmers who benefit from those extension services.** The engagement will do this by profiling existing extension staff to determine the number of youth, assess existing recruiting practices and examine existing recruiting models to assess best practices, and finally engage stakeholders to develop youth friendly methods/approaches for recruiting volunteers and targeting youth farmers within their programs.
- **Conduct consultations and analysis to inform policy options to support the enabling environment for youth integration in agriculture.** The study would build on the youth diagnostics study, and conduct a more targeted analysis to establish the existing policy and legal framework for youth integration and identify gaps, engage stakeholders to strengthen EAS and agriculture in the education system through workshops to get broader feedback.
- **Strengthen monitoring and evaluation frameworks in both Twigire Muhinzi as well as partner organizations to ensure data-driven decision making regarding youth strategies.** The engagement would embed youth into existing monitoring and evaluation frameworks by building capacity of implementers to characterize Rwandan youth in different segments and establish new indicators to track progress of youth programming.
- **Test youth-centered interventions to build the evidence base of best-fit youth programming and advocate for replication and scaling through Twigire Muhinzi and private actors.** The interventions ideas (developed in conversation with Hinga Weze) could strengthen and scale up Hinga Weze's ongoing activities in youth. It would build on HW's youth segmentation efforts to identify capacity building needs of youth; expand and scale the youth village agent program to cover both inputs and market activities and provide additional benefits for youth; build capacity of youth agents (as well as other agents where there is demand and interest) to use digital tools (e.g., interactive voice response, short message services, video, and radio) to improve input delivery, the quality and consistency of extension messaging, and increase adoption of identified practices and technologies; and expand and

strengthen HW's assistance to youth groups to help them to access credit and information and to better produce and market crops. Beyond this we could build the capacity of One Acre Fund to integrate youth into programming (and possibly University of Tennessee's USAID-funded TI project to integrate youth in poultry value chain) and further evaluate youth-centered interventions through quasi-experimental design and disseminate best-fit practices to the Twigire Muhinzi system to promote replication and scale up.

NEXT STEPS

The DLEC Leader with Associates award offers two flexible funding mechanisms: (1) Mission buy-in; and (2) associate awards. Any of the above recommendations (from supporting the CDCS development with specific language and indicators on how the youth lens can be applied to developing any of the new initiatives to supporting existing Mission programs through any of the USAID-DLEC collaborations) can be implemented at a smaller scale with financial contribution from the DLEC core award and Mission support. An engagement with a broader scope, national scale and greater impact would necessitate additional funding via a buy-in or associate award.

REFERENCES

- CNFA. (2018a). Hinga Weze: Annual Progress Report (October 1, 2017 – September 30, 2018). Washington, DC: Cultivating New Frontiers in Agriculture.
- CNFA. (2018b). Hinga Weze: Year 2 Workplan. Washington, DC: Cultivating New Frontiers in Agriculture.
- Christoplos, I. (2010). Mobilizing the Potential of Rural and Agricultural Extension. Rome: FAO.
- EDC. (2018). Annual Report. Kigali: Huguka Dukore Akazi Kanoze Project, Education Development Center.
- FAO. (2018). Youth employment in agriculture. Conference report. Rome: FAO.
- Feder, G. and Savastano, S. (2006). The Role of Opinion Leaders in the Diffusion of New Knowledge: The Case of Integrated Pest Management. Washington DC: World Bank Policy Research Working Paper 3916, World Bank.
- Flink, I., Vaast, C., Jacobs, J. (2018). Youth in Agricultural Cooperatives: Challenges and Opportunities. Amsterdam: Royal Tropical Institute (KIT),
- GoR. (2005). National Youth Policy. Kigali: Ministry of Youth, Culture and Sports, Government of Rwanda.
- GoR. (2013). Youth Sector Strategic Plan 2013-2018. Kigali: Government of Rwanda.
- GoR. (2015). National Youth Policy. Towards a HAPPi Generation Kigali: Ministry of Youth and Information and Communication Technology. Government of Rwanda.
- GoR. (2018). National Agriculture Policy. Kigali: Ministry of Agriculture and Animal Resources, Government of Rwanda.
- Gray, J., D. Grover, and S. Rivas. (2018). Local Systems Framework Learning Note and Presentation - Experiences from the USAID/Honduras Funded Transforming Market Systems (TMS) Activity. Tegucigalpa: Dexis Consulting Group, ACDI/VOCA, USAID/Honduras.
- Land O'Lakes. (2015). Quarterly Report July 1 – September 30, 2015. St. Paul, Minnesota: Land O'Lakes, Inc., USAID Rwanda Dairy Competitiveness Project, Phase II. .
- M-LIMA. (2018). M-LIMA platform. Presentation downloaded on April 14, 2019 from https://horticulture.ucdavis.edu/sites/g/files/dgvnsk1816/files/extension_material_files/M-LIMA%20PLATFORM%20Presentation%20final.pdf
- McNamara, P. and Bohn, A. (2017). Opinion: 3 ways extension services can engage and empower rural youth. Global Views. Champagne-Urbana, Illinois: University of Illinois.

- McGill, K. (2018). *Cultivating Youth Entrepreneurs in Rwanda's Agriculture Sector*. Research Triangle Park, *North Carolina*: RTI International.
- MacNairn, I. and Davis, K. (2018). *Rwanda: Desk Study of Extension and Advisory Services*. Washington DC: Developing Local Extension Capacity (DLEC).
- MINAGRI. (2009a). *National Agricultural Extension Strategy*. Kigali: Ministry of Agriculture and Animal Resources.
- MINAGRI. (2009b). *The Strategic Plan for the Transformation of Agriculture in Rwanda – Phase II ((PSTA II)*. Kigali: Ministry of Agriculture and Animal Resources.
- MINAGRI. (2010). *Agriculture Gender Strategy*. Kigali: Ministry of Agriculture and Animal Resources.
- MINAGRI. (2017). *The Strategic Plan for Agricultural Transformation 2018-2014, Phase IV*. Kigali: Ministry of Agriculture and Animal Resources.
- MINAGRI. (2016). *The National Information and Communication Technologies for Rwanda Agriculture (ICT4Rag) Strategy (2016-2020)*. Kigali: Ministry of Agriculture and Animal Resources.
- New Times. (2015). *New government policy lowers youth bracket*. Kigali: New Times, November 15, 2015.
- Ntirenganya, G. (2017). *Government seeks more youth engagement in agriculture*. Kigali: New Times, February 14, 2017.
- NISR. (2016). *EICV4 Economic Activity Thematic Report, 2013/14*. Kigali: National Institute of Statistics of Rwanda.
- NISR. (2018). *EICV5 Youth Thematic Report, 2016/17*. Kigali: National Institute of Statistics of Rwanda.
- PSDAG. (2018). *Gender and Social Inclusion Learning Event*. Kigali: USAID Feed the Future Project: Private-Sector Driven Agricultural Growth.
- Sommers, M. and Bertsch, G. (2012). *Stuck: Rwandan Youth and the Struggle for Adulthood* Athens, Ga.: University of Georgia Press.
- USAID. (2019). *Request for Proposal No. SOL-72069619 R00001*. Pp. 125-149.
- USAID Youth Power Program. (2018). *What works in Youth and Agriculture, Food Security, and Nutrition*. Retrieved from Youth Power: <http://www.youthpower.org/what-works-youth-and-agriculture-food-security-and-nutrition#YouthAssessmentTools>
- University of Tennessee Institute of Agriculture. (2018). *Tworore Inkoko, Twunguke. Annual and Quarter 4 Report, FY 2018*. Knoxville, University of Tennessee Institute of Agriculture.

Versailles, B. (2012). Rwanda: Performance Contracts (Imihigo). London: Overseas Development Initiative. Budget Strengthening Initiative, Country Learning Notes.

Yami, M., Shiferaw, F., Abdoulaye, T., Alene, A.D., Bamba, Z. and Manyong, V. (2019). African rural youth engagement in agribusiness: achievements, limitations and lessons. *Sustainability*, 11:185:1-15.