Chapter 4
Innovative and Inclusive Finance for Youth in Agriculture

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KEY MESSAGES

ONE Links between young entrepreneurs in agriculture and formal financial institutions need to be strengthened by improving youth's financial literacy and the capability of institutions to assess agricultural sector opportunities.

TWO Better metrics can drive better policy – African governments should produce and share reliable statistics on youth employment in agriculture and their financial inclusion.

THREE Young agripreneurs, having fewer assets, will benefit from forms of finance that do not require fixed collateral, such as contract farming, leasing, warehouse receipt finance or factoring. Governments and international development organizations should encourage such forms of finance through blending and guarantee schemes.

FOUR Crowdfunding platforms offer opportunities to young African entrepreneurs, including in agriculture, and governments should remove all barriers that prevent them from operating properly, including for equity and loan financing.

FIVE A scarcity of venture capital firms (including the mentoring services that they provide) hampers African young entrepreneurs, including in agriculture, in developing and scaling up their businesses. Development organizations should continue to scale up their support for challenge funds and impact investing to fill this critical gap in the market.

Introduction

Rural and urban youth have the potential to contribute to food security, economic development, social inclusion and stability. But sadly, three of every four youths in Africa live on less than USD 2/day (African Economic Outlook 2013). Securing youth access to credit, savings, and insurance will unveil their talent for entrepreneurship, boost their self-esteem and allow them to have a positive transformative role in their society. Financing youth in agriculture is already happening, and where African youth have had this opportunity, they have found innovative and creative strategies to secure a future for themselves while contributing to the development of the private sector and social stability in their countries. Financing of youth needs to be scaled up. In 2012, Dalberg Global Development Advisors estimated the global smallholder agricultural finance market at USD 450 billion (USD 50 billion in Africa), half of it for short-term credit, half for long-term credit (Carroll, et al., 2012). Hence, young Africans involved in agriculture or related activities comprise a key means for financial service providers to harness the largely untapped potential demand for smallholder agricultural finance.

This chapter describes practical and evidence-based financial inclusion models to strengthen African youth participation in agricultural value chains. It starts with a brief review of the challenges preventing young agripreneurs (i.e., entrepreneurs in the agri-value chains) from accessing needed finance, as noted elsewhere in this publication. Next, the conditions and specific challenges that prevent access to financial services for young agripreneurs and young subsistence farmers are discussed. This is followed by a description of the role of governments in creating an enabling environment for financial inclusion of youth in agriculture, and in developing innovative financing mechanisms. Then, key principles that financial service providers should follow while developing products and services targeting youth are described and four key innovative financial products for youth are presented. Finally, the conclusion highlights key policy recommendations for enhancing access of African youth to innovative and inclusive agri-finance.

Challenges Preventing Youth Access to Finance and Participation in Agriculture

Youth financial inclusion is a complex and interwoven challenge, and lack of access to finance is one of many challenges preventing youth participation in agriculture (Filmer and Fox, 2014)[1]. Poor inclusion is not only due to direct constraints, such as the lack of innovation in the formal banking industry or the lack of youth financial capabilities, but also to general constraints that simultaneously hamper youth participation in agriculture.

These general constraints include access to: 1) assets and social capital; 2) knowledge, information and adequate education; 3) the political process, and 4) input and output markets.

Africa's youth usually do not possess the collateral needed to make them eligible for loans from the formal banking sector, and informal mechanisms such as savings clubs, while useful (and often the source of funding for small capital investments), are only having a very limited impact on youth access to capital. In many African countries, rural youth move out of agriculture due to the lack of access to land (Bezu and Holden, 2014). The youth often do not possess formal land titles, do not have access to steady employment, and are not endowed with mobile assets, such as cars, motorcycles or furniture, that can be accepted by formal financial service providers as loan guarantees (Filmer and Fox, 2014). With poor social capital, the youth often lack potential guarantors in their private circle to back their loan requests.

Mike Njau, now 25 years old, is a model strawberry farmer in Kiambu County in Kenya. At 22, he resigned from his job in a local bank to venture into small-scale strawberry farming. With support from Farm Concern International (funded by AGRA), he has been able to expand his business, and has doubled his income.

According to Njau, lack of access to affordable finance is one of the biggest challenges facing young people in Africa who want to move into agriculture. The other challenge is lack of land.

Njau was lucky enough to get financing through family borrowing and the little savings he had from his banking employment. Since he started, however, he has used internally generated resources to finance his farm expansion. Even after three years of successful business, he still cannot borrow from banks or microfinance institutions because he does not have collateral.

[1] A survey done in Nigeria ranked inadequate credit facilities as the number one constraint to rural youth's involvement in agriculture [Akpan, S. B. (2010). "Encouraging youth's involvement in agricultural production and processing."]

Youth's relatively insufficient access to knowledge, information and education makes them less prepared to be successful and proactive agripreneurs (see Chapter 3). Capacity building is therefore critical to empower youth in agriculture, which would also reduce the risk of lending. Youth's relative lack of knowledge and information on the structure of existing agricultural value chains prevents them from using market connections to access sales agreements and participate in contract farming, which can be valuable as collateral for banks (Miller and Jones, 2010). Technology has the potential of easing the drudgery of traditional farming (which makes the sector quite unattractive for most young people), but it requires farmers to have the knowledge and skills to identify and use appropriate technology. The poor use of ICT applications and platforms to ease financial and commercial transactions often leads to high transaction costs for the young agripreneurs (de Silva and Ratnadiwakara, 2010).

Finally, even though young Africans often have a high level of involvement in politics, particularly as voters or ground troops for seasoned politicians, they have limited capacity to vie for political office, which in turn hampers their lobbying capacity in local, regional and national decision-making arenas. Thus, the youth's voices are not heard during the design and implementation of policies affecting them, and as a result those policies are often not not adapted to their conditions (UNDP, 2012).

Young Agripreneurs and Financial Inclusion

Current status of youth access to finance[2]

Few African youth have sustained access to a variety of financial services and products at an affordable cost, such as savings, loans, insurance, and payment systems. This is the common definition of financial inclusion (Gardeva and Rhyne, 2011). In 2014, 20.5% of young African adults (aged 15-24) held an account at a formal financial institution – including banks, credit unions, MFIs, SACCOs and post banks – compared to 33.1% of older adults (aged 25 and above). Few youth also have access to formal savings. In 2011, only 10% of African youth saved in a formal financial institution, with a slight increase to 11% in 2014 (Demirguc-Kunt, et al., 2015).

When youth have access to financial services, it is mostly through initiatives led by semi-formal NGO and community-based organizations (such as self-help groups and village savings and loan associations), and informal private financial services providers (moneylenders and traders, family and friends, agroprocessing companies, and input suppliers) (Demirguc-Kunt, et al., 2015).

For instance, in 2014, 47.7% of young adults in sub Saharan Africa reported to have contracted a loan, but in almost four out of five cases, this was from family or friends. Only in one out of fourteen cases was the loan from a bank. Similarly, youth savings were mostly outside of the formal sector: of the 49.8% of young adults in SSA who reported saving any money in 2014, 10.9% saved in formal financial institutions while 16.6% used saving clubs (Demirguc-Kunt, et al., 2015).

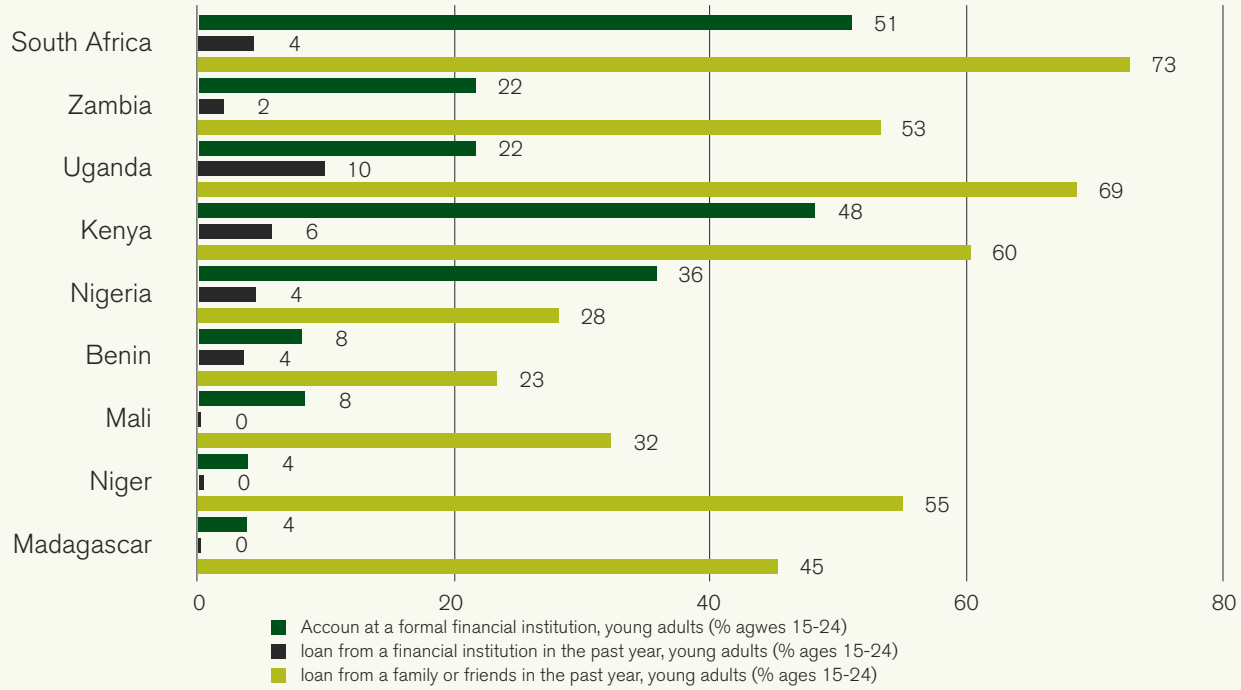
The situation is improving rapidly. For example, from 2011 to 2014, the percentage of SSA youth who held a bank account increased by a fifth, and that of youth able to obtain a formal financial sector loan by almost two-fifths. However, this was from a very low base and much more progress is needed (Demirguc-Kunt, et al., 2015). Furthermore, the low level of youth savings at formal financial institutions is striking, given that such savings are critical for youth to build up financial assets for investment in productive capital and to build up a financial record that can be taken into account in loan assessments done by banks (if banks were to provide facilities for informal savings clubs, like Kenyan banks do with their "chama accounts"[3], this would also help build credit records). To address this issue, organizations such as The MasterCard Foundation are increasingly using youth savings groups as a springboard to formal financial inclusion (Ramírez and Fleischer-Proaño, 2013; Markel and Panetta, 2014; The MasterCard Foundation, 2015a).

Finally, few youth have access to insurance. In 2011, only 6.5% of African youth purchased agricultural insurance. This low participation of youth in the insurance market is mostly due to a lack of appropriate insurance products for smallholders in general and for youth in particular (Filmer and Fox, 2014). Fortunately, the development of micro-insurance schemes (including weather-based insurance programs) supplied by trusted and innovative channels, and characterized by low premiums, simple design, flexible premium payments, and rapid settlement of claims, are increasingly filling this gap (Filmer and Fox, 2014). For instance, in 2013 the Kilimo Salama initiative insured 185,000 Kenyan and Rwandan farmers who received insurance policies that covered their harvest

[2] Throughout this section, please note that whether someone opens a savings account or contracts a loan is not a perfect indicator of whether they have access to formal financial services. We rather use these indicators as a proxy for financial inclusion.

[3] Chama accounts are savings accounts for formal and informal savings groups (chamas) offering the groups savings facilities, but also providing access to bank loans of up to three times a group's savings.

Figure 4.1 Youth financial inclusion is heterogeneous across SAA countries



Source: Global Financial Inclusion Database, World Bank (2015)[5]

losses due to drought or excessive rain[4]. This initiative is expected to cover about 1 million East African farmers by the end of 2015.

Youth financial inclusion is heterogeneous across SSA countries. As Figure 4.1 shows, 51% of young South Africans and 48% of young Kenyans held an account in a formal financial institution in 2014. This compares with only 8% of young Beninese and Malians (and these are by far not the worst countries; in Madagascar and Niger, for example, it is only 3.9%). In all countries, many more youth borrow from family or friends than from banks – ranging from a low of 23% of youth in Benin, to a high of 73% in South Africa. In no country did more than 10% of youth have a bank loan (the actual use of these bank loans is not recorded in the database, and it is likely that much was not used for agriculture; thus, actual access to bank loans to finance agricultural activities is even lower).

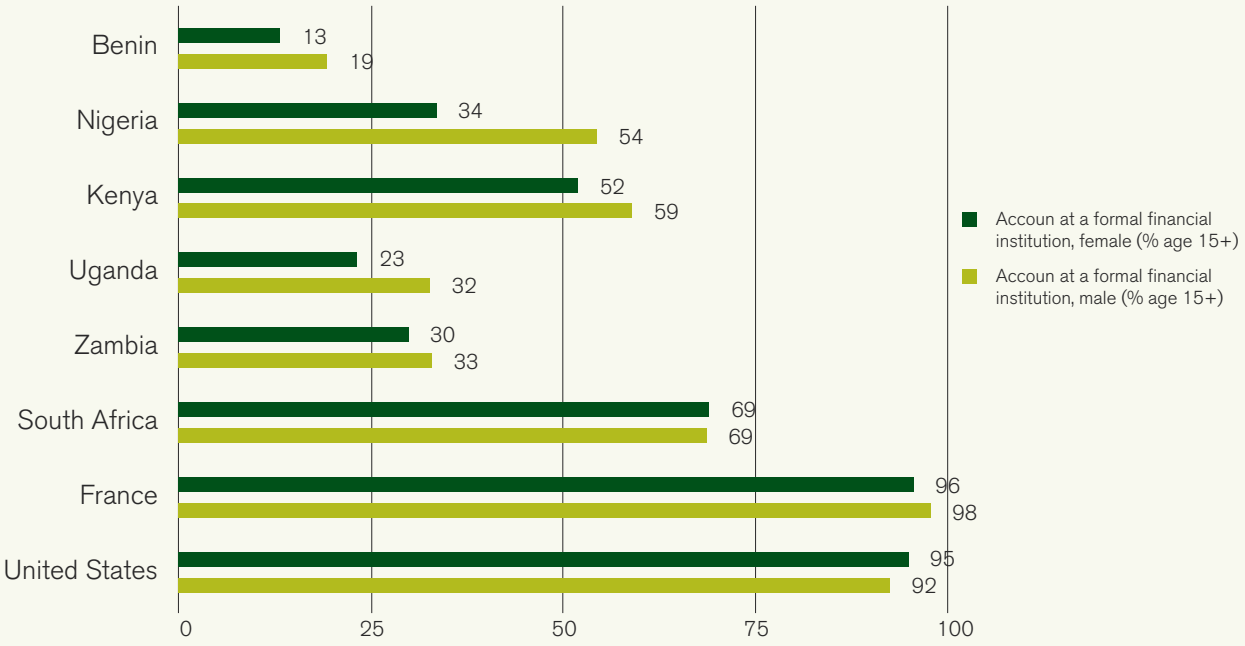
Benin's poor situation is representative of the currently low financial inclusion status in most Francophone West African countries. In these countries, legislation prevents youth below the age of 18 to have access to the formal banking system, and furthermore, the financial market is less competitive than in East African countries such as Kenya (Filmer and Fox, 2014). Moreover, note that in countries like Kenya and Ghana, youth under the age of 18 may open a savings account and/or obtain a loan with the co-signature of a parent or guardian (Zou, et al., 2015).

According to Demirguc-Kunt, et al. (2015), while the share of young African women who have a bank account has increased rapidly in recent years (growing by 18% between 2011 and 2014), there remain large gaps in access to financial services between young males and females. There is a significant gender disparity in ownership of bank accounts and usage of financial products such as savings and credit. In 2014, 25.1% of African women aged 15 and above owned an account at a formal financial institution compared to 32.7% of men. Fewer women had access to savings (13.5%) compared to men (18.4%). Access to loans products also followed the same trend, where women lag behind men in terms of access to formal loans. In 2014, 5.7% of women in SSA had procured a formal loan, compared to 6.9% of men. "Women benefit from only one tenth of the credit to small farmers and less than 1% of total credit to agriculture" (Triki and Faye, 2013).

The gender gap in terms of access to financial services is also heterogeneous across countries. Figure 4.2 shows that in most African countries, women over the age of 15 have less access to formal financial services compared to men in the same age group. This gender discrepancy also exists in developed countries, but the absolute percentage of men and women who have access to the formal banking sector is high (over 90%) compared to Africa.

[4] http://www.swissre.com/corporate_solutions/industries/agriculture/Microinsurance_pays_USD_160000_after_drought_and_storms_strike_Kenyan_farmers.html. [accessed August 2nd 2015)

Figure 4.2 African women have less access to FFIs



Source: Global Financial Inclusion Database, World Bank (2015)[5]

The gender gap in terms of access to financial services between young men and women is due to specific barriers on both the demand and supply sides. Compared to men, young African women 1) have a lower level of financial literacy and competence, 2) face more time and mobility constraints, 3) have less opportunity for access to formal education, employment and entrepreneurship, 4) suffer from poor access to information and networks, 5) experience unfavorable cultural and gender norms, and 6) often have no direct access to land (World Bank, 2013). Often, women can only have access to land through a male relative. Policies that target the financial needs of young women should consider these constraints and address them specifically. Overall, formal financial inclusion of the African youth cohort is low. The following sections briefly cover the specific factors that prevent youth access to finance.

Specific constraints related to youth access to agri-finance

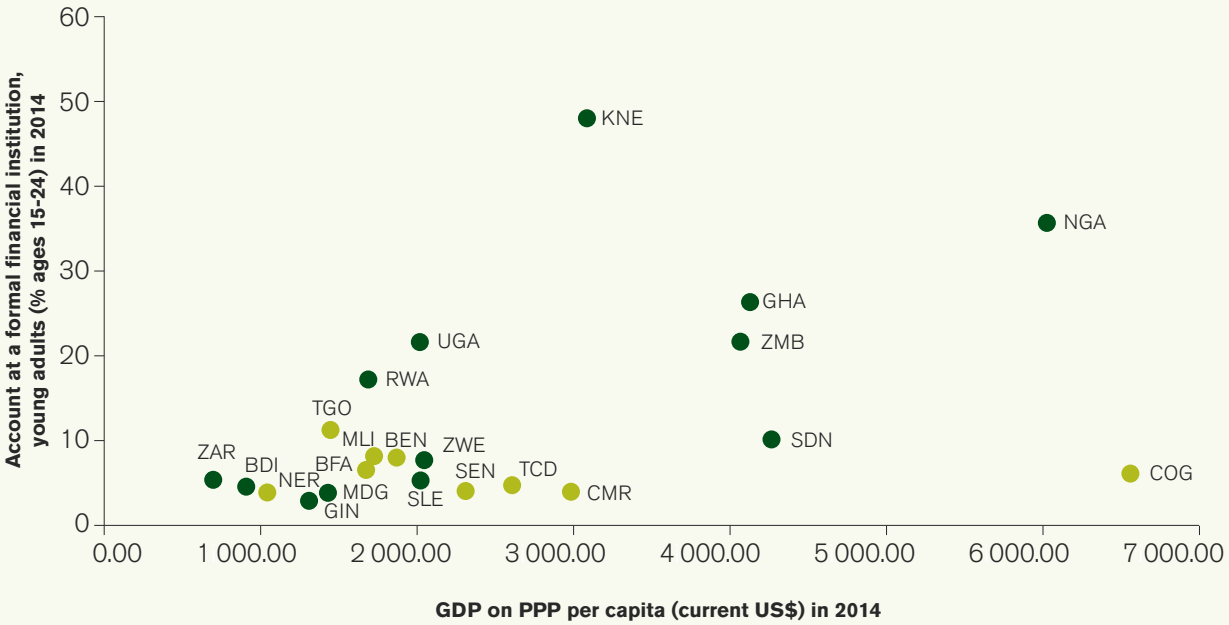
Several key factors influence youth's access to agri-finance: 1) the perception of financial services providers regarding youth and agriculture, 2) financial services providers' capacity, 3) youth's financial literacy, 4) ICT innovations in finance, and 5) the policy and regulatory environment.

Agriculture is considered as a risky activity in developing countries. Especially in remote and rural areas, agriculture is highly vulnerable to external shocks, for example from weather events, pest, and diseases. It is also seasonal (farmers only have earnings during a part of the year), and the production cycle is long (FAO, 2014). Insurance in agriculture is not well developed, yet insurance and credit usually go hand-in-hand to reduce possible lending risks for financial institutions and the risk of bankruptcy by youth engaging in agriculture.

Furthermore, lending to youth is considered even more risky due to their weak financial base and is often not attractive due to the small size of the loans requested relative to bank transaction costs. Formal financial service providers perceive lending to youth as risky because they often do not have a saving culture, minimal financial track records, and their education does not equip them with financial literacy. Youth often do not possess the assets needed to start a farm and may also lack experience in agriculture. This lack of experience, exacerbated by their limited access to agricultural value chains, also makes it difficult for them to engage in contract farming, which would normally be a valuable strategy to give more security to their loan requests. All these factors put together make it riskier to lend to youth in agriculture. They are best addressed by designing financial products tailored to the needs of

[5] Note that this database did not provide these statistics for young women and men separately.

Figure 4.3 Financial inclusion and income per capita in selected SSA countries



Sources: Global Financial Inclusion Database, World Bank (2015) and International Monetary Fund (2015)

Legend: BEN = Benin; BFA = Burkina Faso; BDI= Burundi; CMR= Cameroon; TCD = Chad; ZAR = Congo, Dem. Rep.; COG = Congo, Rep.; GHA = Ghana; GIN = Guinea; KEN = Kenya; MDG = Madagascar; MLI = Mali; NER = Niger; NGA = Nigeria; RWA = Rwanda; SEN = Senegal; SLE = Sierra Leone; SDN = Sudan; TGO = Togo; UGA = Uganda; ZMB = Zambia; ZWE = Zimbabwe; CFA countries are represented by green dots and non CFA countries by blue dots.

young agripreneurs, by integrating them into agricultural value chains, and by providing them with non-financial services and, in particular, capacity building in finance, agriculture, agri-business and entrepreneurship.

Formal financial service providers often lack knowledge about agriculture, production cycles and agribusinesses. Micro-finance institutions and Savings and Credit Cooperatives (SACCOs) that have stronger networks in rural areas and, in some cases, a reasonable track record of lending to agriculture are constrained by their limited capital. Certain practices of financial service providers (FSPs), such as presenting contracts in small fonts, use of complicated language, or not providing oral information to clients who cannot read, hinder agricultural lending (EPRC, 2013). Financial service providers in SSA face high transaction costs, which translate into high interest rates for their loans, including those offered to youth. Informal sources of finance also charge high rates of interest, even though they often fund the rental and purchase of smaller-value productive capital and inputs.

Atkinson and Messy (2012) define financial literacy as: "a combination of awareness, knowledge, skill, attitude and behavior necessary to make sound financial decisions and ultimately achieve individual financial wellbeing". African youth's capacity to access and analyze the information required to carefully choose between financing options is often limited because many youth are not aware of the financial products available to them, or the eligibility criteria and the basic rules of financial transactions. In a number of African countries (Kenya, Uganda and South Africa), the financial literacy of citizens has been studied. Interestingly, in 2008 Kenyan youth had relatively good financial literacy compared to those in Uganda and South Africa (Nelson and Wambugu, 2008; EPRC, 2013; Struwig, et al., 2013).

The poor development of the financial infrastructure in SSA also hampers banks in providing loans to youth. For instance, few credit bureaus exist in SSA countries. This results in limited information on the potential and creditworthiness of young borrowers. Even more importantly, banks still make only limited use of the possibilities to use ICT to increase their reach in rural areas, and reduce the transaction costs of financial services relative to the fixed costs of the staff needed to assess loans (Filmer and Fox, 2014).

Table 4.1 Agri-finance access indicators in selected SSA countries

FARMING SECTOR	INDICATORS	MEAN	BURKINA FASO	RWANDA	MOZAMBIQUE	ETHIOPIA	TANZANIA	NIGERIA	KENYA	ZAMBIA	GHANA
Financing											
Access	Number of bank branches per 100,000 adult population	1.9	1.2	NA	1.6	0.8	2.0	1.3	1.4	NA	5.0
	Percentage of commercial banks lending to Agriculture (3 years) (%)	7	9	3	6	11	14	2	6	9	5
Cost	Average lending rates for Agriculture loans (real rates)	11	10	12	19	-9	5	15	8	17	22

Source: Agribusiness Indicators Synthesis Report 2014, The World Bank

Policy and regulatory environment for youth's access to agri-finance

In most SSA countries, the policy and regulatory environment is not favorable for financial inclusion of youth in agriculture. However, there is a noticeable effort in many SSA countries to remove barriers that limit youth's access to agri-finance. Beyond the policies of central banks that influence interest rates and changes in asset requirements in lending regulations, policies that support the use of ICT technologies can affect the availability and the cost of access to formal banking services such as savings, payments, and credit to underserved populations. Policies and regulations should focus more on enabling youth to have a secure place to open savings accounts and access to reliable yet affordable payment services. Doing so will improve youth's experience with financial institutions, and allow those institutions to learn more about the needs of youth and ease their access to loans in the future.

The policy and regulatory environment clearly plays a role in the level of youth's access to the formal banking sector in Africa. As Figure 4.3 shows, the financial inclusion of youth varies between SSA countries with similar income levels. Furthermore, the financial inclusion of youth in West and Central African countries within the CFA zone is relatively low compared to others SSA countries (Demirguc-Kunt, et al., 2015).

In 2014, Kenya and Senegal had approximately the same per capita income level, yet the percentage of young Kenyans having an account at a formal financial institution was eight times higher than the percentage of young Senegalese. Filmer and Fox (2014) identified four characteristics that explain the discrepancy in the level of youth's financial inclusion between countries in general:

1. The existence of a competitive financial sector, which prompts financial institutions to search for customers and supply products that are a carefully designed and priced for low-income households and youth;

2. The existence of a vibrant microfinance sector, delivering tailored financial products to low-income African households and youth;

3. The existence of a proportionate supervisory system of financial institutions, encompassing a 'test-and-learn' approach that enables innovation; and

4. The existence of a national strategy that includes the three preceding characteristics, and additionally the adoption by the government of an electronic system to execute all government payments to individuals (G2P payments).

[6] https://uidai.gov.in/ Accessed 3 May 2015

[7] http://arstechnica.com/business/2014/09/mastercard-backed-biometric-id-system-launched-in-nigeria/ Accessed 3 May 2015

What makes Kenya relatively successful is its forward-looking and innovative policy and regulatory environment. This has enabled the emergence of a vibrant mobile payment system, as well as a dynamic microfinance sector; in both cases, relying on the widespread use of ICT tools, leading to reduced costs of opening bank accounts and financial transfers. In contrast to Kenya, Senegal, like other West African and Central African countries that are members of the *"Communauté financière d'Afrique"* (CFA), had relatively little competition in the formal banking sector. In the recent past, Senegal and other CFA countries have had a regulatory system that prevented most innovations that would improve financial inclusion. The two regional central banks in the CFA zone are strongly involved in financial regulation and the rigidity of these regulators prevents new entrants (such as telecom companies) in the financial market. Fortunately, innovations are currently taking place in the CFA zone. For instance, in 2012 regulations to enable the development of MFIs were adopted by all the West African Economic and Monetary Union (UEMOA) countries. Mobile carriers are increasingly being allowed to initiate a mobile banking business, such as 'Orange Money' in Senegal. The existence of a common regional regulatory system provides an opportunity for the rapid development of a harmonized system to spur financial inclusion in the West and Central African region.

Afioluwa Mogaji is a young Nigerian farmer who in 2012 started a "Green Collar Jobs" project to get young farmers involved in modern agriculture. The project has two components: the first consists of farmers (175 as of early 2015) who grow fruits and vegetables on what previously was unused government farmland (mostly irrigated), using idle government-owned equipment. In Mogaji's words, "there are government-owned lands available in very remote areas in virtually every state of the country that farmers can use and pay for just within the period they use it – Pay As You Go." (Business Day online, 26 October 2014).

The financing needs of farmers (both for investments and working capital) are met through the structuring of the project. Farmers are given land and equipment at reduced lease rates, provided extension support, and receive inputs on credit. With improved varieties and using precision farming techniques – and not facing significant upfront costs – these farmers rapidly earn back their investments.

The second component involves about a dozen young urban entrepreneurs who sell the farmers' produce through temporary mobile markets (typically in wealthy urban neighborhoods) and direct sales (with delivery to the buyer's premises). All strive to consistently offer a high quality of product.

Mogaji sees most opportunities in the value chain. "I will not advise a young graduate to plant cassava. I will advise him or her to go to the villages and buy cassava tubers and sell to the numerous cassava-processing plants all over the country." (http://africanfarmermogaji.com/node/7)

In other countries as well there are projects that directly link middle-class consumers and farmers, often using mobile phones and social media as the platform for transactions. Generally, such projects remain funded by entrepreneurs' own resources, hampering their potential for growth.

Requirements for proof of identification, such as birth certificates, national identification cards, and other such documents, as well as age restrictions, hamper youth access to saving and payment services throughout Africa. Adopting regulations that allow the use of ICT technologies, in particular biometrics tools, can strongly reduce the cost of providing financial services (the cost reduction is 50% for saving and lending; 20% for financial transfers) and improve their security (Filmer and Fox, 2014). The Indian government, for example, implemented a unique identification project based on biometrics rather than birth certificates, postal addresses and other documents[6]. A few countries like Kenya, Rwanda, Ghana and Nigeria have taken the lead in adopting national strategies and enabling regulatory frameworks that allow the use of technologies

[8] OHADA is the French acronym for "Organisation pour l'Harmonisation en Afrique du Droit des Affaires" – in English "Organisation for the Harmonization of Business Law in Africa". The OHADA Treaty covers 17 African countries, all former French colonies, mostly in West and Central Africa but also including the Comoros.

to reach low-income households and youth. For example, a biometrics system similar to that of India was recently introduced in Nigeria[7]. Technological innovation through mobile banking in low density areas with mobile phones, Automatic Teller Machines (ATMs), and point of sale devices will contribute further to the financial inclusion of youth, especially given that they are early adopters of new ICT technologies.

Apart from promoting the use of ICTs for mobile payments and mobile-based financing, regulation should focus on allowing innovation in the use of collateral and enabling market linkages that allow the reduction of risk in lending to youth**.** For instance, the recent development with the OHADA[8] collateral registries' laws and the design of new secured lending and commercial laws have eased access to financing by traditionally underserved small-scale businesses (Triki and Issa, 2013)**.** Regulation should also focus on developing strong institutional enforcement strategies and helping youth understand the necessity to pay back their loans, as in the recent past many African governments have politicized loan access and repayment, leading to a perception of loans as non-repayable public transfers (Filmer and Fox, 2014).

Finally, it is important to keep in mind that financing mechanisms that are beneficial to young agripreneurs are also beneficial to others and, to a large extent, developing sound mechanisms that improve access to finance for young people that wish to become more involved in agriculture or to expand their existing agribusinesses is a matter of improving the overall policy and regulatory environment for agricultural financing.

Key Principles in Targeting Youth in Agriculture and Agricultural Financing Facilities

Ensuring that youth successfully participate in agriculture requires the development of innovative finance models. This can be done if financial services providers (FSPs), non-financial services providers (NFSPs) and government adopt key principles during the design of the products and provide a suitable environment for youth to express themselves.

In 2009, a worldwide survey and experiences of pioneering NGOs and FSPs permitted the development of six guidelines for the financial inclusion of youth and the reduction of the risk of lending to them (Storm, et al., 2010). From these emerging guidelines, three lines of action can be inferred that can ensure youth have access to financial services (Figure 4).

The first line of action consists of the assessment by FSPs of the needs and wants of young agripreneurs. This should be done through market research focusing on youth and the community in which they live. The results of this market research should allow the development of financial products and services that take into account the heterogeneity of youth in terms of age, sex, location, life cycle stage, and maturity of the agribusiness in which they are involved. This should include insurance to deal with specific agriculture-related risks.

In the second line of action, FSPs should identify suitable non-financial services needed by youth. For instance, the need for capacity building in financial literacy, the establishment of mentoring programs, education in business management and entrepreneurship, and the registration of youth with credit bureaus. For youth in agriculture, their integration in the local and international agricultural value chains is crucial for their access to markets and the reduction of the risk of default. The FSPs should decide whether they have the capacity to provide these non-financial services or whether it is much more suitable to partner with non-financial service providers such as Youth Service Organizations (YSOs), NGOs, credit bureaus, etc. (Storm, et al., 2010). Note that government and international organizations should also support financially and technically these first two lines of action to catalyze the development of financial products adapted to the youth in SSA.

The third line of action, led by the government, seeks to reduce the risk of lending to youth in agriculture essentially by creating opportunities for youth to express themselves, and by providing an enabling regulatory environment that permits a secure interaction with FSPs and dealing efficiently and fairly with complaints that may arise from both parties. Government and NGOs should also promote collective action within the youth cohort,

such as the creation of informal saving clubs and self-help groups. These collective actions should help to generate savings, which will improve access to financial services as a group and/or individually, and enable youth to initiate joint ventures in agriculture (Storm, et al., 2010).

Finally, the enabling environment should also facilitate the development of infrastructure that reduces transaction costs to increase access to financial services and to agricultural markets. The Internet should be made accessible throughout the rural areas. The law should enable the use of ICT tools, e-banking, e-trades and e-business through mobile phone platforms. For further information on the principles related to the design of financial product adapted to youth and children, interested reader should refer to a report published by Child and Youth Finance International and The MasterCard Foundation Incorporated International (2014), which describes the children's rights and business principles (CRBP) and the child and youth friendly banking principles.

Agricultural Financing Facilities for Youth in Agriculture: an Overview

Traditionally, agriculture and youth have both been difficult to finance through formal financial institutions. In response, governments throughout Africa have in the past set up special schemes.

Agricultural financing schemes in SSA often involved state-owned banks providing subsidized credit to farmers. This model was unsuccessful and is therefore not discussed further here. In any case, most of the banks that were involved in such lending have long since become bankrupt (Gonzalez-Vega and Graham, 1995; Levy-Yeyati, et al., 2004; Micco, et al., 2007).

Starting in the 2000s, several governments set up special funds to support youth enterprises as a direct response to high rates of youth unemployment. Examples include the Botswana Youth Fund, the Kenya Youth Enterprise Development Fund, the Namibia Youth Credit Scheme, the Umsobumvu Youth Fund in South Africa (now the National Youth Development Authority), and the Youth Venture Capital Fund in Uganda (Ahaibwe and Kasirye, 2015). These funds normally combine credit at a subsidized rate with training for the beneficiaries. They often include mechanisms to reduce the risk of loan default. For example, Botswana's fund does not pay out loans to the borrowers, but rather, pays directly to the suppliers of assets to the borrowers. In Kenya, the government is committed to source 10% of its procurement needs from youth enterprises in order to reduce these enterprises' market risks (Ahaibwe, 2014).

In some instances, these funds have become rather significant. For example, the Kenyan government set up the Youth Enterprise Development Fund in December 2006. In its first five years, the fund advanced KES 5.9 billion (average exchange rate 2007-2011: KES 77 = USD 1.00) to more than 157,000 youth enterprises (its target age group was 18 to 35 years).[9] However, not all of its loans were successful. It has been found that when it lent to youth investment groups, through district committees (i.e., the government's administrative apparatus in each district) the repayment rate was less than 70%; this was in part because many beneficiaries treated the loans as grants. Lending through banks and SACCOs, the repayment rate was 95%. In Tanzania, the experience was similar: delivery of credit through commercial banks gave much higher recovery rates than through district administration accounts (Symacon, 2011).

By and large, these government funds mostly benefitted urban populations. This was even the case in Kenya, where it took until 2011 for the fund to introduce a special instrument for agriculture, the Agri-Vijana loans (see details in the section on value chain finance below). In Uganda, 25% of the businesses funded under the venture fund in its first year were in agricultural production, processing and marketing (Ahaibwe, 2014). Distribution of the funds often proved difficult. For example, in Uganda, two of the commercial banks that had become part of the Youth Venture Capital Fund when it was created in 2011 were removed from it in 2015 because of their failure to disburse loans to youths.

Government schemes to finance youth in agriculture also often took the form of settlement schemes (Smyth, et al., 2015). Land developed with the help of a government agency was made available to young farmers (graduates of farm colleges, as well as others interested in becoming farmers), and they are given some assistance in their start-up phase. These schemes can be found in most African countries, and began in some countries soon after independence. Many of

[9] http://www.youthfund.go.ke/the-youth-development-fund/, accessed August 7th 2015.

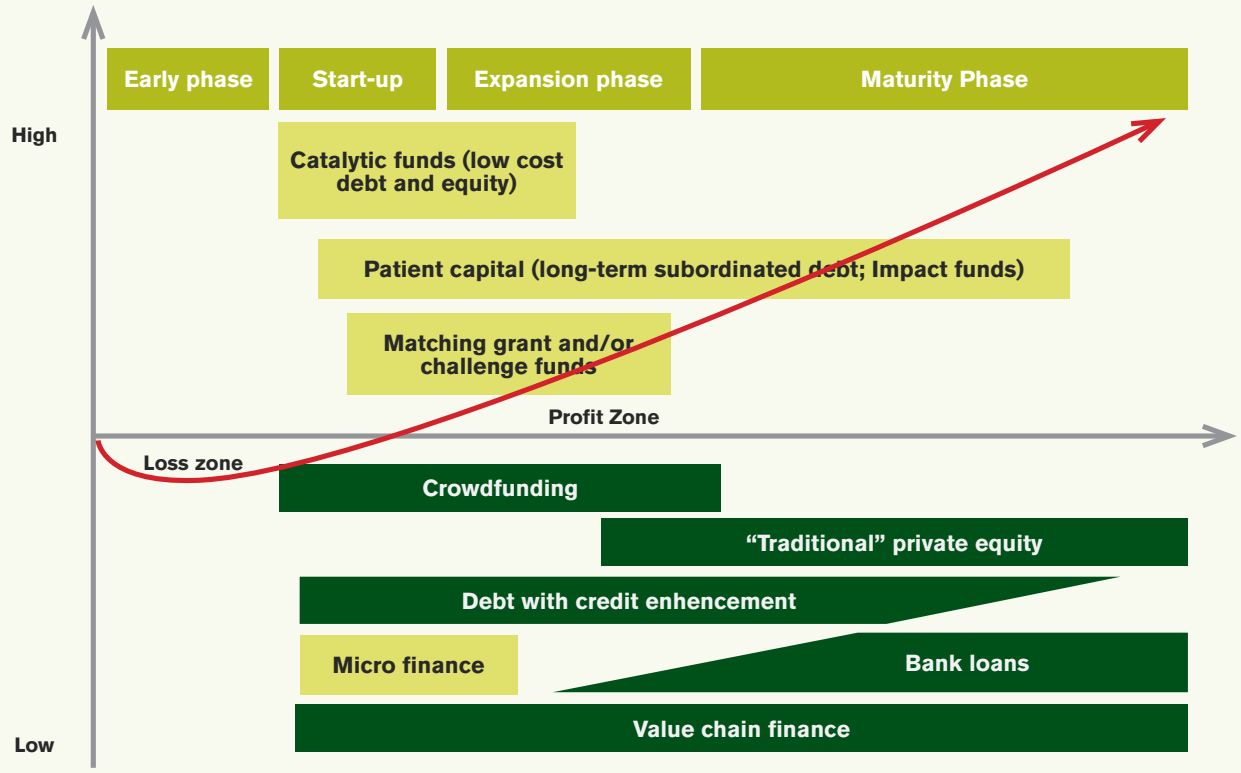
these schemes have not been successful in keeping youth on the land. Settlement schemes were often abandoned, equipment provided by the government remained unused, and loans were not reimbursed. The reasons for failure were often poor provision of services (no electricity, no nearby towns with entertainment options) and the lack of profitability of the farming ventures because they were not linked with organized value chains. Such dedicated government schemes could probably work better if they take into account the various financing modalities discussed below.

The Need for Innovation

When financial instruments and mechanisms are used that go beyond conventional products but instead adapt to the risk-return ratio and the maturity stage of youth's agribusinesses, then agri-lending can become attractive (Tibbo and Guyver, 2013). It should be noted that such innovative models facilitate agricultural lending in general, and that one should not single out youth as the only target beneficiaries – rather, young agripreneurs will benefit alongside other market-oriented farmers.

In Figure 4.5, two main groups of financing facilities can be distinguished. The first group of financing facilities (colored in light green) is generally more socially oriented and serves clearly stated development purposes. Within this group, catalytic funds, patient capital, matching grants and challenge funds are well suited for the financial inclusion of youth in agriculture from the early development stage of their agribusinesses through to maturity. These financing facilities can deal with somewhat medium- to high-risk and low- to high-return youth agribusinesses. Microfinance institutions also fall in this group even though today, many MFIs have become commercially oriented; microfinance is well suited for start-ups and the early expansion stage of youth's agribusinesses, which present low to medium risk. However, note from Figure 4.5 that there is a vacuum of financing facilities in the early phase. As mentioned above, saving groups can fill this gap and support youth financial inclusion.

Figure 4.4 Agricultural financing facilities for youth in agriculture along the risk and profit continuum



Source: Authors, Wilson and Silva (2015), Tibbo and Guyver (2013)

The second group of financing facilities is commercially oriented (colored in green). It regroups private equity, debt with credit enhancement, bank loans, equity and debt-related crowdfunding, and value chain finance. This group of financing facilities is much more suited for the expansion and maturity phases of youth agribusinesses, which are characterized by medium to high profit and low to medium risks. However, it is also possible to craft such facilities for start-ups by using value chain finance, or loan-based and equity-based crowdfunding.

The following section focuses on four types of emerging and innovative financing facilities that are particularly suitable for the financial inclusion of youth agripreneurs: value chain finance, social impact investments, challenge funds, and crowdfunding. Crowdfunding and value chain finance can fill the 'vacuum' between microfinance and bank loans (Figure 4.5). This vacuum currently constitutes a critical issue for youth-managed agribusinesses that are transitioning from the start-up phase to expansion and maturity phases. In fact, in many cases small ventures become too big for MFIs to handle, yet commercial banks are not well prepared to start working with them. This situation leads to a lack of finance for mid-size agribusinesses. Value chain finance and debt- or equity-based crowdfunding are particularly suitable to finance SMEs in the expansion stage. Traditional types of financing facilities, such as microfinance, conventional bank loans, or financing schemes that are part of large donor-driven agricultural development schemes are not described in this report. Interested readers should refer to Tibbo and Guyver (2013) and Meyer (2015).

Innovative Financial Models and Instruments for Youth in Agriculture

Value chain finance

Today's agriculture should be highly competitive, modern and dynamic. Yet the bulk of African agriculture – subsistence and much smallholder commercial farming – does not have these characteristics. The high population growth in Africa, coupled with rapid urbanization, will increasingly drive market changes. Today's consumers want high value-added agro-processed products that consistently meet high quality and safety standards. To provide products to this new and growing market, the agricultural sector has experienced over the last decades a growing concentration of control of activities along different value chains to ensure efficiency of supply chains via economies of scale (Miller and Jones, 2010). Enhancing the participation of youth in agricultural value chains (AVCs) is therefore an opportunity to increase their productivity and competitiveness, along with their access to finance.

Agricultural Value Chain Finance (AVCF) is defined by Miller and Jones (2010) as: "any or all of the financial services, product and support services flowing to and/or through a value chain to address the needs and constraints of those involved in that chain, be it a need to access finance, secure sales, procure products, reduce risk and or improve efficiency within the chain". They go on to note that AVCF allows FSPs to lower risk and reduce the cost of lending to agriculture. The existing relations within an agricultural value chain make this feasible. FSPs provide loans to young farmers against contracts with trusted buyers of the future harvest (forward contracts) or against warehouse receipts from well-known and accredited storage companies. Hence, for youth in agriculture, AVCF allows access to credit that would not be available due to their lack of collateral and high transaction costs.

Value chain finance can be used not only to fund farmers, but perhaps more importantly, it also can be a vehicle for funding young entrepreneurs active throughout the AVCs. Examples could include: a venture by young people to provide services such as pesticide application, equipment maintenance or ICT-based advice to farmers; a cold storage transport company; a company that links farmers directly to urban consumers; or an exporter to high-value markets. The opportunities for young people in agriculture are probably most prevalent in this value-adding component of the value chain, rather than in primary production. As has happened in other parts of the world, the composition of agricultural GDP in Africa is expected to change in response to urban growth and an increase in average incomes. According to the McKinsey Global Institute (2010), by 2030 the potential revenue of primary production in Africa will have more than tripled from 2008, and most of it will come from horticulture (with an annual market size of USD 490 billion, compared to USD 138 billion for cereals and USD 112 billion for livestock by 2030). This implies a strong need for logistics services, as well as new infrastructure (handling

and packaging, and cold chains). The market size for production services will also increase rapidly, particularly as even high-technology solutions such as precision farming, drip irrigation and use of drones have become cost-effective for many African smallholders (Juma, 2012). Furthermore, the demand for processed goods will continue increasing: the potential revenue in the agricultural processing sector will stand at about USD 239 billion by 2030. Most of this demand will be urban, from consumers who will require well-organized value chains that deliver a high level of quality and food safety.

Contract farming – This is a "form of vertical coordination between growers and buyers-processors that directly shape production decisions through contractually specifying market obligations (by volume, value, quality, and, at times, advanced price determination); provide specific inputs; and exercise some control at the point of production (i.e., a division of management functions between contractor and contractee" (Little and Watts, 1994). This institutional arrangement often involves, on the buyer side, financial and technical assistance to producers; the pre-established agreements between the parties can be formal or informal but still binding (Miller and Jones, 2010).

Even though the effectiveness of contract farming to lift smallholders out of poverty is debated in the literature (Oya, 2012), this institutional arrangement constitutes an opportunity for youth to have both access to finance and to the market, and at the same time improve productivity via technical assistance provided by the client. Under specific conditions, contract farming can allow youth access to input and production services both in time and at reduced prices. Furthermore, it is an opportunity for youth to be integrated in value chains for perishable and high-quality products (fresh fruits and vegetables), for immediate processing (dairy products, tea) and for products that are labor intensive (French beans). Finally, contract farming provides FSPs with a sign of security and seriousness and delegates screening to a third party, the buyer. It follows that FSPs can provide youth with a loan, using the contract as virtual collateral (Miller and Jones, 2010).

African youth participation in contract farming and/or out-grower schemes is not well documented. But in Asia, it has been found that youth have a positive attitude toward contract farming, given that it provides them with access to information and that they are trained in agriculture (D'Silva, et al., 2010). Many experiences of contract farming in SSA exist (Oya, 2012), and it would appear to be a good vehicle for improving youth access to agriculture and finance.

Contract farming presents some challenges and risks, among which the more prominent is the risk of default by either party. This opportunistic behavior often takes the form of side-selling by producers at harvest if the price goes up, or loss of interest by buyers due to market changes, bankruptcy, or increased management costs in collection of harvest, input supply, etc. (Prowse, 2012). Furthermore, contract farming – especially in the presence of asymmetric power relationship – may be detrimental for smallholder farmers and particularly the youth. It can be inequitable and exclusive of the poorest farmers and be a disguised form of land acquisition and expropriation, as well as access to cheap labor by multinationals (ActionAid, 2015).

Drawing lessons from a recent case study in Tanzania, there are a number of conditions for ensuring effective and sustainable contract farming with smallholders, including the youth (ActionAid, 2015). These conditions include 1) transparency as a building block of the contract, 2) the role of government as a mediator, and 3) the design of appropriate legislation that protects farmers' rights. The regulatory environment is critical for the enforcement of contracts by either party.

Pamela Anyoti Peronaci is a smallholder farmer in one of Uganda's poorest districts. In 2006, she started a nonprofit venture to promote economic opportunities and, with a group of 15 widows, started growing African bird's eye chili peppers as a cash crop. Soon, she converted the nonprofit into a social enterprise, named Sunshine Agro Products Limited, as a joint venture with a small Belgian cocoa and spices trading company.

With Root Capital, a large social impact investor providing five successive ever-growing loans, Sunshine was able to expand its business rapidly. Root Capital's first loan in 2010 was USD 48,000, and its fifth one in 2013 was USD 250,000 – much more than MFIs could provide, lent to a borrower who at least in the beginning would not have been an acceptable client for commercial banks.

By 2014, the number of farmers supplying Sunshine had grown from 15 to 924. Root Capital's loans were structured around Sunshine's export receivables – i.e., it was value chain finance. Creating a credit history with Root Capital permitted Sunshine to access other credit facilities, in particular to build a warehouse in 2012. In this case, the financing was not for a youth venture, but it remains a good example of the potential role that a social impact fund can play in financing a new venture that starts supplying an organized agricultural value chain.

Source: http://www.rootcapital.org/portfolio/stories/ small-chilies-bring-big-impact-rural-uganda

Box 4.1 Financial leasing in Kenya that targets youth: AgriVijana Amiran Farmers Kit

AFK is a low-cost irrigation kit based on drip irrigation technology, manufactured by Netafim, a multinational company. Five thousand youth across Kenya are targeted by this initiative, with a total fund of up to USD 1.6 million. This has allowed the acquisition of 420 Amiran Farmers Kits (which include two greenhouses each, drip irrigation equipment for the two greenhouses, plus 400 m2 of open field, training, life insurance for all members of the lending groups, and crop insurance against natural disasters). By the end of 2014, 420 greenhouses had been established in the country, with beneficiaries including 200 youth groups and some 15,000 farm families (Ndung'u, 2015).

The kit employs a water-friendly technology, which allows saving between 30-60% of irrigation water compared to other irrigation techniques. The kit is adapted to small farm sizes (especially in urban and peri-urban areas) and also to semi-arid and arid areas of the country. The Kit's lifetime is about eight years.

In principle, the loans target youth groups. Youth (18-35 years old) have to be organized in a group of ten to fifteen members. However, individuals can also apply, as long as they are employed or are already running a business. Distribution of the loans is through the government's administrative apparatus. In each of Kenya's 290 constituencies, at least 2 groups are to be funded. The groups have to have a young leader and must be registered in the constituency from where loan is requested. Youth in the group also have to have access to land and water and some knowledge and experience in crop production.

The size of the loan is approximately USD 3,822, of which the group should itself raise 10%. The loan matures in three years, and it is interest-free, i.e., subsidized. Repayment starts four months after acquisition of the lease and is adjusted in case the crop chosen by the youth group has a longer maturity period. The expected return is about USD 530 per season, which means USD 2,120 if production is done year-round.

The collateral required by the FSPs is the financed equipment itself, personal guarantees by group members, and the assignment of their crop sales. Youth groups that are backed by a sponsor/guarantor, such as the intended buyer of the crop, are more likely to be approved for funding under the scheme.

The performance of the scheme has been below expectations. Partly this is in line with the overall experience of the Youth Fund program that operates through constituencies where many beneficiaries are likely to see the loan as a grant. Another reason is the low uptake of the program by youth groups. Interest of Kenyan youth in agriculture still remains low, and in the face of continuous migration to cities, it has been difficult to form stable groups of at least ten members. Many of the loans were therefore taken out by individuals. The requirement of 10% own-capital has also been a hindrance, as has been the requirement for participating youth to show evidence of financial stability in the form of pay slips, M-Pesa statements or bank statements. Where greenhouses were constructed, lack of water often proved a problem (a result of changing weather patterns), and young farmers were unable to cope with the bacterial wilt that affected tomato production throughout the country (Ndung'u, 2015).

Implementing contract farming in high value-added sectors and market niches is an effective strategy to reduce the risk of side selling. Capacity building in contract farming should also be delivered to young farmers to enhance their knowledge about this form of value chain governance (Samah, et al., 2011).

Warehouse receipts – These are documents provided by a warehousing company to evidence the deposit of goods into the warehouse by a third party; the warehousing company will then manage the storage of goods on behalf of the depositor. Warehouse receipts can be used as collateral to facilitate youth access to finance. Such finance makes it possible to avoid early selling of produce when prices are not favorable to the farmer (Miller and Jones, 2010). There are two main challenges to the development of warehouse receipt finance in Africa: 1) the commodity traded has to be standardized by type, grade and quality, which increases the cost of production at the producer level, and 2) warehouse receipt systems require appropriate legislation (Coulter, 2009). The use of ICT tools can enhance the establishment of successful warehouse receipt systems. Management information systems, as well as mobile phones and other forms of e-banking are increasingly well-developed innovations in this respect (Miller and Jones, 2010). Infrastructural improvements are also critical to support the development of warehouse receipt systems. Governments must invest in warehouses and in reliable road, rail, river, and port infrastructure.

An interesting example of a warehouse receipt scheme that uses ICT to compensate for a lack of physical warehouses is the e-warehouse receipt system developed by Farm Concern International (FCI) in Kenya.[10] his e-warehouse system is still in operation and is coupled with technical support at the village level; it allows farmers to deposit and store their grain in simple and safe storage facilities at the village level, yet reaching economies of scale by 'virtually' bulking it with different villages. The e-warehouse software also links producers to financial services that are ready to issue a loan equal to 50% of the estimated value of their stored produce, thus empowering smallholders to wait until prices increase before selling their produce.

Financial leasing – This approach allows youth access to productive assets while simultaneously providing loan security to FSPs by making asset repossession easier in cases of default (Miller and Jones, 2010). It has a high potential for giving youth access to equipment in agriculture, and supporting medium- to long-term investment of non-perishable assets. Financial leasing is an effective strategy for banks to finance youth, especially in an environment where the legal means of loan collection is weak. However, it requires a high coordination of the three parties usually involved in a financial lease: the seller of equipment, the farmer, and the FSP.

In a growing number of countries, farm equipment leases have been successfully introduced in recent years. Examples include leasing activities by: CECAM, a MFI in Madagascar (Goldberg and Palladini, 2010); Farming and Engineering Services, an agricultural and irrigation equipment distributor in Malawi[11]; Locafrique, a specialized leasing company in Senegal[12]; DFCU, a commercial bank in Uganda[13]; and Rent-to-Own, a social business providing productive assets to rural micro-entrepreneurs in Zambia.[14]
Box 4.1 describes the case of the AgriVijana Amiran Farmers Kit (AFK), which is a financial leasing product developed by the Youth Enterprise Development Fund (YEDF) and Amiran Kenya Ltd. to support young agripreneurs willing to be involved in greenhouse farming. This product finances youth in agriculture and is designed particularly to allow them to have access to inputs and necessary equipment for year-round production. The equipment itself is the collateral and is coupled with group liability to secure repayment.[15]

Factoring – Just like warehouse receipt financing and lease financing, factoring is a way to remove working capital pressure from young agripreneurs, in this case for the post-delivery part of the value chain. The practice in many AVCs in SSA is that farmers are paid late – weeks after they have delivered their produce (1½- to 3-month delays in payment are quite common). Factoring permits suppliers to receive the net present value (minus a transaction fee) of their goods soon after delivery, rather than having to wait until the buyer decides to pay. Factoring can be cheaper than many other forms of finance, in particular if investors rather than banks provide the funds.

The risk taken by financiers in factoring is limited to a buyer refusing to pay when the payment is due, or going bankrupt prior to the payment date. This risk can often be insured, even in developing countries (the African Trade Insurance Agency, for example, provides such trade credit insurance in ten African countries). Factoring requires a smooth information flow on the trade that takes place – it cannot be used in an informal setting. Fortunately, value chains can create the conditions for such an information flow, in particular if ICT is used.

For example, a Kenyan company, Umati Capital, leverages technology to provide innovative supply chain financing to farmers and SMEs who supply larger entities. One of the sectors it has targeted is dairy[16]. The Umati platform provides an electronic backbone for the dairy value chain, from farmers delivering milk to the collection points to the final delivery to the dairy plant. Through the platform, farmers are paid within 48 hours of milk delivery, with buyers (dairy plants) repaying Umati Capital within 60 days. Farmers can request funds and be paid through their mobile phones. Two young Kenyan entrepreneurs set up Umati Capital, and similar opportunities exist in many other sectors. Apart from the entrepreneurs who set up such factoring systems, beneficiaries will include all those in the value chain – with the largest benefits accruing to young farmers who have the least access to alternative sources of funding.[17]

[10] http://farmconcern.org/e-warehouse.html. Accessed August 2nd 2015

[11] http://www.fesmw.com, accessed August 7th 2015

[12] http://www.locafrique-sf.com, accessed August 7th 2015

[13] https://www.dfcugroup.com/dfcu-leasing/, accessed August 7th 2015

[14] http://rtoafrica.com/about-us/, accessed August 7th 2015

[15] http://www.amirankenya.com/afk-2/. Accessed August 2nd 2015

[16] http://www.ati-aca.org/index.php/newsroom/press-releases-75247/2014-press-releases/315-african-trade-insurance-agency-ati-backs-new-venture-umati-capital-ucap-that-aims-to-revolutionise-sme-finance-through-the-use-of-innovative-technology, accessed August 7th 2015

[17] http://www.umaticapital.com/. Accessed August 2nd 2015

Social impact investing

Social Impact Investment (SII) funds seek to maximize the financial return on investment, while at the same time generating a positive societal effect (Saltuk, et al., 2014). SII goals can range from capital preservation to a market rate of return, while their social goals include improving socio-economic, social or environmental conditions (Wilson and Silva, 2015).

As such, impact investment funds can be instrumental for international, regional and national organizations to leverage funds that increase youth agripreneurs' financial inclusion and the adoption of sustainable agricultural practices. SIIs are flexible and can operate in different geographical locations, sectors and asset classes. They have a wide range of return expectations and are supported by a diverse group of investors (Rangan, et al., 2011). SII also constitutes a strategy for sustainability for businesses: "social and environmental factors can impact a company's bottom line and therefore are important factors in business, markets and competition" (Porter and Kramer, 2011).

Even though socially conscious investments are not new, SII funds as dedicated investment vehicles emerged only a decade ago (Saltuk, et al., 2013). USA, UK, France and Australia are leaders in the development of the SII capital market (Wilson and Silva, 2015). While the SII market is still in its infancy, it is growing fast and attracts lot of attention (Kohler, et al., 2011). A survey of 125 impact investors around the world done by the Global Impact Investing Network (GIIN) and J.P. Morgan found that, while 80% of impact investors have their headquarters in North America and Europe, 70% of their current impact investment assets under management are in emerging markets, including Africa (Saltuk, et al., 2014).

The microfinance market, with over USD 50 billion in loans provided to more than 100 million micro-entrepreneurs in developing countries, was an early model of financial investment that addresses social needs while still aiming for a tangible financial return (Rangan, Appleby and Moon, 2011). The SII market is expected to grow as fast as the microfinance market has done – it showed a growth rate of 38% globally from the beginning of its growth phase in 1997 to 2007, with growth only starting to slow down after two decades (Addis, et al., 2013). The size of investments made by the 125 major social impact investors in 2014 is estimated at USD 12.7 billion, which represents a 19% increase of their investments from 2013 (Saltuk, et al., 2014). In terms of asset allocation, 42% of the capital invested is split evenly between microfinance and financial services other than microfinance. SSA accounts for only 15% of the total assets under management by SI investors. The main instruments used by SI investors are private debt, private equity and to a lesser extent, public debt and equity-like debts (Saltuk, et al., 2014).

Not long after Caroline Mtongolo and Waithera Macharia graduated from the University of Nairobi, with degrees in chemistry and economics, respectively, they decided they wanted to become agripreneurs. In 2015, they set up Zoi Investment Limited, a company with plans to develop mushroom farming (and also grow some other fruits and vegetables). In addition to growing its own crops, Zoi also aims to buy from other farmers for resell to local and international markets.

The choice of mushroom farming came from the realization that Kenya imports 150 tons of mushrooms a year (a number that is expected to rise with the growth of the middle class) and that mushrooms can play a significant role in maintaining healthy eating habits and combating obesity.

For Zoi Investment's mushroom farming idea, Caroline Mtongolo in June 2015 became one the year's 1,000 winners of the Tony Elumelu Foundation's challenge awards. Each winner receives USD 10,000 to help realize his/her business vision, and intensive business training.

Source: http://cofoundher.com/2015/05/17/ caroline-mtongolo-mushroom-farming, accessed on 23 June 2015.

The good news for Africa, and for youth in agriculture, is that the prospect for SII in SSA is promising. In fact, many investors are planning to increase their investment in SSA, especially in the food and agriculture sectors, followed by healthcare, financial services and ICT. This is certainly due to the positive performance of the current assets under management in the SII market. In 2014, most SI investors worldwide reported that their portfolios are performing in line with both their impact expectations and financial return targets. Twenty percent of respondents even reported outperformance against their impact expectations and 16% reported outperformance against their financial return expectations (Saltuk, et al., 2014).

On the demand side, the SII market is currently driven by service delivery organizations such as social enterprises and NGOs. However, these organizations face some challenges in accessing SII. In fact, they have an inadequate investment readiness status and capacity to conform to impact assessment standards, coupled with the risk of mission drift (Wilson and Silva, 2015). Improving the financial skills and a better understanding of risk and its value is considered by Brown and Swersky (2012) as key factors in creating more investment-worthy social ventures.

On the supply side, high net worth Individuals and family offices and foundations are the more active providers of SII funds because they have more flexibility and autonomy of decision making compared to other traditional financial market investors, such as banks and financial service intermediaries (Drexler, et al., 2013). Hoh, et al. (2012) have noted the critical role foundations have played in developing SII market infrastructure and providing "catalytic" capital or actively investing through program-related investment (PRI) programs.

Program-related investment is unlike grant-making models traditionally employed by foundations and philanthropy; it uses sets of financial instruments, such as direct debt, equity, guarantees, and debt or equity funds to finance socially relevant investments in developing countries (Wilson and Silva, 2015). PRI investors invested USD 446 million in 2013, but the share of SSA was only 3% (Saltuk, et al., 2014). Two major impact investors in SSA are the Bill & Melinda Gates Foundation in the USA and the Department for International Development (DFID) in the UK operating largely through the Commonwealth Development Corporation (CDC).

The Gates Foundation adopted the PRI approach in 2009 to address poor health and extreme poverty globally. The Foundation is currently financing several PRI programs in Africa. This includes ASA International, which provides financial services to the poor (microfinance) via low-interest loans in Africa and Asia, and also Agricultural Capital Fund, Root Capital, and ProCredit Holding. PRI programs are particularly suitable for improving youth access to finance and participation in agriculture. Box 4.2 provides a description of selected PRI programs.

DFID has also initiated impact investment programs that can contribute to the development of agribusinesses managed by youth in Africa. The rationale behind DFID's initiative is to foster the SII market by showcasing social impacts achieved via investments. In doing so, it expects to catalyze more commitments to impact investment on the global market which will lead to an increase in the number of enterprises that have clear social goals alongside their profit goals (DFID, 2015).[19]

Another organization that provides SII is Acumen, which created a venture capital fund to invest in pro-poor and social businesses in developing countries. As an example, in 2012 Acumen invested USD 1.8 million in a modern Ghanaian farm hub called GADCO20 that will likely impact the lives of 25,000 people by improving market access and agri-services to smallholders producers.

Besides large investors, individual citizens are also able to participate in SII markets, whether through their investments in the local community, through pension funds with a social return element, or through equity crowdfunding platforms. Citizen participation to the SII market is critical for its long-term success (Wilson and Silva, 2015).

Challenge funds

"A challenge fund provides grants or subsidies with an explicit public purpose between independent agencies with grant recipients selected competitively on the basis of advertised rules and processes who retain significant discretion over formulation and execution of their proposals and share risks with the grant provider" (O'Riordan, et al., 2013). Challenge funds are important potential sources of finance for youth involved in agriculture, and are currently being implemented in SSA. They are usually supplemented with capacity building activities in business skills, mentorship and entrepreneurial skills. Their development impact remains to be proven, however (Elliot, 2013). Among the challenge funds operating in Africa is the Africa Enterprise Challenge Fund (AECF), which has an Agribusiness Africa Window that co-funds "successful applicants with grants and repayable grants of between USD 250,000 to USD1.5 million"; The MasterCard Foundation's Fund for Rural Prosperity – a USD 50 million challenge fund to extend financial services to people living in poverty; the YouthStart project, which is a partnership between the United Nations Capital Development Fund and The MasterCard Foundation that provides capacity building to FSPs willing to target the youth; and the Tony Elumelu Foundation, which mainly supports the development of start-ups by youth in SSA.

To illustrate the impact that such funds have, and their growing relevance for young entrepreneurs, consider the case of AECF. Established in June 2008, AECF is hosted by the Alliance for a Green Revolution in Africa (AGRA). It is a USD 207 million challenge fund that is being sponsored by the governments of Australia, Denmark, Netherlands, Sweden and the United Kingdom, as well as the International Fund for Agricultural Development (IFAD). This fund provides, through competitions, grants and repayable grants to small- and medium-scale enterprises (SMEs) involved in agriculture and agribusiness, but also other sectors such as renewable energy, adaptation to climate change, information, and finance. AECF achieves high leverage: private businesses contribute on average 3.1 times

[18] http://www.gatesfoundation.org/How-We-Work/Quick-Links/Program-Related-Investments, accessed August 7th 2015.

[19] http://www.theimpactprogramme.org.uk/the-impact-programme/ Accessed May 3rd, 2015

[20] http://acumen.org/investment/gadco-cooperatief/ Accessed May 3rd, 2015

the funds received from the Fund. Through this AECF support, 3,752 jobs were created between June 2008 and December 2012 in Africa. About 51% of these jobs were for youth under the age of 35.[21]

Crowdfunding

This is a novel and fast growing financing model, which essentially uses the Internet to connect borrowers and lenders (Bouaiss and Maque, 2015). Crowdfunding can enable youth in agriculture to raise funds from multiple individuals through donations, presales/rewards, debt, or equity (Raymond, 2014). The approach has emerged as a new way of raising funds after the 2008 financial crisis, when traditional banks reduced their funding of artisanal businesses, start-ups, and entrepreneurial enterprises (InfoDev, 2013). Crowdfunding can be seen as a web-based extension of the informal finance mechanism used by youth (i.e., funding from family, friends, village saving clubs, etc.) that allows them to reach more potential contributors, locally and globally.

Since 2008, crowdfunding has expanded tremendously in the developed world, especially in the United States, Europe and Australia. In 2013, the global crowdfunding market was worth more than USD 5.1 billion, and is expected to reach a market size of USD 96 billion in 2025 (Raymond, 2014). Even though crowdfunding finances mostly artistic and technological projects, agribusinesses are increasingly raising funds via this mechanism. For instance, in the USA, Barnraiser is a crowdfunding platform specifically designed to finance food and farming innovators with the vision to establish a healthy food world. Innovators are producers of healthy and artisanal foods, community kitchens and organic farms. Interestingly, crowdfunding is also being used by young Americans to establish themselves in farming by financing land acquisition, equipment and supply startup costs, which can reach USD 300,000 for individual ventures. The crowdfunding platform 'Kickstarter' has 4.7 million contributors, and is used by many young American farmers to finance their establishment in agriculture. More than 600 farming projects, including dairy, chicken cooperatives, and organic produce, were thus financed in 2013 (Wessler, 2013). Following this outstanding growth in developed countries, the crowdfunding market is expanding in SSA due to the rise of the middle class, the rapid penetration of mobile technology, and strong demand from entrepreneurs (Meyer, 2015).

Crowdfunding is increasingly being used to finance agriculture and potentially youth agripreneurs in Africa. 'Kiva' is a prominent crowdfunding platform that combines an online platform with field partners to deliver loans to poor, unbanked, and underserved in the developing world. Kiva allows a minimum loan size of USD 25 and is run by 450 volunteers around the globe. Since its creation in 2005, Kiva has allowed approximately 1.3 million lenders to provide more than USD 700 million in loans via 295 field partners in 86 countries. A little more than 1.6 million borrowers received an average of USD 416.50 through Kiva. The average loan made by a Kiva lender is about USD 10. The repayment rate of the loans is high, at 98.76%. In Africa, Kiva has 110 field partners through which loans are disbursed to the borrowers. These field partners are usually MFIs that review the loan requests, post them on Kiva platforms, and collect reimbursements. Also note Kiva Zip, an interest free model being tested in the USA and Kenya that relies on organizational testimonies about recipients in lieu of interest or collateral. [22]

KIVA is not the only crowdfunding platform in Africa with the potential to finance youth in agriculture. 'Homestrings', for instance, allowed entrepreneurs in more than 20 African countries to leverage funding especially from the diaspora and from impact investors. In 2013 this crowdfunding platform mobilized USD 25 million with a minimum investment of USD 1,000. It has a special focus on Kenya, Ghana and Nigeria (InfoDev, 2013). 'Startme' is another crowdfunding platform with reach in Africa and a focus on financing cause-related campaigns (Raymond, 2014).

To sustain the development of crowdfunding platforms in SSA and the inclusion of youth agripreneurs to this funding mechanism, governments must establish a conducive environment via favorable regulations and the development and access to ICT. For example, companies should be free to raise equity as well as grants and loans through crowdfunding, without undue limitations (other than on the required level of transparency) from securities or banking regulations. Cultural acceptance and trust between investors and investees are also important challenges affecting the rise of crowdfunding in Africa. Lastly, young agripreneurs seeking funds from crowdfunding platforms should be able to present innovative and compelling projects, which have to be backed by credible peers or the 'crowd', such as accredited local financial institutions, international NGOs and value chain actors. In doing so, the youth increase the trust of investors to participate in their project and reduce the risk of lending via this platform (Meyer, 2015).

[23] http://www.newamerica.org/youthsave/ [Accessed August, 2nd 2015]

[24] http://www.uncdf.org/en/youthstart [Accessed August, 2nd 2015]

Conclusions and Recommendations

Financing youth in agriculture is a must. Financing mechanisms that are beneficial to young agripreneurs are also beneficial to others, and to a large extent, developing sound mechanisms that improve access to finance for young people that wish to become more involved in agriculture or to expand their existing agribusinesses is a matter of improving the overall environment for agricultural financing in a country. A few concluding points, specifically about youth should, however, be made.

Limited access to formal sector finance, both for investments and for working capital needs, is a greater constraint for youth than for older entrepreneurs, as they have less assets and less access to informal finance. Female youth in SSA face even more challenge in accessing agricultural finance than their male counterparts.

Hard data on this problem, however, are still somewhat scarce. It is important for each African government willing to improve youth financial inclusion to produce and share reliable statistics on youth employment in agriculture and their financial inclusion. In this respect, the design of a system of monitoring and evaluation on the financial inclusion of youth in agriculture is critical to support learning-by-doing processes and enable the continuous design of products and services and effective policies and strategies. It is worth mentioning such initiatives as Findex, YouthSave[23], and YouthStart[24] – research activities that have significantly contributed to the current growing knowledge on youth and financial inclusion in Africa. Furthermore, a few newly created platforms, such as http://finclusionlab.org/, http://fspmaps.org/ and http://finclusion.org/, are significantly improving the availability of information related to financial inclusion in Africa and can be adapted to include more information specific to youth and agriculture.

Young agripreneurs, having fewer assets, will especially benefit from forms of finance that do not require fixed collateral, but rather are based on the expected future production/sales of the borrower (through contract farming or value chain arrangements), or on floating assets such as equipment (leasing) or commodity stocks (warehouse receipt financing). For the same reason, young agripreneurs can also benefit greatly from factoring, as it removes a considerable part of the working capital burden of an enterprise (it no longer needs to finance the deferred payment conditions that many buyers want).

Young agripreneurs, many of them relatively well educated, may spot emerging market opportunities and formulate high-potential business plans to realize such opportunities. Unfortunately, African banks rarely provide financing just on the basis of a business plan, and especially not for young, inexperienced entrepreneurs. There is also a scarcity of venture capital firms on the continent (and moreover, most agricultural ventures are too small for them). Therefore, impact investment and challenge funds fill a critical gap in the market. Such funds should continue to be supported, including by development partners. Their country coverage in Africa should be broadened.

The need to improve the situation in African agriculture is evident to many people. Also, many urban consumers are showing an increasing interest in healthy food chains, which implies sound, socially and environmentally sustainable production methods, and well-managed value chains to bring produce from farm to fork. As the success of crowdfunding sites show, in developed countries consumers are increasingly willing to invest themselves in making this happen; such consumer engagement could be promoted in Africa too. Crowdfunding platforms need support for further expansion, and governments should remove all barriers that prevent them from operating properly.

Many of the traditional schemes for improving youth involvement in agriculture were based on settlement schemes: give youth land, and provide them with advice and training. However, experience has shown that such schemes rarely work. To improve youth involvement in the sector, full value chain must be covered, ensuring that farmers, if they grow the right product, will indeed have attractive earnings. Furthermore, quality of life issues matter. Good living conditions, including access to the Internet, should be part of the design of youth settlement schemes.

Inclusion in well-organized agricultural value chains addresses many of the prime constraints that youth face when becoming involved in agriculture. Markets must be reasonably secure, inputs provided on credit, the availability of additional funding against the security of future sales, access to technical support, well-established logistics to bring goods to market, etc. The growth of African cities and the increasingly sophisticated demand of many of their denizens create large opportunities for the development of short-distance (national or regional) food value chains

[23] http://www.newamerica.org/youthsave/ [Accessed August, 2nd 2015]

[24] http://www.uncdf.org/en/youthstart [Accessed August, 2nd 2015]

in the continent. While supporting the development of such chains they should not be focused on youth alone. It is clear that the youth will be among the main beneficiaries.

Many of the opportunities for youth in agriculture are not in primary production, but elsewhere along the value chain, from advisory services to treatment of crops, to storage, market linkages, processing and so on. African banks should develop expertise in value chains so that they understand where such opportunities arise, and how young entrepreneurs propose to capture them. Governments and their development partners who aim to enhance agricultural finance, for example by the creation of guarantee schemes, should consider how their schemes can be made to include specific support for value chain ventures other than primary production.

Young entrepreneurs often lack experience, and training and mentoring greatly enhances their chances of success. In this regard, using such methods as incubation, intensifying hubs and accelerators, business development training for agribusinesses, and their integration to international and local value chains, can allow them to become bankable. Good financing schemes for young agripreneurs include sound training and mentoring services.

Helping a young agripreneur establish herself in a value chain and providing her with intensive training and mentoring greatly reduces the risk of failure of her enterprise (Youth Business International, 2010). Banks, however, may not be fully aware of this, and not take it into account in their loan approval procedures. In this situation of information asymmetry, it may well make sense for an agency providing agripreneurs with such support to offer partial credit guarantees to banks, at a rate that is likely to bring revenue to the agency.

The instruments highlighted above can be effective if, and only if, government and international development organizations provide strong support to improve policy and regulatory frameworks in Africa. They must build not only the capacity of young agripreneurs, but also that of the institutions in the formal financial sector that can work with and support them in their endeavors.

References

ActionAid (2015). Contract farming and out-grower schemes: Appropriate development models to tackle poverty and hunger?, Policy discussion paper.

Addis, R., J. McLeod and A. Raine (2013). IMPACT-Australia: Investment for social and economic benefit, Australian Government, Department of Education, Employment and Workplace Relations.

African Economic Outlook (2013). "Promoting Youth Employment in Africa. Why an African economic outlook on youth employment?".

Akpan, S. B. (2010). "Encouraging youth's involvement in agricultural production and processing."

Atkinson, A. and F.-A. Messy (2012). Measuring Financial Literacy: Results of the OECD / International Network on Financial Education (INFE) Pilot Study. OECD Working Papers on Finance, Insurance and Private Pensions.

Bezu, S. and S. Holden (2014). "Are Rural Youth in Ethiopia Abandoning Agriculture?" World Development 64: 259-272.

Brown, A. and A. Swersky (2012). "The First Billion: A forecast of social investment demand." Boston Consulting Group, London, September.

Carroll, T., A. Stern, D. Zook, R. Funes, A. Rastegar and Y. Lien (2012). Catalyzing Smallholder Agricultural Finance, Dalberg Global Development Advisors: 48.

Child and Youth Finance International and MasterCard Incorporated International (2014). Banking a new generation: Developing responsible retail banking products for children and youth. Amsterdam, The Netherlands. <http://www.childfinanceinternational.org/resources/publications/2014-banking-a-new-generation.pdf%3E.

Coulter, J. (2009). "Review of warehouse receipt system and inventory credit initiatives in eastern & southern Africa." UNCTAD, All ACP Agricultural Commodities Programme (AAACP).

D'Silva, J. L., H. A. Shaffril, J. Uli and B. A. Samah (2010). "Socio-demography factors that influence youth attitude towards contract farming." American Journal of Applied Sciences 7(4): 603.

de Silva, H. and D. Ratnadiwakara (2010). "ICT Policy for agriculture based on a transaction cost approach: Some lessons from Sri Lanka." International Journal of ICT Research and Development in Africa (IJICTRDA) 1(1): 51-64.

Demirguc-Kunt, A., L. Klapper, D. Singer and P. Van Oudheusden (2015). The Global Findex Database 2014: Measuring Financial Inclusion around the World, Policy Research Working Paper 7255, World Bank, Washington, DC.

Drexler, M., A. Noble and J. Bryce (2013). From the Margins to the Mainstream: Assessment of the Impact Investment Sector and Opportunities to Engage Mainstream Investors. Geneva: World Economic Forum, Switzerland.

Elliot, D. (2013). "Exploding the myth of challenge funds - a start at least." ASpringfield Centre website, Accessed at: http://www.springfieldcentre.com/?article=exploding-the-myth-of-challenge-funds-a-start-at-least.

EPRC (2013). Uganda 2013 FinScope III Survey Report Findings: Unlocking Barriers to Financial Inclusion, Economic Policy Researcg Centre, Uganda.

FAO (2014). Youth and Agriculture: Key Challenges and Concrete Solutions., The Food and Agriculture Organization of the United Nations (FAO) in collaboration with the Technical Centre for Agricultural and Rural Cooperation (CTA) and the International Fund for Agricultural Development (IFAD).

Filmer, D. and L. Fox (2014). Youth Employment in Sub-Saharan Africa. Washington, DC, World Bank and Agence Française de Développement.

Gardeva, A. and E. Rhyne (2011). Opportunities and Obstacles to Financial Inclusion: Survey Report. Washington, DC, Publication 12, Center for Financial Inclusion, Accion International

Gonzalez-Vega, C. and D. H. Graham (1995). State-owned agricultural development banks: Lessons and opportunities for microfinance, GEMINI.

Kohler, J., T. Kreiner and J. Sawhney (2011). "Coordinating Impact Capital: A New Approach to Investing in Small and Growing Businesses." Santa Clara University, July.

Levy-Yeyati, E. L., A. Micco and U. Panizza (2004). "Should the government be in the banking business? The role of state-owned and development banks."

Little, P. D. and M. Watts (1994). Living under contract: contract farming and agrarian transformation in sub-Saharan Africa, Univ of Wisconsin Press.

Markel, E. and D. Panetta (2014). Youth Savings Groups, Entrepreneurship and Employment. Plan UK: London. <http://www.plan-uk.org/resources/documents/494816/> [accessed 02 AUgust 2015].

MasterCard Foundation (2015a). Financial Services for Young People: Prospects and Challenges. Toronto: The MasterCard Foundation. <http://www.mastercardfdn.org/what-we-are-learning/publications/youth-financial-inclusion> [accessed 02 August 2015].

Meyer, R. L. (2015). Financing agriculture and rural areas in sub-Saharan Africa: Progress, challenges and the way forward, IIED Working Papers. IIED, London.

Micco, A., U. Panizza and M. Yanez (2007). "Bank ownership and performance. Does politics matter?" Journal of Banking & Finance 31(1): 219-241.

Miller, C. and L. Jones (2010). Agricultural value chain finance: Tools and lessons, Food and agriculture organization of the United nations (FAO).

Nelson, C. and A. Wambugu (2008). Financial Education in Kenya: Scoping Exercice Report Financial Sector Deepening (FSD), Kenya.

O'Riordan, A.-M., J. Copestake, J. Seibold and D. Smith (2013). "Challenge Funds in International Development." output of a collaborative 'Knowledge Transfer Partnership'between the University of Bath and Triple Line Consulting, supported by the UK Department for International Development and the Economic and Social Research Council, Research Paper.

Oya, C. (2012). "Contract Farming in Sub- Saharan Africa: A Survey of Approaches, Debates and Issues." Journal of Agrarian Change 12(1): 1-33.

Porter, M. and M. Kramer (2011). "Creating shared value. how to reinvent capitalism-and unleash a wave of innovation and growth." Harvard Business Review.

Ramírez, M. R. and L. Fleischer-Proaño (2013). Saving Together: Group-Based Approaches to Promote Youth Savings. Davis, CA: Freedom from Hunger <https://http://www.freedomfromhunger.org/sites/default/files/SavingTogether_Eng_Web.pdf> [accessed 2nd August 2015].

Rangan, K., S. Appleby and L. Moon (2011). "The Promise of Impact Investing." Harvard Business School, Background Note(512-045).

Saltuk, Y., A. Bouri, A. Mudaliar and M. Pease (2013). Perspectives on Progress: The Impact Investor Survey, J.P. Morgan and the Global Impact Investing Network (GIIN).

Saltuk, Y., A. EL Idrissi, A. Bouri, A. Mudaliar and H. Schiff (2014). Spotlight on the Market: The Impact Investor Survey, J.P. Morgan and the Global Impact Investing Network (GIIN).

Samah, B. A., J. L. D'Silva, H. A. M. Shaffril and J. Uli (2011). "The impact of female university students' acceptance towards agriculture contract farming on Malaysian economy." African Journal of Business Management 5(15): 6625.

Smyth, E., M. Steyn, A. M. Esteves, D. M. Franks and K. Vaz (2015). "Five 'big'issues for land access, resettlement and livelihood restoration practice: findings of an international symposium." Impact Assessment and Project Appraisal(ahead-of-print): 1-6.

Storm, L., B. Porter and F. Macaulay (2010). "Emerging guidelines for linking youth to financial services." Enterprise Development and Microfinance 21(4): 307-323.

Struwig, J., B. Roberts and S. Gordon (2013). Financial Literacy in South Africa: Results of a 2012 national survey update., Report prepared by the Human Sciences Research Council on behalf of the Financial Services Board. Pretoria: Financial Services Board.

Tibbo, K. and P. Guyver (2013). Documentation of Best Practices in Smallholder-Inclusive Agricultural Value Chain Financing in Africa, AFRACA/CTA. Report prepared by Wasafari Consulting in collaboration with Prorustica.

Triki, T. and F. Issa (2013). Financila Inclusion in Africa, African Development Bank (AfDB), Tunisia.

UNDP (2012). Engancing youth political participation throughout the electoral cycle: A good practice guide.

Wilson, K. and F. Silva (2015). Social Impact Investment: Building the Evidence Base OECD. (Available at http://www.oecd.org/sti/ind/social-impact-investment.htm).

World Bank (2013). Women and Finance Progress Report to the G20, Global Practice for Financial Inclusion & Infrastrucre and OECD/INFE.

Zou, L., S. M. Tlapek, G. Njenga, E. Appiah, D. Opai-Tetteh and M. S. Sherraden (2015). "Facilitators and Obstacles in Youth Saving: Perspectives from Ghana and Kenya." Global Social Welfare 2(2): 65-74.