

Inclusive finance and rural youth

by
Arianna Gasparri
Laura Munoz

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Authors:

Arianna Gasparri, Laura Munoz

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About the authors

Arianna Gasparri is the Youth Finance Advisor for the Youth Finance Portfolio at United Nations Capital Development Fund (UNCDF), based in Dakar, Senegal. She co-leads multiple technical assistance projects to build conducive financial ecosystems in sub-Saharan Africa that enable youth to flourish in their communities. Her specific areas of expertise ranges from design, development and testing of financial and non-financial services adapted to youth needs, using human-centric design approaches, to financial innovation to promote youth inclusion and empowerment. Prior to joining UNCDF, Arianna worked as an analyst for MicroFinanza Rating, where she was in charge of diagnostics, risk management and performance evaluation of financial services providers worldwide. Arianna holds an MSc with honours in economics and management for public-sector and international organizations from Bocconi University (Italy) and an MA in international development from the Paris Institute of Political Studies (Sciences Po) (France).

Laura Munoz is a senior engagement manager at the Centre for Financial Regulation and Inclusion (Cenfri) on the payment systems work stream. She has worked on financial inclusion for the past 13 years. Prior to working with Cenfri, she worked as an independent consultant on digital finance, specialized in agent banking, credit scoring and mobile money and its link to financial inclusion, for clients such as the International Finance Corporation (IFC), UNCDF and the International Labour Organization. She has been the Business Development Director for Microcred Senegal, in charge of developing new products and customer experience among other responsibilities. She has also been technical advisor for UNCDF for a programme called YouthStart, aimed at supporting microfinance institutions at developing, pilot testing and rolling out savings products for youth. Laura holds a master’s degree in international business administration from the Centre of Economic and Commercial Studies in Spain.

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Abstract

This working paper deepens the analysis on inclusive finance and rural youth through cutting-edge research and new insights and approaches that have emerged over the years in the field. The overall narrative clearly documents the ways in which rural youth engage with the economy, policy and institutions and identifies the rapid changes occurring across the globe as well as the opportunities and challenges that young people living in rural areas encounter in their different livelihoods. Within this context, financial inclusion has gained attention as a key contributing factor to unlock the potential of rural youth in driving sustainable and inclusive rural transformation. This paper investigates how recent developments in this sector entail new opportunities for rural youth, and highlights persisting barriers that prevent rural youth from accessing financial and non-financial services, making the case for a market system approach to financial inclusion with specific attention given to digital finance.

The youth employment challenge is a global development priority. In many developing countries, high youth unemployment rates, significant proportions of working poor in vulnerable employment and economic disengagement together pose the risk of creating disaffection, driving migration, inciting social unrest and slowing progress toward development goals. The paper documents the increasing body of evidence about the positive link between financial inclusion and individual welfare, business creation and women's empowerment but also highlights the body of research that questions such a positive narrative, pointing out the lack of a sound and functional financial inclusion ecosystem.

Financial inclusion is a concept that seeks to ensure that all individuals and businesses have access to and can effectively use a range of appropriate and high-quality formal financial services to improve their lives. The study presents evidence about the disproportionately large share of unbanked youth worldwide and identifies specific constraints that prevent an efficient match between the demand and the supply of financial services, limiting access, usage and quality of available services and the transition from school to work. A review of the existing narrative shows that, in recent years, funders and international actors have focused their strategies on advancing financial inclusion on the supply side of the financial ecosystem, by providing technical assistance and funding to financial service providers. However, such approaches failed to address underlying constraints that go beyond the micro level of service providers.

The paper intends to describe how the financial ecosystem can be conducive to enabling rural youth to flourish. It examines the application of the market system approach to address those barriers to financial inclusion for rural youth, and defines roles and investment opportunities for practitioners and development actors. According to this approach, interventions to advance financial inclusion must go beyond the micro level and need to play a catalytic role to incentivize all market players to perform their functions more effectively. Finally, it highlights the potential of digital finance as a powerful accelerator of financial inclusion in general and for rural youth in particular to increase access and de-risk youth vis-à-vis their financial ecosystem.

The paper is structured as follows: the first section after the introduction focuses on the latest narrative on advances and persisting barriers in the financial inclusion of rural youth; the next section describes the holistic approach to inclusive finance for rural youth by leveraging digital innovations; the final section outlines recommendations for development actors to build youth resilience to successfully navigate school-to-work transitions and to broaden youth employment opportunities in rural areas.

1. Introduction

The International Fund for Agricultural Development (IFAD) commissioned this background paper as part of its Rural Development Report 2019, which will focus on rural youth. It describes the rapid changes occurring across the globe and identifies the opportunities and challenges that young people living in rural areas encounter in their different livelihoods. Financial inclusion has gained attention as a key contributing factor to unlock the potential of rural youth in driving sustainable and inclusive rural transformation. Recent developments in financial inclusion entail new opportunities for rural youth, but they will materialize only if existing limitations are alleviated.

This paper aims to present the latest narrative on advancements and persisting barriers in the financial inclusion of rural youth, making the case for a market system approach to financial inclusion with specific attention given to digital finance. It presents a comprehensive and holistic set of interventions aimed at catalysing systemic change. Finally, the paper shares a set of recommendations at the policy and programmatic levels to guide the way forward.

2. The importance of serving youth

2.1 The development challenge

The demographic challenge in rural areas

The youth employment crisis is a global development priority. In many developing countries, high youth unemployment rates, significant proportions of working poor in vulnerable employment and economic disengagement together pose the risk of creating disaffection, driving migration, inciting social unrest and slowing progress toward development goals. Approximately 1.2 billion people worldwide are between the ages of 15 and 24, which accounts for 17 per cent of the global population (United Nations, 2010). They are disproportionately affected by high unemployment rates as they transition from school to work, with only 40 per cent expected to be able to obtain jobs that currently exist (Khokhar, 2016). The situation is particularly grave in rural areas of the least developed countries, which host 70 per cent of the population and where economic opportunities are scarcer, presenting additional challenges to youth (United Nations Population Fund, 2011). Because of the limited employment options in agriculture, a sector that still takes up 65 per cent of the labour force, as well as the lower potential wages associated with activities in that sector, young people living in rural areas tend to move to urban centres (United Nations Population Fund, 2011).

In 2015, 740 million migrants moved within their country, mainly from rural to urban areas (United Nations Department of Economic and Social Affairs, 2015). This phenomenon is particularly acute among rural young people, as they perceive migration as the “only option for improving their employment and life prospects and meeting their particular aspirations and needs” (Deotti and Estruch, 2016, 1).

A sustained increase in the number of children and young people, a number which is expected to increase by more than 60 per cent over the next 40 years in the least developed countries, imposes additional burdens on the labour market (United Nations Population Fund, 2011): these countries will simultaneously confront the challenge of creating more productive and decent work for an increasing proportion of youth while managing the attractiveness of rural areas as a catalyser of resources and employment opportunities. **There is an urgent need for a sustainable model to build youth resilience to successfully navigate school-to-work transitions while adopting a capabilities approach to broaden youth employment opportunities in rural areas.** These approaches need to enhance the engagement of young people with their local economies and support their access to

opportunities within their immediate ecosystem. Key capabilities and factors that support their transitions include financial capability and other social services that support youth economic inclusion:

- Financial capability encompasses the knowledge, skills, attitudes and self-efficacy needed to make and exercise money management decisions that best fit the circumstances of one's life, within an enabling environment that includes, but is not limited to, access to appropriate financial services and non-financial services such as financial education, reproductive health training, mentoring and advisory support (Microfinance Opportunities, 2013).
- Other social services that support youth economic opportunities include general skills acquisition, mentoring, networking and job-matching services for youth to improve employability and entrepreneurship. These services should be context appropriate and match the demands of the labour market.

How financial inclusion can contribute to the development challenge

The Consultative Group to Assist the Poor (CGAP) defines **financial inclusion** as a concept that seeks to ensure that all individuals and businesses have access to and can effectively use a range of appropriate and high-quality formal financial services to improve their lives (CGAP, 2018). Currently, the world's poor save, borrow and manage day-to-day expenses in the so-called informal economy, especially in rural communities that are traditionally underserved by formal structures. However, such informal means of managing money are often insufficient, risky, expensive and unpredictable. Financial inclusion aims to offer everyone full access to, among other services, credit products, savings accounts, payment and transfer methods, insurance and financial education. Clearly, access to financial services is just one piece in the financial inclusion puzzle. As the reach of formal financial services spreads, actual usage and service quality are imperative to improving broader access. Indeed, financial inclusion is measured in three dimensions: "(i) access to financial services, (ii) usage of financial services and (iii) quality of the products and the service delivery" (Senechal, 2017). The research community has expanded this basic set of concepts into the Group of 20 Financial Inclusion Indicators, covering the three dimensions and providing further insights into aspects of access and usage in order to deepen understanding of the financial inclusion landscape (Global Partnership for Financial Inclusion, n.d.).

Recent empirical literature is investigating the benefits of financial inclusion and how they can contribute to inclusive growth and economic development. **An increasing body of evidence shows that financial inclusion can help improve individual welfare and encourage business creation as well as women's empowerment.**¹ At the micro level, research suggests that financial services hold the promise to help reduce poverty and improve development outcomes with a positive impact on a variety of microeconomic indicators including self-employment, business activities, household consumption and well-being (Cull et al., 2014, 2). In particular, financial inclusion seems to have a significant effect on adults in terms of smoother consumption, greater asset accumulation and increased income. Savings help households manage cash flow and working capital – especially in **rural** areas, where shocks occur more frequently – with additional benefits for health and education. At the community level, financial access is proven to improve local economic activities. At the macroeconomic level, literature suggests that financial intermediation is positively correlated with growth and employment (e.g. Beck et al., 2007; Pa ali, 2013). However, **there also exists a body of research that questions the positive narrative around financial inclusion and the effects on broader socioeconomic development** (e.g. Mader, 2018; Cull et al., 2012; Demirgüç-Kunt et al., 2017). As described above, most of the evidence on the link between financial inclusion and inclusive growth exists at the individual, micro level, whereas there is no evidence on the effects of macro-level

¹ A randomized evaluation in rural western Kenya found that access to a new commitment savings service enabled female market vendors to mitigate the effect of health shocks, increase food expenditure for the family (private expenditures were 13 per cent higher) and increase investments in their businesses by 38-56 per cent over female vendors without access to a savings account (Dupas and Robinson, 2013).

goals, and there is relatively limited research on the topic. Their main arguments point out the lack of a sound and functional financial inclusion ecosystem. On the one hand, the limited data available prevent comprehensive impact assessments. On the other hand, some studies find that financial inclusion's positive impact on environments is conditional on conducive regulation and supervision, particularly around financial integrity and consumer protection. The positive growth impact is occurring in economies with strong institutional frameworks (Demetriades and Law, 2006). In fact, coordination at the national level is negatively impacting a sound inclusive financial ecosystem and its positive impact.

Over the last 10 years, the world has witnessed the birth and rise of digital finance, especially in developing countries. Much hope has been placed in the ability of digital channels to bridge the gap in terms of financial inclusion. The most recent Global Findex, a database and accompanying report prepared every three years by the World Bank that represents the world's most comprehensive dataset on financial inclusion, revealed that, in sub-Saharan Africa, mobile money account ownership rose from 12 per cent in 2014 to 21 per cent in 2017 (Demirgüç-Kunt et al., 2018a). However, studies on the specific impact of digital finance on consumers and households are still scarce. There is early evidence from several studies that suggests that the use of digital payments and transfers is having a positive impact on rural populations in terms of higher usage of agricultural inputs, graduation from subsistence agriculture, reduced reliance on multiple occupations, greater consumption and increased income (Kirui and others, 2013; Partnership for Finance in a Digital Africa, 2017; Sekabira and Qaim, 2016; Suri and Jack, 2016). The driver of these positive outcomes is the enhanced reception of remittances and therefore the better allocation of resources, labour and risks. In Kenya, for example, a 2016 study revealed the following results: 194,000 Kenyan households were lifted out of extreme poverty as a result of access to M-Pesa mobile money services; M-Pesa helped an estimated 185,000 women move from farming to business occupations; and female-headed Kenyan households saw far greater increases in consumption than male-headed households (Suri and Jack, 2016).

Are rural youth benefiting from these positive effects? Although there have been only a handful of comprehensive impact evaluations that test such correlations on this specific segment, a review of the existing literature confirms the linkage (Cho and Honorati, 2013; Kilara et al., 2014; Loke et al., 2015; Microfinanza, 2015; Solutions for Youth Employment, 2015). According to the School-to-Work Transition Survey, promoted by the International Labour Organization, there is a positive correlation between greater levels of financial inclusion and more successful employment outcomes for youth.² The main drivers of such impact are (1) financial services for youth entrepreneurship and (2) a combination of financial services with soft-skills training, namely financial education. There is also evidence highlighting that product design and adaptation to specific market segments, such as youth, could result in improved impacts (Field et al., 2013). The specific impact of digital finance on rural youth has not yet been studied but, considering that financial inclusion has a proven positive impact on youth, digital finance is becoming an accelerator: from 2014 to 2017, mobile money account penetration grew by 128 per cent in rural areas and by 163 per cent for youth (Demirgüç-Kunt et al., 2018b). These findings should contribute to the dialogue on how policy responses and programme interventions in the field of youth employment should look to financial inclusion to stimulate job creation and youth resilience.

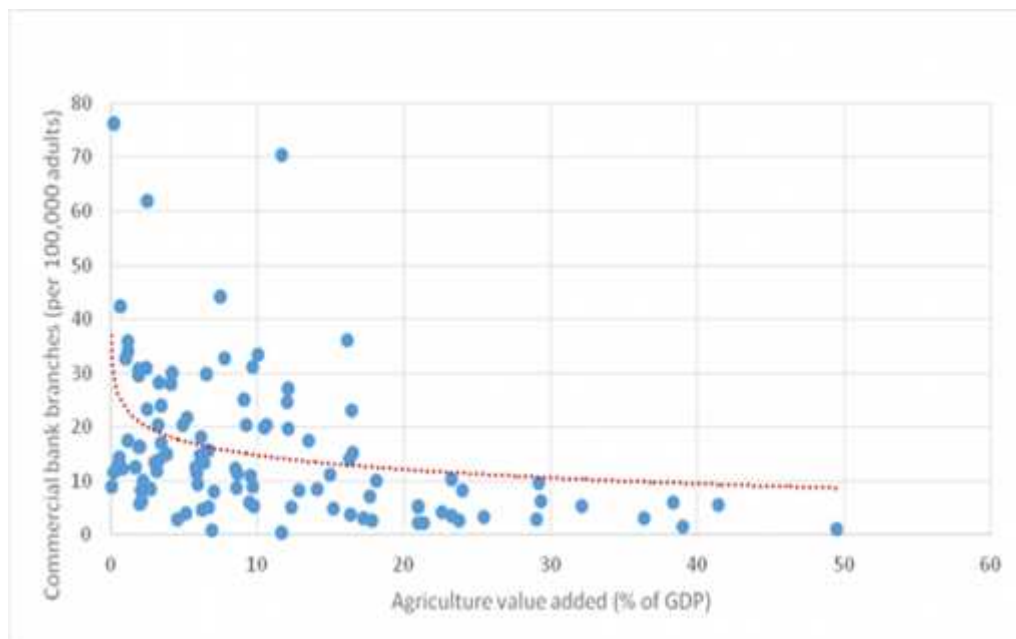
² "The School-to-Work Transition Survey is a unique survey instrument that generates relevant labour market information on young people aged 15 to 29 years, including longitudinal information on transitions within the labour market" (International Labour Organization, n.d.).

2.2 An unserved segment

Findings on the current situation: unbanked rural youth ³

The share of jobs in the informal economy is significantly higher for poorer countries and vulnerable groups. Financial access mirrors informal employment: while they need it the most, rural communities remain the largest unserved market for financial services. In low-income countries, only an average of 22 per cent of the rural population aged 15+ has an account at a formal financial institution, with Madagascar scoring the lowest at 6 per cent, compared with 94 per cent for countries in the Organisation for Economic Co-operation and Development (OECD). At the regional level, exclusion is greater in sub-Saharan Africa (29 per cent) and the Middle East and North Africa (36 per cent). Resource-rich countries⁴ stand at 35 per cent. Latin America and the Caribbean, Europe and Central Asia, South Asia, and East Asia and the Pacific stand at 51 per cent, 61 per cent, 67 per cent and 68 per cent, respectively, for percentage of the rural population having an account at a financial institution. Using a proxy to better understand the relationship between access to formal financial services and rural areas, there are fewer points of access per capita in countries with higher shares of agricultural GDP (see figure 1).

Figure 1. Correlation between the percentage of gross domestic product in agriculture and the number of commercial bank branches (source: data adapted by UNCDF from World Bank, 2017a)



³ Subregional data exclude high-income countries. Unless otherwise specified, the source for all data cited in the section 'Findings on the current situation' is Demirgüç-Kunt et al. (2018b).

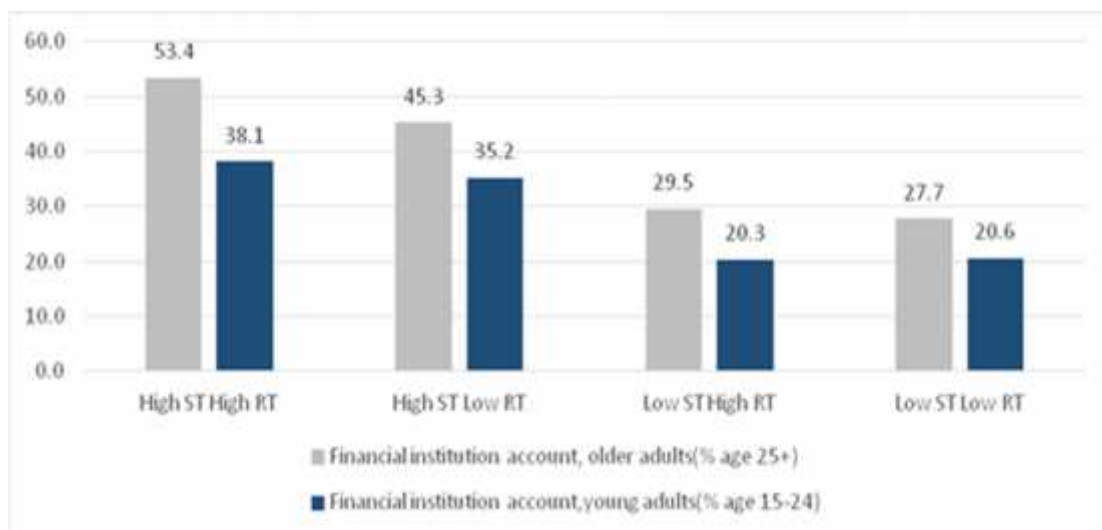
⁴ Resource-rich countries are Algeria, Angola, Azerbaijan, the Democratic Republic of the Congo, Congo, the Islamic Republic of Iran, Iraq, Kazakhstan, Liberia, Mauritania, Mongolia, South Sudan and Turkmenistan (IFAD classification). Data on Angola and Sudan are unavailable on Findex.

Figure 2. Percentage of young adults with an account at a formal financial institution (source: World Bank, 2017a)



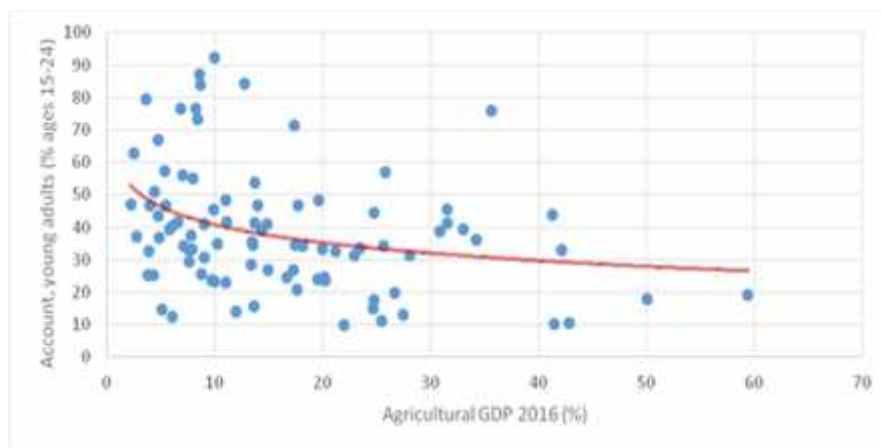
Sub-Saharan Africa is lagging behind with only 26 per cent of its young people reporting having an account at a financial institution, followed by the Middle East and North Africa with 31 per cent, Latin America and the Caribbean with 37 per cent, Europe and Central Asia with 49 per cent, South Asia with 58 per cent, and East Asia and the Pacific with 66 per cent. Deepening the analysis, the lowest rate of youth uptake recorded by country in each region is in Chad (4 per cent) in sub-Saharan Africa, Afghanistan (9 per cent) in South Asia, Myanmar (10 per cent) in East Asia and the Pacific, Egypt (12 per cent) in the Middle East and North Africa, Azerbaijan in Europe and Central Asia (12 per cent), and Paraguay (16 per cent) in Latin America and the Caribbean. The exclusion of youth is even more dramatic if data are compared with industrialized countries, where 83 per cent of youth (aged 15-24) in OECD countries have an account at a financial institution. Age gap trends do not change if different levels of structural and rural transformation, as defined by IFAD, are considered: young people continue to be more excluded than their adult counterparts (see figure 3).

Figure 3. Comparison of financial institution account ownership of adults and young people (source: data adapted by UNCDF from IFAD internal data and World Bank, 2017a, and based on IFAD classifications) RT, rural transformation; ST, structural transformation.



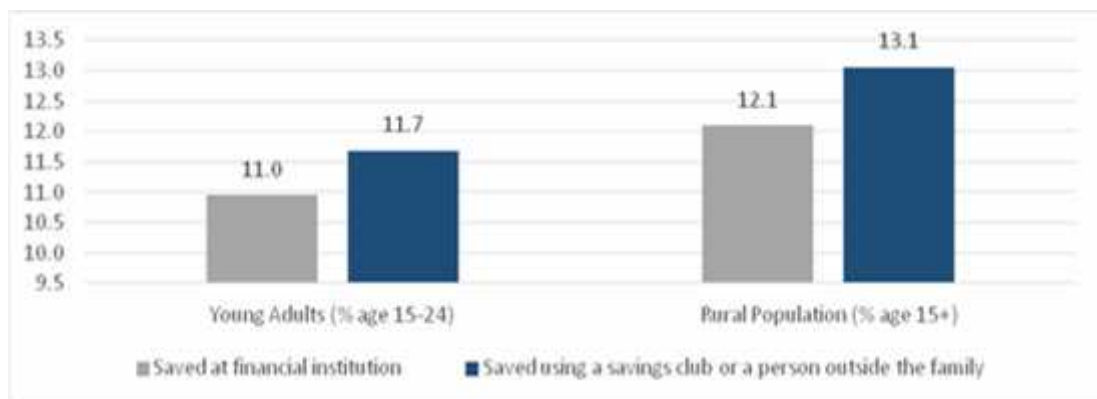
Youth exclusion persists in resource-rich countries, with 13 points of difference between the youth and adult account-ownership rates. A cross-country comparison between the agricultural contribution to GDP and youth with a formal account confirms an inverse relationship between rural areas and youth account penetration (see figure 4). In point of fact, for financial service providers (FSPs), the hardest group of young people to serve is those living in rural areas beyond the reach of existing banking infrastructure.

Figure 4. Correlation between the percentage of gross domestic product in agriculture and youth account penetration (source: data adapted by UNCDF from World Bank, 2017a)



Saving and borrowing habits exacerbate the financial exclusion of youth, especially in rural areas: while 18 per cent of youth globally report having saved formally in the past year, 29 per cent of older adults report having done so. It is interesting to see how the youth population and the rural population aged 15+ are still saving through informal channels (see figure 5).

Figure 5. Savings habits of youth and rural populations (source: data adapted by UNCDF from IFAD internal data and World Bank, 2017a)



There is also a significant age gap in formal borrowing behaviour: 6 per cent of young people report having borrowed from a financial institution, compared with 12 per cent of their adult counterparts. Surprisingly, the biggest gap in access to credit is registered in countries with high structural and high rural transformation, with a 10 per cent difference between adult and youth borrowing habits.

It is estimated that only around 50 per cent of FSPs globally include youth in their client portfolio (Storm et al., 2010). Moreover, both anecdotal and quantitative data provide evidence that, in the vast majority of instances, even those FSPs that do serve youth have significantly underserved this segment when one looks at the percentage of youth in the overall population.

In terms of agricultural financing, despite growing demand, the sector remains underserved. Globally, there are an estimated 500 million smallholder farming households – representing 2.5 billion people – relying, to varying degrees, on agricultural production for their livelihoods. Yet, as the World Bank (2018) notes, “financial institutions in developing countries lend a disproportionately lower share of their loan portfolios to agriculture compared with agriculture sector’s share of GDP”. The Agriculture Orientation Index for credit gives an accurate measure of the relative importance commercial banks give to agricultural financing:⁵ it remains at its lowest for many sub-Saharan African countries, starting with Togo (0.01 per cent), Niger (0.02 per cent) and Guinea-Bissau (0.02 per cent).

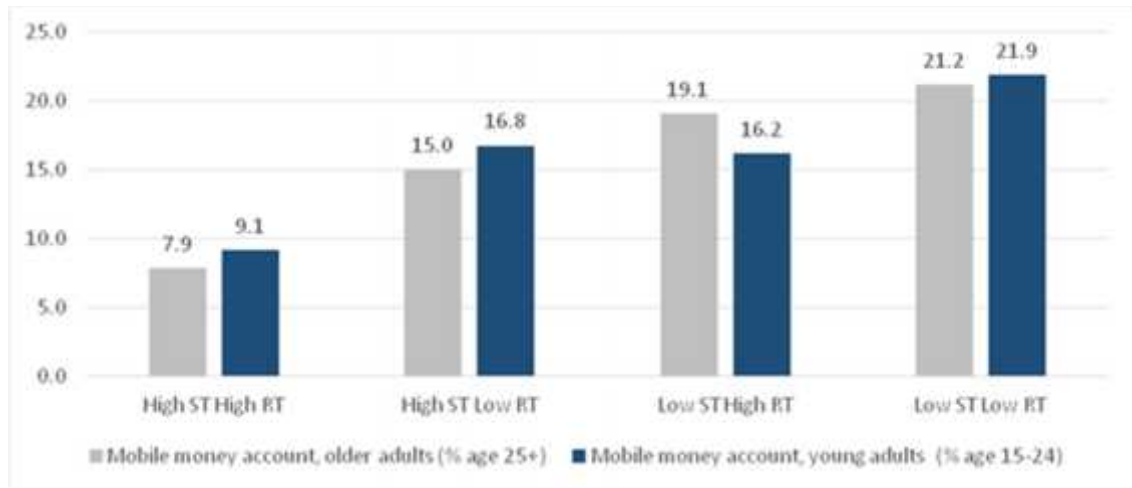
The digital revolution is starting to counterbalance these trends. Leora Klapper, a co-author of the 2017 Global Findex report, notes that mobile money accounts have helped narrow the gender and income gap. For instance, in Côte d’Ivoire, men are twice as likely as women to have a bank account, yet women are just as likely as men to have a mobile money account only (Clement, 2018). As the report itself explains, “In Kenya and Zimbabwe, poorer adults are more likely than wealthier ones to have a mobile money account only” (Demirgüç-Kunt et al., 2018b, 28). Contrary to what one may believe intuitively, mobile money account penetration is similar in rural and urban areas: mobile money accounts have an average penetration rate of 14.3 per cent in the rural population compared with 16.1 per cent in the whole population. In some countries that are leading in the digital revolution, penetration is higher, such as Kenya, where it reaches 72 per cent, and Uganda, where it is 50 per cent for both rural and urban populations. Digital financial services are becoming a major financial inclusion driver for rural adults and youth alike. Although most service providers are not specifically targeting rural youth, youth are naturally early adopters of technological innovations, as suggested by 2017 Global Findex data, which register higher uptake of mobile money accounts among youth than among adults (6.4 per cent versus 3.9 per cent), and some empirical evidence (Czaja, 2006; Olson et al., 2011). In many African countries, where mobile money account ownership rose from 12 per cent in 2014 to 21 per cent in 2017, young people below 35 have 10 per cent higher smartphone ownership rates than older adults (Pew Research Center, 2015). On average, mobile money accounts have a penetration rate of 16.6 per cent among youth, slightly higher than the 16.1 per cent seen for the whole population. In some countries such as Bangladesh, the Islamic Republic of Iran and Mexico, youth mobile money account penetration exceeds that of older adults by almost 10 percentage points.

If one considers the IFAD classification of countries by their level of structural and rural transformation, two major trends are observed in relation to youth access to digital finance: (1) youth (aged 15-24) have greater access to mobile money in all categories, except for the countries with low structural transformation and high rural transformation,⁶ proving youth are taking the lead in digital finance virtually everywhere; and (2) mobile money penetration rates are inversely proportional to the level of structural and rural transformation in a country, as digital finance is growing particularly quickly in countries with little pre-existing banking infrastructure and where uncovered needs are greater (see figure 6).

⁵ An Agriculture Orientation Index of less than 1 indicates that agriculture receives a credit share less than its contribution to GDP, while an Agriculture Orientation Index greater than 1 indicates a credit share higher than its contribution to GDP (Food and Agriculture Organization of the United Nations, 2017).

⁶ Chad, Côte d’Ivoire, Nigeria, Pakistan, Paraguay and Tajikistan. However, data on mobile money penetration for Tajikistan are unavailable in Global Findex.

Figure 6. Mobile money account penetration for youth and adult populations (source: data adapted by UNCDF from IFAD internal data and World Bank, 2017a, and based on IFAD classifications) RT, rural transformation; ST, structural transformation.



Despite the significant potential of digital finance, evidenced by its rapid and rising adoption rates, the above-mentioned penetration rates are still weak among youth and rural populations in developing countries. Unfortunately, beyond the low uptake figures, usage rates are even lower: mobile account dormancy is indeed an industry-wide problem, with two thirds of worldwide mobile payment accounts reported as inactive as of December 2015 (Angelow et al., 2016). The challenge lies ahead.

Current barriers to financial inclusion for rural youth

Despite the positive impact of financial inclusion on the most vulnerable, specific constraints prevent an efficient match between demand and supply of financial services, limiting access, usage and quality of available services. The challenges faced by young people are specific – especially in rural areas – as they try to access financial services to smooth their transition from school to work. The financing gap for this segment persists because of the typical challenges of rural finance, affecting youth and adults alike, and the specific challenges facing rural youth. Such barriers can be analysed in terms of access to financial services and risks of the segment, which together disincentivize the financial inclusion of rural youth.

In terms of access, poor rural infrastructure and dispersed populations make the provision of financial services too costly for providers because of high operation and transaction costs: the majority of FSPs still rely on brick-and-mortar branch models, which become too expensive when expanded to rural areas. On the demand side, the weak value propositions of FSPs do not match the needs of rural youth and do not add value in terms of accessibility, flexibility and cost. FSPs generally focus on segments that require little adaptation and fail to meet the financial needs of typical rural clients, who have seasonal and unstable cash flows, pushing them to use informal financial services.

In terms of **risk**, the challenges are twofold. On one side, rural markets are dependent on climatic and weather conditions that are difficult to predict and mitigate, a situation that prevents FSPs from lending to agricultural activities and agriculture-related businesses. Indeed, despite the economic importance of agriculture, only around 1 per cent of bank lending goes to the agricultural sector (International Finance Corporation, 2014). On the other side, young people are usually perceived as a risky segment: they often lack collateral, have no credit history and may not comply with the requirements that are typically set by FSPs to limit risk, such as proof of business ownership or years of experience. The negative stereotypes about young people are also due to their low level of financial education and are sometimes exacerbated by cultural and social norms. Inexperienced clients tend not to appreciate the benefits and risks of formal financial services and might be unaware of the various providers in the

market. Limited financial capabilities have implications in terms of informal business practices as well, which make it difficult for rural young people to prove the profitability of their activities.

Finally, **gaps in supporting functions or an unfavourable financial regulatory framework** often aggravate the barriers specific to youth.

Lack of high-quality information, information asymmetry between clients and FSPs, and inefficient industry-level coordination are key factors that drive up costs for both clients and FSPs. For instance, credit risk assessments are often based on traditional sources, such as credit history. However, according to the World Bank, credit bureaux cover less than 30 per cent of the adult population worldwide and only 6 per cent in sub-Saharan Africa (2017b). In addition, data disaggregated at rural or age level are usually scarce; it is indeed impossible to determine the share of financing by sector in rural areas, which prevents effective data-driven decision-making.

The regulatory framework varies greatly country by country. For those cases in which the regulatory framework is restrictive, outdated and/or unresponsive, financial inclusion of the most vulnerable is at risk. Weak property rights and even total lack of access to production factors (e.g. water and land) make collateral requirements hard to meet for rural populations, especially for young entrepreneurs who want to access capital to start a business. Moreover, strict regulation on the minimum age to open an account independently and lack of national identification documents prevent young people from opening a bank account. Currently, only 68 per cent of countries register at least 90 per cent of births. This percentage is significantly lower for some continents, such as Africa, where just 56 per cent are registered (United Nations Statistical Division, 2016). Although there are no accurate statistics, the situation tends to be worse in rural areas.

Agricultural and rural areas, in general, have a long history of political interventions that crowded out the private sector and inhibited the capacity of FSPs to innovate. Subsidized rates and interest rate caps distort markets or create disincentives for private-sector players to offer financial services to remote clients.

Practitioners recognize that, in recent years, funders and international actors have focused their strategies on advancing financial inclusion on the supply side of the financial ecosystem, by providing technical assistance and funding to FSPs, especially for portfolio growth (Lahaye et al., 2015). **However, such approaches failed to address underlying constraints that go beyond the micro level of service providers:** they did not consider the importance of demand-driven approaches or the role and impact of the regulatory framework and market infrastructure on the soundness of the financial ecosystem and, ultimately, on financial inclusion outcomes.

This paper attempts to address such problems and to define how the financial ecosystem can be conducive to enabling rural youth to flourish.

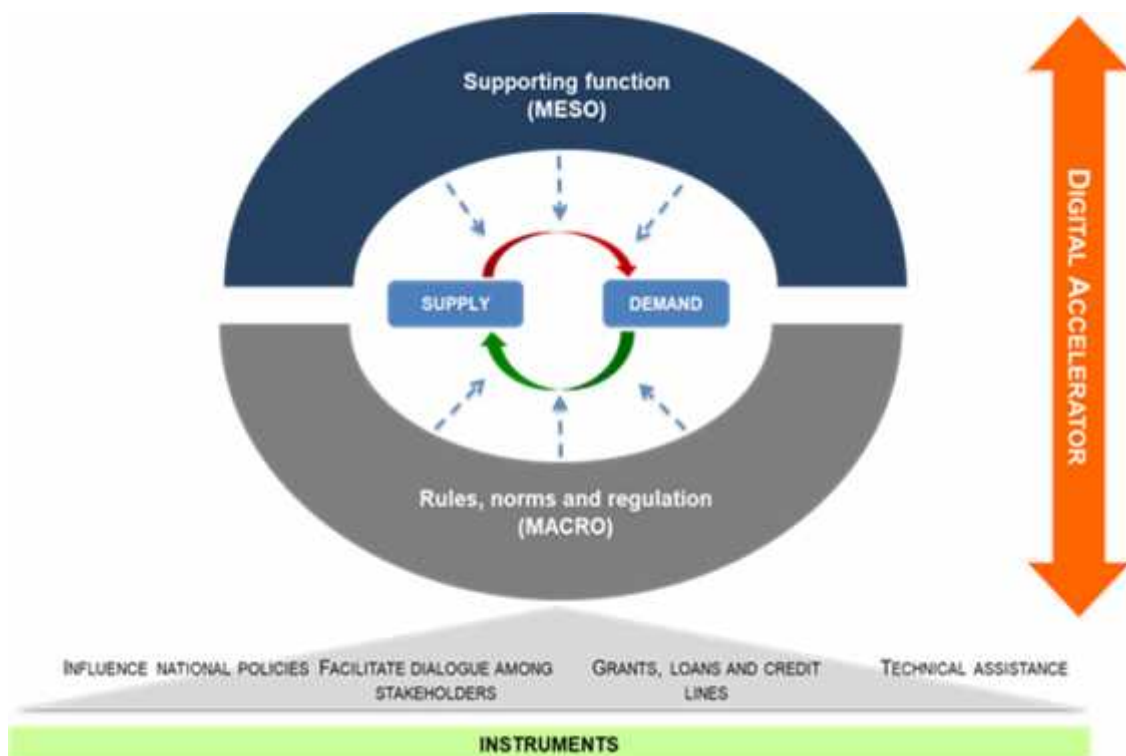
3. A holistic approach to inclusive finance for rural youth

3.1 The market system approach

The lack of coordination and harmonization of actions among the key players in the youth economic opportunities ecosystem is one of the biggest challenges the sector faces. Despite the shift from a classic microfinance approach toward more inclusive financial markets, there is still substantial variation in access, usage and quality of financial services, often due to the disconnection among the key actors of the financial ecosystem.

Within this context, there is great momentum towards using a market system approach to address barriers to financial inclusion (see figure 7). CGAP defines this approach as a market system around the delivery and use of financial services (Burjorjee and Scola, 2015). At the core of this market system, there is demand (clients) and supply (service providers); however, multiple market functions (supporting functions and regulatory framework) interact and support the core exchange between supply and demand. According to such an approach, **interventions to advance financial inclusion must go beyond the micro level, and need to play a catalytic role to incentivize all market players to perform their functions more effectively.**

Figure 7. Market system approach applied by the United Nations Capital Development Fund (source: Springfield Centre, 2015, 3). Note: the original figure was later adapted by CGAP, a version which also informed the present adaptation by UNCDF (Burjorjee and Scola, 2015, 4)



Note: the original figure was later adapted by CGAP, a version which also informed the present adaptation by UNCDF (Burjorjee and Scola, 2015, 4).

A market system approach aims to catalyse systemic change: rather than providing services, funders become facilitators and enablers in new development programming composed of multiple market actors within a dynamic market context.

This approach to economic development has gained prominence within the field of development. Donors such as the Department for International Development of the United Kingdom, the United States Agency for International Development and the United Nations Capital Development Fund (UNCDF) have adopted market system approaches as a way to help the most vulnerable to achieve greater opportunities within a well-functioning financial ecosystem. International policy dialogue promotes additional interventions at meso and macro levels to advance the financial inclusion agenda. For example, the Group of 20 and the OECD have developed principles and advice at the macro level, by pushing national strategies for financial inclusion and consumer financial education. Although the overall approach is still relatively new when applied to financial inclusion, there are already a few practical examples of positive effects of this approach, even in rural areas (Ledgerwood and Johnson, 2018). A very good and comprehensive example is Kenya, where the period of 2005-2015 witnessed a positive systematic change in the financial sector. There, Financial Sector Deepening (FSD) Kenya not only focused its interventions on service providers but also involved aspects of the market system, including capacity-building of market actors, innovation, regulation, research and public infrastructure, which contributed to financial inclusion reaching two thirds of the adult population in 2015 compared with one quarter in 2005 (Gibson, 2016). In the United Republic of Tanzania, the International Finance Corporation played the role of facilitator within a market system approach to support the interoperability process of the main mobile network operators (MNOs), contributing to a huge increase in transaction volumes (see box 1)

Box 1. Creating an enabling environment through market facilitation and coordination

Digital finance has the potential to scale up financial inclusion and serve remote communities and populations by lowering transaction costs. In the United Republic of Tanzania, where the mobile money market is well developed, there was a need to advance interoperability by creating a common platform with the big market players in order to allow clients to transact with their mobile wallets among different MNOs. The International Finance Corporation supported the interoperability process by facilitating interaction among the main stakeholders (MNOs, central bank, government), which in turn contributed to a huge increase in volume: from February to September 2016, mobile money transactions tripled to US\$72 million (Moretto and Scola, 2017). This case will certainly influence other markets. To this end, the International Finance Corporation is developing a toolkit for interoperability solutions that could inform market actors elsewhere.

3.2 Digital accelerator

Digital finance has emerged in recent years as a powerful accelerator of financial inclusion in general and for rural youth in particular. When adopting a market system approach, digital finance has the potential to accelerate and increase programming interventions at all levels. At the micro level, the inherent characteristics of digital channels contribute to the acceleration of service delivery to areas that were traditionally unserved and reduce transaction costs for both the customer and the service provider. This synergy is already translating into greater access for both rural and youth populations in many countries. Yet digital innovations have the potential to impact the financial inclusion of rural youth at other levels as well. On the demand side, once initial mistrust and unfamiliarity with technology are overcome, youth are expected to benefit from more convenient and easy-to-use digital financial services. Moreover, it can have positive outcomes on youth attitudes toward agriculture, making the sector more attractive for youth employment opportunities (Bello et al., 2015; Noorani, 2015), as pointed out in a recent research paper by the MasterCard Foundation that revealed how well available technologies have reached young people who are working in agriculture (MasterCard Foundation,

2018). At the meso level, digital finance will probably result in greater coordination and interoperability among market actors (MNOs and credit bureaux, among others) and will also benefit customer interactions with the entire system. From a market perspective, digital finance can make financial intermediation more efficient as the use of cash is reduced.

However, the level of development in digital finance varies greatly from country to country. For instance, regulatory approaches range from open-minded, allowing new players onto the scene, to rigid regulations, taking too long to create the necessary supportive environment. Supply-side actors including MNOs and FSPs have deployed different strategies leading to more or less aggressive expansion plans, depending on their business model and importance given to rural areas. In almost all cases, sending and receiving money was the use case that boosted uptake and usage of digital financial services, among both rural and urban populations as well as among adults and young people alike. Yet supply-side actors still lack broad knowledge of other needs of rural youth and may not view them as a differentiable target segment. From a demand-side perspective, rural youth may struggle not only with a general lack of financial capabilities but also with a lack of awareness of how to use digital devices for financial services.

Building on the literature and data presented above, this paper subsequently explains how a market system approach, anchored on the digital revolution, can effectively contribute to a conducive financial ecosystem that enables youth to flourish in rural areas. While there are some interventions that can benefit all actors within a financial ecosystem, including market segments other than youth, there are specific policy and programmatic implications that would benefit young people in rural areas in particular. This paper identifies three pathways to achieving financial inclusion of rural youth.

3.3 Implications of the market system approach on the financial inclusion of rural youth

Demand-side interventions

Young people face a complex mix of barriers to economic inclusion, including a lack of education programmes that match their needs. Low levels of awareness, knowledge of providers and services, and literacy make youth a risky segment to serve. Research confirms that, being easily influenced by media, family and peer pressure, young people with spending power are particularly vulnerable to making poor financial decisions and developing poor financial habits (McCormick, 2009). The quality of education in rural areas is even worse than in urban areas and does not prepare youth adequately for existing livelihood opportunities. Undereducated youth encounter considerable challenges as they access financial services. To that point, a UNCDF study in The Gambia found that the lack of knowledge on the usage of financial tools from formal institutions is the biggest bottleneck for youth to save through formal institutions; for example, of the youth interviewed in rural and urban areas, 50 per cent did not understand how to open and operate a bank account (United Nations Capital Development Fund, 2017).

Interventions at this stage must de-risk youth vis-à-vis FSPs by equipping them with tools and confidence to make sound financial decisions, in turn enabling them to manage financial services and helping them work toward tangible savings goals. Financial education seeks to reduce the economic vulnerability of young people by providing them with the knowledge, skills and attitudes to make wise financial decisions and counteract the negative influences on their financial behaviour.

There are various financial education delivery models, depending on whether the FSP directly offers financial education or other players such as youth serving organizations provide these services, within wider national programmes or in collaboration with FSPs. In all cases, from a business perspective, investing in non-financial services such as financial education can be at a high cost. Though evidence

regarding the efficacy and the business case for financial education is still lacking (Deb and Kubzansky, 2012; Miller, 2013; Xu and Zia, 2012), the assumption is that financial education has the potential to help young people reduce their vulnerability and become responsible, profitable clients (Muñoz et al., 2013). One example comes from Morocco, where a youth-focused project established a link between participatory financial education and an increase in the uptake and usage of financial services on the part of young people (Mizrokhi, n.d.). Financial education programmes that are pedagogically strong and appropriate for their target groups appear to contribute to the increased uptake of financial products. Another interesting example comes from Sri Lanka, where the youth financial services market is highly competitive and almost every commercial bank offers some form of youth product with similar features and delivery channels. Hatton National Bank determined that offering financial education would be one way to differentiate itself in the youth market there. In 2011, it conducted market research with a special focus on rural youth and accordingly developed training programmes adapted for young rural and urban clients. The bank realized that both the level of financial literacy and the amount of exposure to commercial activities are different for every young person and so are their financial needs (Dias and Siisel, 2011).

Financial education builds strong relationships between young people and FSPs and often offers an additional means to market to youth. It therefore has the potential to support the scaling up of outreach by positively impacting youth empowerment and actual behavioural change in terms of money management and youth planning skills (see box 2).

Box 2. Effects and behavioural changes of non-financial services on rural youth

In 2016, UNCDF conducted a study to assess whether or not participation in the UNCDF YouthStart programme impacted money management skills of young people and thus on their planning for the future. A sample of 280 youth between the ages of 18 and 24 was selected in Ethiopia and Togo and segmented by geographic location and gender through a controlled trial exercise over a period of six months. Half of the youth selected were from rural areas. Findings revealed positive effects of financial education sessions on money management skills: the treatment group nearly doubled the amount of net average income. Beneficiaries also exhibited best practices in saving regularly and minimizing loan requests (e.g., in Togo, the treatment group deposited savings an average 8.43 times compared with 6.07 times for the control group). Finally, access to financial and non-financial services encouraged young people to plan for their future and thus smooth the transition from childhood to adulthood and to build financial capital, mainly thanks to the financial education sessions they received as part of the programme and support from their parents (e.g. 70 per cent of young people in Ethiopia reached their savings goals). In addition, YouthStart participants in both countries were more confident about their future, less stressed and happier overall than non-programme participants (77 per cent and 54 per cent of youth from treatment and control groups, respectively, declared that they were happier).

Source: Massie et al. (2015).

Supply-side interventions

Offers from formal FSPs are often generic and designed for clients with regular income sources; they do not recognize the diversity of needs of rural youth compared with other market segments. Especially in rural areas, underdeveloped delivery channels and mobility constraints coupled with rigid conditions and high costs together disincentivize financial service access. However, there is extensive evidence that youth are bankable and capable of saving and repaying loans as adults do (IFAD, 2015). Young people in rural areas save at comparable levels to those in urban areas, and they will use formal financial products when given adequate access just like any other client segment. In rural Senegal, for example, young people with weak educational levels are perfectly able to identify their financial needs (see box 3).

Box 3. Financial needs expressed by unsatisfied rural youth: insights from rural Senegal

In 2017, UNCDF conducted a demand-side research study on financial services of rural youth in two regions of Senegal. Findings showed that, although undereducated, rural young people are able to identify their financial needs. Through a human-centred design approach that gives voice to user needs, the youth in the study defined their financial needs that have not been satisfied by the current financial ecosystem:

- loan products with flexible guarantees to avoid property requirements;
- leasing products to finance big infrastructure, eventually in groups, to mitigate risks;
- flexible and adapted insurance products to lower the risks related to climatic conditions;
- flexible savings products with no account-opening fees and no minimum balance to address unstable cash flows, especially for seasonal workers;
- digital credit products to buy production inputs.

Source: United Nations Capital Development Fund (2018).

A lack of understanding of young people's financial needs can result in a mismatch with financial products that are neither affordable (i.e. high fees or high account-opening amounts) nor appropriate (i.e. burdensome collateral requirements or guarantees). Rural youth who might have seasonal income and who also lack collateral would not have any demand for such existing products.

Interventions should support FSPs to design, test and deploy financial and non-financial services adapted to the specific conditions and demands of rural youth. To this end, FSPs should keep in mind several broad dimensions when designing products tailored to rural youth. These dimensions include transversal principles such as the following:

- Adopting a life cycle approach. Products and services need to be relevant and appropriate at different key life transitions and stages of youth. Human-centred design approaches aim to develop products based on the actual needs of the segment served.
- Reducing costs. Especially in rural areas, youth are price sensitive. Account opening is facilitated by low initial deposits as well as low or zero account fees.
- Increasing flexibility. Rural young people usually have irregular income as a result of their underemployment conditions. Flexible deposit and withdrawal features are critical to attract youth and scale up a product for youth. In terms of collateral requirements, FSPs should not exacerbate the legal requirements with additional requests but rather advocate to address key barriers young people face when accessing financial services.
- Facilitating ease of use. Financial products should be easy to use and to understand (e.g. by using local languages, using simplified language and interface, and having minimal steps to conduct transactions). Product development should aim to optimize the user experience and should ensure intelligibility and ease of use for target users.
- Including caregivers and others in the immediate surroundings of youth. Parents and close relatives affect the ability of youth to access and use financial services in different ways, especially when the regulatory framework does not allow minors to fully manage bank accounts. Therefore, product development needs to include a wider range of stakeholders.

Early evidence of success in the adaptation of products to the specific needs of rural youth comes from the Rural Youth Economic Empowerment Program, which is aimed at supporting product development of FSPs in order to serve young people in rural areas of four countries (see box 4).

Box 4. Five financial products for rural youth

As explained by Making Cents International, it developed the Rural Youth Economic Empowerment Program (RYEEP) to do the following: “Funded by a three-year grant from the International Fund for Agricultural Development (IFAD), the program sought to increase employment and self-employment of young people aged 15-35 in Egypt, Yemen, Morocco and Tunisia, and was implemented by Making Cents International, in partnership with Silatech. RYEEP provided capacity building and technical assistance to local FSPs to pilot five youth-inclusive financial and non-financial service delivery models to rural youth” (2016, 1). The delivery models comprised the following:

- youth savings groups
- enterprise loans
- savings product
- youth-inclusive value chain finance
- start-up lending

Despite their reputation for being higher risk, borrowers of RYEEP partners demonstrated similar repayment performance to that of their adult peers. Based on initial findings of the pilots, a few recommendations can be drawn: (1) serving rural youth effectively requires youth- and rural-specific adaptations; (2) youth financial services should be an integrated part of a larger rural expansion strategy; (3) rural youth represent heterogeneous groups, and different approaches need to be adopted according to age groups; (4) critical minimum approaches have to be applied for the delivery of non-financial services; (5) start-up loans should be subsidized with lending to older rural youth; and (6) new technology and alternative channels should be explored to support financial inclusion of rural youth (e.g. value chain finance approach).

Source: Making Cents International (2016).

Recent experience in youth financial inclusion programming has shown that savings need to be an entry point to formal financial services.⁷ This **savings-led approach** builds young people’s capacity and confidence in using formal financial services and serves as a basis for building assets for the future (IFAD, 2015a, 9). Experts and practitioners view savings as the most beneficial financial service to empower youth, since a formal savings account from an early age helps youth establish a trusting relationship and a proven credit history with the financial institution, which could eventually help them access other financial products, including loans (Linder et al., 2012).

Box 5. MyAgro savings approach

“MyAgro has pioneered an alternative system that matches how farmers already manage their money. Using a prepaid scratch card model – similar to buying prepaid mobile minutes – farmers can pay in advance for fertilizer, seed and training packages by buying a myAgro card at their local village store (from 50 cents to \$50), depositing their money into a layaway account by texting in the scratch-off code.

“After a few months of buying the scratch cards and saving little by little, myAgro delivers the fertilizer, seed, and training they’ve paid for in time for planting season. Through this bank-less savings scheme, average harvests for myAgro farmer[s] increase from 50 per cent [to] 100 per cent over traditional farms, and net farming income increases \$150 [to] \$300 per farmer.”

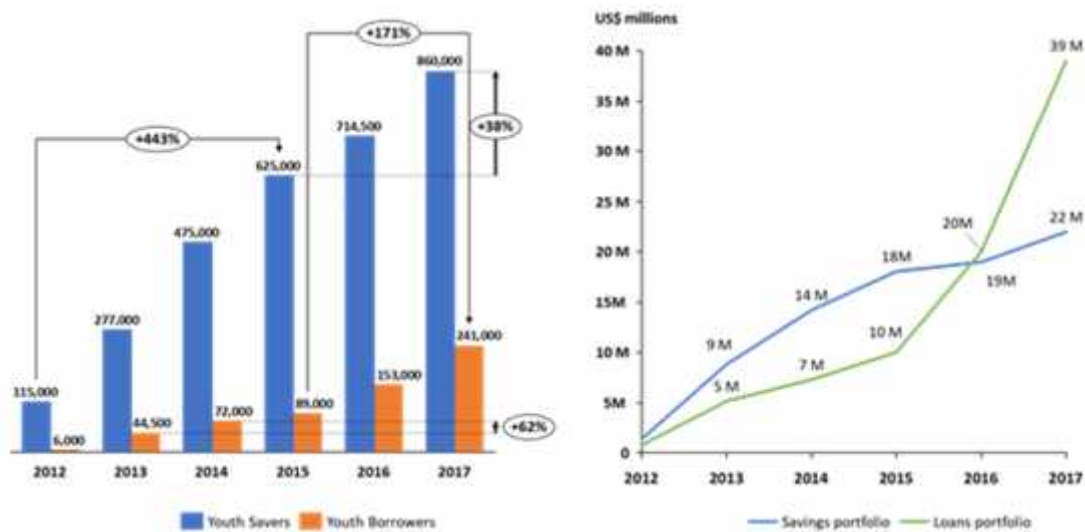
Source: MyAgro (2017).

⁷ See UNCDF YouthStart, Child and Youth Financial International, Women’s World Banking and International Rescue Committee (European Microfinance Platform, 2012).

MyAgro, a financial technology company (fintech) founded in Mali and active in other West African countries, has adopted this savings-led approach to launch a mobile platform for small rural farmers that combines a payment system for seeds and fertilizer and training modules focused on financial education and agricultural techniques. While credit excludes the majority of the world's poor, the experience of MyAgro has "proven [that] smallholder farmers can finance themselves if they have the right tool to save" (MyAgro, 2017; see also box 5). The MyAgro business model does not specifically target youth; however, it can benefit youth, as it allows rural coverage of otherwise unserved areas and reduces transaction costs that often prevent youth from using financial services. Moreover, innovative solutions have the natural potential to impact youth thanks to their convenience and ease of use compared with traditional products.

Another example of such an approach is provided by the UNCDF YouthStart programme, which was launched in 2010 in eight sub-Saharan countries. The programme has supported 10 FSPs in designing financial and non-financial services for youth both in rural and urban areas. During the initial five-year programme, the savings and loan portfolios reached US\$18 million and US\$11 million respectively. Notably, by 2017, the loan portfolio reached nearly US\$40 million – US\$17 million more than savings (see figure 8). Partner FSPs started to offer loan products to youth clients as they grew older because they no longer perceived them as a risky segment thanks to their long relationships as savers and to their increased financial literacy capabilities.

Figure 8. Savings-led approach with youth (15-25) that gradually leads to access to other financial services



Source: UNCDF YouthStart programme internal data

Digital accelerator of interventions at the micro level

Digital innovations and digital financial services hold significant promise for the acceleration of interventions at the micro level by supporting service providers to increase access through attractive business models and cost-effective delivery channels that add real value and respond to actual needs of rural youth. Some digital innovations have already proven their business case for reaching rural areas, while others are still in nascent stages yet offer some early evidence of their potential. In both instances, there is a case for supporting supply-side actors to scale up and replicate initiatives in search of accelerating rural youth financial inclusion.

Addressing barriers linked to dispersed populations and mobility constraints, agent networks are an ideal solution for service providers to expand to rural areas at a lower cost. The concept is based on the provision of financial services through a network of convenience stores and outlets that sign an agency agreement with the provider and gain a commission on every transaction performed on the provider's behalf. Agent networks allow FSPs to lower costs related to opening branches or setting up

ATMs, overcoming the limitations of brick-and-mortar models to reach a wider customer net and bringing their services to the last mile. They also offer MNOs the possibility of introducing themselves in places FSPs have not yet reached. For rural populations, both adults and young people alike, having an agent nearby means they no longer have to travel long distances and spend money on transport to get to an FSP branch. At agent locations, rural youth can also pay bills, send/receive money to/from family members and friends, or finance a solar lamp via pay-as-you-go (PAYG) technology, among other services. Malaysia provides a very promising case in which agency banking has contributed to a significant increase in rural and youth financial inclusion. According to a World Bank report, from 2011 to 2017, financial inclusion of rural Malaysians increased from 54 per cent to 76 per cent and financial inclusion of Malaysian youth improved from 52 per cent to 74 per cent (2017c). According to the same paper, in 2011 46 per cent of Malaysia was unserved – mostly rural areas – whereas in 2017 only 3 per cent did not have any service points. This impressive progress was made possible thanks to a national policy strategy with a market system approach,⁸ which included the expansion of agents from three FSPs (Agrobank, Bank Rakyat and Bank Simpanan Nasional), which account for 94 per cent of all agents (World Bank, 2017c).

Even though agency banking is not youth specific, its enormous positive impact in extending geographical coverage to otherwise unattended rural areas represents major progress that lays the foundation for rural youth financial inclusion.

Some digital innovations are allowing FSPs to develop relevant services adapted to the needs of rural youth. A good example of appropriate product design is PAYG technologies. It is estimated that 600 million people live without access to electricity, mostly in rural areas of sub-Saharan Africa, because they lack grid infrastructure and/or unreliable electricity services. PAYG allows the financing of “[solar] kits against small instalments instead of a lump sum payments with technology that locks the functionality in the event of nonpayment by a consumer” (Mutema, 2017). As of 2016, 800,000 PAYG devices had been financed (GSMA, 2017). These initiatives established that designing services that truly respond to clients’ needs – in this case, allowing flexible repayments that match the irregular income of rural youth – boosts adoption. PAYG is particularly relevant to rural young people. Research shows that, besides improving living conditions for the whole family, being able to afford solar home systems positively impacts the number of hours that students spend studying at home and socializing (Scott, 2017).

Digital innovations are also helping farmers reduce the risks linked to weather dependence, ensuring stability in their income and making agriculture a more appealing activity. Weather index insurance (WII) is a new approach that applies technology to insure agriculture against weather calamities in the developing world. WII estimates losses using a predetermined index based on historical weather data. Farmers can cover small parcels of land for a low premium (about US\$2). The key benefit of mobile WII products for service providers, compared with traditional models, is the cost reduction of in-person farm visits thanks to the usage of geographical data from satellites and the digitization of weather station data for the compilation of indexes (Tricarico and Darabian, 2016). Agriculture and Climate Risk Enterprise (ACRE), the largest index insurance programme in Africa, offered by Syngenta Foundation in partnership with the seed company Seed Co and the MNO Safaricom, provides a good example of how these innovative products can advance financial inclusion by lowering associated risk (Hess and Hazell, 2016). The usage of mobile technology and mobile banking by ACRE in East Africa to collect premiums and make payments is innovative in its use of the M-Pesa mobile banking system. In 2014, it sold 233,700 policies, provided US\$12.3 million of insurance coverage, and made pay-outs of US\$379,405 (Hess and Hazell, 2016). WII illustrates why a

⁸ The Financial Sector Blueprint includes, among other efforts, reforming the development finance institution, enlarging the mandate of the central bank to include financial inclusion, creating a credit bureau, upgrading the national payment system, supporting the expansion of agents, introducing a Malaysian identity card for all citizens and providing structured financial education programmes.

market system approach is needed. Although the private sector can benefit from lower delivery costs, very few private insurers have succeeded in scaling up their services. Wherever WII has reached scale, some form of subsidy has been put in place by the government (e.g. India) or by private institutions (e.g. in the ACRE case the Global Index Insurance Facility by the World Bank subsidizes up to 40 per cent of the premium volume; Hess and Hazell, 2016). Some practitioners are unsure of the sustainability of WII, as its commercial viability without subsidies is yet to be proven (Di Marcantonio, 2016; Arce, 2016; Li, 2014).

Supporting functions and regulatory framework

Multiple market functions are needed to support the core exchange between demand and supply of financial and non-financial services for rural youth. Promoting financial inclusion requires an “understanding of how this exchange is shaped by rules and supporting functions present in the market” (Burjorjee and Scola, 2015). When absent or dysfunctional, those functions result in weak markets and the exclusion of the most vulnerable.

Typical **supporting functions** in financial service markets include information services, coordination mechanisms, capital markets and market infrastructure. Market development can happen at different levels: “By encouraging change in behavior through capacity building; by helping market actors take more informed decisions through access to better and timely information; and by incentivizing innovation through better-informed risk assessment” (El-Zoghbi and Lauer, 2013, 9). Concerning rural youth, **interventions should target specific supporting functions that are key to advanced financial inclusion**, such as the following:

- Data collection for the specific segment. Disaggregated data on financial usage and habits of rural youth at the national and local levels are imperative for making informed decisions and programming that respond to the real challenges faced by rural youth.
- Credit history and information. Availability and accessibility of this data to market actors are crucial to lessening the information asymmetry between consumers and providers of financial services.
- Innovative infrastructure. As technologies and innovative solutions enter the financial market and offer the potential to improve youth financial inclusion, there is a need to facilitate the integration of these new actors (fintechs, mobile transfer organizations, MNOs) with traditional stakeholders (FSPs, regulators, ministries) to ensure the availability of these affordable new delivery channels and services.
- Knowledge building. Advocacy, academic research and knowledge sharing are essential to bringing rural youth financial inclusion on to the national and international development agenda.

The **legal and regulatory framework** often represents a key challenge to delivering financial services to youth. In a Child & Youth Finance International survey of more than 200 youth finance experts from 20 countries, 63 per cent of respondents felt that governments should establish a youth finance inclusive regulatory framework and providers should adhere to a code of conduct, mainly to protect the savings of youth (2010). For instance, youth who do not meet the minimum age requirement to open an account independently need the consent of a parent or guardian, which often discourages or even prevents them from opening an account. Age restrictions are exacerbated by identification requirements, hindering access to formal financial services for children and youth who often do not have such documents. Lastly, political interference is still very common in these settings, especially in the poorest countries, and can distort or disincentivize market functioning.

Within this context, **in order to facilitate financial inclusion, interventions should target the regulations that shape the way in which demand and supply of financial services interact as well as the supervision processes that help enforce these rules**. Policymakers and regulators can help promote a conducive environment to expand youth access to financial services by removing some of the most critical barriers, for instance by (1) developing a youth-friendly legal and regulatory framework, (2) incentivizing the design and delivery of youth financial services, and (3) promoting

financial education. UNCDF has developed a set of recommendations for policymakers and regulators to advance youth financial inclusion (see box 6).

Box 1. Recommendations by the United Nations Capital Development Fund for policymakers and regulators to advance youth financial inclusion in rural areas

Youth-friendly legal and regulatory framework

- Develop legislation that is inclusive and protective of youth rights (e.g. minimize age restrictions, be more flexible on identification and collateral requirements in terms of property rights, rescind know-your-customer requirements for youth-specific products).
- Ensure that adequate recourse mechanisms exist and that they are accessible to youth.
- Promote industry standards for client protection and youth-friendly products.
- Coordinate policy dialogue and ensure alignment with national youth policies.

Design and delivery of youth financial services

- Stimulate and support the financial sector to design appropriate financial products that are consistent with the Smart Campaign and the Child and Youth Friendly Banking Principles of Child & Youth Finance International.
- Develop policies that offer incentives to open and use a youth savings account.
- Develop appropriate policy and regulation to support innovation that promotes access to youth financial services.

Financial education

- Develop and implement a national strategy for financial education.
- Integrate financial education and an entrepreneurship curriculum into the national curriculum.
- Advance best approaches to financial education for youth by coordinating among government entities and collaborating with FSPs and youth-serving organizations.

Digital accelerator of interventions at the meso and macro levels

Digital innovation is creating new business models and opportunities at the meso level, making the financial inclusion ecosystem more sophisticated. Specific supporting functions are making a big leap forward in terms of big data usage and offering connected services to FSPs. **New players are gaining attention within the market as they develop solutions that lessen information asymmetry and increase data quality to ultimately reduce risk, increase access and drive decision-making.**

In recent years, new platforms have emerged to develop people's credit scores based on alternative data sources. Their business model usually consists of buying data from MNOs and partnering with service providers to offer digital short-term loans to customers. The alternative data sources most commonly used are mobile phone airtime and data consumption, as well as mobile money usage. These loans are usually disbursed digitally to the person's mobile money account. The platforms allow a large number of rural youth to access a loan for the first time, as FSPs can finally collect clients' information and assess their risk profile. An additional advantage is that these loans can be processed remotely, without the client needing to visit a store or agent in person, and are processed (approved/denied) immediately. There are other initiatives specifically focused on alternative data sources for rural and agricultural populations. In Kenya, for example, a company called FarmDrive has developed a digital platform that helps farmers keep a record of their expenses, revenues and yields. These data can be shared with FSPs to assess the farmers' creditworthiness. The system also has an

algorithm that provides a credit score based on individual and social, agronomic, environmental and satellite data.

Concerning regulation of digital finance, the rapid rise of new players and business models has resulted in different approaches ranging from rigidity and risk aversion on the part of regulators to openness and testing through formal or de facto sandboxes. Experience shows that the regulatory framework can become a very powerful enhancer of digital financial inclusion or can temper it. Market actors must allow innovation to reach its full potential while protecting consumers. To this end, regulators play a critical role in accelerating financial inclusion through digital means.

There are four basic regulatory enablers for digital finance to flourish: (1) which players are allowed to issue mobile money, (2) which players are allowed to use third-party agents, (3) risk-based customer due diligence and (4) consumer protection (Staschen and Meagher, 2018). These four basic enablers are particularly important to rural young people, as they tackle their main barriers to financial inclusion. Enablers (1) and (2) boost the rapid expansion of agent networks and mobile money services to rural areas. Enabler (3) helps lessen the burden of presenting a legal ID, which rural youth often do not have, as service providers are advised to apply a risk-based approach to know-your-customer requirements.

The existing regulation around these basic regulatory enablers clearly impacts mobile money penetration rates and therefore financial inclusion. For example, concerning enablers (1) and (2), countries whose regulation allowed MNOs to enter or lead the mobile money market have much higher penetration rates. MNOs usually have more experience than banks with mass market segments and transactional business models, and in general are more aggressive in their expansion plans. The cases of Kenya and Uganda (73 per cent and 50 per cent mobile money penetration rates, respectively) confirm this theory (Demirgüç-Kunt, 2018a). On the other end of the spectrum, regulation in India and Nigeria only allowed banks to issue mobile money and have agents, which contributed to their unusually low mobile money penetration rate (1.9 per cent and 5.6 per cent, respectively; Demirgüç-Kunt et al., 2018a). Both countries recently introduced modifications to their regulation to allow MNOs to create specific vehicles to enter the market. It is highly probable that both countries will experience significant growth in the overall uptake of mobile money in the coming years. A supportive regulatory environment is essential to facilitate innovation and to accelerate the financial inclusion of rural youth.

Concerning enabler (3), risk-based customer due diligence, some regulators are adopting new innovative solutions to overcome traditional legal barriers related to ID requirements that prevent rural youth from accessing financial services. Proof of identity is generally the most basic know-your-customer requirement that FSPs are required to seek by regulation worldwide, as part of anti-money-laundering and counter-terrorist-financing measures. Yet one of the problems rural youth face is the lack of a formal ID needed to open a bank account and access financial services.

In this context, some pioneering governments in developing countries have deployed nationwide initiatives that completely change the landscape and become a game changer for millions of people (e.g., the Aadhaar card in India and the National Identity Number biometric identification system in Nigeria). At the time of writing, an estimated 1.17 billion people had been enrolled in India (*Times of India*, 2018) and 30 million people in Nigeria, with the Government of Nigeria planning to capture 50 million more Nigerians in the system by the end of 2018 (Technology Times, 2018). These two national identification systems are based on the biometric registration of all citizens' fingerprints, which are then stored and managed from a centralized database run by an official institution. Once enrolled, each person would have only to present his/her fingerprint to open a bank account at any institution, receive subsidies from the government, register a vehicle or participate in national elections, to name a few options. One of the most important advantages offered by these systems is the full interoperability of the identification. Once a person is part of the database, the identification process should be over for good.

For rural young people, a biometric identity system would not only solve the problem of presenting formal identification that they may not have for accessing financial services; it would also ease their onboarding, as opening an account could be completed with an agent, without the customer having to travel long distances to the nearest FSP branch. The young person would only have to present his/her fingerprint.

4. The way forward: recommendations for development actors

Although evidence is still limited, a market system approach appears to be a viable solution to advance financial inclusion for rural youth and to ensure systemic change in the long term.

The proposed approach is intended to provide guidance, best practices and investment opportunities for funders, policymakers and international actors that want to pursue financial inclusion at policy and programmatic levels with long-term impact for rural youth.

The development agenda needs to address all three levels of intervention and can support market actors by reducing the perceived risks of innovation to stimulate system-level change. At the micro level, funders and practitioners can support innovative service providers to develop products adapted for segments (e.g. rural youth) that otherwise would not be served. Such actions can lead to a demonstration and crowding-in effect. It is hypothesized that, if interventions target the learning curve of FSPs that are willing to (1) serve a rural youth segment, (2) institutionalize youth-specific financial and non-financial services and (3) prove the business case, other players will enter the market more easily and additional benefits will be provided to the entire financial ecosystem. Such effects would not occur automatically; rather, development actors would need to facilitate such transitions through their various activities (e.g. developing open-source products, raising wider public awareness).

Donors, investors and development agencies can play the critical role of facilitator in the effort to build a financial system and sound market infrastructure through subsidized funding aimed at promoting innovation, competition and evidence-based research. Although such interventions have no direct financial returns on investment (El-Zoghbi and Lauer, 2013), when market functions are more effective, more low-income populations and businesses – and consequently rural youth – will be linked to the financial system while long-term investment opportunities will increase in a more diverse and inclusive financial services market.

The opportunity to strengthen the market system at the macro level is evident and imperative. Although it requires a long-term perspective, funders and the development community must engage with policymakers and regulators to craft regulation and supervision that spur innovation and inclusion by balancing youth financial inclusion, stability, integrity and consumer protection.

These interventions are likely to benefit the entire population. This premise is particularly relevant to interventions that address rural barriers, such as insufficient infrastructure and dispersed population. Although they may not target rural youth specifically, these actions are needed to reach the rural youth segment. However, other interventions may impact rural youth more deeply than other population segments, for example if policies or programmes target youth directly or if interventions appeal to youth (e.g. digital innovations that naturally drive youth uptake).

Finally, it is important to note that a market system approach may be difficult to implement by any stakeholder alone, as it requires coordination of multiple actors across the entire ecosystem. For that reason, any market system approach should follow these guidelines:

- Ensure that it is led or supported by the government and policymakers in charge of regulation.
- Put in place the necessary mechanisms to bring together all stakeholders in the field. The coordination of donors and development agencies is particularly important to ensure there is complementarity in actions and additionality in impact.
- Make sure it leverages the private sector and is designed to positively impact rural youth as well as FSPs and supporting players, in terms of expansion and sustainability of their business.

The state of practice in this field is still new, and conclusive empirical evidence of success and lasting impact is not yet widely available. However, the market system approach could offer evidence and data needed to fully prove the correlation between financial inclusion and broader development outcomes that are not yet assessed. Therefore, there is a role for donors and the international development community to prove such an approach and support service providers (FSPs but also MNOs and fintechs), supporting entities as well as regulators and state actors to enhance the attractiveness of the rural youth segment. **IFAD and like-minded partners can assist in strengthening these systems and advancing financial inclusion as a way to build youth resilience to successfully navigate school-to-work transitions and to broaden youth employment opportunities in rural areas.**

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