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Research Report

Youth enterprise growth: Evidence from youth forward in Uganda

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Report

Youth enterprise growth

Evidence from Youth Forward in Uganda

Karishma Banga, Susan Njambi-Szlapka and Sanyu Phiona

June 2021



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Cover photo: Farmers use bikes and *boda boda* transport to reach the banana market and sell their produce in Uganda, 2019. Photo credit: MehmetO / Shutterstock.com

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Acronyms

AfCFTA	African Continental Free Trade Area
ASSP	Agricultural Sector Strategic Plan
BMAU	Budget Monitoring and Accountability Unit
CURAD	Consortium for enhancing University Responsiveness to Agribusiness Development Limited
DRT	Development Research and Training
DYNAMIC	Driving Youth-led New Agribusiness and Microenterprise
EAYIP	East Africa Youth Inclusion Programme
FAO	Food and Agriculture Organization of the United Nations
FDI	foreign direct investment
FGD	focus group discussion
GDP	gross domestic product
ICT	information and communications technology
ILO	International Labour Organization
KII	key informant interview
LDC	least developed country
LMIC	low- and middle-income country
MAAIF	Ministry of Agriculture, Animal Industry and Fisheries
MB	megabytes
MSEs	micro and small enterprises
MSMEs	micro, small and medium enterprises
NCBA CLUSA	National Cooperative Business Association CLUSA International
NDP	National Development Plan
NGO	non-governmental organisation
OECD	Organisation for Economic Co-operation and Development
OTT	over the top tax (social media tax in Uganda)
SACCOs	Savings and Credit Cooperatives
SMEs	small and medium enterprises
SMS	short message service
STRYDE	Strengthening Youth Development through Enterprise

UIRI	Uganda Industrial Research Institute
UGX	Ugandan shilling
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Programme
USSD	unstructured supplementary service data
VSLA	Village Savings and Loans Association
YETA	Youth Empowerment Through Agriculture
YLP	Youth Livelihood Programme

Executive summary

The national lockdown in Uganda during Covid-19 has affected businesses in the agricultural sector through a range of supply-side disruptions, exacerbating problems related to availability of transport, inputs, accessing physical trainings and topping up mobile phones. Demand has also shifted from cash crops to subsistence crops (GSMA, 2021). With these heightened challenges, it is now even more important to understand the challenges to youth enterprise growth and diversification for building business resilience. This study aims to bring a more nuanced understanding of the drivers of business growth and economic resilience in young entrepreneurs in Uganda, using the agricultural sector as a case study. The main research question was ‘how can youth businesses be supported in their growth?’. To answer this question, we explored two key sub-questions. First, what contributes to the growth of businesses? And second, what makes a successful youth entrepreneur? The study focuses on young people living in rural Uganda. A mixed-methods approach is taken, and the analysis draws on a survey of 367 youth entrepreneurs involved in agricultural value chains, complemented with insights from 60 semi-structured interviews with respondents, key informant interviews (KIIs) and focus group discussions (FGDs). The survey and interviews were conducted between July and November 2020.

Key messages and findings

Impact of Covid-19: *Young people’s spending was based on consumption and many of them reverted to subsistence farming. Covid-19 and the ensuing lockdown rules in Uganda had significant impact on young people’s businesses. On the supply side, young people’s access to markets was severely*

inhibited due to the restrictions on movement, closure of markets and businesses, as well as the serious overall decline in household income across communities. Furthermore, there were significant price fluctuations; markets and shops were closed, further reducing young people’s customer base, and, as a result, young people were forced to sell to a limited number of local buyers who were pressuring them to sell at lower prices, resulting in significant losses for young people’s businesses. The prices of inputs rose to a level that young people could not afford, and they struggled at times during Covid-19 to find good quality input, like quality seeds and fertilisers, which led to lower harvests. The restrictions on transport, and its increased cost, made access to inputs even more costly. Other challenges included no access to labour during lockdown, loss of land for farming due to inability to afford rent, inability to top up mobile phone airtime due to travel restrictions, as well as not being able to carry out group activities and gatherings as part of cooperatives.

Role of youth aspirations: *A secondary non-farming business reduces the risk of dependency on farming, and at the same time brings in additional income to grow/invest in farming.*

For 56% of respondents, the main aspiration of their primary business is to expand into more businesses to reduce risks, while 31% of the sample want to invest in and grow one business. Overall, 60% of the 367 youth entrepreneurs surveyed own more than one business. Most of the youth have their primary businesses in farming, which is seasonal and risky. The costs and the lengthy process of registering a business may be a deterrent for businesses to register formally in Uganda; 89% of the youth enterprises have not formally registered any of their businesses, with

15% of male entrepreneurs in the sample having at least one business registered, and just 5% of female entrepreneurs. Most (56%) of the youth enterprises are microenterprises, employing between 1 and 4 people in their primary business, followed by small enterprises (25%) employing between 5 and 19 people. Of those surveyed, 12% are self-employed.

Entrepreneurs who own multiple businesses have been more resilient to the economic effects of Covid-19. Among entrepreneurs who own multiple businesses, 48% have diversified into new markets and 45% into higher value-added activities, compared to a lower 43% and 31%, respectively, of entrepreneurs with a single business.

Role of mobile phones: Access to and ownership of mobile phones appear to be positively associated with enterprise development, both in terms of growth of existing business and expansion into new businesses. Of youth entrepreneurs with multiple businesses, 71% own a mobile phone, compared to 46% of youth with only one business. A larger share of medium-sized enterprises (68%) reported ownership of a mobile phone, compared to 63% of small enterprises, 60% of microenterprises and 60% of self-employed youth. Overall, 62% of respondents own a mobile phone, 33% report access but not ownership and only 5% have no access to a mobile phone. A gendered digital divide is prominent; 72% of male entrepreneurs own a mobile phone, compared to only 45% of female entrepreneurs, while several young women report that their husbands do not allow them to own a phone.

Access to mobile phones helps young people to smooth business operations, mainly by easing communication with clients and buyers; expanding access to market information and thereby entrepreneurs' ability to bargain for better prices;

and enabling the coordination of purchase and delivery of produce, inputs and technology, while also saving on transport and logistics. The most common method of selling agricultural produce is through dealers/middlemen/agents. Mobile phone access plays a key role in allowing young people to negotiate prices with these buyers. Mobile money was also used as a way to save, though more so by male entrepreneurs, possibly because they are more likely to own a mobile phone.

Role of digital platforms: Problems with low uptake of ag-platforms (apps or services accessed through mobile phones for finding farming-related information) include lack of awareness (over 70% of non-users of platforms report not being aware of them), high access costs and lack of support in using the platforms – in addition to lagging digital infrastructure and low internet penetration in rural areas. Only 18 young people (less than 5% of the sample) were engaging with agricultural digital platforms (ag-platforms). Even on these platforms, users report several challenges pertaining to lack of trust, fear of being conned, low access to smartphones, poor network quality and data connection (which hinders access to real-time information), unreliable access to electricity to charge phones, the high cost of internet bundles, issues around online payment, and increasing rates of rejection on platforms due to higher standards being required.

Those that access these platforms do so mainly through a model based on short message service (SMS), with youth paying a platform registration fee as well as paying for the phone internet bundles to access them. During Covid-19, most platforms reported a spike in the number of users, who primarily searched for more information on Covid-19 support (cited by 13 respondents), followed by access to inputs. Top benefits/reasons for registering include access to new markets

and buyers (cited by 10 respondents), access to training and skills (8), improved production practices (8), improved productivity of businesses (8), access to credit (8) and increase in bargaining power (4). Overall, 15 of the 18 platform users report diversification of production; 12 report diversification in value-added activities; 5 have diversified into new market or buyers; and 3 have diversified into new products.

Platforms have also enabled a form of contract farming, allowing farmers to escape from exploitation when demand is low. Through the platform they can access markets and better prices. Non-platform users experienced diversification in production but predominantly in new markets and products, rather than value addition. Platforms provide important information on value addition in terms of how entrepreneurs can upgrade products and undertake post-harvesting activities, such as packaging and processing. Young platform users appear to be receiving direct information and training on value addition through their platforms, while non-platform users lack this information and training.

Of the platform users, 94% belong to some form of business group. The advantages of the platform being accessed by a group is that people who belong to that group can access the information even if they do not have internet or even a phone – yet challenges were reported around group membership retention and an inability to access information individually. The main sources of support for platform use include farm group leaders and cooperatives (29% of users), extension officers (24%) and the platform itself (also 24%). Accessing digital platforms through groups allowed young people to benefit from the information on the platforms without needing access to a phone or internet. Over 50% of those without access to platforms gained information

(on prices, pest control, market demand) mainly through the radio, which is directed towards – and caters more to – long-term business practices and growth, as compared to more real-time information available via mobile phones.

Training and skills development: *There is a positive association between access to training and business growth. Roughly 78% of small and medium-sized enterprises (SMEs) have access to business management training, compared to only 58% of microentrepreneurs. Young people found agronomy, business management and financial management training to have the most impact on their business growth and aspirations. Training also helped young people start new businesses and run multiple businesses.*

The training also changed young people's attitude towards farming, enabling them to see farming as a viable business which could be scaled. However, many young entrepreneurs reported having forgotten the training received or a lack of confidence in applying it, suggesting the need for a longer-term mentorship programme. Some also expressed a desire for training in how to use a smartphone to sell on Facebook or WhatsApp. Non-governmental organisations (NGOs) are the main source for several trainings, except information and communication technology (ICT) trainings, which are given by ag-platforms (reported by only 7 respondents). When asked how the trainings changed their aspirations, the majority referred to how training had helped them start a new business rather than how it had helped them grow an existing one.

Access to resources and investments: *The loans young people can receive from their Village Savings and Loans Associations (VSLAs) depend on how much they have saved, indicating that those who are struggling the most with their*

business are also benefiting the least from VSLAs, creating a vicious cycle or loop for those at the bottom of the business profit pyramid.

Access to land: *Renting land emerged as the most common way in which both young men and women were accessing land, but this is costly and the land on offer is generally small in size, and hence renting is often not financially viable, in addition to being seasonal. Landowners often forbid young people from using agricultural inputs such as fertilisers that could increase their yield for different reasons, including the belief that fertilisers cause soil infertility. Young men and women often struggle to farm beyond subsistence as the size of the land limits their yield, leading to lack of surplus capital for investing in business growth. Those who inherit land from their parents – mainly male entrepreneurs – are at an advantage as they can rent additional land with capital derived from the inherited land.*

Investment in labour is important for enterprise development, particularly for business expansion. Overall, 77% of youth with a small or medium-sized primary business (i.e. having between 5 and 100 employees) have a secondary business, compared to 62% of youth entrepreneurs with a microenterprise (with fewer than 5 employees) as their primary business, and only 46% of self-employed youth. Entrepreneurs with farming

businesses mostly employ seasonal and casual labourers who are typically either members of their group (VSLA), family members (including their spouses, children and parents), peers or so-called ‘digging groups’ (i.e. groups of young people involved in rotational digging activities for themselves or others) (UNDP, 2013). Several young people also reported engaging in reciprocal employment relations where they would help other young people in their farming business (e.g. by weeding or harvesting) in return for the same or similar assistance to their business, indicating the importance of ‘social capital’ and ‘local embeddedness’ for enterprise development.

Gender and business growth: *As young women have less access to land, capital and assets than young men, they are at a disadvantage when it comes to business growth, and social norms around marriage and childcare also affect young women’s business aspirations. Gender norms and access to resources shape young women’s and men’s business aspirations, performance and growth. Norms around appropriate work and how women should conduct business – over questions such as distance of travel, manual labour, as well as access to and use of mobile phones – limit young women’s access to networks and information, and therefore markets. Balancing their household chores and expenses limits the time and capital at young women’s disposal for their business investment.*

1 Introduction

Uganda has one of the youngest populations in the world, with 78% below the age of 30. Uganda's GDP growth in the fiscal years before 2020 was 6.8% while in 2020 it shrank to 3.1% due to the Covid pandemic (World Bank, 2020b). Yet even before Covid young people accounted for 60% of the unemployed population. The highest proportion of young Ugandan workers are employed in the agricultural sector (57.2%), followed by the services sector (32.1%) and then industry (10.9%) (ILO, 2017). More than nine out of 10 (91.9%) young workers in Uganda are employed in the informal economy – typically in low-productivity self-employment (ILO, 2019).

Most Ugandans are self-employed, with salaried workers accounting for only 21.2% of the total labour force. With over one million young people entering the labour force annually,

entrepreneurship has emerged as key for addressing the challenge of unemployment. Most of these enterprises are microenterprises that typically employ fewer than five people, and stay at that size without growth (Berner et al., 2012; Fiala, 2018). The agricultural sector in Uganda is characterised by 2.2 million smallholder farmers owning small pieces of land of between two and three hectares, with 93% of them relying on family land. Farmers also predominantly use low-tech tools like hoes (53%) to till their land, resulting in low productivity (Löwe and Phiona, 2017). Further constraints to productivity include dependence on rain and lack of irrigation systems, low input usage, weak agricultural institutions, limited access to land and finance, lack of ownership of livestock and labour constraints. Additionally, poorly functioning markets inhibit farmers' capacity to invest in inputs and technologies for enhancing productivity.

Box 1 Defining micro, small and medium-sized enterprises

There is no one standard definition for micro, small or medium enterprises (MSMEs). A commonly used metric is the number of employees. Yet, even among those using number of employees to define firm sizes, there are discrepancies due to different statistical approaches and economic situations, as well as the divergences in how countries report data on employment distribution (ILO, 2019).

Given that the research took place in Uganda, this report will be using a more contextualised definition, deployed by Lakuma et al. (2019) in their research on financial inclusion and Ugandan MSMEs and based on categorisations used in the World Bank Enterprise Survey for Uganda (World Bank, 2014). The Economic Policy Research Centre in Uganda applies these same categories for the generation of the Uganda Business Climate Index – a composite perception index based on the experiences of employees and business owners in the country. Therefore, the report applies these firm size definitions throughout when referring to the data.

In this research, definitions for enterprise size are as follows:

- Microenterprises have between 0 and 4 employees.
- Small enterprises have between 5 and 19 employees.
- Medium-sized enterprises have between 20 and 99 employees.

Inconsistencies are also reflected in the literature. For example, the International Finance Corporation differentiates firm size by number of employees, with microenterprises having 2–9 employees, small enterprises 10–49, and medium-sized enterprises 50–299. The ILO uses this same definition but without an upper bound for medium-sized enterprises (ILO, 2019). In contrast, the 2018 United Nations Conference on Trade and Development (UNCTAD) report defines microenterprises as those with fewer than 5 employees and small enterprises as those with 5–9 employees, with the rest being classified as medium-sized enterprises.

With few opportunities for formal and salaried employment, microenterprises are emerging as a key pathway to addressing unemployment; microenterprises make up 90% of private sector production and employ 2.5 million people in Uganda (Fiala, 2018). While many employment policies and programmes see these enterprises as avenues for creating employment opportunities and economic development, only 1–4% of the microenterprises in lower-income countries graduate to medium size (Berner et al., 2012). Many of these microenterprises operate in uncertain environments characterised by unreliable institutions, predatory or negligent government agents, overcrowded markets, multiple volatile sources of household income and exploitative buyers, suppliers and credit providers (ibid.).

In 2020, microenterprises in Uganda were hit hard by Covid-19, particularly in the agricultural sector (Lakuma et al., 2020). Due to lockdown rules and a ban on weekly markets, these microfirms were unable to access inputs. Demand for fresh agricultural products decreased significantly as people switched to dry rations, leading to falling

prices. At the same time, there were increases in transport costs due to reduced occupancy per vehicle (in line with government Covid-19 measures), reductions in household income, and decreases in informal cross-border trade (World Bank, 2020b). Loss in income forced every fifth household to borrow in order to manage the Covid-19 crisis, with the majority of households borrowing due to reduced sales or an inability to sell produce, or having to close their business (ibid.). In May 2020, the majority of micro and small businesses in Uganda expected to exit business within one to three months if the situation persisted and if they continued to face constraints on access to input and output markets and demand, or due to Covid-19 preventive measures such as provision of hand sanitisers or handwashing facilities (Lakuma et al., 2020). To cope with the loss in income, young people in developing countries are drawing on their savings (as opposed to borrowing) which they soon expect to run out the longer lockdown measures continue (ibid.). Under these heightened challenges to youth enterprises, it is more important than ever to understand the challenges to youth enterprise resilience and growth, and the

effectiveness of the approaches that have been implemented.

Given the context, this report examines youth enterprise development in the agricultural sector in Uganda, with the aim of informing the Mastercard Foundation's current and future programming for boosting job creation in the country. This research aims to determine which interventions have been most effective in helping youth entrepreneurs in the Ugandan agricultural sector. It uses primary data collected from a survey of 367 youth entrepreneurs in the Youth Empowerment Through Agriculture (YETA) programme, complemented with detailed semi-structured interviews. It determines the factors enabling enterprise development – both business growth, and expansion into new businesses – and sets out the type of support a youth entrepreneurship programme should be offering.

Section 2 of the report presents a review of literature on different drivers of youth entrepreneurship, with a focus on Uganda.

Section 3 discusses the data and methodology used in this study. Section 4 presents analysis using the data on the current landscape of business practices followed by young Ugandan entrepreneurs, and Section 5 presents six key headline findings on current youth business practices and challenges. Sections 6–9 delve deeper into the data, analysing the drivers of business growth for young people under four broad categories: **youth business aspirations; technology and digital platforms; training and skills development; and investment and resources**. Finally, Section 10 discusses the gender differentiated experiences of youth enterprise growth and Section 11 provides core recommendations to improve programmes and policy that direct support to youth enterprises and aim to enhance livelihoods.

2 Drivers of enterprise growth

This section outlines the current literature on drivers of enterprise growth in the Ugandan agricultural sector. In doing so, it seeks to develop a conceptual framework for understanding factors affecting entrepreneurship in the sector, which informed the design of the questionnaire for the survey. It begins by outlining the concept of entrepreneurship in low-income countries like Uganda, before discussing four drivers of growth as outlined in the literature.

While traditional occupational definitions conceptualise entrepreneurship as an individual's choice between waged employment and self-employment, in 'least developed countries'¹ (LDCs) self-employment is often the result of labour market conditions and the lack of alternatives (UNCTAD, 2018). These so-called 'survivalist' entrepreneurs typically operate in low-productivity and low value-added activities where they produce traditional goods and services with established rather than innovative technologies (ibid.). As a result, their growth potential is limited and they typically remain as microenterprises, with little evidence of graduation to small or medium-sized enterprises. Most rural enterprises combine agricultural production and non-farm activities to increase and diversify income and mitigate risks of seasonality. Microenterprises dominate much of the informal sector in LDCs (74% of enterprises), while small enterprises make up 20%. In rural areas microenterprises make up

95% of firms, typically smallholding and family farms. There are high entry and exit rates among these enterprises as survival is hampered by seasonality and low productivity.

2.1 Youth aspirations and enterprise growth

Individual characteristics, particularly aspirations, motivation and orientation towards the future, are associated with growth (Sutter et al., 2019). The goal or aspiration of subsistence is to provide household welfare rather than grow a business (ibid.). While growth-oriented enterprises show a capacity to accumulate capital to reinvest, the majority – so-called 'survival enterprises' or subsistence businesses – prioritise risk diversification by creating new enterprises rather than growing existing ones (ibid.). This horizontal growth model is even more common among women, as their household duties and child-rearing responsibilities mean they require a steady income source, and having multiple businesses allows them to account for different seasonal markets and cash flow requirements (Richardson et al., 2004).

Forming effective aspirations is an important enabler for young people's business growth. Effective aspirations exist when the gap between a young person's current living situation and their imagined future is big enough to incentivise them

¹ 'Least developed countries' (LDCs) is a category used across the UN system and in much development literature: www.un.org/development/desa/dpad/least-developed-country-category.html. In this report, the authors would like to acknowledge current debates which question the use of this terminology, seeking to challenge the power relationships and assumptions inherent in ideas about progress and development. Although in this instance we employ the term 'LDCs' to situate this report within the current literature, we will continue interrogating the appropriateness of the term and working with our partners to develop more appropriate language and terminology.

to invest in their future and forego immediate benefits, but not so big as to be unrealistic (Löwe et al., 2019). When young people form effective aspirations, they are more likely to make longer-term investments that will increase their business productivity. As they save towards these longer-term goals, they also tend to forego spending on consumption for instant gratification.

Internalised ideas of what is appropriate work and perceptions of what is accessible to them can create a psychological trap that makes it harder for young people to use the opportunities available to them (ibid.; Boateng and Löwe, 2018). This can present challenges for young people’s business growth. These aspirations develop through a combination of lived experiences (such as family, structural or community constraints) and social

messaging (see Figure 1). Structural constraints include the economic environment, which limits the types of opportunities young people can pursue and the perception of what opportunities are available to them, where local labour market conditions influence the range of realistic aspirations. This perception is also influenced by what others in the community say and do (social messaging) (Gardiner and Goedhuys, 2020), and is itself influenced by the economic environment. In rural Ghana, for instance, cocoa farmers are well respected in the community as cocoa farming provides a stable income for individuals and also plays a key role in generating foreign exchange, which contributes to young Ghanaian’s aspirations to work in the sector (ibid.). In urban areas, however, young people aspire to white-collar jobs and view farming as a failure.

Figure 1 Role of youth aspiration in business growth



Source: Boateng and Löwe (2018).

To grow a business, young people with limited resources must make financial sacrifices. Therefore, for young people to aspire towards business growth and forego immediate consumption to make necessary investments, they must perceive business growth to be a realistic, affordable aspiration and the sacrifices worthwhile. Furthermore, attainment and formation of aspirations are mutually reinforcing (Leavy and Smith, 2010). This suggests that, as young people achieve smaller milestones towards their larger aspirations as a result of their current investments, they are more likely to continue investing.

Gender also plays a key role in forming aspirations as societal messages about what is appropriate and achievable for young women limit the spectrum of aspirations that young women can form. Much has been written about young people aspiring to move away from agriculture in rural Uganda, and other rural areas in Africa, due to their negative perceptions of agriculture and their aspiration to escape farming life (Leavy and Smith, 2010). Young people's willingness to aspire to grow an agricultural business is therefore also likely to be influenced by their perception of agriculture. Messaging around agriculture as a

viable business with potential for success is also likely to be key. As digital technology brings other messages from outside young people's immediate social circle, they are likely to aspire towards less traditional businesses.

2.2 Role of ICT and digital platforms

In constrained business environments like those in Uganda, ICT – including digital platforms – can help businesses overcome important barriers and grow. ICT fosters the growth of microenterprises by improving efficiency, coverage, reach and flexibility (Tang and Konde, 2020). As shown in Table 1, digital technology can help young people in agriculture by enhancing their access to finance, access to inputs and equipment, access to markets and capacity development (World Bank, 2021).

ICTs can promote business growth by increasing efficiency and productivity through:

- **reduced needs for physical journeys to clients and customers** (Foster et al., 2018). ICT enables information flows for enterprises and thus better management and monitoring of assets and workers (ibid.). Agri-wallets, for instance allow farmers to borrow and spend

Table 1 Digital solutions to youth agribusiness constraints

Challenge	Traditional solutions	Examples of digital solutions
Access to finance	Family, friends, money lenders	Digital agri-wallets; smallholder credit and alternate credit scoring, crowd funding platforms
Access to inputs and equipment	Manual or animal aided	Digitally enabled equipment sharing
Access to markets	Farmer cooperatives, intermediaries	Market information systems, digital platforms for finding buyers
Capacity development	Producer organisations, extension agents	Advisory services through videos and platforms, real-time alerts for weather or pests, digital farmer extension services

Source: Adapted from World Bank (2021).

money digitally, saving on transport costs while improving security and efficiency (World Bank, 2021). Alternate credit scoring, where agricultural entrepreneurs can record financial transactions and performance data, can allow young people to build credit profiles without need for collateral (ibid.). Crowdfunding can also provide alternative sources of finance through connecting young business owners with potential investors.

- **greater access to resources and knowledge**, including awareness of government support, tools and customer knowledge, which improves market participation. For example, platforms like Hello Tractor enable young people to hire tractors and other agricultural services such as ploughing, planting or harvesting (ibid.).
- **building stronger networks between firms**, enabling creative and innovative activities between them.
- **improving firms' interaction with the market by enhancing access, efficiency and coordination**. Mobile phone use provides both access to market and information, enabling enterprises to select new markets, find customer bases and integrate business on online platforms. Real-time information on market prices allows business owners to make informed decisions about when to sell, limiting their risk of selling produce under value (ibid.). Financial technologies like mobile money enhance these transactions by removing physical barriers such as distance.
- **enabling microenterprises to connect with customers and coordinate value-chain activities**, as well as improve operational efficiency in businesses and promote development of cost-effective business models (Foster et al., 2018; Ilavarasan and Otieno, 2018).
- **behavioural changes and aspirational changes among microentrepreneurs**. ICT use can lead to a shift away from reactive, short-sighted and low-

level aspirations about growing their business towards more information-based decision-making, planned coordination, skills learning with strategic thinking, and business management and expansion (Tang and Konde, 2020).

Digital platforms, in particular, remove previous gatekeepers and enable new types of businesses and innovations to form (World Bank, 2016; Foster et al., 2018). The use of such platforms can improve access to resources, such as the leasing of equipment which young people cannot afford to buy, while also providing alternatives to credit scoring and facilitating access to better loan products for young people. The types of digital platforms are set out in Table 2. The level of disruption through digital technologies and platforms, for traditional agricultural and other businesses, depends to a large extent on mobile access and level of internet penetration (World Bank, 2021).

Table 2 Types of digital platform

Types of digital platforms	
Broadcast media (TV and radio)	<ul style="list-style-type: none"> ● Distribution of information, storytelling ● Access: low cost, requires broadcast signal
Feature phones	<ul style="list-style-type: none"> ● Two-way communication, access to information, digital finance (i.e. mobile money) ● Access: low cost, requires 2G cellular signal, mediated use through agents and brand ambassadors
Internet-enabled devices	<ul style="list-style-type: none"> ● Business tool, social media, sales system, interactive education ● Access: higher cost, requires 3G cellular service, available in urban and peri-urban areas with higher literacy, mediated use through brand ambassadors and agents and extension officers

Source: authors, adapted from Mercy Corps and Mastercard Foundation (2019).

Although there are several pathways through which ICT and digital platforms can enable enterprise growth, there is no consensus on the true impact of ICT use on micro and small enterprises (MSEs) in Africa; methods for evaluating impact are often not rigorous, relying on self-reporting and often ill-defined concepts. This is in part due to the lack of clarity across ICT studies on what type of specific technologies are being referred to (i.e. mobile phones, computers, internet or SMS), as well as which types of businesses. The systematic review from Ilavarasan (2017) suggests a positive impact on business growth as measured by market share, profits, profitability and increase in customer base in MSEs in low- and middle-income countries. Mwangi and Acosta (2013) find that in Kenya and Tanzania microentrepreneurs with fewer than five employees who used ICT saw profitability and customer base increase as a result of mobile phone usage. Similarly, Frederick (2014) finds that among enterprises in Zambia with fewer than five employees the use of mobile phones and mobile money, in particular, was associated with increases in profits, controlling for income, level of education and access to financial services. Mobile money users report saving more money for business purposes, as this was a safe and easy way to save.

Yet, especially in Africa, ICT use among microenterprises remains low and is limited to basic day-to-day telephony and communication purposes, including real-time information search, contacting customers or suppliers and basic marketing activities (Donner and Escobari, 2010; Foster et al., 2018; Tang and Konde, 2020). There are cases of more integrated and advanced uses of ICT among microenterprises, including digitalising transactions and operation systems, managing customer and partner relations, coordinating value-chain activities and supporting administration, but these cases remain rare (Donner and Escobari, 2010;

Tang and Konde, 2020). In the agricultural sector in Africa much of the ICT technology is focused on text- and voice-based services using mobile phones to communicate agricultural information to rural farmers. Radios are also a common means for communicating this information. Computers, on the other hand, are rare (Donner and Escobari, 2010; Ayim et al., forthcoming). The adoption of more advanced ICT is constrained by poor technological infrastructure, inappropriate ICT policies and low capacity to use these technologies among users, especially farmers (Ayim et al., 2020). This is because most farmers in Africa live in rural areas characterised by poor road networks, no access to electricity and poor network connectivity (ibid.). Low literacy rates affect farmers' ability to use ICT tools, while the costs of servicing mobile phones further limit farmers' access to them. Women face additional challenges due to their comparatively lower education and lower income.

While there is agreement in the literature that mobile phone usage accelerates the flow of information, there are disagreements as to whether this translates into new customers and suppliers. Mobile phones are used to keep in contact with existing customers rather than to find new ones (Esselaar et al., 2007; Tang and Kode, 2020). There is little evidence that mobile phones help users in low- and middle-income countries (LMICs) start new businesses. Nor is there evidence that mobile phones were used to bypass middlemen. In practice, mobile phones transformed the relationship with middlemen, wholesalers and traders, helping them to perform their roles more effectively (Donner and Escobari, 2010).

Although over half the Ugandan population has access to mobile services, only a sixth has access to the internet. Coverage and reach of broadband in Uganda is also poor, with 65% of the population covered by 3G and only 17% by LTE/4G networks (Gillwald et al., 2019). Currently,

the low penetration of ICT and the limited ICT infrastructure means that there is little incentive for businesses to use ICT (Deen-Swarray et al., 2013; Obiri-Yeboah et al., 2013; Tang and Kode, 2020). Challenges to businesses include also limited availability of network, high costs, poor service quality and access to electricity, which all affect value for money for ICT, especially for resource-constrained microenterprises (Donner and Maunder, 2014; Kabanda and Brown, 2017; Tang and Kode, 2020). These challenges are compounded by the government's tax on social media, which increases the costs for already resource-constrained young people (see Box 2).

2.3 Business and skills development

Another pathway to foster business growth is through training. Typically, training is intended to provide young entrepreneurs with the skills to start or improve business performance. A systematic review focusing on skills training for

increasing youth engagement in agricultural employment finds that the types of trainings provided range from agriculture-related courses, on-the-job training, technical or vocational training and agricultural training to general skills training on entrepreneurship, financial literacy, and also life skills for engagement in agriculture (Maïga et al., 2020). The study finds that skills training in agriculture encourages youth engagement and self-employment in agriculture and also leads to increased profits/income, with some evidence of increased productivity (including increased yields).

While interventions are sometimes tailored to a particular business, they are often generic trainings, typically lasting for less than a year. Most studies measuring the impact of training for MSMEs focus on training areas around business management, accounting, financial literacy or vocational skills development, and look at the impact of these on entrepreneurial skills and

Box 2 The social media tax in Uganda and influence on usage

The introduction of a social media tax led to a significant decrease in use of internet in Uganda (Pollicy, 2019). The 'over the top' (OTT) excise duty is a 1% tariff on all mobile money transactions and a daily tax of 200 Ugandan shillings (about \$0.05) that was introduced by the Government of Uganda in 2018. It is mandatory for accessing any of more than 60 social media platforms, including Facebook and WhatsApp.

According to the government, the tax was introduced to generate revenue that would help turn Uganda into a middle-income country by 2020 (Akumu, 2018). However, the OTT led to a drop in internet users from 18.5 million to 13.5 million in the first six months following its introduction (Rukundo, 2020). The Pollicy (2019) report also found that the OTT led to significant decreases in income among those who were using social media for business, as well as a 50% decrease in mobile money transactions just one month after it was introduced. Of their 976 research respondents, 87% indicated that the mobile money tax had resulted in reduced income and businesses growth (ibid), and many switched to banks or in-person transactions. However, a large number also revealed that they were using virtual private network (VPN) connections to avoid paying this tax.

improvements in business performance. These studies find significant improvements in business skills and behavioural skills, plus higher motivation and optimism (i.e. aspirations). However, this does not imply that business skills are sufficiently developed to run or expand businesses (Cho et al., 2015); most studies on business skills training find no impact on profit or sales (ibid.; Berge et al., 2012; Blattman et al., 2014). Some studies looking at the impact of training on investment also find no significant impact. Only when investment is a core component of the training is the training likely to show an impact on business investment (Bruhn and Zia, 2011).

Overall, training seems to have less impact on business expansion but seems to be more helpful for business start-up, especially when combined with financial assistance. Vocational and skills training works better than financial training in improving business performance and elicits even better results when combined with financial support and counselling (Cho and Honorati, 2013). There is some consensus that the combination of training with financial assistance provides better results than either of those in isolation (Fiala, 2014; Grimm and Paffhausen, 2015). Gender is a key determinant of the success of these programmes – typically, the effect of training is greater for male participants than females. One study found that vocational skills training, combined with microloans for small-scale income-generating activities and together with life-skills training (such as family planning), can help improve labour force participation for women, which is often stifled by childbearing and early marriage (Bandiera et al., 2015; and Bandiera et al., 2018).

As technology is increasingly embedded in business operations, new skills are becoming important for employability. Banga and te Velde (2018) highlight three categories of skills that are emerging as critical

in the digital age: basic to intermediate job-neutral digital skills, such as accessing the internet, digital advertising and data analysis; job-specific digital skills, such as computer programming and web-app development; and soft skills such as communication, management and critical thinking. Lack of basic digital skills or digital literacy, especially among the elderly and rural dwellers, is one of the biggest barriers to mobile internet adoption in Uganda (Krishnan et al., 2020). Young people, in particular, face the double challenge of poor infrastructure and lack of affordability to access digital technology (Pinet et al., 2021). While expanding coverage of a mobile broadband network can increase access, there is a clear usage gap (GSMA, 2020) largely explained by affordability, with many citing the high costs of internet and data bundles, which especially affect people in lower-income households (Pinet et al., 2021).

Around 43% of respondents in the latest Uganda Bureau of Statistics household survey cited lack of confidence, knowledge or skills as a major reason for not using the internet (GSMA, 2019). A survey of over 800 farmers in Uganda on ag-platform use revealed the critical need for increasing skills development and training for the youth; only 35.44% of young platform users were found to have high digital skills, i.e. skills for using mobile phones to access digital apps, browse the web or for mobile money (Krishnan et al., 2020). Targeted initiatives are therefore needed to increase access for young farmers to digital and soft skills training. Providing digital skills requires both supply-side interventions, such as formal education and informal technical and vocational training, along with demand-side input such as training from employers and coordination between the supply of and demand for these skills (ibid.; Banga and te Velde, 2018). Young farmers are more likely to benefit from mobile phones, for instance, when they are better educated and have more assets

(Krishnan et al., 2020). Young women also require more support as they are less likely to benefit from digital technology and mobile phones.

2.4 Access to financial and non-financial resources

Young people's business growth is intricately linked to productivity and income limitations. Young people in Uganda face significant challenges in accumulating the resources they need, such as farming inputs and tools/technology, to increase their productivity and grow their businesses (Löwe and Phiona, 2017). Resource constraints that young people face include **access to financial resources** that can enable young people to move beyond subsistence farming, and **access to non-financial resources** such as markets, input and technology, in addition to social capital and networks.

In terms of financial constraints, young entrepreneurs in Uganda face the double challenge of having microenterprises and being young. Smaller firms are more likely to experience constraints to access finance than larger firms. As firms grow, the less likely they are to perceive access to finance as their primary obstacle (Haider, 2018). However, the costs of credit remain very high even for larger firms in Uganda, with interest rates often over 30% (Mugume and Rubatsimbira, 2019). The probability of small businesses accessing a bank loan is less than half that of medium-sized businesses in low-income countries (Haider, 2018). There are different reasons for this in individual countries, but some of the most significant overarching factors include the following:

- Capital constraints in Africa decrease as firm size increases (Fowowe, 2017). As a result, small firms are more likely to finance their growth through informal sources (Haider, 2018).
- Small firms face unfavourable collateral requirements and interest rates. This challenge is even more acute for small firms in the agricultural sector, given that credit repayment deadlines rarely coincide with agricultural seasons.
- Proving creditworthiness is more difficult for smaller firms (ibid.).
- Small firms are less likely to keep and show information about their business (past performance and current operations) and so are perceived as riskier by lenders. It is also more costly for small firms to meet information requirements from lenders than for bigger firms that keep this information as part of their routine business operations (Onubedo and Yusuf, 2018; Ndiaye et al., 2018).

For young people in Uganda, the capital constraints and limited access to finance for small businesses and microenterprises are compounded by the fact they are young. As youth, they face greater barriers to accessing financial services than older adults (Demirgüç-Kunt et al., 2015), with common barriers including regulatory requirements (such as minimum age), lack of identification documents (ID), the costs associated with opening and maintaining an account and the lack of financial literacy (see Table 3).

Young people's business growth is further constrained by the lack of a range of financial and non-financial resources. Use of improved inputs like seeds, fertiliser, agricultural chemicals and veterinary drugs is significantly lower in youth-headed households, as they tend to lack the knowledge and financial resources to afford these high-cost inputs (Ahaibwe et al., 2013). Additionally, challenges faced by young entrepreneurs are often similar to those faced by small businesses more generally.

Table 3 Barriers to youth access to financial services

Demand-side barriers	Supply-side barriers
High regulatory and legal requirements (proof of residency, collateral, ID, age, etc.)	Legislative and regulatory barriers: age, ID (also known as 'know your client' requirements)
High costs of opening and maintaining an account, including minimum balance requirements	Costs: youth save smaller amounts and have less frequent transactions, but costs are the same; costs of attracting youth through marketing, financial education, etc.
Products are not appropriate for youth needs, i.e. short-term goals, seasonal income fluctuations (agriculture)	Low levels of interest among young people in financial system
Perception that banks are for older adults and people with money	Lack of disposable income and collateral
Lack of adequate protection measures	Perception of youth as high risk, less experienced and less able to manage money
Limited knowledge or experience of financial services	Financial literacy
Physical distance to a branch and associated costs	High cost of mobilisation because often have to include parents, schools and community leaders, and financial literacy training
Migration (rural youth migrating to urban areas) as youth are more mobile than adults	

Source: authors, adapted from Hopkins and Perdomo (2011), Demirgüç-Kunt and Klapper (2012), Kilara and Latortue (2012) and CYFI (2016).

They are both constrained by low or lack of access to markets, human capital, communication infrastructure and technologies and limited by out-dated equipment and inadequate business services, while also being exposed to poor regulatory frameworks, political instability and corruption (Donga et al., 2016; Anderson, 2017; Haider, 2018). While political instability and corruption affect all businesses regardless of size, small businesses are less likely to have the necessary social capital and connections to mitigate the impact on their business (Rooks et al., 2009; Löwe et al., 2019).

The business growth challenges for young people in rural Uganda extend beyond access to financial

resources. Being young means having less land for farming, less time for running a business and less access to means for improving production, such as inputs, technology and social capital. For example, whereas older farmers can use their houses and granaries to store harvests to sell later on when prices improve, young people tend to sell their products early at low prices due to a lack of good storage facilities. The provision of logistical and storage facilities has been shown to improve the incomes of farmers in other parts of Africa (Donaldson et al., 2018).

While individual factors are important for determining growth, entrepreneurs often operate within an economic and social context

that severely limits their potential for growth. A report on entrepreneurship in low-income countries by UNCTAD (2018) finds that the lack of institutional development, limited financial development, insufficient infrastructure and the disempowerment of women severely limit enterprise development. Social capital, trust and

networking are crucial determinants of success and growth for rural enterprises. Networks like farmers' associations, cooperatives and marketing bodies are often at the forefront of promoting rural development policies, including agribusiness, access to rural credit and extension services generally (ibid.).

Box 3 Summary of findings from UNCTAD's *The Least Developed Countries Report 2018*

UNCTAD's 2018 report, *Entrepreneurship for structural transformation: Beyond business as usual*, finds that the wider business climate in LDCs can create additional production costs, inhibit adoption of technologies, reduce market size and weaken market competitiveness. Labour market constraints and the absence of social safety nets see many people unable to secure formal employment and pushed into low-productivity enterprises with low survival rates and little growth prospects. This is compounded by lack of access to markets, including export markets. Access to reliable and affordable energy and water is another constraint that inhibits the productivity of enterprises, including the agricultural sector and the development of agribusiness value chains. Power outages cause loss of production and additional costs.

At the macro level, while global value chains could help stimulate entrepreneurship development, enterprises in Uganda (as in other LDCs) struggle to compete in global value chains. LDCs like Uganda are hindered from participating in and benefiting from global value chains due to the complexity and governance of value chain power relations that favour lead firms, along with the intense level of global competition in market segments accessible to them. The participation of agricultural enterprises in global value chains is even more limited than for other sectors due to the costs of compliance – linked to non-tariff measures, which disproportionately affect agriculture. Growth in contract farming is helping to integrate some smallholder farmers into global trading and is alleviating some of the compliance costs to entrepreneurs, but farmers often have little bargaining power. These challenges suggest a need for multifaceted interventions that target both the individual entrepreneur and these macro-level barriers. For this, targeted interventions to relieve supply constraints faced by youth entrepreneurs have to be complemented by macro-level approaches by governments to create an agriculture sector with productive investment opportunities and higher productivity that attracts investment, such as foreign direct investment (FDI), that can link youth entrepreneurs to larger-scale investors and turn them into suppliers in value chains.

3 Policy context: interventions for youth enterprise growth in Uganda

The Ugandan government's principal planning document and development strategy, *Uganda Vision 2040*, considers youth as a key contributor to implementing the nation's economic transformation on the path from a 'Peasant to a Modern Prosperous country in 30 years.' The government's flagship Youth Livelihood Programme (YLP) was launched in 2014 to address high youth unemployment and poverty rates, covering all 112 districts in Uganda. The YLP is the government's strategy to ensure youth-inclusive growth and follows on from the 2002 National Youth Policy, which also emphasised the need for expanding youth employment to increase young people's participation in Uganda's economic development. The National Resistance Movement Manifesto (2016–2021) reiterates its commitment to the YLP and its goal of creating employment and providing start-up credit to young entrepreneurs. In addition, the current National Development Plan (NDP II 2015/16–2019/20) sets targets to reduce the number of youth who are not in employment, education or training by 20%.

3.1 Promoting youth entrepreneurship in Uganda

The Government of Uganda has expressed its commitment to promoting young people's employment in agriculture in several of its strategies and policies. The Agriculture Sector Strategic Plan (ASSP 2016–2020) had four objectives: (1) increasing agricultural production and productivity; (2) increasing access to critical farm inputs; (3) improving markets and value addition; and (4) strengthening the capacity of the Ministry of Agriculture, Animal Industries and

Fisheries (MAAIF) to provide improved service delivery (MAAIF, 2016). National Development Plan III (NDP III) 2020/21–2024/25 has among its prime objectives increasing production and productivity in agriculture overall while making specific provision to encourage young people's participation in agriculture, including developing youth skills, facilitating their access to and use of modern extension services and empowering youth to form cooperatives (Republic of Uganda, 2020). While NDP III makes commitments to prioritise productive sectors like agriculture, the 2020/21 national budget does not reflect this, with most of the budget allocations going to Works and Transport, followed by Security and Education, and only 3.8% of the budget allocated to the agriculture sector – far less than the 10% that African nations committed to in the Maputo Declaration on Agriculture and Food Security in Africa (African Union, 2003) and Malabo Declaration on Accelerated Agriculture Growth and Transformation for Shared Prosperity and Improved Livelihoods (African Union, 2014).

The National Strategy for Youth Employment in Agriculture (MAAIF, 2017) is intended to promote youth participation in the sector. It aims to address the barriers that young people face in the sector, such as access to credit or land or insurance, lack of skills for agricultural activities and barriers in the legal framework. Under the strategy, the government will establish a youth-in-agriculture fund to facilitate youth access to affordable finance, set up training facilities, and access public and private land and critical equipment. Uganda's new National Financial Inclusion Strategy 2017–2022 (Republic of Uganda,

2017) states that one of its aims is to introduce a legal/regulatory exemption amendment that allows youth aged 15–17 to open savings accounts in their own right, but its implementation remains a challenge (FAO, 2019; Benni et al., 2020). Accompanying these policy frameworks are a number of programmes that seek to address challenges young people face in the agriculture sector. For instance, the Consortium for enhancing University Responsiveness to Agribusiness Development Limited (CURAD) is an agribusiness incubator supporting over 150 mostly youth-led SMEs providing business development services, including food product development, climate-smart agriculture innovation support, mentorship and networking opportunities. A government-subsidised Electronic Voucher Management System aims to improve farmers, access to agro-inputs. It links farmers to pre-qualified and certified agro-input dealers/providers at a cost that is subsidised

by the government. Similarly, the Youth-led Call Centre Initiative was established by MAAIF to facilitate access to standardised information on crop management, access to agricultural credit, weather forecasts, markets, agricultural inputs, crop disease control and livestock management (MAAIF, 2019).

A recent review of all programmes supporting rural youth employment in Uganda found that most of the programmes focus on employment creation and enterprise development (FAO, 2017). Most have focused on innovative ways of funding youth enterprises, such as through revolving funds, low-interest or interest-free loans, cost-sharing and guarantee schemes (ibid.). In Uganda, group-based interventions have often been combined with the youth programmes as they provide the infrastructure with which to reach young people (see Box 4).

Box 4 Group-based interventions

Group-based models have also been used to increase young people's access to financial services and markets. These models typically take the form of VSLAs, cooperatives and Savings and Credit Cooperatives (SACCOs). Savings groups provide a way to reach areas that are often hard to access by formal banking services and can provide a springboard towards accessing formal financial institutions (Allan et al., 2016). They offer quick and non-bureaucratic access to those who cannot meet the stringent requirements of formal financial service providers. In addition, youth may receive advice and guidance from peers on saving and investment as well as access to training opportunities provided by NGOs (CYFI, 2016).

Research shows that savings groups increase savings, income, use of credit, asset ownership and business expansion. Yet, savings groups (and to some extent financial cooperatives) are not appropriate for addressing long-term business capital needs and investment. Lump sums from savings or loans are often insufficient to start or sustain a business, tending to provide at best enough capital to purchase small inputs such as fertilisers (Flink et al., 2018). As the demand for bigger and longer-term loans increases, access to formal financial institutions at low interest rates becomes essential (Agarwal et al., 2018).

While the VSLAs and SACCOs are largely intended to increase access to financial services, cooperatives have a market access outlook as well (CGAP, 2009; WOCCU, 2002). Membership in cooperatives is associated with improved productivity and increased production yields as well as increased adoption of inputs and technologies (Bolton, 2019). However, studies find mixed results on the impact of cooperatives on income and expenditure, with more educated, older, landowning members benefiting more than others (Verhofstadt and Maertens, 2014; Shumeta and D’Haese, 2018). Accessing cooperatives is more challenging for young people, as they are often perceived by older adults to be irresponsible and not economically active (Flink et al., 2018). Under YETA, VSLAs were found to increase young people’s access to finance by allowing them to access capital for renting land and buying inputs and equipment. It also facilitated young people’s access to formal financial services through the banks. Finally, young people were more easily able to access government loans as government confidence in the VSLA members’ ability to manage loans increased. Their membership of cooperatives and associations also allowed YETA youth to increase their crop yields and receive better market prices both when selling their produce and accessing inputs like seeds (Löwe et al., 2019).

Approaches to increasing youth access to financial services have aimed to address both supply-side and demand-side challenges, along with creating an enabling environment. They have addressed regulatory frameworks, increasing outreach, improving product design, establishing group models such as VSLAs, as well as providing financial education and literacy.

3.2 Interventions on financial inclusion and youth enterprise development

A range of programmes focus on increasing youths’ access to finance. The Agriculture Credit Facility, established by the Government of Uganda with banks including Uganda Development Bank and micro and credit financial institutions, facilitates the provision of medium- and long-term loans to projects in agriculture and agro-processing. The government’s 2012 Youth Venture Capital Fund and the 2013 Youth Livelihood Programme also promoted youth access to agricultural finance, while the ASSP makes commitments to increasing young people’s access to agricultural financial services. Efforts to improve access to finance for

young agricultural entrepreneurs also come from the Central Bank of Uganda through initiatives like the Financial Consumer Protection Guidelines, the National Financial Inclusion Strategy, the National Strategy for Financial Literacy and the Mobile Money Guidelines. The Yield Uganda Investment Fund is a public–private partnership to support small and growing agribusinesses by offering tailored financial solutions using equity or semi-equity and debt to SMEs with potential for significant social impact.

Do interventions to increase access to financial resources actually lead to business growth? Much of the evidence comes from the microfinance and cash transfer literature. Studies find no impact of microfinance on enterprise growth and earnings, but they do find impact on farm investment (Blattman et al., 2013; Angelucci et al., 2015). Studies of conditional cash transfers typically do not look at enterprise growth, but some findings show increases in non-farm earnings as well as shifts from farm labour to livestock ownership (Blattman et al., 2013; Bandiera et al., 2013). As these funds are usually very small, it could be too difficult to invest them in tools or assets. None of the interventions

seemed to affect women's businesses, which is (in part) explained by family pressures for women to spend income on school fees, healthcare and other family expenses (Fiala, 2018). The literature suggests that the way cash is distributed can play an important role in determining the impact on enterprise growth. A study comparing cash and in-kind grants to female-owned businesses in Ghana found that in-kind grants lead to significant increases in business profits for female microenterprises, but only for those that were already profitable (Fafchamps et al., 2014).

3.3 Designing multifaceted design programmes

Young people in Uganda clearly face a multitude of challenges to their business growth, often exacerbated by their age, meaning they suffer from exclusion due to lack of access to social capital. While entrepreneurship training and financial services access by themselves do not result in enterprise growth, the combination of these interventions along with mentoring

and business support may be more beneficial. Young people who receive business assistance, including mentoring, networks and advisory services, are more likely to grow their business over time (Schoof, 2006; Ahaibwe and Kasirye, 2015). While recipients of loans experienced immediate increases in profits, training sustained these effects over time. Additionally, the type of financial support influenced business success, with loans or conditional cash transfers yielding better results than grants. Finally, programmes tend to have a bigger impact on male business owners than female owners, suggesting the need for more targeted support for young women.

Designing and implementing multifaceted programmes is therefore key to delivering impact on business growth for young people (see Figure 2). When implemented, however, programmes originally conceived as multifaceted sometimes end up focusing only on the financial component. The YLP is one of the biggest multifaceted programmes (see Box 5), yet there is little evidence of its impact on business growth for participants.

Box 5 The Youth Livelihood Programme (YLP)

Created in 2014, the YLP aims to promote young people's self-employment and income by providing them with vocational skills, a self-employment kit and financial support for establishing income-generating activities along with entrepreneurship and skills training. Young people have to undergo orientation training in financial management and accountability, provided mainly by Enterprise Uganda, before funds are disbursed to them (FAO, 2017).

A recent evaluation of the YLP (Bukonya et al., 2019) found little evidence to suggest that this intervention has led to business growth. There was no statistically significant difference in income growth, employment or the value of tools that young people who received the intervention were using. With regard to business formalisation, the evaluation found no statistically significant difference in the number of youth businesses that were keeping records of expenses and revenue, the number of youth who formally registered their businesses with regulatory authorities, the number of youth paying taxes or the number registering their business with regulatory authorities.

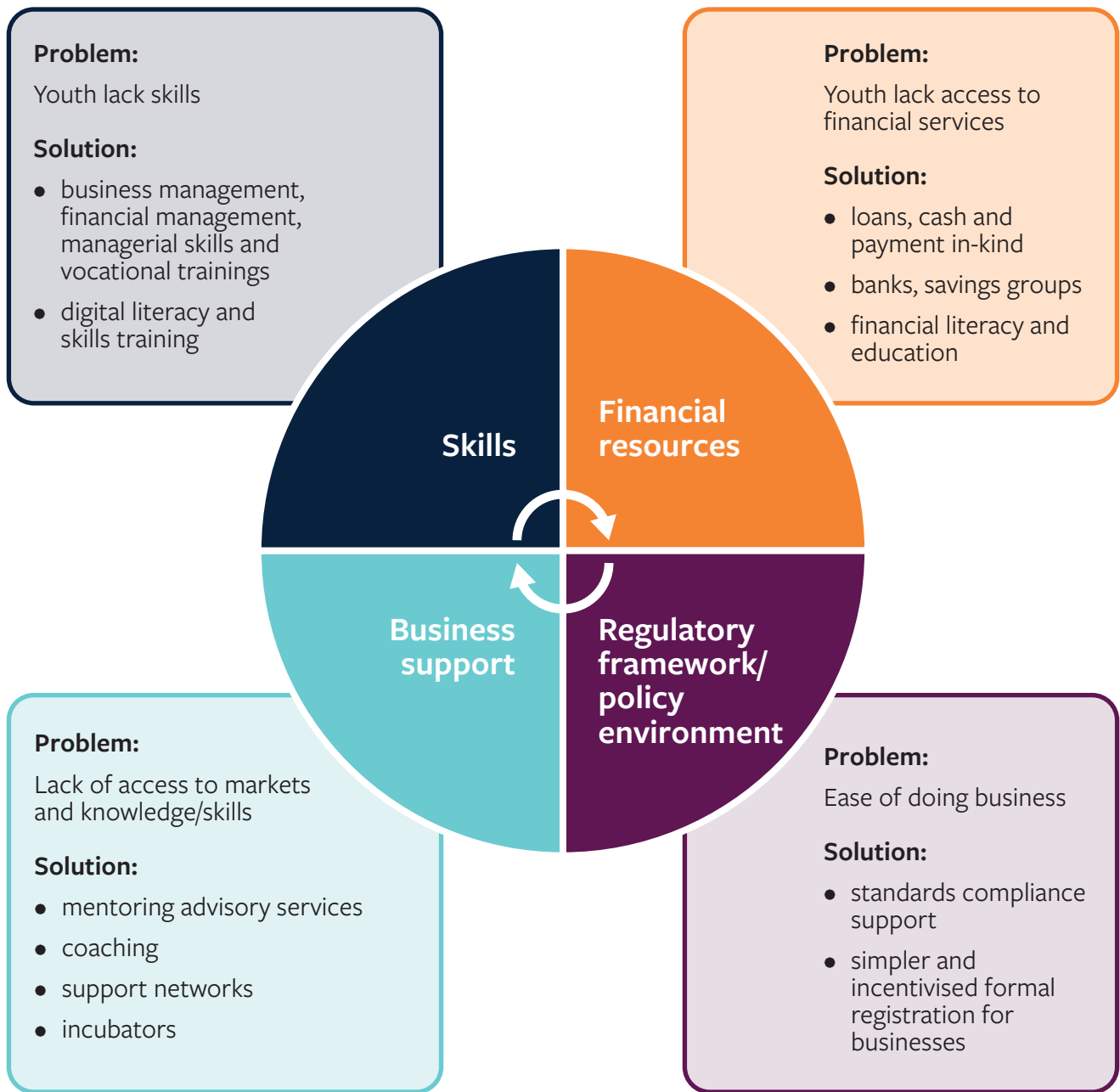
While conceived as a multifaceted programme, much of the implementation of the YLP focused on disbursing and recovering loans, while business-support activities, such as building the capacity of youth and guiding and nurturing their investments, were given much less emphasis (Bukonya et al., 2019). Young people expressed the need for training in marketing, adding value, price determination, financial management, book-keeping and post-harvest handling (ibid.). These findings support Blattman et al. (2018), who find that providing funds alone is not enough to help enterprise growth. Young people were diverting the funds they received to consumption and basic necessities like health and education. Young people who were engaged in agribusiness also suffered losses due to prolonged dry weather, pests and diseases, as well as price fluctuations (ibid.). There were reports of mismanagement of funds by the group leaders and diversion of funds to other, non-business-related expenses, such as health and education expenses. Another study on the Youth Venture Capital Intervention also found no significant impact on enterprise growth for rural youth, as most beneficiaries were urban youth who were older (aged 26–35) and working in the service sector with a mature business (Ahaibwe and Kasirye, 2015).

This highlights the need for more comprehensive programming that not only looks to provide young people with funds for their businesses and training, but also facilitates their access to markets with the provision of market intelligence, access to technology, standards compliance support, plus longer-term guidance and nurturing to make

productive investments. Value-chain and more comprehensive approaches, like one-stop shops, seek to address longer-term business success by enabling youth to access the wider support they need. Examples of the value-chain approach to promoting enterprise growth include the Afribanana intervention (which focuses on the banana value chain) and CURAD (an incubator which focuses on the coffee value chain) (FAO, 2017). The one-stop shop or hub concept delivers a comprehensive range of business support services to youth enterprises in one centre or location, along with closer supervision and guidance for their development. Providers include Enterprise Uganda, the Uganda Industrial Research Institute (UIRI), Afribanana, Strengthening Youth Development Through Enterprise (STRYDE), CURAD and the East Africa Youth Inclusion Program (EAYIP). Yet, while they show promising results, one-stop shops are costly to establish and manage.

On the demand side, there is a need for ventures that are high impact and profitable so that the businesses survive and grow. For this, targeted interventions towards relieving supply constraints for youth entrepreneurs need to be complemented with macro-level interventions by the government to create productive investment opportunities in the agriculture sector, raise its productivity, attract investment – including FDI – and link youth entrepreneurs to larger-scale investors and turn them into suppliers in value chains. The African Continental Free Trade Area (AfCFTA) can play an important role here, creating opportunities for youth entrepreneurs to connect to regional value chains and regional markets.

Figure 2 Designing multifaceted programmes for youth enterprise development



Source: authors, based on literature review findings.

4 Methodology and data

Using a mixed-methods approach, this research aims to determine which interventions have been most effective in enabling youth enterprise development in the Ugandan agricultural sector. The study determines the factors that can enable entrepreneurs to build resilience and grow their businesses, specifically identifying the type of support a youth entrepreneurship programme should be offering. We also attempt to unpack the role of technology as a new driver of business growth.

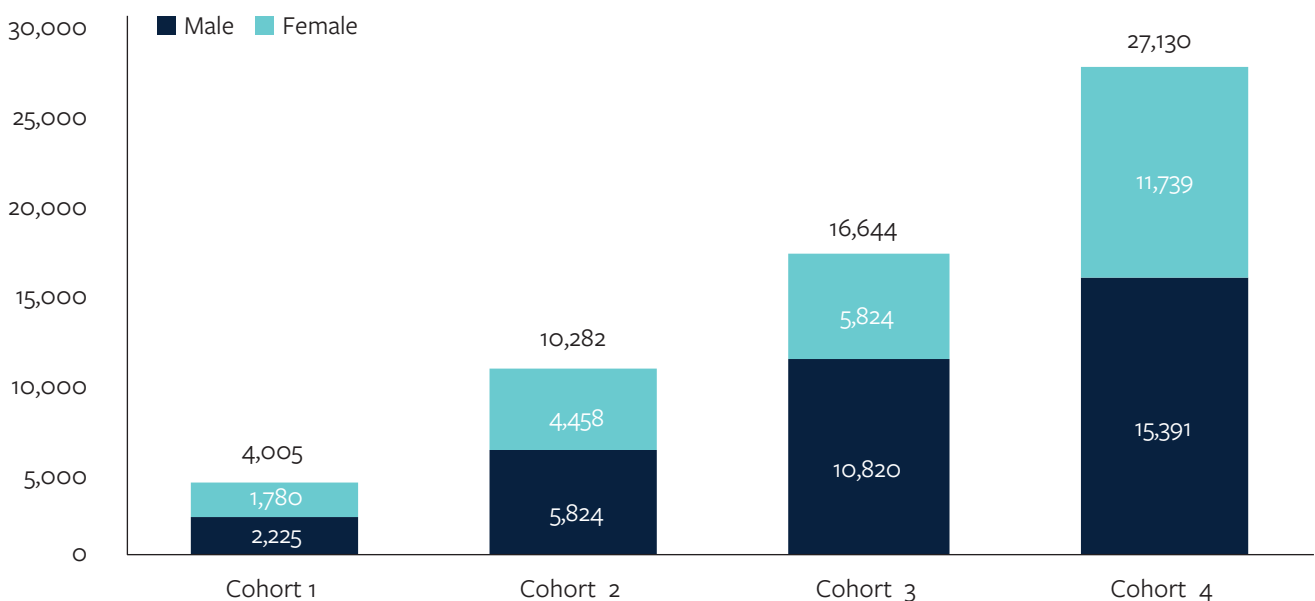
4.1 About Youth Empowerment Through Agriculture (YETA)

The target group for this study was participants in the YETA programme (see Box 6), part of the Youth Forward Initiative in partnership with the Mastercard Foundation, ODI, Global Communities, Solidaridad, NCBA CLUSA and GOAL.

This programme was implemented in the Northern and Midwestern areas of Uganda in the districts of Dokolo, Kole, Masindi and Kiryandongo, in a consortium led by NCBA CLUSA. To empower young people through agriculture, YETA participants mobilised and organised into groups to receive a series of trainings. The training package included governance, financial literacy and agro-entrepreneurial skills, as well as foundational skills. During their engagement in agriculture, youth were supported and mentored by parent mentors, peer educators and leaders, thereby building and enhancing their capacities to build sustainable enterprises.

YETA programme participants were recruited in cohorts from which baseline and follow-up data were collected. A follow-up survey occurred one year after the end date of their mentoring period and data were collected from a representative sample of selected participants.

Figure 3 Number of young people mobilised



Source: Löwe et al. (2019).

Box 6 The YETA group model

A key component of the YETA project was the support for young people to organise themselves into groups in order to facilitate access to markets, inputs and affordable finance. Organising themselves into groups increased young people's social capital, which crucially allowed them to access resources they were not able to access as individuals. Young people who formed Village Savings and Loans Associations were able to pool their funds by saving small amounts regularly as a group and lending to group members for business investments. Membership in VSLAs also facilitated member and group access to formal financial services through banks.

In addition to gaining access to finance through VSLAs, young people also pooled their resources through cooperatives and associations. In these groups, youth members pooled their produce which allowed them to sell in bulk and negotiate better prices on the market for their produce, as well as access cheaper inputs such as seeds (Löwe et al., 2019). By saving in groups, young people increased their access to capital for investing in land, equipment and inputs like seeds and fertilisers. Accessing savings and loans also allowed young people to rent bigger plots of land. YETA also put young people in touch with financial service providers like PostBank, encouraging them to open a bank account while collaboratively designing loan products with PostBank that would meet young people's needs, such as mobile phone services for savings and loans (ibid.). Through their experience in the VSLAs, young YETA participants also gained access to government funds via the Youth Livelihood Programme, as government officials had more confidence in the groups' capacity to manage and repay loans.

4.2 Data collection and selection of research participants

Data on Cohort 2 programme participants were collected in four phases. Phase 1 involved designing a survey questionnaire, in collaboration with Development Research and Training researchers, on youth business enterprise development in Ugandan agricultural value chains. This questionnaire (see Appendix 1) included questions on the business profile of enterprises (number of enterprises run by a youth, type of enterprises, yearly profits and revenue, etc.) and on the use of digital platforms, resources and trainings. In Phase 2, the survey questionnaire was

pre-tested on five YETA programme participants in June 2020. This contributed to redesigning the survey and adding clarifications and definitions to important categories, such as digital platforms and secondary businesses. In Phase 3, the automated survey questionnaire was rolled out to 367 youth entrepreneurs in Kiryandongo, Kole, Dokolo and Masindi to help understand business growth and its driving factors, including youth aspirations, technology and access to capital. Data collection was completed in August 2020. One limitation of the study was that not all the participants responded to all questions, which resulted in some variation in number of respondents. In some questions, therefore, the sample size is smaller than 367.

Figure 4 shows that, of the young entrepreneurs who responded, 61.7% were male and 38.3% female. Table 4 further shows the distribution of respondents by district for both the target number and those followed.

Figure 4 Distribution of respondents by gender

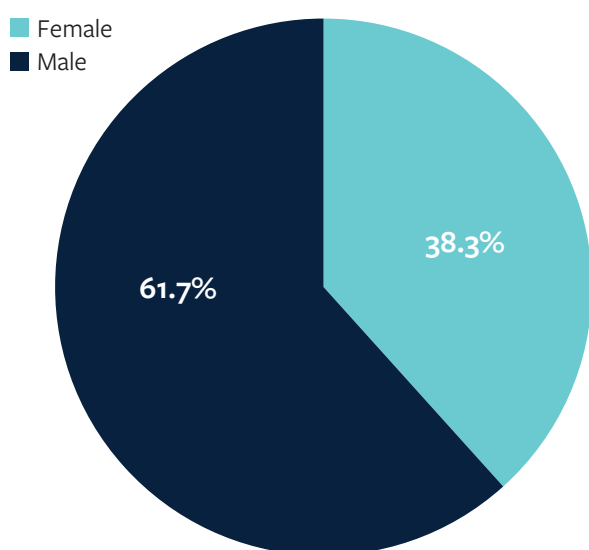


Table 4 Distribution of respondents by district

District	Target number	Respondents	Balance
Dokolo	97	82	15
Kiryandongo	102	81	21
Kole	145	145	0
Masindi	73	59	14

Total sample (N=367).

In Phase 4, to triangulate and complement data from the quantitative survey, qualitative data were collected using in-depth semi-structured interview questionnaires (60 respondents) and FGDs (4 groups). Young people were purposively selected in Kole and Kiryandongo districts according to their gender, types of business, whether they had indicated they were growing one business or diversifying into multiple businesses, whether they were running multiple businesses or one business, the level of success of their business measured by income, the number of businesses they were running, whether they were employers, and business survival rates (how long their business had been operational). Respondents were also selected according to whether they had indicated in the survey that they used ag-platforms or not, and had access to mobile phones (personal or shared). This aimed at collecting a diverse range of different types of business and individual characteristics and levels of business success or failure.

In addition, small FGDs were conducted consisting of only young women entrepreneurs, only young men entrepreneurs, and mixed young women and men entrepreneurs. To further triangulate the results from the in-depth semi-structured interviews and FGDs with young entrepreneurs, two FGDs were also held with parent mentors who provided business mentorship and advice to young people under the YETA programme. To gain a policy perspective, KIIs (6 respondents) were conducted with selected district level officials.

5 Six key findings on current youth business practices and challenges in Uganda

Different indicators can be used to understand youth enterprise development. These include growth of the business through increases in productivity, expansion into new businesses, formal registration of businesses, turnover and profits, as well as increases in the number of employees. Below, we highlight six key findings on current business practices and challenges to enterprise growth from the survey and interviews.

5.1 Most young entrepreneurs own more than one business

Roughly 60% of youth entrepreneurs in the sample own more than one business (Table 5), while it is further observed that of those who own multiple businesses, 61% are male. We also find that, on average, 68% of the total income is derived from the primary business.

Most of the primary businesses are concentrated in farming; 65% of primary businesses are

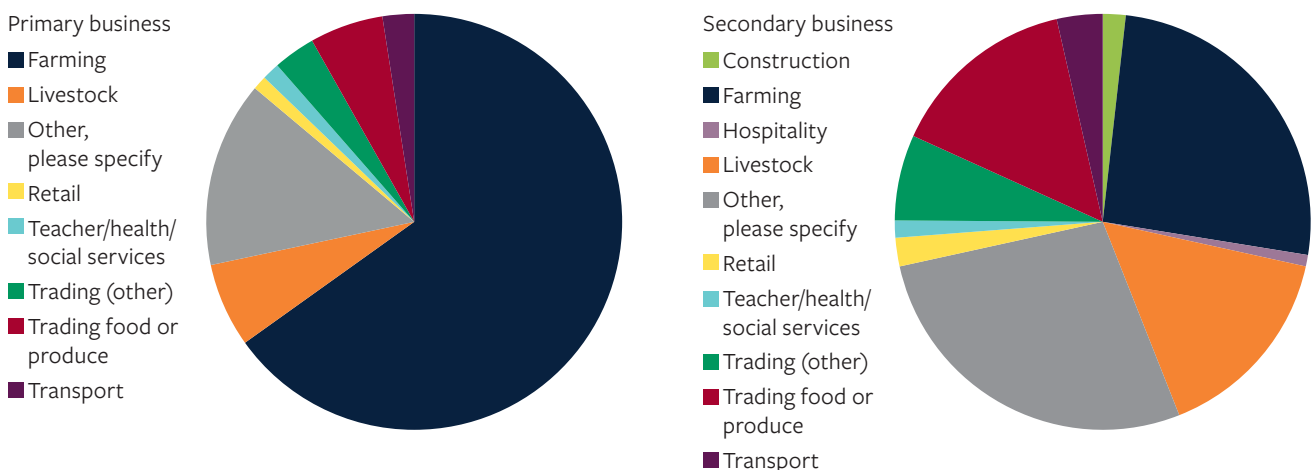
classified under farming whereas this is the case for only 25% of secondary businesses (Figure 5). Examples of those who responded “other” include tailoring, bread making, hairdressing/running a hair salon and bricklaying. Roughly 15% of secondary businesses in the sample are classified under trading food and produce, and another 15% are in livestock. On average, primary businesses are four years old and secondary enterprises are three years old.

Table 5 Share of respondents by number of businesses owned

No. of businesses	Frequency	Percentage
1	141	39.83
2	174	49.15
3	33	9.32
4	6	1.69

Total sample (N=367).

Figure 5 Respondents by primary and secondary businesses



5.2 Entrepreneurs with more than one business are doing better

Youth with only one business are not doing as well as entrepreneurs with more than one enterprise – especially if they have diversified into new value-added activities and markets, with non-farming businesses earning on average higher revenue and profit in a year. In terms of diversification, 48% of entrepreneurs in the sample who own multiple businesses have diversified into new markets and

45% into higher value-added activities, compared to a lower 43% and 31% of entrepreneurs with a single business, respectively. This will be explored in more detail in Section 6.

Table 6 shows that the average annual revenue (in US dollars) in farming businesses (primary business) is \$339, which is almost half the average revenue in transport businesses in the agricultural value chain.

Figure 6 Diversification by number of businesses owned by a youth entrepreneur



Table 6 Revenue and profit (primary business)

	Average revenue (\$ per year)	No. of businesses reporting yearly revenue	Average profit (\$ per year)	No. of businesses reporting yearly profit
Farming	338.93	155	222.51	156
Livestock	457.02	15	262.67	14
Other, please specify	422.60	25	220.82	28
Teacher/health/social services	958.50	3	756.00	3
Trading (other)	798.75	6	378.00	6
Trading food or produce	391.29	13	231.78	13
Transport	671.63	4	383.40	5
Average	386.41	221	243.69	226

5.3 Young entrepreneurs are not formally registering their businesses

Formalisation of businesses is often correlated with business growth, but causality goes both ways (Merotto, 2020). Formalised firms are more likely to grow, become more productive and create jobs. Formalised firms are also more likely to access credit and business support (ibid.). At the same time, those that do not formalise often identify a lack of resources as the reason for not formalising. Microenterprises can often only access government support for their business if that business is registered with a local authority. However, the costs and the lengthy process of registering businesses in Uganda are deterrents for many. A large majority of enterprises remain informal for reasons such as the costs (financial and non-financial) of the business registration process, lack of information on the process and the uncertainty about the benefits of registration compared to costs (UNCTAD, 2018).

Some enterprises choose to remain informal due to their uncertainty about the viability of their business model and a consequent reluctance

to incur the costs of registration. SME owners often do not see the benefits of formalising their business which, combined with the added costs of registering and the tax obligations they incur on formalising, deters them from doing so (ibid.). Evidence from government interventions to encourage business registration has shown these to be unpopular (Lince, 2011). Particularly for women, keeping their businesses ‘invisible’ can be an important way to protect themselves against their husbands or male relatives taking their resources and earnings.

It is unsurprising, then, that almost 89% of the youth enterprises are not formally registered (see Table 7). Only 25 of the 367 youth entrepreneurs have registered their primary business; 13 have registered their secondary business and only 3 (less than 1%) have both primary and secondary businesses registered formally. While 15% of the male entrepreneurs in the sample have at least one business registered, this falls to 5% in the case of female entrepreneurs. Kole and Kiryandongo had the most registered businesses (17 each), while Masindi and Dokolo had the least, with 3 and 4 youth entrepreneurs registering their businesses, respectively.

Table 7 Formal registration of businesses

Business – formal registration	Frequency					Percentage
	Dokolo	Kiryandongo	Kole	Masindi	Total	
None is registered	78	64	128	56	326	88.83
Both primary and secondary business are formally registered	1	1	1	–	3	0.82
Primary business	3	12	8	2	25	6.81
Secondary business		4	8	1	13	3.54
Total	82	81	145	59	367	100

Some of the reasons presented among those who registered include:

I registered my *boda boda* [motorcycle transport services] business so that I can get more customers and I can also be trusted since I am attached to a stage where customers find me. (FGD with young male business owners, Kiryandongo).

It is a government demand and it also helps me to benefit from government projects. (Young male business owner, Kiryandongo).

Others included:

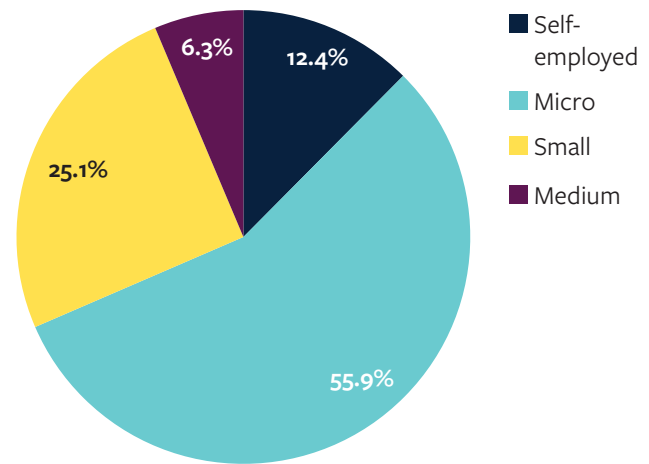
I was motivated by fellow business colleagues.
 To acquire loans and trading licences.
 To evaluate the business progress.
 To sell to the company.
 (Survey responses from young business owners in Kiryandongo and Kole).

It was also acknowledged in Kole during the validation meetings with district officials that formal registration for youth enterprises could be challenging. This may be because, as youth diversify their enterprises, it is difficult for the young entrepreneurs to get motivated to register a business they are still exploring. Generally, youth microenterprises remain informal, employing family and operating in fear of being subjected to tax.

5.4 Most of the youth run microenterprises

Of the young entrepreneurs in the sample, almost 56% have a primary business employing between 1 and 4 people, 25.1% of the sample have a primary

Figure 7 Distribution of respondents by enterprise size



N= 363.

business employing between 5 and 19 people (with employment both being seasonal and based on a verbal contract), and 12.4% are self-employed (see Figure 7). The average number of employees in single-business enterprise is 3, while in multiple businesses enterprises it is 5.

5.5 Young people use multiple methods to sell their products

Some young people sell directly from their homes, while others sell to passers-by from roadside stalls near their home. For those who had a goods store or brewery, customers would come and buy directly from there. Many youth sell their products through middlemen or agents, or through a market or trading centre. Only a few young people mentioned selling services such as *boda boda* or casual labour as a source of income.

Transport is a key facilitator for accessing customers when young people are not selling from home or are not located near a place where they can sell (e.g. near a market or a main road). For young people selling from their home to



A young male farmer checks his phone for updates on seed prices. Photo credit: Courage007 / Shutterstock.com

customers, they relied on transport like *boda boda* or their own bicycle to deliver their produce to their customers.

So, I can access customers at any time, in farming business, I would hire a vehicle and ferry it to town direct but in goats rearing and piggery I use *boda boda* or sometimes I use bicycle to reach them, and they will also do the same. (Young male business owner, Kole).

Having their own means of transport, such as owning a bicycle, provides flexibility to young people, allowing them to reach their customers at any time. When they do not have that flexibility, it appears to be easier to sell at a marketplace. This is likely to be because youth can reach more people there at a lower cost and more quickly

than having to pay for and wait for transport each time they want to reach individual customers at their homes. When they struggled to sell enough of their stock, being able to access their own means of transport provided them with the flexibility to go and sell their stock at a nearby market. This is probably due in part to young people having to weigh up the costs of public transport and the potential risk of not selling any or enough of their products after paying for that transport.

I used to sell cassava as my secondary business, but my bicycle which I was using to carry cassava was stolen. Now I sell directly at a marketplace. (Young female business owner, Kole).

I normally ferry this produce to Lira town. Sometimes I hire a vehicle to carry them, sometimes I hire a motorbike depending on the quantity I have already. (Young female business owner, Kole).

Mobile phones help young people to sell in such a way that they can bypass transport challenges altogether. This is the case when customers or buyers collect the product; the young person only has to inform them when the product is ready. However, young people relying on mobile phones for selling their produce also struggled with challenges, such as buyers not paying or not collecting the produce. This is in addition to the other problems around using mobile phones, such as running out of credit (airtime) or not being able to charge the phone due to electricity issues.

The most common method of selling agricultural produce is through dealers/middlemen/agents. Young people typically sell to agents who come to the village looking to buy produce. These agents are typically business owners who aggregate the produce and then sell this on to traders or buyers. When selling to an agent or middleman, the price is determined by the agent, who tests the quality of the produce and weighs it against market price. Young people, however, did not report any instances of agents refusing to buy their produce because of poor quality. Another advantage of selling to a trader or agent, in addition to the guaranteed/reliable sales, is that often the agent/buyer would go door-to-door and collect the produce themselves, saving young people the cost of travelling to markets.

Sometimes I do not have transport to take my products to the centre. So, I wait for these people that move door-to-door to buy maize. (FGD with young male and female business owners, Kiryandongo).

Typically, young people were contacting the agents to find out the market price at which they could sell their produce. If they only had access to one agent, they would either agree a price or wait until the market price was more favourable. The latter required them to have access to storage where they could leave their produce until they were ready to sell. The minority of young people who had more than one agent would negotiate over price with different agents until they found the one that was offering them the best price. Access to a mobile phone plays a key role in enabling young people to negotiate prices with buyers (see Section 6).

In some cases, when young people were members of a cooperative, the cooperative would either buy directly from them to sell to the buyer or facilitate the connection with a buyer. But some businesses, such as poultry, are less likely to use traders or middlemen and tend to sell directly to customers in their neighbourhood, while others, such as those producing maize, would sell via middlemen.

I always take maize and soya beans to the cooperatives near our place here and later sell at higher price. (Young female business owner, Kole).

Because of Covid-19, however, many of these means of access to markets were not available to young people. Given the lockdown measures and restrictions on movement, buyers were not coming to the communities to buy produce. As markets had closed, young people could not sell their produce or goods at markets either. Often young people had to resort to selling from home to local communities at lower prices. Public transport was restricted. At times, motorcycles were only allowed to carry goods, while at other times they were only allowed to carry one passenger, which resulted in an increase in the price of transport, making it more difficult for young people to get their goods to customers.

5.6 Most young entrepreneurs receive information on business growth and practices via radio, and then youth groups

Youth entrepreneurs receive information relevant to their business primarily via radio, in combination with peers who are engaged in similar businesses, community members, organisations like YETA, and buyers and sellers (see Figure 8). Community members include neighbours and church members. The most commonly used source of information is radio. But there is no single, central place where young people get all the information they need for their business, and they often have to go looking for that information through different channels.

The type of information young people received was mostly about farming practices, including when to sow and when to harvest, as well as information on weather conditions.

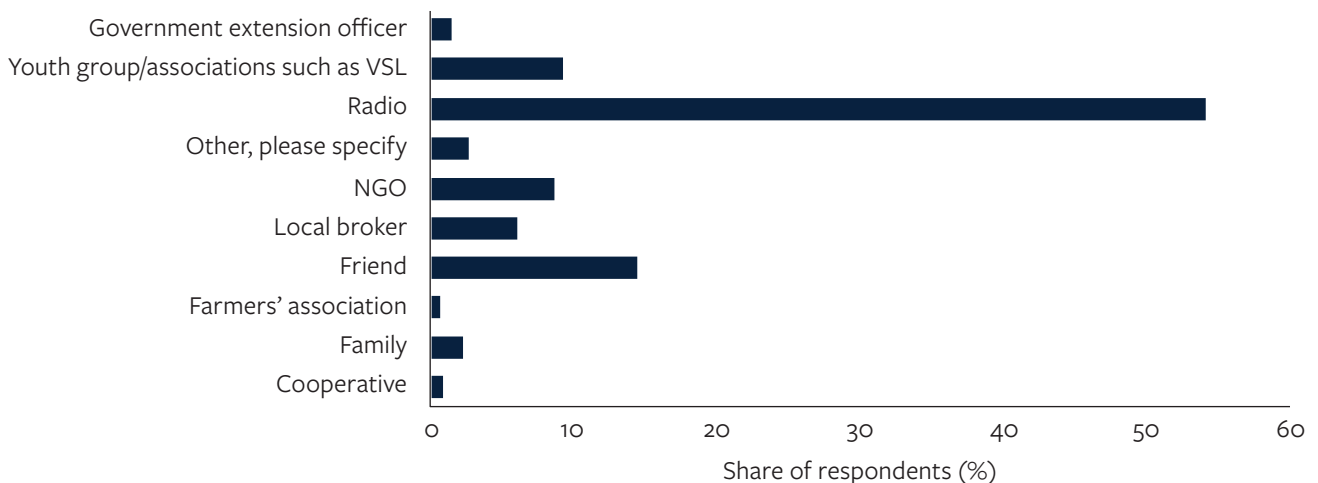
We access this information through radio talk shows. There are some programmes where ... we can learn about which crops grow better,

the varieties or the types of seeds to plant and other information that can be helpful to make the crops grow better. (FGD with young male business owners, Kiryandongo).

I always listen to the radio ... there is a programme where they talk about issues of farming like growing crops, rearing animals, keeping birds. (Young male business owner, Kiryandongo).

Young people who were only receiving information about prices and other buyers through their existing buyers and suppliers were at a disadvantage, as those buyers and sellers came with set prices that young people had to accept. This is the case unless they have mobile phone contact with several buyers that they can negotiate with and choose whom to sell to. Having information about the current market prices through other channels, such as cooperatives, gave young people a better negotiating position and protected them from exploitation. Information around buyers and sellers or prices was typically not received via radio, but through community connections such as friends, cooperatives and neighbours, or their current network of agents.

Figure 8 Source of information



I have got friends that give me information concerning prices of products that I sell and I also call the agents in Bweyale and Kigumba on my phone to ask about the market prices. (Young male business owner, Kiryandongo).

Cooperatives are an important part of that network. Young people who were part of a cooperative or association were struggling less to assemble all the information they needed, as they had a central point of information. They were receiving information and advice on prices, weather information and how to run their businesses, through cooperatives or other youth groups.

I got information on how to source for good market through the cooperative. (Young male business owner, Kole).

I access real-time information on agriculture, government extension services, weather changes and mostly through radio, friends and my group. (Young female business owner, Kole).

When young people were not benefiting from being in a group, they were using a combination of radio, friends and other social connections as mentioned above. This enabled them to access information including on topics such as extension services, soil quality, available seeds, and buyers and sellers. Yet, among those using the radio to access information on farming methods, there were some who said they did not receive any of the additional aforementioned information. Some young people recognised that they had been missing out on information on agricultural practices, like when to plant and grow crops, and information about weather conditions. This limited their ability to grow and expand

their business enterprises. This was particularly highlighted after their engagement with the project, and especially during the adoption of Covid-19 prevention measures.

It would be important to get information on weather which would help me to plan better for example when to plant or when to grow particular type of crop. (Young male business owner, Kiryandongo).

Young women, in particular, faced more challenges when it came to accessing information. In addition to challenges in accessing mobile phones, some young women also reported not having access to a radio, while none of the young men mentioned this in the interviews:

I don't have a phone to communicate with friends or other people who can give me clear information. Also I don't have radio to access information. (Young female business owner, Kole).

5.7 Covid-19: challenges to youth businesses

In March 2020, President Museveni announced a nationwide lockdown which included a ban on public transport, a curfew from dusk till dawn, and a ban on weekly markets and non-essential shops. Public transport was significantly restricted, at times including a complete ban on public transport. At other times public transport operators were only allowed to operate at half their usual capacity, which led to a significant increase in transport costs.

Covid-19 and the ensuing lockdown rules in Uganda had a significant impact on young people's businesses. From the interviews, young people

during Covid-19 shifted from their business growth aspirations towards taking care of basic needs and the survival, rather than the growth of their businesses. Several young people reported struggling to find food for themselves and their family. In this context, business growth became less of a priority, as other priorities such as food security and the overall survival of their businesses for the provision of income for their livelihood took over. Overall, loss of income meant young people no longer had the capital to grow their business. Young people's spending was based on consumption and many of them reverted back to subsistence farming. The focus shifted from cash crops to food crops.

I wanted to sell my maize so I can use the money for operating my tomato business, but since the

lockdown took so long I harvested my crops and decided to consume them. (FGD with young female and male business owners, Kiryandongo).

During corona there were no movements, so we ended up eating our crops after harvest. We didn't get anything out of it. We just consumed. (FGD with young female and male business owners, Kiryandongo).

Since lockdown was put in place, we were unable to ferry our agricultural output to the market and some markets were completely closed down. Even transport was a problem. So, we were struggling to get food for a day. (Young female business owner, Kole).



A young African man finds out information from his mobile phone during the Covid-19 pandemic.
Photo credit: Kwame Amo / Shutterstock.com

On the supply side, young people's access to markets was severely restricted due to the restrictions on movement, closure of markets and business, as well as the overall serious decline in household income in their communities. As mentioned above, to sell their produce young people typically relied on buyers who came to their communities, as well as local markets and trading centres. However, due to the restrictions on movement these buyers were no longer coming to the communities to buy, as they generally came from outside. Furthermore, markets and shops were closed, further reducing young people's customer base. As a result, young people were forced to sell to a limited number of local buyers who were pressuring them to sell at lower prices, resulting in significant losses for their businesses.

Some buyers who used to come to buy from us no longer come. (Young male business owner, Kiryandongo).

Buyers complained that people from outside are not coming so there is no need to come and buy our produce. They would say if you don't sell at this price we are not buying. So prices went down. (Young female business owner, Kole).

The second most commonly reported challenge under Covid-19 was price fluctuations. As other households were suffering from similar challenges of loss of income, the demand for products fell (Heifer, 2020). Household consumption decreased significantly and prices for produce fell accordingly, leading to a significant collapse in sales. The lack of access to buyers and markets meant that young people had to sell to whoever was willing to buy, with little leverage to negotiate better prices for themselves, resulting in huge losses.

The prices has gone down because of corona. When I take my produce to the produce dealers they buy at a low price. When I ask why they say that these big trailers that usually take agricultural produce outside the country are no longer coming because of corona. (Young female business owner, Kole).

We used to sell soya beans at 1,600 shillings before but during Covid time we were selling soya beans at 700 shillings. (Young male business owner, Kole).

'The young people had kept their maize for a long time bulking it so they could sell it at a better price. But due to Covid that has not happened. Before Covid, usually around November the price of maize would be 1,000 Ugandan shillings but as we speak the price is still at 500 shillings.' (FGD with YETA parent mentors Kiryandongo)

Corona has forced me to sell my crops and my piggery at the lowest price. (Young male business owner, Kole).

While the prices of selling their produce went down, the prices of inputs rose to a level that young people could not afford. The transport restrictions and increased travel costs made access to inputs even more expensive.

Also seeds were hard to find because of movement restrictions. *Boda bodas* were not allowed to carry and that became a big challenge. (Young male business owner, Kiryandongo).

Prices of materials that we usually buy have gone up and even transport cost has gone up. (Young female business owner, Kole).

Young people also struggled at times to find good quality inputs like quality seeds during Covid-19. They could not reach the suppliers from whom they would usually purchase inputs such as seeds, fertilisers, or chemicals to treat crops. As a result, their production fell and harvests were rotting as crops could not be sold, or were spoiling due to lack of access to chemicals. Those who could not sell their perishable goods saw a lot go to waste or rot. Without income and means of transport to buy chemicals to treat their crops, young people saw more of their crops die, thus creating lower yields and more losses.

There was no one buying because people were told to stay at home. So edible goods like cabbage, tomatoes and bread ended up getting spoiled and incurred losses. (Young female business owner, Kole).

Pests and diseases affected my cassava in the garden. People were not buying my cassava so I had no money to buy chemicals to treat the diseases. (Young male business owner, Kiryandongo).

Other businesses which were not selling food or essential items were forced to close at times. This included businesses like hair salons, bars and tailors. Young people active in these businesses turned to farming to provide their basic needs. Several resorted to selling food because that was the only thing they were legally allowed to sell.

For my salon business, because people were fearing corona, we all decided to go back home where we started to plant crops in the hope that one day lockdown will end. We also started working in other people's gardens and they pay us. (Young female business owner, Kiryandongo).

Since bars are closed, I have decided to venture into farming because there are no restrictions there. (Young female business owner, Kiryandongo).

Other than food, these youths were not allowed to sell any other thing. So, youths in tailoring, youths in clothes, could not sell because only food was allowed to be sold. (KII with local government official).

During Covid-19 other challenges included no access to labour during lockdown, loss of land for farming due to inability to afford rent, difficulties in accessing transport and inability to top up mobile phones with airtime or to carry out group activities and gatherings as part of cooperatives due to travel restrictions.

Covid has affected us a lot because we have cooperatives, where we usually gather and discuss businesses. But we cannot now meet regularly, which has affected business greatly. (Young male business owner, Kole).

We used to get money from cooperatives but now people have borrowed almost all the money

in the cooperative ... you go to the cooperative and VSLA but there is no money there. People are not saving because they are not working. (Young male business owner, Kole).

To cope with these challenges, young people typically stopped running multiple businesses and started focusing on the farming business, as the quotes above illustrate. Others reported using mobile phones and digital technology to stay in touch with customers and organise deliveries to their customers, as well deliveries from suppliers. The use of technology allowed young people to continue running their business from home.

I make sure that I am always in contact with my customers. We normally communicate to make sure that our relationship is still okay, even if the virus is still here. (Young female business owner, Kole).

During Covid they chased us from the market at around 6 p.m. so myself and others would inform our customers that they should come and find us at home. I would put my sack in front of my door and assemble my products for sale just outside my home. (Young female business owner, Kiryandogo).

I used to spend much of my time in the garden and sometimes when I come back, I would put some of my products at home, then use the phone to alert customers to come and buy from my home. When they come I observe standard operating systems like keeping distance, washing hands frequently and wearing a mask. (Young female business owner, Kole).

Since I deal in this business of cabbage, onions, green peppers that can easily be destroyed at any time, it was very hard for me but I tried to overcome the problem by calling other people within this area – those who are willing to come and buy at a cheaper price than they sell it later. (Young male business owner, Kole).

Several young people pointed out that having a bicycle would have been helpful as they could have delivered their produce to customers without relying on public transport. Some were selling to customers on credit and are still waiting to be paid back. Those selling crops who had access to storage facilities decided to store their crops until market prices improved. Those who were able to do so put safety measures in place, such as hand-washing facilities and social distancing measures, that would allow them to continue with their business activities. A few young people also reported borrowing from their VSLAs.

Overall, Section 5 has provided important insights into current business practices and challenges faced by young entrepreneurs in Uganda. This has helped to depict a landscape of how business models are shaping up for the youth involved in businesses across the agricultural value chains. The following sections of the report present findings on the key drivers and enablers of enterprise growth, touching on youth aspirations, technology and digital platforms, skills development and training in business practices, and investment and access to finance and resources, which are explored in Sections 6, 7, 8 and 9, respectively.

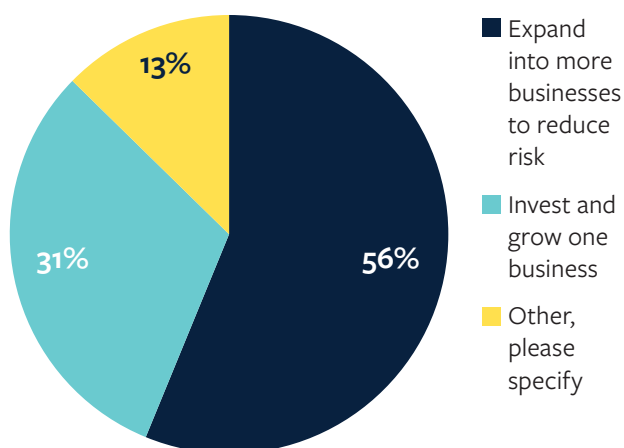
6 The role of youth aspirations and business growth

Young people were asked about their business aspirations to understand whether they were planning to grow (i.e. scale) an existing business or expand into new businesses. By scaling we mean selling more of the same product within the same line of business by increasing yield through improved technology, greater labour efficiency, buying more land, or adding value. As interviews were only conducted during Covid-19 rather than before and after Covid-19 hit, it is not possible to assess the true extent to which aspirations changed as a result of the pandemic.

6.1 Scaling primary business

For 56% of respondents the main aspiration for the primary business was to expand into more businesses to reduce risk, while 31% of the sample wanted to invest and grow one business (see Figure 9).

Figure 9 Main aspiration for primary business (percentage of respondents)



The young people that were looking to grow their current businesses mostly aspired to do so through purchasing more land and improved technology. While some were choosing to grow one business, others wanted to grow two or more of their current businesses simultaneously. The former were typically using one of their businesses to generate the capital to grow the other business. Investment or plans to invest in mechanisation and technology emerged as an important pathway for youth to grow and scale their businesses, as well as to gain access to land and inputs.

My aspirations for my farming business are expanding it and mechanising it ... I always farm using a hand hoe but at least if I save money ... I can buy an oxen plough and also increase on acreage. (Young female business owner, Kole).

I want to work hard and buy the equipment that I use in brewing because currently I just hire that equipment. (Young female business owner, Kole).

As discussed in Section 5, entrepreneurs are hiring their own family members as labourers due to trust and the added cost of hiring non-family labour. Young people who employed the help of unpaid labour, e.g. family members or through the exchange of labour (reciprocal employment relations), reported the most benefits to their growth. When young people employed family members or peers, or engaged in a reciprocal labour exchange, this was free labour. This allowed them to increase productivity by helping them to do the work faster, reduce waste, achieve

better quality and thus increase their yield, while saving money which was then used towards business investments.

I used to get low yield because of weeds ... But when I started hiring labour, they would clear all the piece of land, and now I get a higher yield.
(Young male business owner, Kole).

Hiring people has helped me a lot in expanding and growing my business.
(Young male business owner, Kole).

This was particularly important in the farming business where young people were renting land for a limited time. Because of this, they had to prepare the land quickly to ensure they could leave enough time for the crops to mature by the time their lease expired. The time they saved by hiring help, and the increased income, encouraged young people to rent more land to grow their farming business or start a new business.

It ensures time saving ... we would weed the whole garden in one day giving time to do other things ... Hiring of labour has improved my income through getting higher level of yield from the garden and hence getting some money so I am now preparing to start another business of small retail shop.
(Young male business owner, Kole).

6.2 Expanding into new businesses

Most young people are aspiring to grow as well as expand one of multiple businesses, or start a new one, and this is true across different sub-sectors of agricultural value chains (see Table 8). Expanding into more than one business also emerges as the primary goal for both young men and women.

Many are using their farming business as a springboard to start or grow a secondary non-farm business, using the profits earned from selling their produce. Below, we discuss some of the key factors motivating youth to expand into new businesses, particularly those who are engaged in farming.

Table 8 Aspirations for primary business, across sectors (percentage of total enterprises)

	Invest in one business and scale that	Expand into a new business to reduce risks	Other reasons	Total enterprises in the sample
Farming	35.15	51.46	13.39	239
Livestock	16.67	70.83	12.50	24
Other, please specify	20.75	62.26	16.98	53
Retail	25.00	75.00	0.00	4
Teacher/health/social	0.00	100.00	0.00	5
Trading (other)	58.33	41.67	0.00	12
Trading food or produce	23.81	66.67	9.52	21
Transport	22.22	77.78	0.00	9

6.2.1 Coping with seasonality and risks of farming

As most young people started with a farming business, they were familiar with the risk factors associated with farming or agricultural business more widely, including weather conditions, pests or diseases and limited access to land, which meant they could not always rely on their farm to bring them a steady income. The seasonality of farming, and the fact that they have to wait several months to reap the benefits of their harvest, meant some sought to generate more income to supplement their farming income lest the harvest not generate enough. Farming as a business requires time, and benefits are only accrued at harvest time. Even after harvesting, young people might choose to wait for market prices to improve before selling their produce. This means that young people have to find ways to earn income during the months when they are waiting for the harvesting period or waiting to sell.

Because there are other changes, including seasonal changes that may affect my farming business, I decided to start a poultry business to supplement my farming business so that in case I fail in farming business, I can get money through poultry. (Young female business owner, Kole).

I realised that the primary business its income always take long and it is seasonal so I decided to start a small business to supplement it or to support it. So that when I wait for the season, I will be getting some small thing for my wellbeing. (Young female business owner, Kole).

Weather conditions can significantly reduce the yield, sometimes to the extent that young

people may only be left with enough for their own subsistence. In addition, diseases and pests might also pose significant threats to the crops, further increasing the risk of not having enough yield for a farming business. A second or third business provided security by diversifying both sources of income and risks in case the first business failed to bring in enough income. In some instances, young people were expecting that one business/farming would not bring in enough income and they were running a second or even a third business to supplement that income.

Weather sometimes disturbed us in farming and pests can also destroy our crops. Sometimes I may end up even failing in this primary business; that is the reason why I decided to start the secondary business since it is profitable and it is not seasonal. (Young female business owner, Kole).

Expanding to new businesses is therefore an essential coping mechanism to face the risk of running a farming business and to guarantee income during times in which young people cannot earn from their farming business.

6.2.2 Using non-farming business income to grow farming enterprises

Others were using their non-farming business to generate capital for growing their farming business, e.g. allowing them to rent or buy more land or fuel the growth of their farming business. The challenge of not being able to earn enough income through farming was in part the result of young people not having enough land. This limited their yield and therefore the amount of income they could make from their farming business. As a result, for many young people who engaged in farming as their primary business, the secondary

business served to bring in the additional income to rent or buy more land, or hire labour to help, and be able to grow their farming business. The secondary business was therefore a strategy to supplement their farming income such that they could scale their farming enterprise.

The challenge with farming, I never had enough land where I would cultivate my crops that's why I decided to start up general merchandise shop. (Young female business owner, Kole).

The money I get from this business I put it back to the farming business to help me hire people to help me in the garden when I'm engaged in other things. (Young female business owner, Kole).

I decided to start a business which cuts across all seasons to supplement this primary business so that in case I fail in this primary business, the money I will raise from the secondary business which is cutting of timber will help me to hire a piece of land to expand my business. (Young male business owner, Kole).

Despite its risks, young people were aspiring to grow their farming business. Their reasons included that farming was easier and more accessible to them than other businesses, it provided food security and there was always a demand for agricultural produce. Among some youth there was the perception that farming was the only business option available to them. Others chose to grow the farming business because, out of all their businesses, this was the one that was generating the most income for them.

I've been able to earn more income from farming than the kiosk business, that's why I would like to expand it further. (Young male business owner, Kiryandongo).

6.2.2.1 'Farming is the backbone'

Some wanted to grow their farming business because it provided food security, seemed easy to them to run as a business, or because they saw this as their only option for earning income. For others it was more opportunistic, meaning that this is where they saw the most demand.

Because farming is the backbone and I can even pay my school fees using farming ... it is the only source of money I can get for my own living. (Young female business owner, Kole).

I would like to expand my farming business, because from farming I can get food for domestic use and I can also earn some income from the yields of the crops. (Young male business owner, Kiryandongo).

There is money in this business and also it is easy to access. (Young female business owner, Kole).

During Covid-19 some young people reported closing down other businesses to concentrate on running their farming business, seeing this as a way to ensure their food security, and others said there was always going to be demand for food. It is also likely, however, that this was because the government only allowed people to sell food and not any other goods during lockdown.

6.2.3 Transitioning towards another business

Others were seeking to transition to other businesses altogether. Some would carry on farming to supply their food security needs or to supply the capital to grow the new business. For others, the idea of expanding into businesses beyond farming continued to appeal.

My aspiration for my tailoring business is to save some money so that I can open up a tailoring school. Because if you have a tailoring school and you have very many

students, you get a lot of income from it. (Young female business owner, Kole).

My plan is that after getting money from these two businesses, especially farming which generates a lot of income, I use that money to start a small-scale retail shop. (Young female business owner, Kole).

I'm growing my crops such that in the next few years I may be in position to earn enough money to invest in a hair salon business. (Young female business owner, Kiryandongo).

7 Technology, digital platforms and enterprise growth

7.1 Access to mobile phones

Access to mobile phones helps young people’s business growth by reducing the cost of transactions such as connecting with customers, sellers and buyers; it also reduced the costs of logistics, most notably transport and helping young people access information around market prices and other market information. Overall, 61% of respondents reported owning a mobile phone, 32% reported access but not ownership, and only 5% reported no access

to a mobile phone (this was the same percentage for both males and females). As per Figure 10, 72% of male entrepreneurs own a mobile phone, as compared to only 45% of female entrepreneurs. We further note that, of the 343 young entrepreneurs reporting access to mobile phones, only 7% have access to smartphones. Predominantly, young entrepreneurs use feature phones. Roughly 71% of youth entrepreneurs with multiple businesses owned a mobile phone, as compared to 46% of youth with only one business (see Figure 11). Similarly, a larger

Figure 10 Access to and ownership of a mobile phone by gender

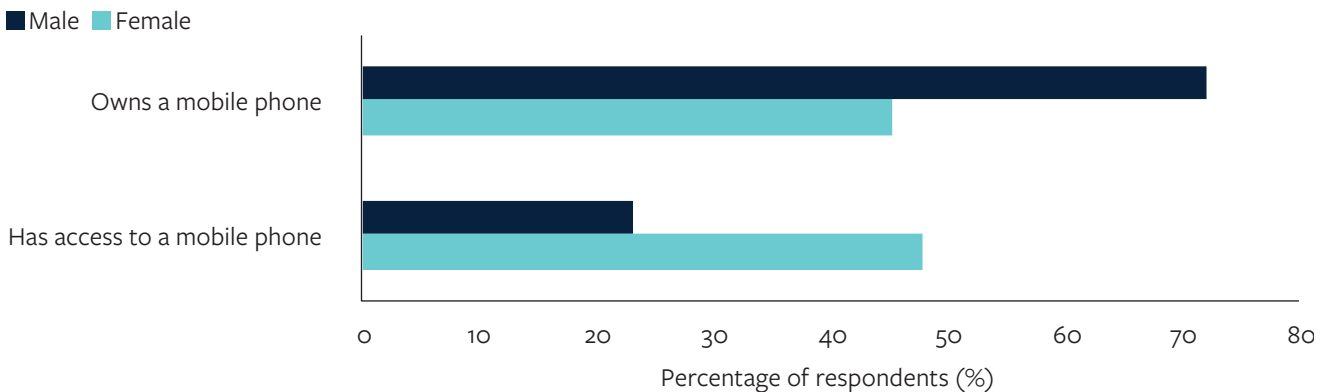
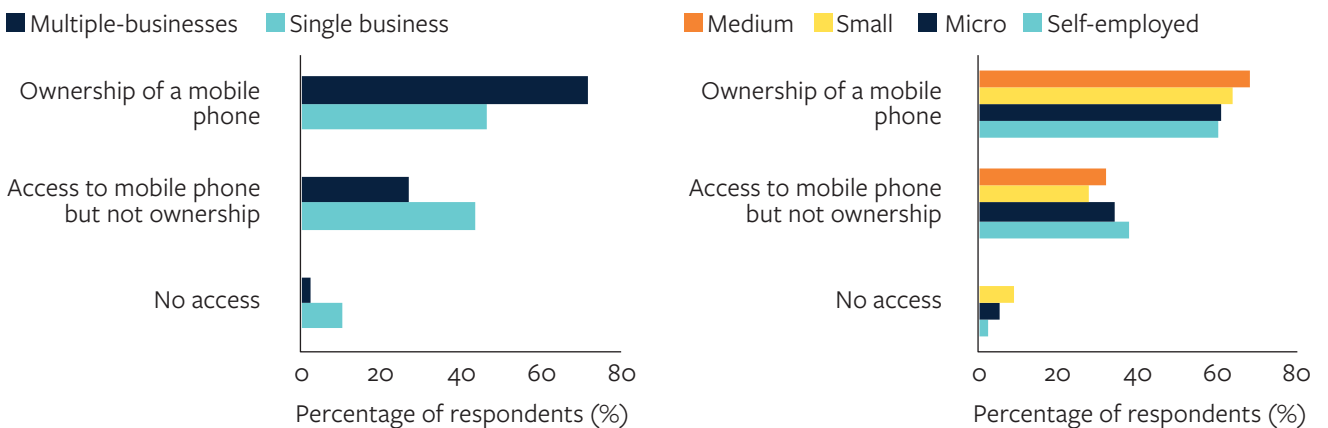


Figure 11 Mobile phone ownership by business and size



share (68%) of medium-sized enterprises reported ownership of a mobile phone compared to microenterprises and self-employed youth (60%). This suggests that there is a positive association between mobile phone access or ownership and business development – both in terms of business expansion and, to a lesser extent, in terms of business size. The bigger difference in mobile phone access between those who own multiple businesses compared to those with one business could suggest that access to a mobile phone makes it easier to run multiple businesses. On the other hand, it might simply indicate that individuals with multiple businesses are better able to afford mobile phones.

Interviews revealed that many young people were accessing other people’s phones – those of their parents, relatives, spouses, neighbours, friends, or a local mobile agent – to use for running their business. All young people stated that they thought it was important for their business to have access to a mobile phone. While several of those who did not own a phone said they aspired to acquire/purchase one, acquiring a phone is challenging for young women. Some young women reported that their husbands would not allow them to have their own phone as they feared this would lead to infidelity.

When you are someone’s wife and you keep on talking on the phone, your husband will feel that you’re talking to your ex which brings problems. That is a main challenge these girls are facing. (FGD with YETA parent mentors).

My husband does not accept me having a phone because he says phones spoil women. (Young female business owner, Kole).

7.1.1 Reducing transaction costs through mobile phones

Among young men and women, mobile phones are a key way to access customers or buyers and sellers. Typically, young people are using mobile phones to find information about market prices and to negotiate with buyers.

The use of this smartphone helped me so much that, when my crops are ready and harvested, if I need to sell them, I would send messages to some of my friends to ask about the prices. (Young female business owner, Kole).

This is particularly important for young people who live far away from a marketplace or where marketplaces are not easily accessible. While the agents and buyers determine the price at which they buy the produce, young people communicate with them via mobile phone to find out the current price and decide for themselves whether to sell immediately or wait. In addition to deciding when to sell their produce, young people can also increase their income by choosing who to sell their produce to, depending on the prices they are offered. This seemed to be related to social capital, including whether young people had contact/relationships with people who have information about market prices, as well as the number of buyers they could access.

I mostly sell to buyers who come with a better price. I use my phone to get information from my friends. They always give me information of the prices prevailing for the price of commodities. (Young male business owner, Kiryandongo).

A mobile phone also helps me in consulting how different places are selling or buying their produce so if I want to buy these produce I first consult people in different areas and buy from the cheapest. (Young female business owner, Kole).

A mobile phone is also key for young business owners who run their business from home (especially during the Covid-19 lockdown). Due to the costs and time saved by reducing the need for transport, a mobile phone also enables young people to run multiple businesses. But several interviewees reported that, due to fluctuation of market prices or buyers' dishonesty, the price offered by buyers can often change by the time they deliver the product.

Sometimes the buyer lies to you and doesn't meet the terms you have agreed with him or her to buy the commodities, so I feel that is a challenge. (Young male business owner, Kiryandongo).

Young people who were not communicating with buyers and agents through a mobile phone were typically waiting for agents or buyers to go around the villages to collect their produce. In this case, it is more likely that young people will agree to the price the agent sets, as they have fewer options for finding alternative buyers with better prices.

7.1.2 Reduced cost of logistics and transport

Mobile phones not only facilitate communication and relationships with clients/buyers/customers, they also allow young people to keep records of business transactions, which in turn gives them greater control over their finances. For informal businesses, where record-keeping is typically poor, mobile money enabled young businesses to keep a record of their finances. Young people also report

that mobile money helps them with their savings, especially for those who do not have access to a bank account. It is perceived to be a safer way of saving money than saving cash in a physical place.

When I receive money, I save it in my mobile money ... by keeping money in my mobile money, I can plan and avoid unnecessary spending. (Young male business owner, Kiryandongo).

If I have a phone and registered with mobile money, I will just put the money on my mobile money account and save it there so that in case I'm moving anywhere, I will be moving with my money with me and I can withdraw it at any time I feel like. (Young male business owner, Kole).

The use of mobile phones for saving money was, however, reported much more among young men than young women, as more young males owned a mobile phone and ownership guarantees access and use of a cellular line, which is linked to one's mobile money account. When young women use their husband's mobile phone to do business, it is likely to be very difficult for them to save money or more generally use mobile money to grow their savings and their business (Ansar et al., 2021). Other challenges beside ownership of mobile money devices and accounts include lack of information about mobile money among young women in Uganda as well as lower appetite among young women for mobile money financial transactions (Chamboko et al., 2018).

Mobile phones also help young people to save on transport costs, as they allow them to find out information on prices, and thereby avoid unnecessary journeys and save on transport costs. Young entrepreneurs also save on transport costs by sending produce for delivery via motorcycle.

When they do need to travel to deliver the product in person, young people also receive upfront mobile money payment from their clients/customers to pay for the transport. This also puts them in a better negotiating position as, after travelling long distances, they might otherwise be forced to accept lower prices to make up for the sunk travel costs, whereas the mobile phone allows them flexibility to call different people at different times to get the best price. These advantages apply both to when young people are selling produce and when they are buying inputs for their business.

The phone is important when I'm doing business, for example if I want stock from town and I don't have transport, I can call my supplier to put stock on the *boda boda* or a taxi and I pick it from the shop. (Young female business owner, Kole).

Having a phone in running a business is very important. One, you can just call to your supplier and they deliver what you need in your shop. Two, if you want to go and buy produce from somewhere, you will first call and confirm whether that good is there or not. So, you avoid losses of moving for no reason. (Young female business owner, Kole).

The communication with customers and buyers on the phone was particularly important during the Covid-19 crisis. Being able to communicate to customers when products are ready the price of products, for example, can be key to maintaining customer relationships and a stable income. For many, this constant communication and effective customer relations provided a way to ensure business continuity and trust.

By reducing the costs and time for transport and logistics, mobile phones allow young people to run multiple businesses. As they spend less time travelling to access markets, they save the time they would otherwise spend on moving around.

It is important that that it make communication very easy unlike using *boda boda*, using mobile phones means because you just sit at home, you make call and the customer comes. (Young male business owner, Kole).

Therefore, mobile phones are used in all parts of running the business: buying inputs, selling produce, money transactions and receiving and giving information about produce, as well as market information such as prices. Combined with access to transport like the *boda boda*, a mobile phone is a key enabler of running and growing a business, especially for those young business owners who do not live near a marketplace.

I use phone to call customers and customers call me to find out if products are ready. When my products are ready, I will just call them. I use a *boda boda* to deliver my products to them. Then they just put money through my mobile money. (Young female business owner, Kole).

In line with the literature, young people were using mobile phones to communicate with existing customers, buyers and sellers. None of young people interviewed (without access to ag-platforms) reported using mobile phones to find new clients. Interviews did reveal some instances of young women using mobile phones to do market surveys, which could perhaps be a pathway towards finding new customers.

7.1.3 Other uses of mobile phones

Some young men were also using mobile phones to recruit people to help them on their farm. Mobile phones also seemed to be a key enabler to accessing government extension services and NGO interventions.

This subsection shows how access to mobile phones helped young people's businesses by smoothing business operations, predominantly by making communication with clients and buyers easier, as well as facilitating access to information on market prices and coordinating purchase and delivery of produce, inputs and technology, all the while saving transport and logistics costs. Saving time and money on travel also helped young people run their multiple businesses, as they could run some of their business operations from the comfort of their home.

Finally, for young people who had a strong social and business network, i.e. a network of agents, a mobile phone helped them to find information on market prices and negotiate with clients and buyers. Young people who did not have a phone aspired to purchase one in the future because they believed that it would enable them to find new customers who were outside their village or immediate vicinity. However, none of the youth who had a mobile phone (without access to ag-platforms) reported finding new clients.

7.2 Use of digital platforms in agriculture

Ag-platforms are apps or services accessed via mobile phones, by means of SMS, unstructured supplementary service data (USSD), social media apps, e-commerce apps or other apps for finding

information on weather, land use, seeds, buyers and sellers, etc.

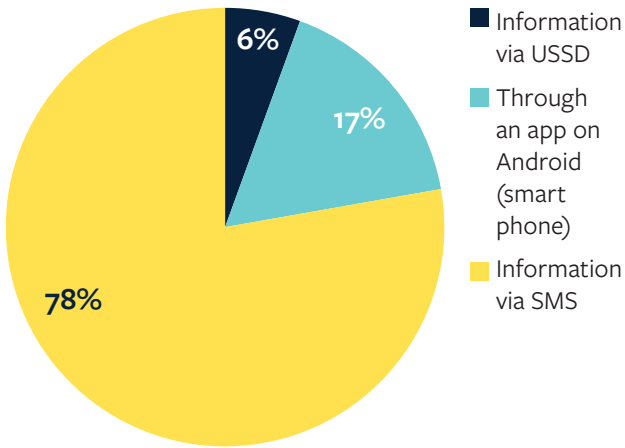
It is important to note that the lack of ICT infrastructure in rural areas limits access to these platforms. Most youth had not heard of ag-platforms. Those who knew of them often did not have a clear understanding of what they were for, how they worked or the opportunities they would present for them. Some, for instance, did not understand the app registration process. We discuss challenges in accessing and using ag-platforms in more detail in Section 7.2.4.

7.2.1 Ag-platforms – channels of access

Of 367 respondents, only 18 (under 5% of the sample) were engaging with ag-platforms, broadly classified as those who are: (1) using digital social platforms such as Facebook and WhatsApp; (2) using Android-based digital apps for agriculture; or (3) accessing information via USSD or SMS. Respondents using ag-platforms in the sample also include those using apps such as m-Omulimisa or MobiPay, as well as those receiving SMS-based information through cooperative and farmer groups. Most (13 of the 18) report having used a platform for more than nine months. Of the 18 ag-platform users, 13 own a feature phone, 3 own a smartphone and 2 own both.

The majority of those who are accessing ag-platforms are doing so through groups such as cooperatives rather than as individuals. Information is received via SMS by 78% of platform users; 17% are accessing a platform through an Android-based app and 6% through USSD (see Figure 12). Most youth are paying a fee for registering on the platforms and for the internet bundles to access the platform via the phone.

Figure 12 Operation model of platforms (percentage of platform users)



I have registered with Enterprise Uganda as a Community-Based Facilitator to gain information on animal breeds, their feeding, vetting and other things. I paid 450,000

Ugandan shillings [UGX] to register, which is deducted from my salary. I am given a smartphone, a SIM-card and a solar charging unit. I pay UGX 5000 per month extra for subscribing to internet bundles on the phones but don't need to pay for OTT. (Young male business owner, Kole).

I get information on farming, agroeconomic practices and access to seeds for planting such as simsim [sesame] and sunflower from Ngetta Tropical Holdings, mostly in the form free of cost messages on my phone or through WhatsApp. But for accessing information through their Facebook page, you have to subscribe for MBs [megabytes of data]. I access information through FB weekly, paying about UGX 4,000. (Young male business owner, Kole).



Young female farmer checks her phone for ag-platform updates. Photo credit: L_am_zews / Shutterstock.com

One parent mentor spoke of young people in her group accessing an ag-platform called Agrinet directly. Young people are using Agrinet to access improved seeds or to sell their produce. Thus, the platform links farmers with buyers and sellers. This platform does not require access to a smartphone.

For the platform that I'm in called Agrinet, they always give you a code. When they are having their talk shows they tell you dial this code and they call you back directly ... their work is to link you to the buyers or the sellers ... so they will call you and start asking you what exactly you have and at what price and tell you which buyer is buying that product. So, if you're not ready, you tell them I'm not ready to sell because I don't agree with your price and they will not pressurise you to sell. (FGD with YETA parent mentors, Kole).

Since the pandemic there has been an accelerated use of ag-platforms as Ugandan businesses have been negatively affected by Covid-19, with emerging evidence suggesting a higher negative impact on agricultural businesses than manufacturing and services firms (Lakuma, 2020). National lockdowns and travel bans made buying and sourcing inputs difficult (as discussed in Section 5.7). In line with this, 14 of the 18 platform users in the survey reported a spike in their use of ag-platforms during Covid-19, primarily for finding more information on Covid-19 support (cited by 13 respondents), followed by accessing inputs (4 respondents).

7.2.2 Sources of support and models of use of ag-platforms

Interviews reveal that awareness of ag-platforms largely came from community-based projects, friends or from the ag-platforms themselves.

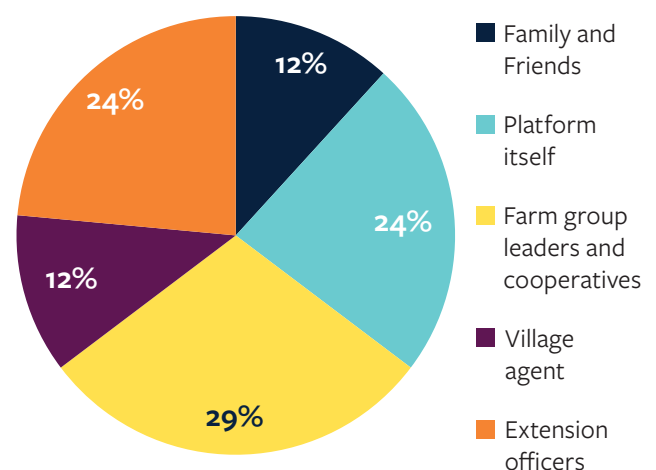
I got to be a Community-Based Facilitator because one organisation – Community Connector – had a project in our area. I went through that and was given a phone containing all information, for example, on farming. (Young male business owner, Kole).

People of Ngetta Tropical Holdings came to our groups – the YETA groups – and gave us some lines – we registered – they profiled us and we gave them specific lines where they always send us those messages. (Young male business owner, Kole).

As shown in Figure 13, the most important source of support for platform users in terms of using the platform are the farm group leaders and cooperatives (29% of users), followed by extension officers (24%) and the platform itself (24%).

Most of those who reported benefiting from ag-platforms said they were accessing the information indirectly through others or through their group, rather than as individuals. The types

Figure 13 Support in using the ag-platform (percentage of users)



of information they received through ag-platforms (mostly indirectly) included the current price of crops in their village compared to neighbouring villages and Kampala, how to plant crops, how to gain access to market and sell as a group, information on good agricultural practices (including when to sow and when to harvest), as well as weather conditions.

Interestingly, 94% of the platform users are part of some form of business group: 14 platform users report participating in farmers' groups, 17 in VSLAs and 10 in cooperatives (see Figure 14). Young people reported using a combination of online and offline information sharing to benefit from ag-platforms. Several young people reported there was someone facilitating the information flow, passing the information from the platform to young people who were generally members of a group. The advantage of the platform being accessed by a group is that members of that group can access the information even if they have no access to the internet or even a phone.

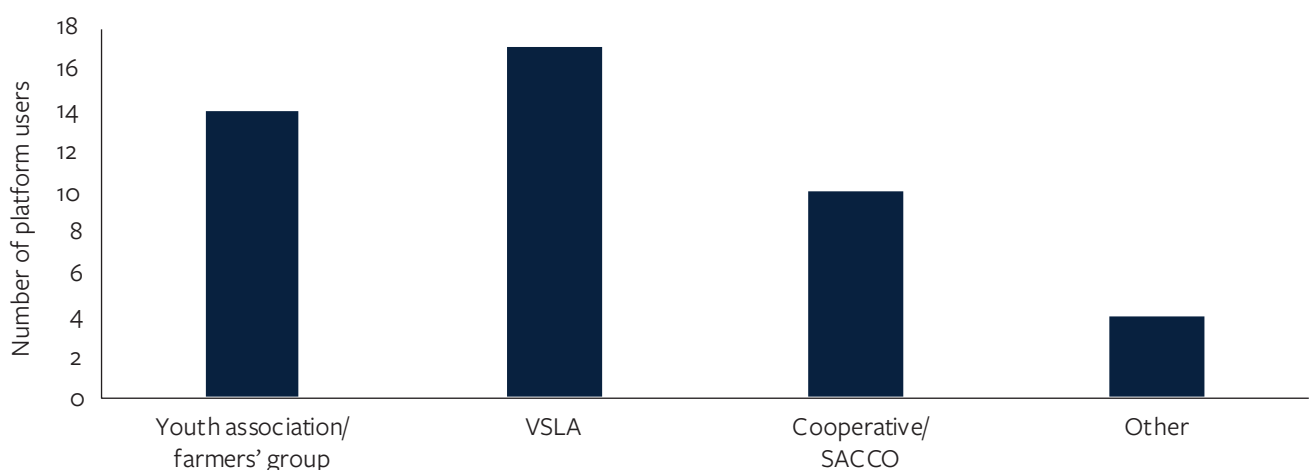
Interviews with platform users clearly indicate the importance of accessing ag-platform services through a cooperative.

We are getting platform services because we came together as a cooperative, so it becomes easier to access information and have bargaining power also as a group. As a cooperative, we have an office, and in that office we have a smartphone where we access all the information. We also have different committees in our cooperatives; for example, the marketing committee search the market, bargain and get a concluded price. (Young male business owner, Kole).

I could do it alone but it would be difficult, for example carrying, loading and offloading maize from here to town as an individual. It can be hard – buying the sacks for packing, stitching the sacks, doing all those things individually. In a cooperative, you pool resources together so it becomes easy. (Young male business owner, Kole).

In one group, which had been formed as a cooperative, youth were saving towards acquiring an iPad that would allow them to access more information through apps, for instance information around government extension services.

Figure 14 Participation in business group



When we acquire this iPad, we will build an app which can connect us to other partners, hence they will be picking interest in helping us. Secondly, government programmes in most cases display updates through digital platforms like WhatsApp, Facebook. Thirdly, there are some apps in that iPad which can display weather conditions, weather changes so that it will enable us to be ready to overcome any other changes. Also to add on that, it will help us to get ready market from partners and to set a stable price for our products. (Young male business owner, Kole).

But this also comes with challenges, such as an inability to individually access information or make decisions, as well as around group membership retention.

If you don't have a smartphone, it becomes difficult for you to access some platforms or some information on other platforms and also if the cooperative has gathered your things together, it becomes very hard for you to sell your own. You have to wait for other people to agree on when to sell and then sell as a group as a cooperative.s (Young male platform user, Kole).

A disadvantage of the platform being run through a group is that the access to that information is geographically bound to a place. When a person moves to a different village, for instance, they lose access to that information, as it is transferred to the group verbally. Furthermore, the use of and access to the information on the platform entirely depends on the facilitator. In one case, when the individual died, the information ceased to be transmitted to the group. Finally, some young people reported that they had to pay this facilitator to cover costs like transport or airtime.

This created some challenges as some members were unable or unwilling to pay, and therefore the group could not access the information.

In some cases, the person who provides the information from the platform (acting as a facilitator) is also the buyer. In other cases, the person sells inputs to them, such as seeds.

I've heard about people sending messages about prevailing prices in different markets ... There was somebody working in this sub-county of Mutunda whereby those people who used to send him messages, they could send to him, then he circulates the message to other people. (FGD with YETA parent mentors, Kiryandongo).

In other places, the information from the platform is passed on using a blackboard in a public place.

In my village, there was a blackboard put somewhere in a public place, so, whenever this gentleman would receive messages, he would go himself and write on the board, for example that in Kampala the price of maize is this much, in Gulu the price of maize is this much, in this place it is like that so that's how he used to do it. (FGD with YETA parent mentors, Kiryandongo).

Still others received information from the platform through friends.

I would get good advice on how to treat even my piggery, how to plant crops, so that you would just google and then get all the information through this platform then advice from friends who are also in this platform. (Young male business owner, Kole).

7.2.3 Benefits of ag-platforms

Top benefits/reasons for registering include access to new markets and buyers (cited by 10 respondents), access to training and skills (8), improved production practices (8), improved productivity of businesses (8), access to credit (8) and increase in bargaining power (4) (see Figure 15).

Interviews reveal important insights into how these ag-platforms are helping youth to grow their businesses, but also associated challenges.

7.2.3.1 Enabling contract farming

Platforms have also enabled a form of contract farming, allowing farmers to escape from exploitation when demand is low.

We source sorghum from dealers online and sign an agreement with them. So, even if we produce a lot but the demand is low, we are still able to get the money and we are not affected by the fall in price. This kind of contract farming as a result of using that platform has helped us in getting good market. Overall, the improved seeds sourced from the platform, in case of maize and soy-bean give us a better yield during

harvest period than the local seed we were using earlier. (Young male business owner, Kole).

In the village here, people always buy sunflower at UGX 800 but the market we got on the platform for Ngetta Tropical, we took there our sunflower, and they were given at UGX 1,000. (Young male business owner, Kole).

7.2.3.2 Diversification in production linked to higher access to extension services, access to inputs and markets

Of the 18 platform users, 15 (83%) report diversification of production, 12 (66%) report diversification into value-added activities, 5 have diversified into new markets or buyers, and 3 have diversified into new products (see Figure 16).

Diversification of production (into new markets, products and value-added functions) in platform users is probably facilitated through access to information. Access to information on buyers and sellers and on government extension and legal services was reported by 14 of the 18 platform users, 13 reported access to information on inputs or product prices, 12 on pest and disease control information, and 11 on input use (see Figure 17).

Figure 15 Benefits of ag-platforms

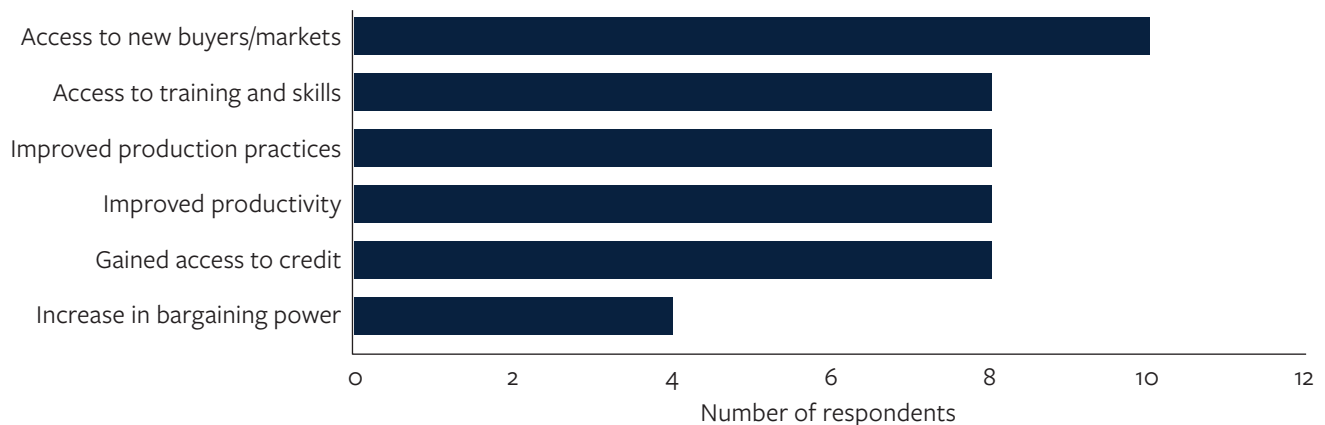


Figure 16 Diversification by respondents (number of platform users)

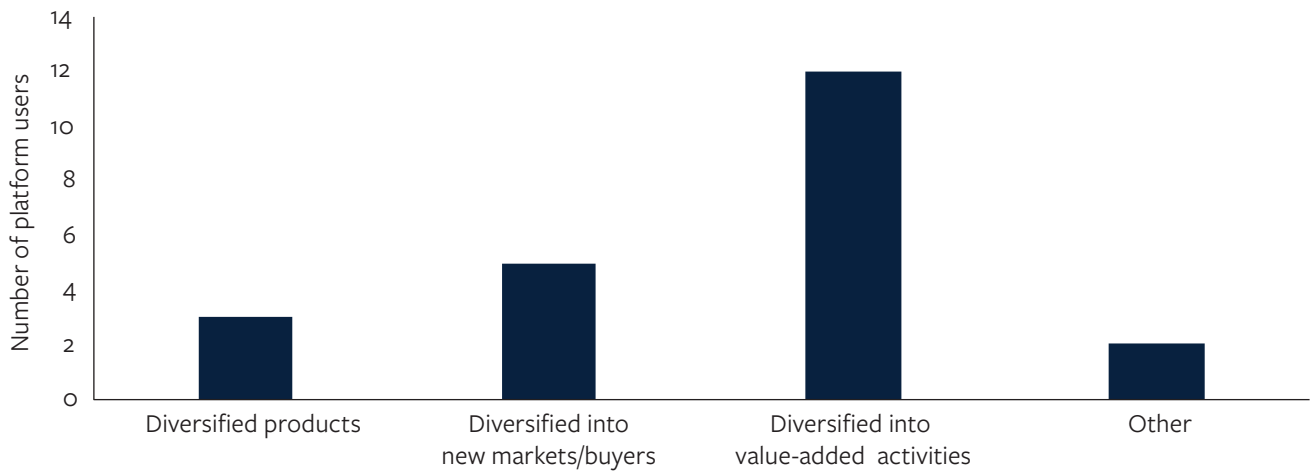
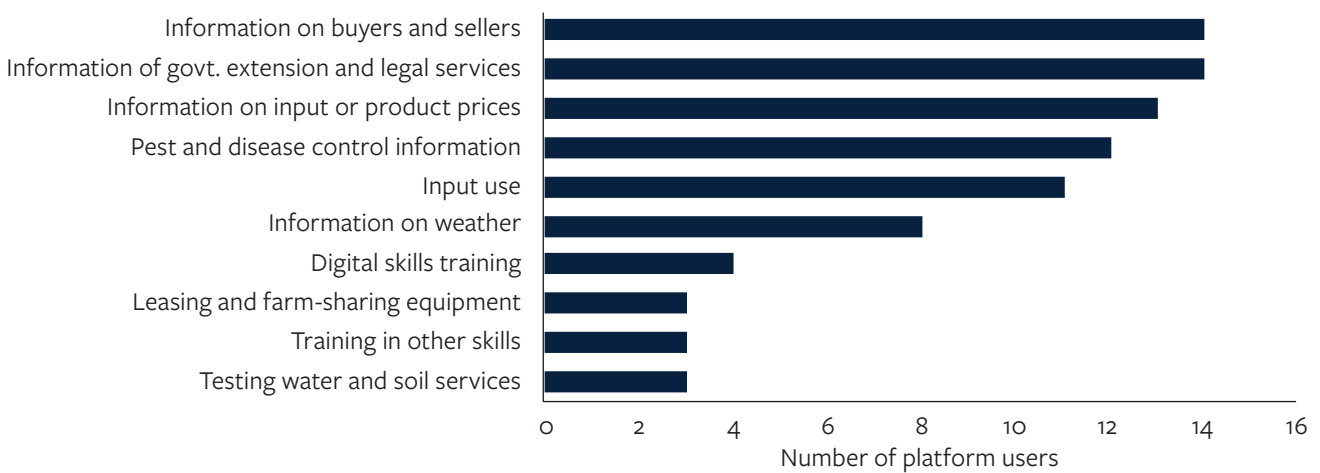


Figure 17 Access to information and services



Interviews revealed how ag-platforms provide information on inputs, weather and buyers and sellers, facilitating access to new markets and new products. At the same time they also revealed concerns about the lack of real-time information on farming and weather due to poor network coverage in their villages.

I use the Enterprise Uganda online app to learn about the weather; when the rains are going to start and when I should plant. I have also learnt the application of fertilisers and planting of

seeds, in addition to finding out information and accessing improved seeds, such as the Maksoy 6N and Chromatin sorghum that has good market with Uganda Breweries. (Young male business owner, Kole).

I used the app to find out more information on the sign and symptoms of crop diseases and pests, and how to control them. You can search signs and symptoms of crop diseases and the app tells you whether it is disease or a pest and how you can control it. (Young male business owner, Kole).

I live in Kole, and I have a platform with people in Oyam, in Lira. If there is an outbreak of a pest in Oyam, but the pest has not yet reach here, then from the platform you know what the pest look like and so on, by the time the pest reaches here you are already informed, you know what to do. We get advice from experts on the platform of pest control. (Young male business owner, Kole).

The app informed me that soy-bean has a market in Lira district, the rate at which it was selling, location and contact details of the dealer. It also provides us information on which crop does better in the market. For example, we found out that the DK [DEKALB®] variety of maize, when you grind it, gives you less flour compared to other varieties like 'bazooka', so we have switched to the latter. (Young male business owner, Kole).

On value addition, the general perception was that it is expensive, and young people do not have the resources or knowledge to do it.

Value-addition mechanisms, some of them are expensive. You may find a maize mill costing UGX 50 million which they may not have. Secondly, we don't have power distribution. You don't find distributed power to support because value addition, especially milling, requires power which is not there. (KII with local government official).

Platforms help address this challenge by providing important information on value addition to their users. Young entrepreneurs demonstrated how they made more profit by adding value through upgrading products and undertaking post-harvesting activities, such as packaging and processing.

I get information on how to pack and process honey from the platform. It provided us with information on maize storage; after drying maize, I need to sort it, then pack it properly in clean bags and store. If you are storing, you don't put down on the cement, you put on top of racks so that the moisture from the cement does not go into our maize and it ends up getting spoiled. So, that is how ag-platforms have helped. (Young male business owner, Kole).

My participation in a cooperative has helped through using the platform. When I sell on platform, I get more money than local buyers. With this money, I go and add value on other products that I've harvested. Last year, I decided to process maize and pack it and kept it for some short time when the price went up, I sold it at a higher price as Posho [maize flour] not as maize. (Young male business owner, Kole).

You learn many skills from those platforms, more especially about post-harvest handling and value addition. I learnt the use of tarpaulins during harvest handling, which helped me to increase the quality of our produce and reduce the aflatoxins in our produce. (Young male business owner, Kole).

Non-platform users have also experienced diversification in production but, while most platform users have diversified into value-added functions, diversification in non-platform users is predominantly into new markets and products. Only 38.5% of non-platform users reporting diversification have done so through entry into new value-added functions. Of 348 non-platform users, 179 have diversified production (85 into new markets, 82 into new products, 69 into value addition). Over 50% of non-platform users have access to information on input and product prices, input use, buyers and

sellers and on pest control (see Table 9), but the main source of information is radio, followed by information exchange among friends.

Interviews reveal a key difference between the information received via radio (by non-platform users) and that received through mobile phones (including platform users). The information young people received via radio is more directed at long-term business practices and growth, such as how to increase yield through planting and growing in

Table 9 Access to information for non-platform users

Access to info	% of sample
Real-time information on inputs and product prices	57.18
Government services	33.91
Input use	50.86
Weather information	47.41
Testing soil and water	4.59
Access to digital skills training	5.46
Other skills training	8.05
Information on buyers and sellers	74.7
Information on pest control	55.75
Information on leasing and farm-sharing equipment	10.06

certain periods, while the information received through mobile phones is more real-time information that helps young entrepreneurs in their day-to-day business operations.

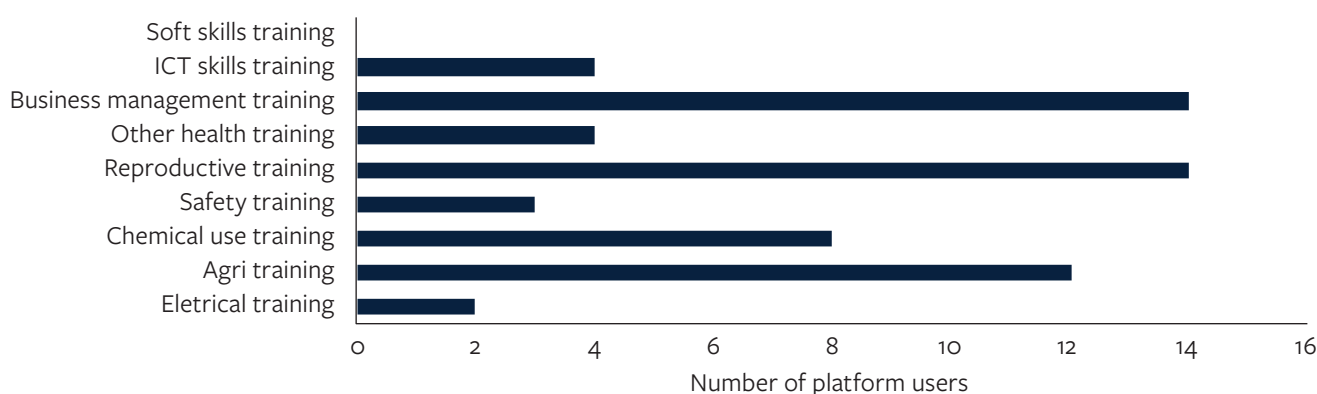
7.2.3.3 Training and business management support

Platforms have also emerged as important gateways for trainings and skills development, particularly for financial and business management for youth. Of the 18 platform users in the survey, 17 are undertaking some form of training. Traditional training is mostly through NGOs and farmers groups, while ICT training is provided by platforms (see Figure 18).

I was taught how to use the app from Enterprise Uganda, who took me through a training workshop. That facilitator has been helping us, even up to now he helps us. But I wish for more capacity building or more training on how to use such apps. (Young male business owner, Kole).

We also learn to be trainers or teachers to people in our community, or consultants, such as in the case of apriary or bee-keeping, or crops we usually grow, such as maize and soy-bean. I have also accessed some trainings from the platforms; we connected with Lango food security organisation

Figure 18 Types of training undertaken



– Lango Food Cluster – and went through training of gender balance roles and vision road journey. It also served as a linkage between me and my friend for training on how to make improved charcoal stoves – energy saving charcoal stoves (Young male business owner, Kole).

If there is any organisation that is giving support to cooperatives or groups, we always get them on these agri-platforms. (Young male business owner, Kole).

Using agri-platforms has helped us in financial management that end up boosting our production and our businesses. For instance, if I am planting an acre, it will show me the quantity of seeds and herbicides needed. So, there is that component of financial literacy in using these agri-platforms that help us. (Young male business owner, Kole).

Agri-platforms have helped me in building my capacity or skills in a way that it takes you through a process. So, I got more knowledge and skills, especially on keeping animals and planting crops through agri-platforms. (Young male business owner, Kole).

7.2.3.3 Reduced cost of logistics and communication

Not only have ag-platforms reduced transaction costs (cost of searching, connecting and coordinating) but, for some businesses, engagement with ag-platforms has reduced the cost of transport. There was also a general sense that access to platforms helps to connect with people outside their immediate village and talk to people who are further away. The exposure to people outside the immediate vicinity appears

to be associated with access to a wider market, better information on how to grow a business and better communication with customers, as well as an overall shift in business aspirations.

I feel like the digital should come in, so that's how these people are exposed because if you are confined in one place, it is not good, you think that you are doing a good business yet you find that you are not doing anything. You can be in that same business for very many years you think that you are making profit while you are just keeping that capital. (KII with local government official).

I pray that I will come to know about this. I know very well that it will help me to be known to other people, to some of my partners who are doing the same business as well as it make easy communication between me and other clients. But not only that; it will help even get advice on how to plant, on how to spray crops, how to harvest and all those things related to that. (Young female business owner, Kole).

So long as you bulk your things together, buyers on agricultural platforms give you transport that is calculated on their own, not cutting from what you are selling. (Young male business owner, Kole).

Some non-platform users reported interest in and plans to join ag-platforms in the future, primarily to gain access to up-to-date information on prices and information on better agricultural practices to increase their yield, and to save on travel costs through direct access to information and customers. Some sought to interact with friends, while others wanted to gain easier access to markets.

It would make my work easy. Whenever I need to get market from somewhere far, I would just take a picture of my product, then use WhatsApp to send it to the client or to customers to see how valuable my products are and thereby raise interest. It will act like an advert to my business. (Young male business owner, Kole).

7.2.4 Challenges to accessing and using ag-platforms in Uganda

While digital platforms can address some of the challenges to business growth discussed above, young people’s access to these technologies in Uganda is limited. Our survey revealed that awareness among youth regarding digital platforms is the key challenge to expanding adoption. Over 70% of the non-users of ag-platforms are not aware of such platforms, and over 20% of the sample reported the high costs of using platforms and lack of support as reasons (see Figure 19). For women in particular, awareness of these platforms emerged as a key problem during interviews.

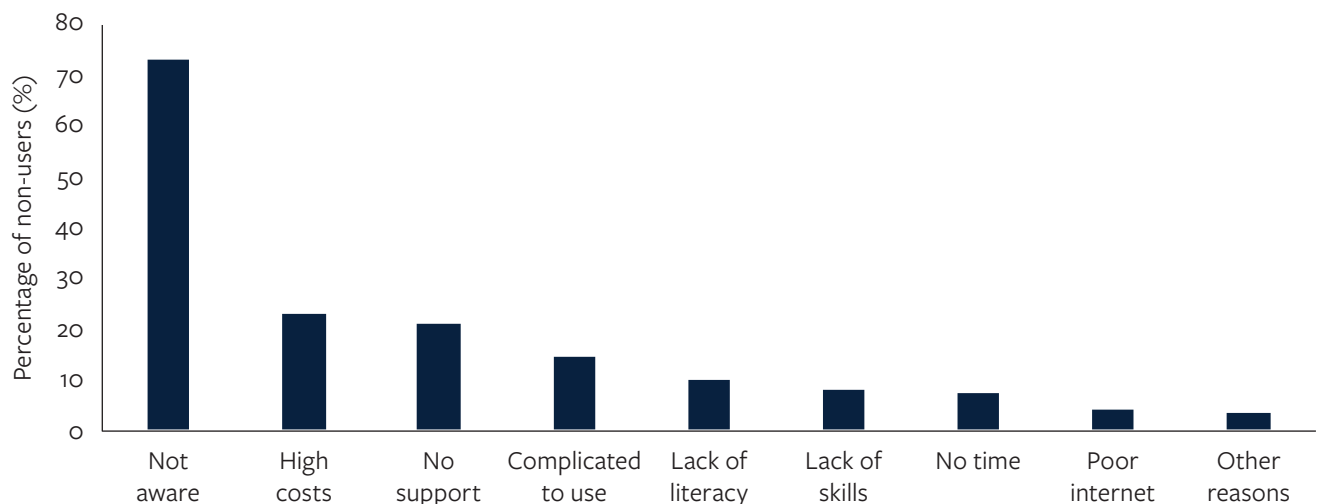
While over 60% of non-platform users do have access to mobile phones, during interviews

access to smartphones emerged as a commonly mentioned reason for not using the platforms. Some youth talked about the costs of using a phone, including airtime, electricity and the OTT tax, as well as internet access, as being among the main challenges to accessing ag-platforms. Some also mentioned that even if they had a smartphone, they would not know how to use it. One person had a phone and gave it away because they did not know how to use it. Illiteracy was another challenge when it came to using ag-platforms and smartphones more generally.

My challenge is the phone. I have an ordinary phone. If I had a smartphone maybe I would try and register. (Young male business owner, Kole)

Connection is very important. If you are not connected it is very hard for you to go for it. The other thing is, when using these digital apps, you need at least a smartphone. I still don’t have one, though am planning to acquire one. (Young male business owner, Kole)

Figure 19 Reasons for not using ag-platforms



There is also a problem of poor network and charging because we don't have electricity. I will be required to move up to the centre to charge the phone. I decided to invest in solar charging, although it is expensive. Another problem is that of OTT tax and the MBs. (Young male business owner, Kole).

I lack skills on how to participate in the group. And not only that; I don't have even a smartphone that can support me in browsing ... to access apps like WhatsApp, Facebook, Twitter or Instagram, which are normally used to create those groups. (Young female business owner, Kole).

The perceptions and attitudes towards ICT use in microenterprises are important (Bharadwaj and Soni, 2007; Chew et al., 2013; Tang and Konde, 2020 citing Bengtsson et al., 2007). Microenterprises aspiring to expand their business beyond their immediate local nexus have greater information needs and can benefit from ICT to communicate with geographically dispersed customers, suppliers and business partners (Tang and Konde, 2020). At the same time, investing in ICT can be risky for resource-constrained microenterprises if they are uncertain about the returns. Direct and indirect costs can be substantial, including investment in acquiring equipment, capacity to operate, manage, maintain and upgrade technologies, as well as the potential risk of online fraud. One challenge faced by those using platforms in our survey was lack of trust and the fear of being 'conned'. The perception is that people on the platforms are spreading lies. For some, this is based on past experiences where something had been agreed online through a platform, such as the delivery of products, but the person on the other end did not deliver, leading to disillusionment.

For others, however, this fear is not based on their past experiences. The absence of trust in the platforms and their users is a barrier to platform use.

Interviews with ag-platform users also revealed further challenges to the use and uptake of these platforms, including access to smartphones, payment for internet bundles, poor network availability hindering access to real-time information, poor data connection, unreliable access to electricity to charge phones, lack of online selling due to payment issues, higher standards and rates of rejection on platforms, and low online trust of consumers.

The problem that we have seen with online selling is that the payment period takes long; people come and collect the items they have purchased but we get the money later, this is particularly difficult in a cooperative when there are lots of people. (Young male business owner, Kole).

Buyers on ag-platforms are very strict on their standards. For example, they come and measure the moisture content for example in soya and when you are drying or the way you stored your things, if they happen to absorb water and they find that the moisture content is higher compared to the normal one that then is accepted as one of the standards, they always chop off your money. (Young male business owner, Kole).

People don't trust online selling. If I tell them I have 10 tonnes of maize, they will first come to see if the maize is truly there before they come to buy. There are many delays. (Young male business owner, Kole).

8 Trainings, skills development and enterprise growth

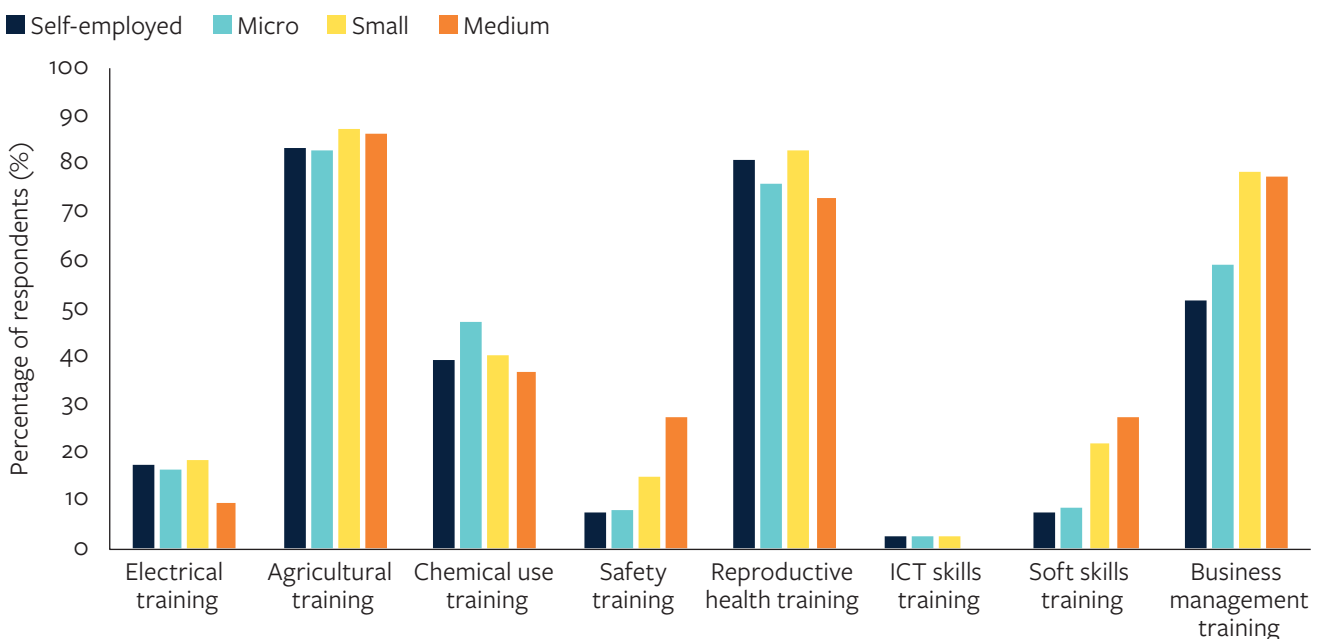
8.1 The role of training in enterprise growth

Human capital is an important enabler of business growth. While much of the evidence suggests that training alone is not associated with microenterprise growth, experimental evidence from Uganda suggests that, among young men, training in business skills when coupled with funding support increases business profits (Fiala, 2013). Training helps to ensure that the immediate impact of loans for microentrepreneurs goes on to have a lasting effect. One such programme is the YETA programme, which developed financial literacy and encouraged young people to form VSLAs to save to increase their access to capital for investment through loans. In addition, a group incubation kit was also provided, as a

group demonstration of how to enhance youth skills in a particular enterprise. Not only do skills help entrepreneurs run their businesses more effectively, there are often skills like managerial skills or financial literacy skills that are a prerequisite for accessing other resources, such as financial services. To grow a business, young people need the know-how and technical skills that can increase their productivity as well as more standard business skills around business management, financial management and marketing that can help increase their sales and grow their capital and improve overall performance.

A higher share of young entrepreneurs, across firm size, report access to agricultural training, reproductive health training and business management training (see Figure 20). However, ICT

Figure 20 Access to training according to enterprise size



skills training and soft skills training, in particular, are lagging behind. In certain types of training, firm size also appears to be relevant. Roughly 78% of SMEs have access to business management training, as compared to only 58% of microentrepreneurs. Larger firms are also doing better in terms of access to soft skills training and safety training. Friends or family appear to be the main source of electrical training, while NGOs are the main source of training on chemical use, agricultural practices, safety, and on reproductive health and soft skills. For business management training, the main source is NGOs, followed by farmer groups. The main source for ICT trainings (reported by only 7 respondents) is ag-platforms.

8.2 Which trainings are benefiting young people's business growth?

The training that young people felt had most influenced their business growth and aspirations were the agronomy, business management and financial management trainings. After undergoing training, young people changed their agribusiness practices as well as practices in other businesses, and they also changed their post-harvest practices. While most reported receiving this training through YETA, which was led by NCBA CLUSA, some young people talked about learning these practices informally; for instance by observing family or members of their community to learn from their agricultural practices. Some learnt how to use a phone from community members or family. Parent mentors in the YETA programme also played a key role in solidifying the skills young people gained and guiding them through how to address challenges such as coping with diseases in their livestock and resolving conflicts within their groups (Löwe et al., 2019).

8.2.1 Agronomy training

Those who underwent the agronomy training reported changes to the way they do farming, i.e. being more methodical when it came to planting in rows, spraying their crops, using fertiliser, using improved technology such as an ox plough, or giving medicine to their animals. As a result, they were seeing greater yield as well as increased profit, allowing them to start new businesses or reinvest in growing their current business.

The training has helped me a lot because after putting it into practice I am now getting a higher yield. Not only that, we receive general knowledge in different aspects like even how to rear poultry, how to rear goats. I put it into practice and that is one of the factors why am planning to start up another business of produce. (Young female business owner, Kole).

Before CLUSA trainings, we were growing crops like maize without fertilisers, but after we got trainings from CLUSA I'm now growing maize while applying fertilisers so this makes the yields grow much better than before. (Young female business owner Kiryandongo).

The training in agribusiness helped change some young people's attitude to farming. Where they were previously farming for consumption, young people are now seeing it as a business in which they can invest and witness growth.

Training that I really saw that was key to these boys and girls was the training on agriculture as a business not on a small scale for consumption. (FGD with YETA parent mentors Kole).

As a mentor, I have seen in this community of ours, people always do farming just for home consumption but the training and package of agriculture that they were given really taught them farming can be done as a business ... most of them they would get money from farming, they put it back in farming and part of it they use it for saving. (FGD with YETA parent mentors Kole).

Young people also changed their post-harvest practices, including seeking information about market prices before selling and getting better prices by selling during off-season, as well as bulking and selling through their cooperatives to increase their negotiating power for better prices.

8.2.2 Financial and business management training

The financial management and financial literacy training was found to be particularly helpful by young people. Under the YETA programme, the VSLA model was a component of the financial literacy training. Young people learnt how to save money in a VSLA and how to use the savings or loans from the VSLA to invest and grow their business. Young people were saving towards a business purpose, i.e. saving towards an investment in their business such as inputs. When they were borrowing, they were doing so for business investments rather than for consumption. Young people spoke about borrowing and saving towards starting a new business.

When I joined the CLUSA programme they trained us in saving skills so we started saving as a group. That is where I got my money to start my personal business and up to now I still save. At the end of the year after distributing the money I get the money and invest in my business. (Young male business owner, Kiryandongo).

The training, especially on VSLA, has helped me in a way that when you don't have money but you want to expand your garden, you can get money from the VSLA, then use it in the garden and when you get money, you pay back with some little profit, thus helping you to go on expanding your business. (Young female business owner, Kole).

As a result of their VSLA saving, young people were making significant investments, such as building a storage space and a shop.

From the trainings we got from YETA, the youths in my community were able to involve themselves in VSLA. Last year they saved a total of UGX 6 million. When we distributed that UGX 6 million in the VSLA the youths were able to get land, they made bricks, and they are trying to construct a building where they will store and bulk their maize and start a retail shop. (FGD with YETA parent mentors Kiryandongo).

The training on savings also helped young people learn how to continue earning money and make a profit even when market conditions were unfavourable, and how to deal with emergency situations. This would help smooth consumption and protect their business against emergencies.

I had a weakness in the sense that when the season for selling is not good, I would just sleep. The way we were trained that you have to be in at least a saving group whereby when your sales are low or when you don't have money, you can go to the group to borrow and you put the loan in your business and stand strong. (Young female business owner, Kole).

Even if someone has an emergency, at least he has a source whereby he can go and borrow some money and solve that problem since he or she has been saving. So, that is the most important training that I've seen. (FGD with YETA parent mentors, Kole).

Moreover, following the training, young people started keeping records and calculating their profit and loss in a more systematic and regular way. Prior to the training they were not calculating profit and loss. They also reported changing their spending behaviour and being more purposeful about saving towards the growth and expansion of their business, seeking out information about market prices, calculating profit and loss and generally having a better overview of their finances, including where they had debts. Young people reported changing their business practices, in particular being more systematic in their farming business. Overall, they felt they had more agency about their business. They actively went out and sought information about market prices before deciding whether to sell their produce/products immediately or to wait until market prices improved. They diversified their business to ensure a steady income even during the off-season.

The training I received through YETA on financial management and business skills training, as well as VSLA training, helped me in a way that whenever I go anywhere with all the money in my pocket, I would have in mind that this one I am going to use for this one specifically, for this one, this one, I'm going to save and then go back home with it. (Young male business owner, Kole).

I learnt how to calculate profits and losses and it has also made me know how to identify challenges. I'm seeing the income and profits that

I'm getting on a weekly basis, which shows me that my business will grow bigger than before. (Young male business owner, Kiryandongo).

When they see they are making a loss, they change their business practices to increase profits and cut losses.

It is helping me for example if I have skills of business management and I see that what I have sold have not brought for me the profits, instead has made me to get losses. I have to change immediately and I see the tactics of how to mitigate losses next time. (Young female business owner, Kole).

8.3 Training and young people's business aspirations

When asked how the training changed their aspirations, the majority referred to how it had helped them start a new business rather than how it had helped them grow an existing one. Overall, young people felt that the training made the aspirations of starting a new business or growing current businesses seem more achievable. Some young people began to consider starting businesses that they would have not otherwise have considered.

I had nothing to do. I had never thought of doing anything or venturing into any sort of business, but after the training I decided to carry out farming as a business, and after I also ventured into this business of making timber which is still helping me. I now generally know what I'm doing. (Young male business owner, Kole).

This training changed how I was feeling about businesses generally because I was just thinking

of farming, I was not thinking of any other business. Through the training, I was able also to think of doing something else like general merchandise shop and tailoring. Now I do farming as a business, tailoring and sale of merchandise. (Young female business owner, Kole).

The training also changed young people's attitude towards farming. Young people started seeing farming as a viable business, one they could engage in with aspirations to grow it further.

Before the YETA training, I used to do only dirty things and I used not to think about any business. I used not even to think about farming as a business. After the training I began now to build confidence in farming as business and then also start something small which is my secondary business of bicycle repair to support farming. (Young female business owner, Kole).

Many young people wanted more of the same training they had received from YETA, as they felt they had forgotten or did not have enough confidence to apply it. This suggests longer-term mentorship is needed to increase application of some of those skills. Others wanted training in life skills, such as how to use a smartphone, how to ride a motorbike and other skills that

were not technically linked to their business but would strengthen their ability to run and grow it. Often these were enablers for market access. For instance, some wanted to learn how to use a smartphone in order to sell on Facebook or WhatsApp, while others wanted to learn how to ride a motorbike to be able to transport their goods to the market or customers.

Many of the benefits of the trainings were accrued through group activity, whether through saving and borrowing through their VSLA or building as a group and selling through a cooperative. However, for some young people, trainings in running their business through this group model made no difference to them, as their group members were not collaborating. Some groups did not have their meetings, and as a result young people started doing their own business without the group.

We received training equally but the problem was there was selfishness in the group. Some of our members also decided to take some of the incubation business which was given and the group just collapsed and that is the reason why I decided to start my own business, not something in line with what was trained – what we were trained on. (Young male business owner, Kole).

9 Investments and resources for business growth

Most young people were investing in their current businesses, e.g. buying inputs, growing their land and acquiring assets. Most young men and women were investing in assets such as livestock and poultry, and bicycles or mobile phones, as well as land. Others invested in a mobile phone to help them communicate better with customers. Below, we discuss sources and types of investments and how they are contributing to business growth.

9.1 Sources of investment capital

Asked how they found their resources to make their business investments, most young people replied that it was through income from their sales, VSLA borrowing or a combination of both. The charts in Figure 21 exceed 100% as young

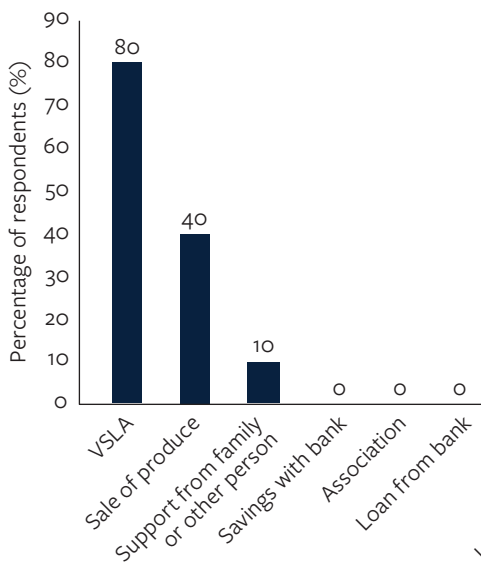
people were using multiple sources simultaneously or at different times.

I started with farming. With the money that I got from farming I bought a tailoring [sewing] machine. I continued with farming and with what I earned from making clothes and farming, I was able to start a general merchandise shop. (Young female business owner, Kole).

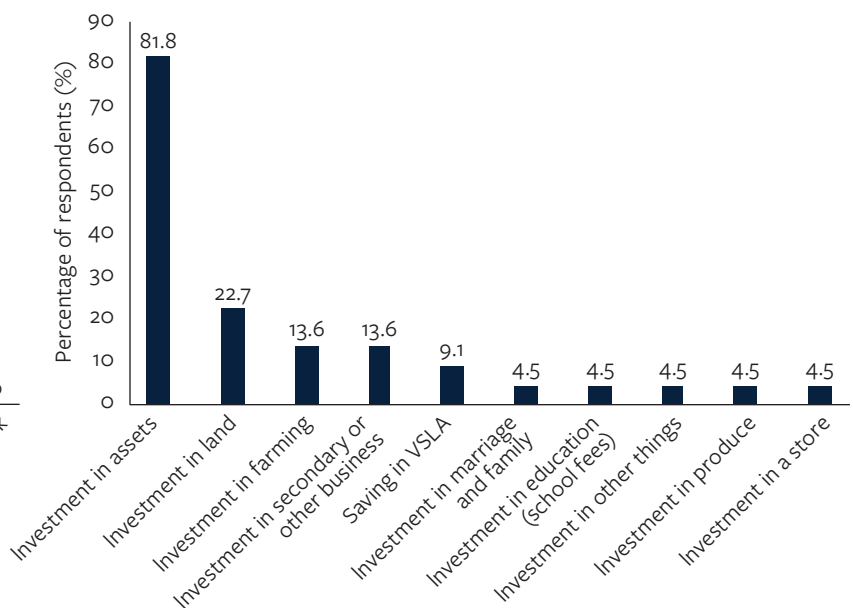
I was farming half an acre of land, but after joining the VSLA scheme I could borrow money from my VSLA, and I hired two acres of land. That is how I've been able to expand my farming business. (Young female business owner, Kiranyandongo).

Figure 21 Sources of investment according to gender

Current sources of capital for business investment – female



Sources of funds for realising growth aspirations – male



The timing of the paying out of the VSLA savings ensured that young people used this to invest in their business. They learnt through the YETA programme that if the group distributes the savings just before or during festive periods (such as Christmas) young people were likely to use the money for consumption rather than business investment (Löwe et al., 2019).

The project that was being implemented by CLUSA has helped our youths to improve on the livelihood, for example the VSLA part of it. Our youths always save and they make sure their cycle ends during planting season. After getting their money they use that money specifically for buying improved seeds. Some of my youths have bought oxens for ploughing, so, because of that saving, they have improved on their farming and therefore they are getting good output out of it, hence expanding their farming business. (FGD with YETA parent mentors Kole).

None of the young people said they relied solely on the capital from the VSLA or loans. This is not surprising given that to benefit from VSLAs, young people must first save with the VSLA. Often the loans young people can receive from their VSLA are based on how much they have saved. In fact, most VSLAs will have agreed with young people how much they can borrow – for instance, no more than three times what the member has saved. This directly limits how much young people can borrow, and for some the amount is so little that it only allows them to make small investments to keep their business running rather than growing it substantially. The more a young person saves in the VSLA, the more they can borrow. This also means that those who are struggling the most with their business are also benefiting the least from VSLAs, thus creating a vicious cycle for those at the bottom of the business profit

pyramid (Löwe et al., 2019). Young people who are not making enough profit are not saving enough and therefore cannot borrow enough to make significant investments that allow them to grow their business. To access enough capital for business growth, young people must first make enough profit from their business to allow them to save enough with the VSLA.

9.2 Types of investment

9.2.1 Investment in land

Productivity in Uganda is limited by young people's lack of access to land. The average size of land in the hands of youth in Uganda is 0.89 hectares, compared to 1.25–1.5 hectares among adults and older members of farming communities (Ahaibwe et al., 2013). Unclear land tenure is another challenge; only 20% of land in Uganda is formally held under title, which creates land insecurity (ibid.). Our survey and interviews confirmed that most young entrepreneurs had only small plots of land, and therefore they were continuously investing each season in renting or acquiring new land. Renting land emerged as the most common way in which both young men and young women were accessing land, but interviews revealed important pitfalls. First, it is costly to rent land every season, and young people complained that the cost of renting has gone up consistently. Second, renting land is often not financially viable and young entrepreneurs can end up making a loss, especially if they cannot sell their harvest or the market price of the produce is too low. This, in turn, means they end up just doing subsistence farming as there is no surplus capital to invest in business growth after taking care of their basic needs. Those who inherit land from their parents are at an advantage as they can rent additional land with capital derived from the inherited land, increasing their acreage and thus their yield.

Third, landowners often forbid young people from using agricultural inputs, such as fertilisers, that could increase their yield. Part of the explanation for this is that landowners from whom the young people rent land hold assumptions around fertilisers contributing to soil infertility. However, in parallel there were also cases where, after young people had agreed to rent land for two seasons and used fertiliser on that land, owners of the land would then take it back after only one season, thus reaping the benefits of the fertiliser the young people had applied before they could benefit from it.

Since the land I'm farming on is mine, I'm free to apply fertilisers to enhance growth of my crops, but when you hire, landowners would take application to be put on their land. On my own land, I'm free to do anything on it, like putting fertilisers. (Young male business owner, Kiryandongo).

Fourth, as renting is seasonal, young people cannot grow crops that take longer to grow and harvest. The size of the land young people rent is typically small; youth acquire more land by renting from different landowners in different parts of the village, which in turn requires travel. Young men and women often struggle to farm beyond subsistence, as the dispersed and limited amount of land restricts their yield and therefore how much they can sell to make a profit.

9.2.2 Investment in assets and technology

The most common assets young people invested in (apart from land) were livestock and poultry. Investment in livestock was done with the purpose of multiplying the livestock, sometimes in order to sell part of the increased livestock and then reinvest in more animal rearing or other businesses.



Field of maize growing in Kampala, Uganda. Photo credit: Herbert Musoke / Shutterstock.com

The youths buying animals like cows, goats, pigs and poultry – the birds – it shows that their businesses are growing. For example, when they save, after the cycle they get money, they buy those animals, those animals with time they are multiplying and they sell and invest into their businesses, some of them invest in general merchandise. (FGD with YETA parent mentors, Kole).

Some young people are investing in livestock as a longer-term saving mechanism, with investment in other assets beyond livestock directed at increasing access to markets, such as through bicycles and other means of transport.

I bought a bicycle; I really saw it was important because it helps me to carry crops when I am harvesting those crops from the garden to home or sometimes when I am going to sale to the selling point. I always use a bicycle to transport. (Young female business owner, Kole).

Young people also made investments towards increasing their productivity and business growth. They are investing in buying inputs for their business. For those in farming this includes fresh crops or seeds, fertilisers or improved technology.

I borrowed money from my VSLA group, then I used part of that money for buying seeds and paying casual labourers who are working on my farm. Then again part of that money I used for buying ingredients like yeast for brewing the local brew. (Young female business owner, Kiryandongo).

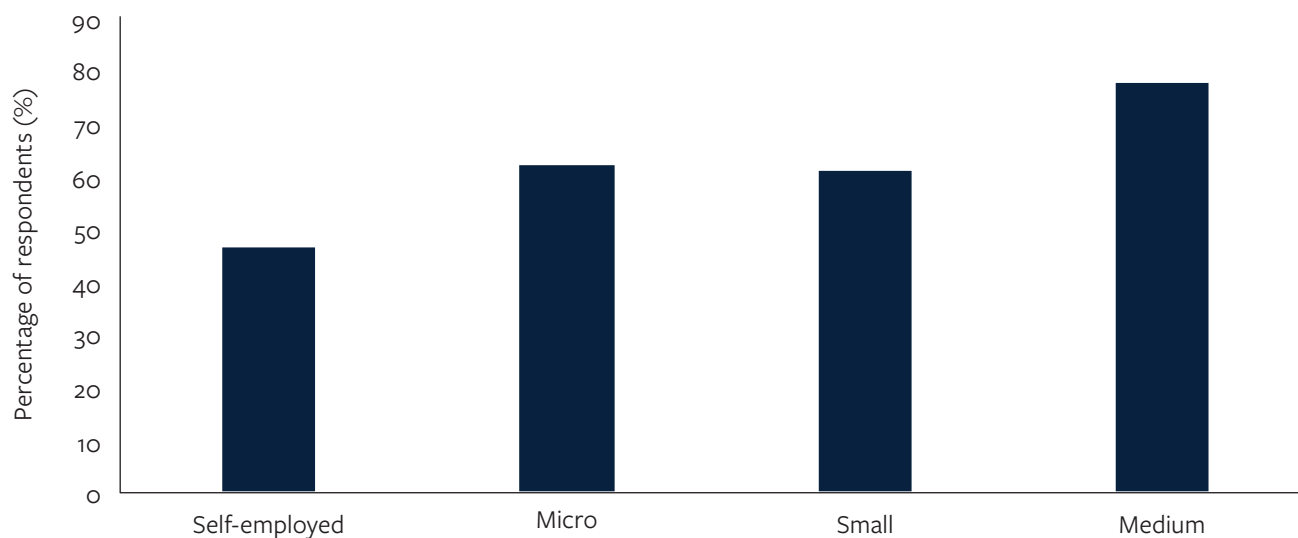
9.2.3 Investment in labour

Investment in labour emerged as important for enterprise development, particularly for business expansion, although the causal relationship is not entirely clear. Overall, 77% of youth with a small primary enterprise of between 5 and 19 employees have a secondary business, compared to 62% of youth with a microenterprise primary business (with 1 to 4 employees); only 46% of self-employed youth have a secondary business (see Figure 22). It may be that as their primary business takes on more employees, entrepreneurs become better placed to take risks and enter into new businesses. On the other hand, entrepreneurs with multiple businesses may be making more profit and so hire more labour in their primary business.

The number of employees in the primary business therefore appears to be a potential factor for business expansion, as was confirmed during the interviews.

Hiring people to help me in the garden has supported the growth of my business in this way. My work in the garden is done fast, which gives me time to attend to the businesses so I maintain my customers rather than my customers coming and not finding me at my business place. That would make them run away. (Young female business owner, Kole).

My business does not close whether I'm there or not there, they remain operating; for example today I had gone to sell my produce in Agwenyi market but they were here selling the general merchandise and buying other produce. (Young female business owner, Kole).

Figure 22 Share of youth with multiple businesses by primary business size

In a similar vein, employing someone also helped ensure business continuity in case of sickness.

Sometimes I fall sick, so, even if I get sick, still my work keeps going because of the labour that I hire. (Young female business owner, Kiryandongo).

Interviews with farming entrepreneurs revealed that young people were employing mostly casual labourers to help with weeding and harvesting and sometimes transporting goods. The employment relationship varied from season to season.

Typically, the work was for a few hours at the start of the season for weeding and again at harvest time. The agreements were verbal and short-term arrangements based on current needs.

I hire people when it's time for weeding, they come and do weeding work in my garden and also I hire them when it is time for harvest. (Young male business owner, Kiryandongo).

Sometimes we hire casual labourers to help us in farming, especially during time for weeding. (Young female business owner, Kiryandongo).

In non-farming businesses, young people employed someone to help them run a store while they were attending to another business, deliver their products/produce to a buyer or help with their hairdressing. Others needed help with transport for their produce-selling business. Others bought or hired a motorcycle and employed other young people to ride the motorcycle as part of their *boda boda* business.

The people they employed were typically either members of their group (VSLA), family members (including their spouses, children and parents), peers or so-called 'digging groups'. The latter were other young people who were offering their services in the community as a group providing paid manual labour on the farm for a few hours. In addition to saving on the costs of employing labour, young people were also choosing to employ family members because of trust. This was more often the case in non-farming businesses.

The people I employ are in a group. In this community, people dig communally, so whenever you need their services they come as a community, they come and help. So, mostly they weed the crops. Since they are many, they can weed very fast. (Young male business owner, Kiryandongo).

For the brewing business, why I use my sisters to support me in the business is because sometimes when you use other people, they don't return or they don't give you back the money from the sales. (Young female business Kiryandongo).

Several young people also reported engaging in reciprocal employment relations where they would help other young people in their farming business, often by weeding or harvesting, in return for the same or similar assistance in their business. These employment relations were not based on payment and appeared to be ad hoc rather than long-term arrangements. These reciprocal relations helped young people increase their productivity while saving money towards business investment and growth.

I always do exchange of responsibility ... some of our family members would come and help me today, then tomorrow we would go together and help this one, then the next day also like that. We keep on exchanging them. We don't pay money for it. (Young male business owner, Kole).

Exchange of labour has helped me to save some money and put back into business, making it expand. Instead of paying it to other people

outside, we would just exchange it and save some part of money to do other things mostly this business. (Young male business owner, Kole).

Employing labour helped young people grow their business by increasing productivity and income, which in turn provided them with additional business capital to invest and grow or expand their business. This was more so for young people who benefited from the increased productivity without paying for the labour. Employing labour seemed to influence young people's business aspirations, with most planning to invest the increased productivity and income in growth or expansion. Young people who were employing someone seemed to see labour as part of their growth strategy.

However, young people who were not employing any labour or receiving support (from family, friends or elsewhere) did not see employing labour as part of their business growth strategy or as helping towards realising their business aspirations. **The most common reasons for not employing someone were affordability and need.** In farming businesses, the need aspect was typically due to the small size of the land, and young people who aspired to get more land and grow their farm envisaged employing labour once their business had grown.

What I get out of farming is too little, so I cannot afford employing someone. (Young male business owner, Kole).

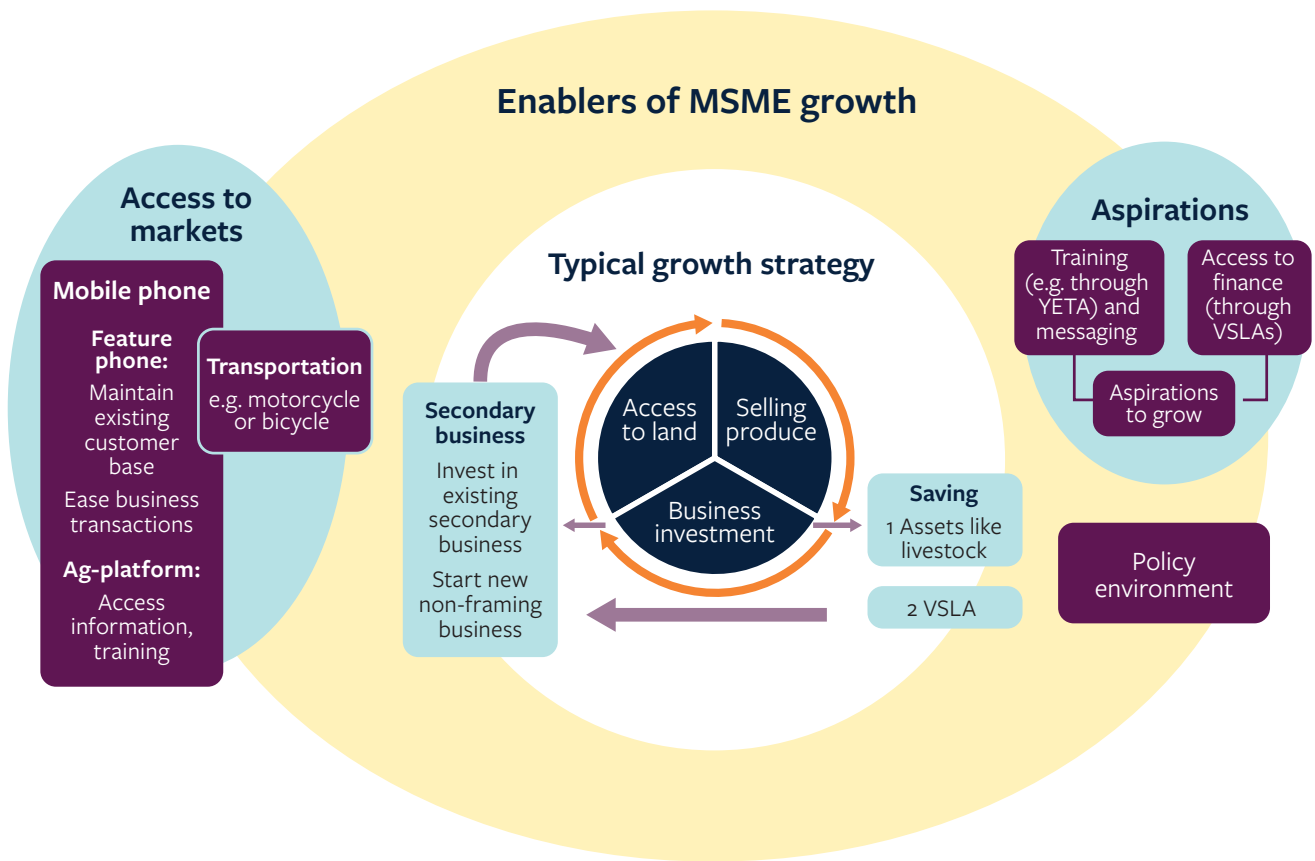
Since I only farm a quarter an acre of the land that one is manageable by myself, so I don't need to get more people to assist. (Young male business owner, Kiryandongo).

After acquiring more land I would like to hire more people because managing a very big portion of land alone will be difficult, so I will have to hire other labourers to assist in farming. (Young male business owner, Kiryandongo).

The cost and affordability reasons for not employing anyone suggest that these young people enjoyed less support from their families compared to those who were benefiting from

the free labour of their family members. It is also indicative of their social capital more generally, as they were also unable to take advantage of reciprocal labour arrangements, unlike their counterparts who were exchanging labour. Due to their age, lack of experience and confidence, some young people may have less social capital (Löwe et al., 2019) and may therefore be less embedded locally, which is a key aspect of enterprise development (Tunberg, 2014).

Figure 23 Enablers of MSME growth



Source: authors' own elaboration.

10 Gender perspectives for youth enterprise growth

In Uganda, women-owned businesses are 30% less profitable than male-owned businesses. Within the agricultural sector women tend to cultivate crops that are less profitable, such as beans or cassava, because they contribute to household food security, while men cultivate more profitable cash crops such as coffee (Mugabi, 2014 ; Nakafeero et al., 2021). Women are also less likely to command labour in Uganda, with evidence showing that men were more likely than women to hire unpaid family labour through siblings or children (Kabeer, 2018). In addition to being more likely to enter into businesses that are less profitable, female business owners are often also obliged to make different business decisions than their male counterparts due to endowment challenges (e.g. lower access to assets and finance and education), contextual factors (e.g. social norms, legal discrimination) and household constraints (e.g. time and care constraints) (World Bank, 2019a).

This was confirmed in our interviews. Women reported having less time for business activities due to the burden of domestic chores (as found in Leon-Himmelstine et al., 2021). Women also face more difficulties when it comes to accessing markets as they are often unable to move about freely – mostly they are at home and often have to stay put due to restrictive gender norms that limit their mobility, further compounded by childcare and domestic responsibilities. Therefore, women often choose to engage in business activities that will allow them to balance their business with childcare, such as tailoring and shopkeeping, or activities they can do within their homestead while balancing domestic work with business activities

(ibid.). These constraints were highlighted particularly by women who were married.

Men mostly do farming because, after farming, they take most of their time doing farming and the ladies in most cases they are at home and they don't move a lot. So, because of that, that's why women tend to do a lot of selling small commodities in the market than the men because the men are fond of moving a lot after doing the farm work. So, they cannot be part of the maybe selling commodities in one place. (FGD with YETA parent mentors Kiryandongo).

The ability to move freely gives young men an advantage in that they are not only able to reach more markets physically but can also extend their networks, which can further contribute to improving their access to new customers and markets generally.

Because men they are free to do anything they wish and they can move anywhere. They can move like in the centre like in the evening. They would go there, they get advice from friends, they share their business idea in any way and sometimes they can make positive decision, sometimes negative decision. (Young female business owner, Kole).

As shown in Section 7 on technology, the proportion of women entrepreneurs owning a mobile phone is significantly lower than for male entrepreneurs. Accessing a mobile phone is also more difficult for young women, especially for

married women. Young women reported that they do not own a mobile phone as their husband would not allow them to own a phone out of fear of infidelity (they might use it to communicate with other men). Young women were therefore also less likely to be using mobile money, as this requires having their own phone.

I really want to be with a phone but my husband does not accept me having a phone. My husband does not accept me having a phone because he gives a reason that phones spoil women. The reason he gives is that the moment a woman gets a phone, she gets spoiled ... she might end up being taken up by other men. (Young female business owner, Kole).

On access to land, some young people inherited land from their parents (customary land) but, due to prevailing gender norms and patrilineal custom practices in Uganda, land is usually inherited by young men. Given that one of the most common challenges of access to capital is access to land, young women are at a disadvantage. Young men can use the yield from their inherited land to rent more land, while it is more difficult for young women to find capital to rent land (Leon-Himmelstine et al., 2021). Because of their limited capital, young women tend to rent small plots of land which limits their yield significantly, thus creating a vicious cycle. This is compounded by existing gender norms on land purchase; young women often cannot purchase land themselves and need a male to accompany them even if they have the money to rent the land themselves. Evidence also suggests that women are less likely than their male counterparts to hire labour. Men hire more of their family members, including siblings and children, to work on the farm, while women are often unable to do so. We do not find systematic differences in this, but there is some indication that young women draw more on the

exchange of labour, i.e. providing labour to their peers in return for this being corresponded in turn.

Gender norms around marriage and childbearing shape young women's aspirations and mediate the growth and sustainability of their business (ibid.). With the average number of children per woman being six in Uganda, the challenges of running a business, including farming, are heightened for young women (AFIDEP, 2018). Most young women in Northern Uganda marry before they are 18 years old. Boys, on the other hand, are not expected to marry early, which means they are less limited in their educational achievement and economic opportunities than their female counterparts (ibid.). Our interviews showed that young women who start a business while they are living with their parents often have to abandon their business when they leave their parents' house to get married.

Some of these young girls start their businesses when they are still at their parents' home. When time for marriage comes, this lady can abandon the business from here and go and get married in another place, so, by doing so, you find she cannot go with the business to the other side and it ends up collapsing. (FGD with YETA parent mentors Kiryandongo).

It is also more difficult for young women to run multiple businesses. This is due to their household duties, and also because some professions are deemed inappropriate for young women. This means that during the off-season or when young women do not have access to rented land, they have fewer opportunities to cope with seasonal income losses. Young women are also often discouraged by repeated setbacks to their businesses. Some women-led businesses, such as hairdressers, were also hit harder by Covid-19, as they require more customer contact.

In my area, the coming of Covid affected mostly women because like those ones who have the sewing machines, people were not allowed to come nearer to one another, so the sewing machines were packed inside and business closed, so, I feel the women were more affected than the men. (FGD with YETA parent mentors, Kiryandongo).

I feel women were more affected, like in my area those ones who are doing hairdressing or having

hair salons could not come closer to one another, so, business of hairdressing had to close. So, it affected that kind of business. (FGD with YETA parent mentors, Kiryandongo).

Finally, young women face particular challenges in registering their businesses, as keeping their business 'invisible' can be an important way to protect themselves against their husbands or male relatives taking charge of their earnings and resources.

11 Recommendations

1. Designing multifaceted programmes.

This can address the multitude of challenges young people face in growing and expanding their businesses, and respond more adequately to their needs. Often, the challenges are exacerbated by their age, which means they suffer from exclusion due to lack of access to social capital. This highlights the need for more comprehensive programming that facilitates their access to markets and provides longer-term support and nurtures to help them make productive investments. Value-chain approaches, and other more comprehensive approaches like one-stop shops, may be more effective. Youth need to be consulted in the design stages of youth-centric programmes; there appears to be a gap in terms of what youth need and the aims of some youth programmes. ICT cannot bring benefits unless it is supported by a range of complementary policies, such as support to young entrepreneurs regarding product standards. A mix of micro-level support to youth entrepreneurs alongside meso- and macro-level support policies targeting internet reliability, digital literacy and business running costs are required for addressing young people's challenges to entrepreneurship.

2. Targeted and longer-term programmes for training and skills development.

Business size appears to be positively linked to training; roughly 78% of SMEs had access to business management training, compared to only 58% of microentrepreneurs. Larger enterprises are also doing better in terms of access to soft skills training and safety training. There is a need for targeted training: first, in ICT skills and soft skills across firm sizes; and second, in trainings geared towards microentrepreneurs.

These trainings and mentorship programmes need to be longer term as youth reported having forgotten their trainings or lacking the confidence to apply them. Some also expressed a desire for training in how use a smartphone to be able to sell on Facebook or WhatsApp. Such training also needs to be gender focused to ensure that programmes do not end up exacerbating the existing digital skills divide across young male and female entrepreneurs.

3. Altering trainings with messaging on viable businesses to boost youth aspirations of business growth and diversification.

Of the 367 youth surveyed, 56% of respondents reported that the main aspiration from their primary business – mostly farming – is to expand into more businesses to reduce risks, while 31% of the sample wanted to invest in and grow one business. Messaging around agriculture as a viable business is therefore important for agri-entrepreneurs. Young people reported that trainings in agribusiness have helped change their attitude towards farming, from viewing it as a source for consumption to viewing it as a business in which they can invest and grow. Trainings also enabled them to change their post-harvest practices.

4. Improving the enabling environment of doing agribusiness, particularly reducing the cost, time and extent of the process of registering businesses.

Uganda's score on starting and formally registering a business in the World Bank's Ease of Doing Business rankings 2020 is 71.4, below the regional average in sub-Saharan Africa (which stands at 80.1) (World Bank, 2020c). Unsurprisingly, then, 89% of the youth enterprises in the survey have not

formally registered any of their businesses, with 15% of the male entrepreneurs in the sample having at least one business registered and just 5% of female entrepreneurs. The costs of registering appear to be high, and the benefits of registering are not always apparent to young entrepreneurs. Often, registering a business does not appear an attractive option, especially for women who might have an interest in keeping their income 'invisible' so as not to risk losing it to their husband or a male relative. There is a need for policies to target ease of conducting business, including through online business registration and increasing incentives for registering, as well as making young people more aware of the benefits of registering their businesses.

5. Supporting women to move beyond access to mobile phones to ownership.

Access and ownership of mobile phones appears to enable enterprise development, both in terms of growth of an existing business and expansion into new businesses, but there is a significant gendered digital divide; 72% of male entrepreneurs own a mobile phone, compared to only 45% of female entrepreneurs. Several young women reported that their husbands do not allow them to own a phone. There is a need to support women to move beyond merely accessing mobile phones towards ownership of mobile phones, possibly through innovative finance schemes to help spread the cost of ownership over time (GSMA, 2019). Gender-focused trainings in skills development may also help address the gender gap in digital skills. A gender transformative approach also requires educating and socialising young men in the benefits of providing their wives with access to mobile phones and ICT generally.

6. Addressing supply-side and demand-side challenges faced by young entrepreneurs in accessing and adopting digital platforms.

Digital platforms have immense potential to enable entrepreneurs to diversify into new markets and value-added activities. Supply-side constraints to adoption and uptake of ag-platforms can be addressed through policies targeting digital infrastructure development in rural areas, such as mobile towers, to increase access to real-time information, as well as setting up digital centres to cover a cluster of villages; subsidising internet bundles and increasing access to good quality and reliable internet; and targeted investments in digital apps that provide horizontal support (broad-ranging support rather than product-specific support) across the value chain. The Ministry of Agriculture, Uganda National Bureau of Standards, and the Federation of Small and Medium-sized Enterprises in Uganda can work with ag-platforms to develop local food standards and quality benchmarks, and provide effective monitoring during the grading and aggregation of products post-harvest to minimise rejection on platforms. Demand-side constraints can be met through increasing awareness of ag-platforms among youth, as well as ways of accessing them and sources of support. Here, farmers' groups and cooperatives can play a critical role. We find that the main sources of support for using platforms include farmers' group leaders and cooperatives (29% of users), followed by extension officers (24%) and the platform itself (24%); 94% of platform users are part of some form of business group.

7. Improving the effectiveness of farmers' groups. The lack of logistical support to farmers, and the insufficient capacity of the

Ugandan Warehousing Authority to store farmer produce or provide commodity receipts, are critical challenges young entrepreneurs face. The provision of logistical and storage facilities has been shown to improve the incomes of farmers in other parts of Africa. The formation of youth groups/associations and cooperatives can be one way of improving entrepreneurs' access to market and to services such as storage and transport, as well as their bargaining power, while reducing exploitation by middlemen. But there is evidence of power asymmetries between members of farmers' groups, leading to the formation of an elite group who capture access to information and receive most of the benefits, while others in the group are excluded. Such challenges also persist for Ugandan farmers' groups, indicating the need to improve their effectiveness, particularly through facilitating access to ICT and internet-enabled devices (such as smartphones).

8. Improving young entrepreneurs' access to resources, especially capital. The loans young people receive from their VSLA depend on how much they have saved, meaning that those who are struggling the most with their business are also benefiting the least from VSLAs, creating a vicious cycle for those at the bottom of the business profit pyramid. This suggests that

providing additional support to help young people sell their produce is key. Cooperatives that support young people with access to markets and improved prices for their produce and inputs can play a key role here. Access to working capital loans needs to be increased for young entrepreneurs, particularly women, who lag behind in access to capital. New models of expanding financial access need to be explored, including digital financial inclusion through platforms. Facilitating the development of social capital for productivity-enhancing labour arrangements is also critical; investment in labour emerged as an important factor for enterprise development, particularly for business expansion. Overall, 77% of youth with a small primary business employing between 5 and 19 people had a secondary business, compared to 61.8% of youth microentrepreneurs with 1 to 4 employees in their primary business; and only 46% of self-employed youth had a second business. Entrepreneurs with farming businesses mostly employ seasonal and casual labourers, who typically are either members of their group (VSLA), family members (including their spouses, children and parents), peers or so-called 'digging groups', suggesting the importance of 'social capital' and 'local embeddedness' for enterprise development. This can be incorporated as an important learning component in soft skills training programmes.

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Appendix

QUESTIONNAIRE – Youth entrepreneurs and ag-platforms Date: 24.07.2020

Name of investigator

Youth ID

District

Sub-County

Village

Section o: Business profile

*Primary business refers to the business from which you derive majority of your income.

1. How many businesses do you have? ____
2. What percentage of your annual income is derived from the primary business?
3. What is the type of your primary business (tick all that apply):
(1. Farming; 2. Livestock; 3. Transportation; 4. Construction; 5. Trading food or produce; 6. Trading (other); 7. Hospitality; 8. Retail; 9. Teacher/health/social services; 10. Other, please specify ____)
 - 3.1 How many years has this business been in operation? ____
 - 3.2 What is your main aspiration from the business?
(1. Invest and grow one business; 2. Expand into more businesses to reduce risk; 3. Other, please specify ____)
 - 3.3 In the last year, how much money was received from the sales of goods and services by this business per year? ____
(Report monthly if less than a year) ____
 - 3.4 In the last year, what was the annual profit of this business?
(Report monthly if less than a year) ____
 - 3.5 How many people usually assist in this business/enterprise?
4. What is the type of your secondary business (tick all that apply):
(1. Farming; 2. Livestock; 3. Transportation; 4. Construction; 5. Trading food or produce; 6. Trading (other); 7. Hospitality; 8. Retail; 9. Teacher/health/social services; 10. Other, please specify ____)
 - 4.1 How many years has this business been in operation?
 - 4.2 What is your main aspiration from the business?
(1. Invest and grow one business; 2. Expand into more businesses to reduce risk; 3. Other, please specify ____)
 - 4.3 In the last year, how much money was received from the sales of goods and services by this business per year?
(Report monthly if less than a year)
 - 4.4 In the last year, what was the annual profit of this business?
(Report monthly if less than a year)
 - 4.5 How many people usually assist in this business/enterprise?

Section 1: Use of ag-platforms

1.1 Did you register on an agriculture platform, anytime in the past 12 months?

* Agricultural platforms are apps or services accessed through mobile phones, including through SMS, USSD, social media apps, e-commerce apps and other apps for finding information on weather, land use, seeds, buyers and sellers etc.

- Yes, I am registered on one ag-platform
- Yes, I am registered on more than one ag-platform
- No, I am not registered on any ag-platform

List all platforms you are registered on: _____

IF YES to 1.1:

1.1.1 What is the main reason for registering on the platforms? (Select one):

(1. Starting a new business; 2. Finding new buyers and clients; 3. Maintaining communication with existing clients; 4. Taking or managing sales orders; 5. Exchanging information on prices and clients with others traders and entrepreneurs; 6. Accessing better or cheaper inputs; 7. Friends told me to use; 8. Receive a subsidy; 9. Getting access to finance; 10. Advisory and information (real time info) – prices, weather; 11. Data analytics – remote sensing use; 12. To engage with other young people; 13. Other).

1.1.2 What have been the benefits of the ag-platforms to you? (Select all that apply):

(1. Reduced transportation costs; 2) Gained access to credit; 3) Improved business productivity/ better crop quality; 4) Improved production practices and grading; 5) Gained access to better quality inputs: chemicals, seeds, fertilizers; 6) Gained access to new buyers/ markets; 7) Gained access to trainings and skills development; 8) Increased bargaining power; 9) others, please specify____)

1.1.3 How long have you used the ag-platform for?

0-3 months; 3-6 months; 6-9 months; >9 months

1.1.4 How much do you pay to register with the platform? _____

1.1.5 How do you pay for registering on the platform?

(1. Savings, 2. Income, 3. Borrowings, 4. Other, please specify _____)

1.1.7 What does the platform you use run on?

(1. Information via SMS, 2. Information via USSD, 3. Through an app on Android)

1.1.8 Who helps you use the ag-platform?

(1. Platform itself; 2. Extension officers; 3. Family and friends; 4. Farm group leader; 5. Village agent; 6. Others please specify _____)

1.1.9 Are you still registered on the ag-platform? Y/N _____

If NO:

1.1.9.1 What are the main reasons for stopping engagement with ag-platforms?

(1. Too expensive. 2. Very complicated to use. 3. Time consuming. 4. No support, 5. Not aware, 6. Lack of regular internet access, 7. Lack of literacy and numeracy; 8. Lack of skills to use phones; 9. Others please specify _____)

1.1.10 Have you used ag-platforms more frequently since COVID-19? Y/N _____

If YES,

- 1.1.10.1 COVID-19 has accelerated the use of ag-platforms in your business for...? (select all that apply): (1. Buying inputs from other businesses; 2. Selling products online on ag-platforms; 3. Getting information on buyers and sellers online; 4. Contacting and communicating with buyers or sellers; 5. Accessing credit and online banking; 5. Communicating with other young people; 6. Finding information on COVID support; 7. Others, please specify ____)

If NO to 1.1

- 1.1.1 What is the main reasons for not using any ag-platforms?
(1. Too expensive; 2. Very complicated to use; 3. Time consuming; 4. No support; 5. Not aware; 6. Lack of regular internet access, 7. Lack of literacy and numeracy; 8. Lack of skills to use phones; 9. Others please specify ____)

Section 2: Training and ICT skills

* Informal training refers to peer-to-peer learning while formal training refers to training provided by Ministeries, organisations, institutes, apprenticeships.

- 2.1 Have you done any training (informal or formal) Y/N ____

If YES,

- 2.1.1 What type? (select all that apply):

(1. Technical skills such as electrical, plumbing etc.; 2. Training in good agricultural practices; 3. Training in chemical and fertiliser use; 4. Safety trainings; 5. Sexual reproductive health; 6. Other health trainings; 7. Business management training; 8. Digital or ICT skills training; 9. Soft skills training; 10. Other trainings, please specify ____)

- 2.1.2 Select sources of training

(1. Local broker; 2. International firm; 3. NGO; 4. Ag-platform; 5. Government extension officer; 6. Friends or family, 7. Farmers group or business association; 8. Other)

- 2.2 Do you have access to a mobile phone?

(1. Yes, I own a mobile phone; 2. Yes, I have access but I don't own it; 3. No I don't have access)

If YES,

- 2.2.1 What kind of mobile phone do you have access to?

(1. Smartphone; 2. Feature phone)

- 2.2.2 What do you primarily use the mobile phone for?

(1. Accessing apps; 2. Mobile money; 3. SMS; 4. Phone calls; 5. Playing games; 6. Surfing the web; 7. Emailing; 8. Other, please specify ____)

Section 3: Formalisation of work

- 3.1 Are any of your businesses formally registered?

(1. Yes, primary business; 2. Yes, secondary business; 3. Yes, both primary and secondary business; 4. No.)

If YES,

- 3.1.1 What was the main motivation of registering your business? ____

- 3.2 Are you given a contract for sales in your primary business? Y/N ____
 If YES,
 3.2.1 Who gives you the contract? ____
 3.2.2 What is the contract type?
 (1. Written-greater than 1 year; 2. Written-short term; 3. Oral; 4. Other)
- 3.3 Are you part of any group/business association? Y/N ____
 If YES, tick all that apply:
 (1. Farmers group; 2. Village Savings and Loan Association (VSLA); 3. Cooperative/ SACCO,
 4. Others; please specify ____)

Section 4: Business growth pathways

- * Business growth can be achieved through various channels such as diversification of production, access to loans, trainings etc.
- 4.1 Have you ever had your products rejected? Y/N ____
- 4.2 What % of total OUTPUT has been rejected?
- 0-25%
 - 25-50%
 - 50-75%
 - More than 75%
- 4.3 Have you diversified production? Y/N ____
 If YES,
 4.3.1 In which business did you diversify production?
 (1. Primary; 2. Secondary; 3. Both)
 4.3.2 How?
 (1. New product; 2. New market/ buyers; 3. More value addition; 4. Other)
- 4.4 Which of the following services/information do you have access to? (tick all that apply):
 (1. Real time information on input or product prices; 2. Information on government extension and legal services; 3. Input use; 4. Real-time weather information; 5. Testing soil and water services; 6. Digital skills training; 7. Other skills training; 8. Information on buyers and sellers; 9. Real time pest control and diseases related updates; 10. Information on leasing or sharing farming equipment; 11. Other, please specify ____)
- 4.4.1 What is the primary source of this information?
 (1. Local broker; 2. International firm; 3. NGO; 4. Ag-platform; 5. Government extension officer; 6. Friend, 7. Family; 8. Youth group associations such as VSLA; 9. Cooperative; 10. Farmers' association; 11. Radio; 12. Other, please specify ____)
- 4.5 Do you have access to commercial loans or working capital? Y/N ____
 If YES,
 4.5.1 What is the primary sources of finance ?
 (1. Insurance co; 2. Farmers' group; 3. Bank; 4. Ag-platform; 5. Friends and relatives; 6. Buyers, 7. VSLA; 8. SACCO; 9. Others, please specify ____)