

Food and Agriculture Organization of the United Nations



INVESTING IN YOUNG AGRIPRENEURS WHY AND HOW?



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There are 223 million unemployed or underemployed youth in developing and emerging economies (ILO, 2017). Wage earning opportunities are few — for instance, Africa creates only about 3 million formal jobs per year (Alam, 2019). Young people lack opportunities for income generation, especially in rural areas. Society, as a whole, stands to benefit by investing in young people, their ideas and innovations, to help shape the the agrifood system of tomorrow (FAO and AUC, 2022). Policymakers and programme implementers have developed a strong interest in promoting entrepreneurship for expanding employment, especially in rural areas and the agricultural sector where many unemployed youth can be found. Evidence is emerging that initiatives to promote agripreneurship are improving business practices, revenue and livelihoods of young people (Alam, 2019).

This brief defines youth agripreneurship and explains its importance. It provides a framework for developing youth agripreneurship, the types of human capital needed for equipping youth for agripreneurship and ways of developing these types. Finally, the brief presents factors that policymakers and programme implementers need to consider when evaluating how to invest in youth agripreneurship.

Defining youth agripreneurship

Agricultural human capital is defined as the habits, skills, abilities, knowledge, social and personal attributes such as creativity, and experience embodied in people that allows them to conduct agricultural activities productively and sustainably (Goldin, 2014). Entrepreneurship, the process of setting up a business and taking on financial risks, is an important element of human capital because it equips the user with transferable skills, provides options for the user beyond the formal job market and has potential to foster economic growth. Entrepreneurship also includes less measurable elements such as personality traits, skills and behaviours associated with success in business (Alam, 2019). Three abilities are important in entrepreneurship: bearing uncertainty and risk, managing competently and identifying and exploiting opportunities (Kruger, 2004). Entrepreneurship can involve self-employment, new business activities, or managing businesses for others.

Entrepreneurship is a multidisciplinary field drawing upon business administration, economics and psychology (Baron, 2007). There are differences between the **art** of entrepreneurship (e.g. creativity, risk-taking, determination) and the **science** of entrepreneurship (e.g. planning, accounting, marketing) (Valerio et al., 2014). Both sets of skills are important. When we talk about agripreneurship, we are referring to any entrepreneurial activity involving agriculture — not only production but also things such as advisory services, input supply, transportation, marketing or processing.

Youth agripreneurship is defined as the process of young people setting up businesses involving agriculture and the habits, skills, abilities, knowledge, social and personal attributes that young people need to conduct agricultural activities productively and sustainably.

Why is youth agripreneurship important for improving livelihoods?

Using the United Nations' definition (ages 15-24),¹ young people make up 16 percent of the world's population (United Nations, 2018); in some parts of the world, however, up to half the population is under the age of 25, e.g. sub-Saharan Africa (Filmer et al., 2014). Globally, the proportion of youth who are not in employment, education or training (NEET) increased from 21.7 percent of youth in 2015 to 22.4 percent in 2020. The number of NEET youth in Africa increased by 7.7 million (CGD, 2020). Policymakers in the Global South promote entrepreneurship as an avenue for increasing youth employment as an engine of growth and job creation as well as to improve livelihoods for the youth themselves (Alam, 2019).

Agriculture-led growth has a high potential for reducing poverty levels (World Bank, 2007; Christiaensen and Martin, 2018). This bodes well for rural youth in the South, but they cannot always take advantage of opportunities in agriculture because:

- Educational levels are low. For instance, in Africa, about one-third of youth between the ages of 12 and 14 are not in school (UNESCO UIS, 2020).
- Youth often lack assets such as land and cash.
- Ageism, prejudice based on age, can affect youth; in some places, youth face social barriers such as lack of trust by elders (Huber, 2020).
- Youth perceptions may be negatively biased against agriculture.
- Youth who are also poor, female or disabled face even greater constraints.

Developing entrepreneurial abilities is often assumed to lead directly to more job creation and poverty reduction. For instance, researchers found that the very poor in Bangladesh move from labourers into entrepreneurs by providing them with assets and training to run a small business, with positive impact on their welfare (Bandiera et al., 2012). But other studies show that the relationship between entrepreneurship and economic development is often complex and nuanced (Valerio et al. 2014). For example, the bulk of job creation resulting from entrepreneurship training is in the informal sector, where failure rates are high (World Bank, 2012). Moreover, innovation (new or improved products, processes or ideas) is not necessarily correlated with firm size; large firms are sometimes more innovative than small firms because of their greater access to information and finance. In other instances, micro-enterprises may be more innovative because they are more agile and have simpler decision-making procedures. For example, an owner/operator of a small business can make her own decisions regarding product design, whereas a manager in a larger firm may have to consult many other persons and structures (Valerio et al., 2014).

Engaging youth in agripreneurship is complex, partly due to local context, e.g. the different socioeconomic and geographical factors that influence performance of entrepreneurial activities. Performance is evaluated across a range of criteria important to planners, governments and beneficiaries; it can include the ability of youth to manage enterprises profitably and sustainably, return on investment, contributions to income, employment and inclusion of marginalized groups such as women.

¹ Definitions of youth vary. For example, India defines youth as between ages of 15 and 29 and Ghana defines it as between 15 and 35 (Government of India, 2014; Government of Ghana, 2010).

Performance is likely to vary across different enterprise and market types and across products of different value. It may be impacted by factors such as availability of information and communication technologies (ICTs) such as smartphones and internet, by government policies affecting starting a business, or environmental hazards such as drought. Performance also depends on incentives driving the private and public sector to engage youth, such as subsidized internship programs, and incentives for youth to participate, such as access to credit.

The need to define and differentiate among youth population segments is critical. Different segments of the youth population (based on variation in such factors as gender, education or market access) may have different needs, opportunities and constraints to accessing information, tools and training. Programme planners need to decide which criteria (e.g. education and gender) to use in defining segments, which segments to target and how to involve potential beneficiaries in the design, implementation and evaluation of program activities (FAO and AUC, 2022).

An important debate in past years was whether improved human capital and entrepreneurship were needed

to improve small business performance or whether improving access to finance was all that was needed. Research has shown that better management and improved business practices matter for productivity of small firms in developing countries (McKenzie and Woodruff, 2015). Moreover, there is considerable evidence that mindsets such as self-confidence, management, and practices can be taught through entrepreneurship programs, and that such training can have high returns on investment, leading to improved incomes and livelihoods. For example, a randomized controlled trial in Peru found that entrepreneurial training led to improved business knowledge, business practices and revenues among rural, female microentrepreneurs (Karlan and Valdivia, 2006). In Pakistan, entrepreneurial training was found to reduce business failure among rural entrepreneurs, improve business practices and lead to increases in household expenditures, a proxy for income (Giné and Mansuri, 2018). In Cameroon, vocational education in livestock and fisheries management highlighting entrepreneurship had high returns on investment with increased incomes covering the cost of training within two years after graduation (Takamgang and Lhoste, 2021) (Box 1).

Vocational training plus entrepreneurship raises incomes and employment in Cameroon

A programme funded by the French Development Agency not only provided vocational training in agropastoralism and fisheries to 1500 individuals in Cameroon, it sought to 'professionally integrate' youth, ensuring graduates were able to achieve either self- or wage-employment. The curriculum highlighted entrepreneurship in a way suited to the needs of employers and communities. The schools also offered coaching, internships, assistance in finding employment, help in developing business plans and linking to financial services. Students were selected less on their past academic performance and more on their motivation, entrepreneurial interest and access to land. The financial returns were high. The cost of training and integrating a youth was USD 5770 per year and graduates earned on average USD 2880 per year, meaning program benefits were able to cover the cost of education within two years after graduation.

SOURCE: Takamgang and Lhoste. 2021. Investing in youth vocational training professional training programme in the agropastoral and fisheries sectors in Cameroon. FAO Investment Centre. Country Investment Highlights No. 11. FAO, Rome. https://doi.org/10.4060/cb7819en



RAX 1

Framework for developing agripreneurship

How can we invest in the human capital of young people to become agripreneurs? Developing human capital involves providing inputs that lead to outputs, outcomes and impacts (Davis et al., 2021). This framework (Figure 1) can be adapted for developing agripreneurship.

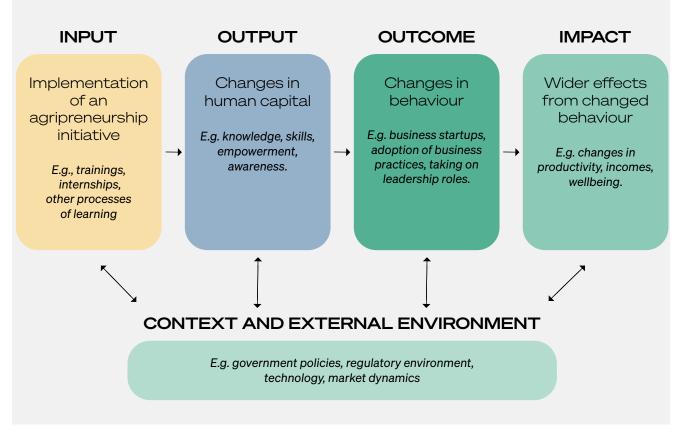


Figure 1

Theory of change for developing youth agripreneurship

SOURCE: Adapted from Davis et al. 2021. Investing in farmers: agriculture human capital investment strategies. Rome, FAO and IFPRI. https://doi.org/cb7134en

Inputs such as training and internships for youth are used in activities that result in **outputs** such as improved entrepreneurship and skills. These result in **outcomes**, behavioural changes, such as business startups or improved business practices. Outcomes then lead to **impacts**, long-term changes, such as increased income for youth and economic growth for society. The framework (Figure 1) also acknowledges the importance of context and external environment, which affect inputs, outputs, outcomes and impact. For example, the regulatory environment may make it easier or more difficult for the output – improved entrepreneurship – to lead to the outcome: entrepreneurs starting businesses. It may also affect the ability of the outcome – the new businesses – to bring about the desired impact of increased incomes.

The inputs in Figure 1 involve agripreneurship training but may include different types of education and training covering subjects such as entrepreneurship, crop and livestock management, processing or adaptation to climate change. They may also involve other forms of learning such as internships or coaching. The inputs lead to three types of changes in human capital. These skills include:

- Technical: improved management and skills in the agriculture-related enterprises that youth are undertaking.
- **Functional:** leadership, communication, negotiation and psychological aspects of entrepreneurship such as self-confidence and resiliency (Glaub *et al.*, 2014).
- Business: planning, record keeping, accounting and budgeting.

There is considerable focus in entrepreneurial training on mindset change and skills to enable trainees to recognize entrepreneurial opportunities and take advantage of them. These skills include self-confidence, leadership, networking, creativity, risk assessment, motivation and resilience. Such skills are important in a wide range of endeavours outside business, such as developing public policy to solve societal problems. Business management is also part of agripreneurship training; topics include accounting, marketing and sales, preparing and updating business plans, resource mobilization and human resource management (Valerio *et al.*, 2014). Initiatives to develop entrepreneurship may be accompanied by other types of activities necessary to ensure that improved entrepreneurship results in desired outcomes and impacts. For example, they may be accompanied by financial services or credit programmes to ensure that beneficiaries have the means to apply what they have learned to start or improve their enterprises.

Ways of developing agripreneurship

Agripreneurship may be developed through formal education, training or through other, often supplementary methods such as coaching (a.k.a. mentoring), internships or apprenticeships (Figure 2). Educational programmes may be at the secondary, vocational, undergraduate or graduate level. A wide range of organizations conduct agripreneurship training including private companies, non-governmental

organizations (NGOs), government services and educational institutions. Coaching, internships and apprenticeships are used by both educational institutions and training entities. In addition, informal (e.g. WhatsApp) and professional networks are helpful in supporting and strengthening entrepreneurship (Hayter, 2013).

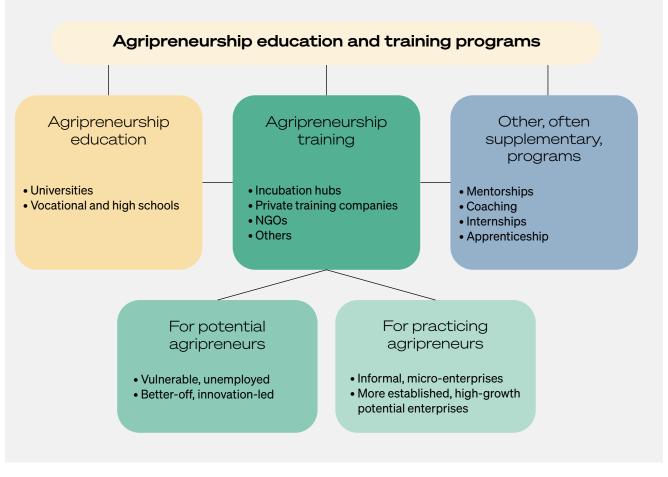


Figure 2

Classifying agripreneurship education and training programs

SOURCE: Adapted from Valerio et al. 2014. Entrepreneurship education and training programs around the world: Dimensions for success. Washington, DC: World Bank. https://openknowledge.worldbank.org/bitstream/handle/10986/18031/9781464802027. pdf?sequence=1&isAllowed=y

The study of agripreneurship in educational institutions tends to be theoretical but many institutions, such as Makerere University in Uganda, provide more practical lessons by involving students in their outreach programmes. Other institutions, such as agropastoral vocational schools in Cameroon, place students in internships on farms or in agricultural companies or agencies (Takamgang and Lhoste, 2021)

Public-private partnerships are particularly effective in fostering agripreneurship, as in the case involving Mars Incorporated, the International Fund for Agricultural Development (IFAD) and the Government of Indonesia providing training to smallholder cocoa growers (Bogor et *al.*, 2021). Many educational institutions also provide training to persons not pursuing degrees or diplomas. Some programs are mobile, such as Enterprise Uganda, which provides short, one- to five-day training sessions to villagers throughout the country (Enterprise Uganda, 2018). On-line and radio-based programs are also popular.

Training programmes may be short term, full time for one to two weeks, or periodic (e.g. one evening per week over several months). Some focus on a particular vocation while others are more general. Some emphasize entrepreneurship alone, others supplement vocational or other topics.

Incubation hubs are also being established to support young agripreneurs. An incubation hub is an entrepreneurial facility that supports development of ideas from basic concepts into viable business ventures. The hubs foster entrepreneurship and small business development and may be hosted by NGOs, universities or private companies (Box 2).

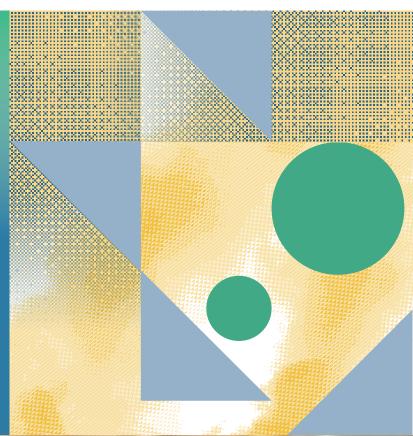
An agribusiness incubation hub in Uganda nurtures new business enterprises

BOX 2

The Agribusiness Incubation Hub at Bishop Stuart University (BSU), Mbarara, Uganda, trains university students with agribusiness ideas to nurture them into successful business enterprises. The hub started in 2018 with a grant from the Mastercard Foundation; other NGOs and companies also contribute. One hundred students are registered in the hub and have enterprises at various stages of development, such as cleaners, briquettes, fertilizers, herbal pesticides, feeds, yoghurt and banana flour. Fifty of the students have formed ten companies to produce and market their products. Six coaches mentor the students, 30 percent of whom are female.

SOURCE: BSU. 2022. Agribusiness Incubation Hub. In: Bishop Stuart University. Mbarara, Uganda. Cited 26 September 2022. www.bsu.ac.ug/project/agribusiness-incubation-hub-aih/

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Internships, apprenticeships and coaching (a.k.a. mentoring) are other important methods for fostering entrepreneurship. Internships are positions taken by students or trainees who work in an organization or company, often without pay, to gain work experience or satisfy requirements for a qualification. Internships offer an effective way for youth to strengthen skills, gain experience, develop professional networks and improve their job prospects. Interns also benefit their host companies and organizations because they are low-cost, highly motivated and able to bring new ideas and technologies from academia. The Rwanda Development Board has an internship program for university graduates, helping them find places in public institutions, NGOs or private companies for six- to twelve-month periods. Host organizations pay the interns a small stipend. Interns reported that they appreciated the agripreneurial skills and experience they obtained from internships. One intern proved how his internship had strengthened his agripreneurial skills - three years after his internship he was the director of his own enterprise and recruiting interns himself (Box 3).

Coaches are professionals who are recruited to help agripreneurs achieve specific goals and improve performance. A coach helps individuals think through situations so they can solve problems themselves. Coaches help entrepreneurs achieve personal growth and improve business skills (van Coller-Peter and Cronje, 2020). Mondelêz International (2017) uses coaches in its Cocoa Life programme to assist cocoa farmers (some of whom are youth) in Indonesia improve their production practices.

ICTs also play an important role in facilitating the growth of youth agripreneurship. In developing countries, internet use is 31 percent higher among youth than the rest of the population (ITU, 2021). There is considerable evidence that ICTs inspire and attract youth into agribusiness activities, facilitating access to information and connecting youth to business networks (Yami *et al.*, 2019). Youth are often more adept at using ICT than adults and this helps explain why youth predominate in certain rapidly growing

Former intern recruits interns for his own company

Upon obtaining his degree in veterinary sciences in Rwanda in 2016, Mr. Innocent Twizeyimana sold inputs. He was doing well but said: "I was feeling an urge to become more, to expand my contributions and to learn how I can do it; you know, this is something that we are not taught at school." In 2017, he interned with the One Acre Fund (OAF), an NGO. He learned the types of analyses to conduct with farmers before taking products and services to them.

Mr. Twizeyimana then founded Expanders, Ltd., a social enterprise committed to improving the livelihoods of smallholders. In 2019, Expanders obtained a grant from a foundation to establish a rabbit production centre, in Rutsiro District and used OAF's impact models in developing it. In 2020, Expanders recruited its first intern. "My managers at OAF challenged my work and that way I learned a lot. Today in my current job, I ask myself and my employees those same questions!" states Mr. Twizeyimana.

SOURCE: Franzel et al. 2020. Engaging young agripreneurs: Options to include youth in private sector extension and advisory services in Rwanda and Uganda. Developing Local Extension Capacity (DLEC) Project. Washington, D.C., USAID.

agripreneur job categories where digital tools are required, such as village agents in Uganda and Rwanda. Village agents work for private companies and other organizations and link farmers to input suppliers, produce buyers and other service providers (Franzel *et al.*, 2020)



BOX 3

10 factors to consider when evaluating how to invest in agripreneurship for young people

Programme planners and policymakers should consider the following factors and actions when considering how to invest in youth agripreneurship:

Differentiate among youth and ensure youth participation. Programme planners need to recognize the heterogeneity of youth, decide which criteria (e.g. gender, educational level, digital literacy) are most important in differentiating among them, define different segments and decide which ones to target. They also need to involve members of targeted segments in the different phases of the project cycle: design, implementation, governance, monitoring and evaluation. FAO and AUC (2022) offer detailed advice on how to do these as well as on conducting youth-sensitive analyses.

Target young women. There is a need to focus on gender at the same time as youth. Otherwise, the benefits accruing to youth may help only young men, particularly if the unique constraints that young women face are not met. These include domestic responsibilities, which limit women's mobility, access to land and negative attitudes about women's capabilities. Much has been learned already about how to create conditions to empower women and how to increase the proportion of women participating in and benefiting from development interventions (Oxfam, 2014). These lessons need to be more widely shared and applied in new investments in youth agripreneurship initiatives

3 Screen potential beneficiaries. Agripreneurial programmes are most effective when they target youth with entrepreneurial interests, drive and behaviours (Adam, 2019). These are more important selection criteria than past academic performance (Box 1).

Offer integrated human capital development methods and supplemental services, such as financial services. In the conventional approach to human capital development, a single human capital development method, such as technical training, is often assumed to lead to employment. But a single method is often not sufficient. As seen in Box 1, vocational agricultural education was not adequate to ensure that graduates achieved employment in Cameroon. Rather, an integrated, holistic approach was required, involving internships, tutoring and coaching, which reinforced and complemented the students' education. The conventional and integrated approaches are compared in Figure 3. The integrated approach begins with a needs assessment to identify constraints to achieving employment and various methods are considered, including foundational training (such as in numeracy or literacy), technical training and coaching. Providing additional supplemental services, such as linking youth to credit and other financial services (e.g. saving societies and opening bank accounts), is also

often important. (Yami *et al.*, 2019). Other services to consider include advisory services, market information, insurance and tools for helping entrepreneurs demonstrate creditworthiness.

- **5 Promote the use of and research on digital tools.** Digital tools have important benefits: improved access to timely information, capacity development materials and online training, enhanced communication and networking, increased economic efficiency and added prestige to agricultural enterprises. Moreover, the explosion and success of business models using digital tools has opened many opportunities (Sylvester et al., 2021). The considerable emphasis on digital tools ought to be sustained and increased research is needed to assess their effectiveness in different applications and to explore how access to them can be increased among women, the poor and other marginalized groups. The gender gap in internet use is particularly high in the Global South. The proportion of men using the internet in least developed countries is 63 percent higher than the proportion of women (ITU, 2021).
- 6 Ensure that youth have incentives to engage. Livelihood programmes engaging young microentrepreneurs often leave them in low-productivity, low value-added sectors, such as retailing produce in open-air markets. Instead, they ought to guide them towards more productive, higher value-added activities such as processing, for which returns are higher (Alam, 2019). Whereas much is made of youth's interest in short-term financial gains, these are not the only incentives they consider. Non-monetary goals such as social status and opportunities for advancement are also important (Yami et al., 2019). Efforts to enhance the role of ICTs in agripreneurship, such as the "Farming is Cool" initiative in Rwanda, help make agripreneurship more attractive to youth (Government of Rwanda, 2016).
- Engage the private sector and facilitate market-based 7 youth agripreneurship. Private sector, market-based methods and public-private partnerships that promote agripreneurship can be effective and help ensure sustainability, as in the above-mentioned cases of village agents and internships where private companies pay nearly all the costs. Governments and projects can play important facilitative roles in such cases, e.g. helping to identify and place interns, financing the development, testing and impact of digital tools that agripreneurs use or supporting the development of innovative pilot initiatives. Leveraging private sector participation and engaging in dialogue for coordination of corporate social responsibility and sustainability strategies can help enhance benefits accruing to youth agripreneurs as well as contribute to economic growth of communities.

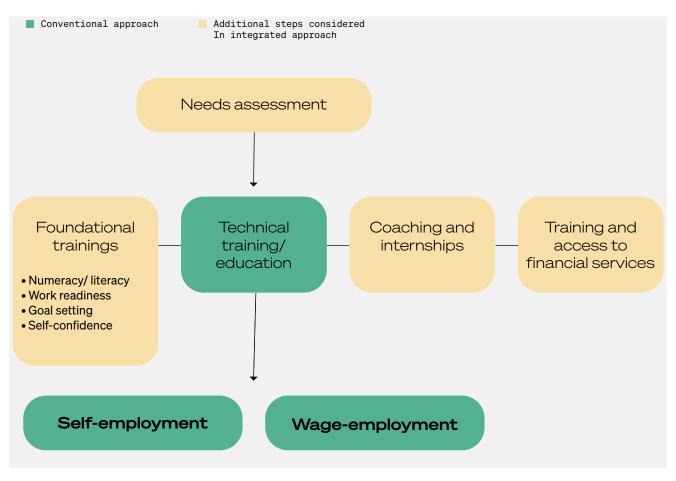


Figure 3

Conventional and integrated approaches to using human capital development methods to achieve self- and wage-employment

SOURCE: adapted from EDC. 2018. USAID Huguka Dukore Akazi Kanoze Annual Report. Washington, DC, USAID and Kigali, Educational Development Center. www.edc.org/usaid-huguka-dukore-akazi-kanoze-annual-report-2018

- 8 Implement policies to promote youth agripreneurship. Governments can implement policies to support youth agripreneurship, such as launching youth internship programs, exempting youth from paying for trading licenses and reducing their tax rates. Strong policies supporting youth agripreneurship, such as Uganda's National Strategy for Youth Employment in Agriculture, also encourage the private sector and civil society organizations to partner with government and to implement supportive measures on their own. For example, in response to policies supporting youth, the Rwandan Private Sector Federation provides advice to youth setting up businesses and helps them negotiate with government agencies on issues such as fees and taxes (Franzel et al., 2020).
- Encourage integration of youth agripreneurship into other development initiatives. Youth agripreneurship programs could benefit from, as well as contribute to, other development initiatives such as climate smart agriculture; orange economy (activities with cultural, artistic, or patrimonial content); and women's empowerment. Young agripreneurs' lower costs and strengths in such areas as digital tools make youth agripreneurship an attractive add-on to other programs.
- **10** Conduct impact assessments of different approaches to developing youth agripreneurship. Impact studies show a wide range of results concerning the economic benefits of developing youth agripreneurship. This variation highlights the importance of context in influencing results and the fact that different methods, and the ways they are applied and combined, also affect results. More impact assessments can help us understand which methods are best, how to apply and combine them and under what circumstances they work most effectively. Such findings can help governments and the private sector earn higher returns on their investments and achieve other goals, such as gender equality, at lower cost. Helping to build the expertise in conducting impact assessments in developing countries is also important.

Conclusion

Investing in young agripreneurs is vital to address the challenges of rural unemployment in developing countries, and to maximise the potential inherent in youth to advance sustainable rural development. The human capital invested in young agripreneurs can significantly improve their prospects and incomes, and build economic opportunities within their communities, with high returns on investment.

Yet, engaging youth meaningfully in agripreneurship requires targeted, integrated, holistic and iterative approaches. Impact evaluations demonstrate the high potential for investments in education and training agripreneurs to improve their capabilities, business performance and livelihoods. In parallel, methods such as mentoring, internships, apprenticeships, and coaching also play key roles in developing agripreneurship, as do complementary programs aimed at improving access to financial services, digital tools and ICT.

It is also crucial to employ participatory approaches to empower and engage youth, ensuring that human capital investment initiatives directly meet their entrepreneurial interests, needs and aspirations.

Public and private sector policymaking and investment that follow these approaches will help to reduce constraints for young agripreneurs and ensure they are equipped with the right tools, skills and opportunities for development.



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Abbreviations and acronyms

AUC	African Union Commission	ICT	information and communication technologies
BSU	Bishop Stuart University	NEET	not in employment, education or training
FAO	Food and Agriculture Organization of the	NGO	non-governmental organization
	United Nations	OAF	One Acre Fund

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