

# Pack 116, Item

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**Backgrounder: Why and how youth should get involved in agriculture**

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**Introduction**

***Why is this subject important to listeners?***

Because potential youth farmers should know:

* The opportunities that exist across the full agricultural value chain.
* How to market their farm produce and popularize their agricultural innovations.
* How to use the media to promote their agricultural activities.
* How to process raw agricultural produce in line with safety regulations.
* How to handle harvested produce to prevent post-harvest losses.
* How to identify opportunities to help fund their new agricultural ventures.
* The high-value crops to grow to maximize their earnings.
* How to capitalize on existing partnerships in agribusiness
* How to make use of existing innovative technologies in agribusiness.

***What are some key facts on youth involvement in agriculture?***

* Incorporating ICTs like internet, smartphones, and artificial intelligence, and airing entertaining and educative agricultural programs on TV and radio can change youths’ negative perceptions about agriculture and attract them to farming.
* Early exposure of children to facets of the agricultural value chain other than crop production, including entrepreneurship, using ICTs, and home-based processing, can encourage youths to go into agriculture.
* There is a potential to draw youth to agriculture by modernizing farming by taking advantage of ICT innovations and mechanization to improve agronomic practices, increase yields, connect farmers to buyers by phone or online, and increase revenues.
* NGOs and governments can fund and incubate great agricultural innovations and businesses that add value and attract more youth into agriculture.
* Governments and communities can facilitate youth access to farmland.
* In sub-Saharan African rural communities, basic agricultural knowledge is passed on to youth. If youth can access education and training on better agronomic techniques and farm high-value crops and marketing, they may consider agriculture as an economically viable career for the long term.
* Improving youth access to finances and credit facilities, and providing training in financial literacy can increase their prospects of entering agriculture and succeeding.
* Having experienced mentors provide youth with training and mentorship and hold them accountable for their training goals can help ensure that their new agricultural enterprises are profitable and successful.
* Youth prefer agricultural value chains that generate money quickly.
* While veteran farmers can help train emerging youth farmers on their agronomic skills, training it is more effective when conducted by youth who are already practicing agribusiness, who can act as new farmers’ main source of information.
* Youths are more likely to embrace agriculture if there are sure markets; online marketing platforms can encourage them to engage in agriculture.
* Youth require intensive and effective follow-up and support to successfully implement their plan of action for agribusiness. Without monitoring of their actions, it is not reasonable to expect major changes nor positive results.
* Youths are the bridge to ensuring sustainability in agribusiness, based on the number of years they will be engaged in agribusiness.
* Mentorship and coaching of youth in agribusiness is more successful than the usual classroom-based trainings promoted by development organizations and other partners.

*For further information, see documents 2, 3, 4, 5, 6, 7, 8, 9, 10, 13, and interview A.*

***Predicted impact of climate change on youth engaged in agriculture***

* Youth interested in agriculture will need to embrace climate-smart agricultural practices and create green jobs so that their agricultural ventures are sustainable in the long term.
* Adopting agroforestry techniques will help rural youth successfully engage in agriculture and adapt to the increased impacts of climate change.
* Increasing population, the increased impacts of climate change, and lack of access to farmland may dissuade young people from engaging in agriculture.
* In Nakuru, Kenya, young dairy farmers are unwilling to grow climate-smart fodder crops because they want quick returns and these crops take longer to mature.

*For further information, see documents 1 and 3.*

***What are the big challenges to promoting youth involvement in agriculture?***

* Inability to own farmland due to limited financial resources and unfavourable land inheritance practices.
* Traditional academic education doesn’t equip youth with the practical agronomic skills needed in agriculture.
* Lack of asset collateral and poor credit scores make it difficult for youth to access loan and credit services from financial institutions.
* The land that youth can access may be unproductive and provide low yields.
* Limited knowledge of where and how to market their crops.
* Failure to access accurate and current price data to help them sell their produce at favourable prices.
* Youths lack transportation to take harvested produce to markets and consequently sell at low farm gate prices.
* Lack of adequate finances to purchase sufficient and high quality farm inputs to ensure high yields.
* Minimal access to post-harvest storage facilities to increase the shelf life of freshly harvested produce.
* High taxes and costs of business licenses, Kenya Bureau of Standards compliance certificates, and bar codes for new agribusiness enterprises.
* Lack of information on how to get required business licenses and compliance certificates.
* Unstable agribusiness value chains that don’t quickly provide the level of economic returns expected by youth. This occurs when buyers who promised to buy produce during planting fail to purchased produce at harvest time.
* Lack of financial literacy, including how to spend money and where they can invest in the agricultural value chain.
* Failure by youths to cluster themselves in welfare groups that can approach financial institutions to access credit and financing to start agribusiness enterprises.
* Lack of knowledge of how to write funding proposals for new or proposed agribusiness enterprises.
* High expectations for white collar jobs by youth discourages youth from taking up agribusiness as a source of income. Unfortunately, these types of jobs are rarely available.
* Lack of knowledge on how to access productive resources, including farm inputs, production information, and potential buyers for their produce.

*For further information, see documents 7 and 12, offline sources, and interview A.*

***Gender aspects of youth involvement in agriculture***

* In Muranga, Kenya, a study found that young women dairy farmers are better at marketing milk than men since they have more knowledge of how to successfully compete.
* In Kenya, young female farmers on parents’ or spouses’ land grow quick-maturing crops like vegetables and rear poultry, while young males invest in both short- and long-term crops.
* Women hold only 1% of registered land in Kenya, which can hinder young women from entering agriculture.
* Young women in Kenya are less likely to inherit ancestral or parents’ land then men due to cultural or tribal traditions.
* In Kenya, men grow high-value crops more often than women and are typically in charge of the more lucrative aspects of agricultural value chains.
* In Kisii County, women hawk their milk around town because they lack buyers who will process their milk. To address the situation, a youth-founded dairy enterprise called Lenack Limited buys milk from the women and processes it.
* In Kisii County, though women feed dairy animals, men reap the economic benefits by selling the milk.

*For further information, see documents 3 and 9 and Interview B.*

***Key information about youth involvement in agriculture***

***Why should Kenyan youth get involved in agriculture?***

* To create good livelihoods, economic opportunities, and employment for themselves and others in the agricultural value chain.
* To help small-scale farmers adopt improved farming techniques and market their produce through the innovations they develop.
* To make agriculture attractive and appealing to growing children.
* To create agribusiness enterprises that process and sell produce within their local communities.
* To take advantage of funding grants provided to agribusiness start-ups.
* Their innovations can help soils in small-scale farming communities to be productive, increasing yields and helping communities become food secure.
* To pursue a career that offers self-employment and livelihoods that sustain families.
* To create employment and boost the economic well-being of the small-scale farming communities where youth run their agribusiness enterprises.
* To ensure continuity in agricultural production after current farmers can no longer work.
* To earn incomes that allow them to sustain their families and support their parents.
* Because youths engaged in agriculture are less likely to engage in destructive behaviours.
* To handle physically demanding activities such as loading and transportation of agricultural produce within the value chain.
* Because young farmers are more likely to quickly adopt and promote emerging technologies that improve their agricultural production.

Youth can benefit by introducing innovations in various activities within agricultural value chains, including land preparation, input use, planting, harvesting, post-harvest activities, and processing.

*For further information, see documents 2, 4, 5, 6, 7, 8, 10, 13, 16, and interview A.*

***Information Communications Technology (ICT) innovations***

In Kenya, youth have developed or use ICT innovations like social media and text messaging to market their yields, buy inputs, or receive current market prices. The following are some ways that Kenyan youth use various types of social media in agriculture.

***Social media***

In Kenya, the social media platforms widely used by young farmers to market their crop produce are Twitter and Facebook.

* Prominent young Kenyan farmers like Rodgers Kirwa (Mr. Agriculture) and Caleb Karuga (Farmercist) use social media to popularize their farming ventures and market produce and inputs. Between both social media platforms, they have over 156,000 followers. Kirwa created the popular hashtag #agribusinesstalk254 while Karuga created #ukulimasioushamba. Karuga’s Swahili hashtag means “Farming is not primitive.” At his farm, Karuga engages in horticulture and rears bees, poultry, dairy goats, and catfish while Kirwa grows horticultural crops in the field and the greenhouse. Kirwa graduated in agribusiness management while Karuga was a TV journalist who ventured into farming. Other popular hashtags used by Kenyan youth in agriculture are #YoungFarmersKe and #MkulimaYoung, which means “young farmer.” Their twitter pages are <https://twitter.com/CalebKaruga> and <https://twitter.com/rodgers_kirwa>.

***Online platforms***

Kenyan youth have developed online platforms that farmers can use to sell their crops and understand current market prices and trends.

* *M-Farm:* This online marketing platform connects farmers with buyers and provides them with daily market prices for various crops. It also helps farmers make decisions on what to plant each season based on price trends. The platform has over 10,000 registered users and was developed by three young women university graduates in 2010.

*For further information, see documents 2, 5, 6, and 7.*

***Consultancy***

Young Kenyan farmers operate successful ventures offering consultancy services to other farmers. For example:

*Model farms:* Young farmers offer agribusiness consultancy services from their farms to new farmers for free or at a fee. At his home in Nandi County, Kirwa, an agribusiness management graduate, runs the half-hectare iAgribiz Africa Model Farm, which features three greenhouses and an open field. From the farm, he trains new farmers and offers free internships to post-secondary students studying agriculture. At the farm visitors learn how to grow cabbages, collard greens, onions, high-value horticultural crops like lettuce, broccoli, and capsicum, and learn how to rear tilapia and market farm produce.

Karuga operates Wendy Farms in Kiambu County, where he teaches visitors how to grow vegetables, keep bees, and rear fish, goats, and poultry for a fee. Safaricom, Kenya’s largest mobile phone operator, sponsors him to talk to youth across Kenya on TV, radio, and at live events about the economic benefits of farming in a mentorship program dubbed [BLAZE](https://www.blaze.co.ke/what-is-blaze/) Be Your Own Boss-Kenya.

***Inputs and livestock feed***

Young Kenyans are also entering input and feed production ventures, tapping into easily available resources to develop local inputs and livestock feed.

* *Organic fertilizer:* Young innovators are using locally available materials to create organic fertilizers. In Kirinyaga County, Samuel Rigu founded Safi Organics which turns dry rice straw into Safi Sarvi, a carbon-neutral organic fertilizer that reduces soil acidity and is used by rice and horticultural farmers. The low-cost fertilizer has been shown to raise crop yields by 30% and, according to Safi Organics, removes 2.2 tonnes of CO2 from the atmosphere per hectare of land annually.
* *Compost manure:* Organic composting is helping youth enter agriculture as input providers. In Kiambu County, a young graduate named George Muturi uses red worms to make vermicompost that his company [Agri-Tech Organic Farm](https://www.facebook.com/comfortwins.farm) sells to other farmers. He also trains farmers around the country on vermicomposting and its benefits.
* *Livestock feed:* Youth researchers have found ways to make alternative and cheaper livestock feeds from locally available resources. Muturi grows the nitrogen and protein-rich Azolla plant as a high-protein feed and biofertilizer. In Homa Bay County, a young researcher named Jack Oyugi founded Biofit Feeds in 2015. His company makes livestock feeds for dairy, fish, and poultry farmers from the invasive water hyacinth that chokes Lake Victoria. Each week, they harvest two tonnes of hyacinth, which they process into five tonnes of livestock feed monthly. They sell the feed to about 50 livestock keepers around Kenya.

***Agronomy***

For many Kenyan small-scale farmers, it is a challenge to know what their soil or crops require. As a result, young Kenyans in agriculture are developing innovations to help farmers make the right agronomic decisions for their farms. These include:

* *Ujuzi Kilimo*: This is a mobile and online platform developed by electronic engineer Brian Bosirein 2014 when he was 19 years old. Its Swahili name means “knowledge farming.” Through the [Ujuzi Kilimo](https://ujuzikilimo.com/) platform, soil tests are done remotely on fields, and the findings on soil nutrient needs sent to farmers’ mobile phones in real time. The online platform also has a suit of services that offers registered farmers crop and seed recommendations, a cropping calendar, weather updates, market links, soil tests, yield estimates, crop protection and management advice, and other services.
* *Appropriate Rural Development Agriculture* Program (ARDAP) is an agricultural NGO based in Busia county, western Kenya. In partnership with RTI-USAID, ARDAP is implementing a poultry project that involves 400 youths. The project is designed to create employment, increase incomes, and improve household nutrition in Busia and Siaya counties. So far, 120 youths have been trained in poultry rearing and 80 have received chicks at a cost of 80 Kenyan shillings per chick. The youths have been linked to input providers and eateries where they will sell their mature chicks. Practical trainings are conducted on farms or at the homes of successful poultry farmers.

***Extension***

* *Rafiki Agrovet*: Jonah Mwaniki is a 29-year-old graduate in general agriculture who opened this agroveterinary service in Makueni County in 2019. His aim was to address the gap in extension services in Kenya. When small-scale farmers buy inputs from the company, Mwaniki offers them free after-sales extension services. At their farms, he advises them on best practices for applying inputs at specific growth stages of horticultural crops and on pest management. During the mango season, he sells insecticides and trains farmers on orchard care to minimize fruit fly infestations. Since free range poultry is reared in the county, Mwaniki advises farmers on how and when to vaccinate poultry as well as selling feed.

***Food processing***

Kenyan youth are developing food processing companies that buy, process, and sell harvested produce from small-scale farmers. The companies process food products certified by the Kenya Bureau of Standards. Companies founded by young Kenyans include:

* *Mhogo Foods:* This award-winning company in Kiambu County was founded by 30-year-old IT specialist Elizabeth Gikebe in 2017. The company buys raw cassava from small-scale farmers around the country. It processes the cassava into gluten-free flour used in pastries and porridge. Mhogo Foods has won various grants to help it expand. The flour Mhogo Foods processes is stocked in major Kenyan supermarkets and sold online on e-commerce platforms.
* *Maribelle Dairy:* This company was founded in 2017 by Mary Maina, a food and dairy technology graduate. Maribelle Dairy makes a variety of flavours of yogurt for households and corporate events. It delivers yogurt orders around Nairobi and its suburbs.
* *Lenack Limited:* This is a dairy processing enterprise based in Kisii County and co-founded in 2017 by 30-year-old George Ogamba and 28-year-old Lena Nyakundi. The company buys 10 litres of milk per day from a dairy farmer and processes it into yogurt. Lenack Limited is the first dairy processing enterprise in the county. The founders started it after observing there was no formal market for milk. Rather, women hawk it in the mornings and evenings in towns. The company aims to expand their processing capacity to 200 litres per day after obtaining pasteurizing equipment.

***Post-harvest***

Small-scale farmers in Kenya grapple with post-harvest losses due to the perishability of fresh produce and the lack of means to transport it to market on time. In response, young Kenyans are developing innovations to help farmers preserve their fresh produce. These innovations include:

* *Solar Freeze*: In 2015, 27-year-old Dysmus Kisilu founded Solar Freeze, a company that has developed innovations to help small-scale farmers minimize post-harvest losses of fresh produce such as vegetables, fruits, and dairy products. Through Solar Freeze, farmers can store their fresh agricultural produce and dairy products in mobile, solar-powered cold rooms. They can use the Solar Freeze app and SMS services to locate the closest mobile cold storage unit, then pay affordable fees to use these cold room services. Solar Freeze also offers transport of fresh produce to market in refrigerated vehicles.

***Funding***

Many Kenyan youths interested in engaging in agriculture value chains are unable to do so because of limited finances or business knowledge. Here are some organizations that are helping youth who operate agribusiness enterprises, especially processing businesses, with funding and business mentorship:

* *Kenya Climate Innovation Center (KCIC)*: [KCIC](https://www.kenyacic.org/about-us/) offers business mentorship and financing to new small and medium enterprises that address climate change challenges like food insecurity. They operate the [Vijana na Agribiz](https://agribiz.kenyacic.org/) (youths in agribusiness) competition, which invites young people with innovative agribusiness ideas to apply for funding and business mentorship services.
* *Mastercard Foundation*: This foundation also provides funding to youth involved in agriculture or new agribusiness enterprises. Youth with innovative agribusiness ideas are invited to apply for seed funding for agro-processing ventures.
* *African Development Bank (AFDB)*: AFDB runs the AgriPitch competition, which targets youth around Africa who operate agribusiness enterprises. Budding agripreneurs are invited to pitch their enterprises to the competition. Past winners include Elizabeth Gikebe of Mhogo Foods, who won $20,000 in funding in 2020.
* *Tony Elumelu Foundation*: Each year, this foundation invites entrepreneurs to pitch their businesses to receive funding. Past beneficiaries include [youth involved in agribusiness enterprises](https://www.tonyelumelufoundation.org/alumni) around Africa.

*For further information, see document 8 and interviews A, B, C, and D.*

***Where can I find other resources on this topic?***

*Documents*

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*Interviews*

1. Daniel Okumu, Portfolio Manager at Self Help Africa, Feb. 10, 2021
2. George Ogamba, Lenack Limited, Feb. 10, 2021
3. Jonah Mwaniki, Rafiki Agrovet, Makueni, Feb. 10, 2021
4. Macdonald Wesonga, Appropriate Rural Development Agriculture (ARDAP), Feb. 12, 2021

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