Graham Johnson Valley High School West Des Moines, IA, USA Uganda, Education

Uganda: Improving Youth Agribusiness Education as a Pathway to Food Security

Located in east-central Africa, Uganda is a landlocked country bordered by South Sudan, Kenya, Tanzania, Rwanda, and the Democratic Republic of the Congo. The country is known for its diverse landscape, including Lake Victoria, Lake Albert, the Rwenzori Mountains, and fertile agricultural land. Uganda encompasses an area of approximately 241,000 square kilometers, slightly smaller than the state of Oregon ("Uganda," CIA). With a population of nearly 47.7 million, mainly concentrated near Lake Victoria and Lake Albert, Uganda's population density is high relative to other African nations. According to the CIA World Factbook, 73.2% of the population is considered rural, with only 3.8 million people inhabiting the capital of Kampala. Uganda's demographic profile is also notable for having one of the fastest-growing and youngest populations in the world ("Uganda," Int'l Trade). Uganda's fertility rate is among the world's highest, at approximately 5.5 children per family. Almost half of the population, 47.3%, is fourteen years old or younger, and only 2.3% is over sixty-five ("Uganda," CIA).

As a young population, most Ugandans did not experience the military coup and mass atrocities under the leadership of Idi Amin in the early 1970s. Still, the economic ruin and political instability that followed affected the country for decades ("Uganda," CIA). The current president, Yoweri Museveni, came to power in 1986 but was met with resistance from various groups. This eventually led to a nearly twenty-year civil war between Museveni's National Resistance Army and the rebel Lord's Resistance Army. Although the civil war ended around 2006, regional civil unrest is still common (Hague). Under President Museveni, the government has taken steps to improve political stability and rehabilitate the economy, with an estimated economic growth of 5.3% in 2023. The agricultural sector accounts for twenty-four percent of the economy, with the most common exports being coffee, tea, and cotton ("Uganda," Int'l Trade). "Agriculture contributes significantly to Uganda's export earnings and provides almost three-quarters of national employment" ("Uganda," USAID).

Agriculture—specifically subsistence farming—also has a significant role in the lives of rural Ugandans. The World Bank estimates that nearly forty-two percent of Uganda's citizens live below the international poverty line of \$2.15 per day. Approximately seventy percent of Ugandans live outside urban areas, so most people produce food on small subsistence farms. "Uganda's fertile agricultural land has the potential to feed 200 million people. Eighty percent of Uganda's land is arable, but only 35% is being cultivated" ("Uganda," Int'l Trade). The staple food of Uganda is *makote*, or mashed plantains. "Other food crops include cassava (manioc), sweet potatoes, white potatoes, yams, beans, peas, groundnuts (peanuts), cabbage, onions, pumpkins, and tomatoes" ("Cuisine"). Ugandans eat two daily meals, with breakfast being a cup of tea. A typical family meal combines a starch—such as *matoke* or a cornmeal paste called *ugali*—with a stew or sauce made from vegetables, peanuts, and occasionally meat ("Customs"). Women and girls perform meal preparation and other household tasks in the home. Additional roles within the traditional family unit are divided along stereotypical gender lines.

Historically, the family has consisted of a father, mother, children, and elderly relatives. Fathers have traditionally been considered heads of the household and not involved in domestic or child-rearing activities. Mothers have been in charge of household responsibilities and child care. "Their childbearing and child-rearing capabilities are of great importance: in Ugandan culture, having enough children to carry on the family name and bloodline is a high priority for families" (Wooldridge). With large, rural families, children have been expected to assist in household duties and farm chores, and the role of

extended family members has been to help with childcare. However, the history of a decades-long civil war, combined with the sub-Saharan AIDS crisis of the 1990s and the more recent COVID-19 pandemic, has affected traditional family structure. "Many households are now headed by widows, single women, children under the age of 18, and orphans. Fragmented families can have greater difficulty obtaining a high-quality education, staying healthy, and getting sufficiently high-paying jobs" (Wooldridge).

Political conflict and economic strain have impacted traditional Ugandan families, holding them in a cycle of poverty and food insecurity. Even in a country with ample agricultural resources and an abundance of young citizens, food insecurity will continue to be a considerable challenge until two significant social issues—lack of education and youth unemployment— are dealt with.

The education system in Uganda consists of four progressive tiers. With English as the official language, primary education is offered for children aged six to twelve. Completing the seventh year of primary learning requires students to sit for the Primary Leaving Exam. Students with the highest scores are then eligible to be admitted to secondary school, which consists of a four-year lower and two-year upper school. An alternate pathway of technical school, Business, Technical and Vocational Education and Training (BTVET), may also be pursued after completion of primary education (Kabuka et al.). Although the government initiated universal primary education in 1997, "estimates indicate that only one-quarter of students who enroll in school reach the final grade of primary level" ("Sustaining"). Many factors contribute to the high dropout rate. An obvious issue is the sheer number of children to educate. According to the Education Policy and Data Center, 8.8 million students are currently enrolled in primary education. Country-wide, overcrowding of classrooms and teacher shortages lead to suboptimal learning environments. The cost of books and uniforms, especially in large households, becomes prohibitive. Domestic responsibilities, illness, and lack of family support also keep many rural children from attending consistently. As a result of these factors, and others unaccounted for, three-quarters of Ugandan children have no avenue for additional formal education by the age of twelve. "While technical education would give skills to many children that drop out of school prematurely, only about 4% of all children in post-primary institutions are enrolled in BTVET institutions" (Kabuka et al.).

Lack of education, specifically vocational training, is tied to youth unemployment. "Children born in Uganda today are likely to be 38% as productive when they grow up as they could be if they enjoyed complete education..." ("Human Capital"). The United Nations defines youth unemployment with the following parameters: individuals between the ages of fifteen and twenty-four seeking but unable to find work. According to the Uganda Bureau of Statistics, youth unemployment is at thirteen percent, more significant than the national rate of ten percent. Furthermore, nearly thirty percent of youth who have completed the appropriate level of education cannot secure jobs, and the scenario is even more dire for semiskilled and unskilled individuals. "Several factors affect youth unemployment in Uganda, including poor access to quality education and training, a skills gap between job seekers and open positions, a dearth of formal jobs relative to the number of young people entering the labor force, and the dominance of the informal sector" (Namuleme).

Improvements in education and levels of employment are linked to increased food security. Better education can lead to more opportunities for employment, which can decrease poverty and food insecurity. While there are significant hurdles to clear to increase the level of food security in Uganda, with proper support, the agricultural sector in Uganda can provide untapped potential for both vocational education and youth employment opportunities. In this scenario, agriculture can be approached through the lens of business development, or agribusiness (Adeyanju et al., "Impact"). This can be beneficial, especially in Uganda, where over seventy percent of the population is outside urban areas, and agriculture is the most significant form of employment. "The transformation of subsistence agriculture and embarking on an agribusiness development path will drive economic growth, while providing increased employment opportunities and enhanced livelihoods for people living in poverty" (Koira). To remove

obstacles that prevent young subsistence farmers in rural Uganda from succeeding in agribusiness, several key areas that revolve around education should be addressed, namely the perception of agriculture as a career, access to skill training, and availability of mentorship.

The first hurdle to clear is improving the overall perception of agriculture as a career. Many youths view the mark of success as securing an urban, white-collar job whether or not they have adequate training, "Not all youth are inspired by the notion that agriculture provides a productive career" (Yami et al.). One way to address this perception would be through a country-wide educational media campaign. A government-supported marketing crusade—through billboards, television and radio spots, and social media —could be implemented to change how youth perceive agribusiness. Public service announcements, which could be created as short films, have effectively disseminated other educational information in Uganda (Green et al.). These clips would be produced using local screenwriters and actors and would be released with the help of the Uganda Communications Commission. Using similar media avenues, it could be beneficial to highlight current agribusiness and entrepreneurial success stories, giving youth inspiration and a template for success. Cameroon developed a national program that "...demonstrated successful youth projects, thus changing the mindsets of the youth toward agribusiness as a career" (Yami et al.). The aim would be to shift the perspective of rural youth using a targeted education campaign to help them view agribusiness as a respectable, competitive career path.

Providing adequate training is the second crucial area to address. Changing the perception of agriculture as a career can only go so far if the youth to be employed do not have the skills to succeed. Having already discussed the challenges of the education system in Uganda, it is imperative that appropriate technical training be made available to rural youth so they can develop the skill set necessary to thrive in agribusiness. "Youths of all ages stressed that vocational training courses were desirable, and many considered them to be more relevant than resuming primary or secondary education, because, as they stated, vocational skills would increase productivity and earnings" (Oosterom et al.). Developing quality training programs aimed at educating rural youth could happen through several pathways. Utilizing local vocational schools to provide technical training has been well-tested in other African countries. In Nigeria, a successful four-week program between the World Bank and the government of Nigeria "...focused on exposing young unemployed graduates between the ages of 18-35 years to new agribusiness ideas...crop and livestock production, marketing, processing, and financial and risk management" (Adeyanju et al., "Youth"). Another successful endeavor, the ENABLE-TAAT program, has been financed by the African Development Bank and facilitated through the International Institute of Tropical Agriculture in nineteen African countries. This program "...provided an intensive 6-week training, mentorship, and technical assistance and facilitated the creation and expansion of youth-led agribusiness enterprises..." (Adeyanju et al., "Impact").

Establishing long-term programs or institutes may offer greater benefits than exposing youth to various agribusiness topics. Partnering with established teaching institutions from abroad that focus on agriculture (i.e., Iowa State University or Cornell University) would offer a well-tested, hands-on curriculum. Visiting professors would provide invaluable guidance and offer different perspectives on agricultural education. Exchange programs could be structured to allow Ugandan youth to visit agricultural-focused teaching institutions, allowing for even more exchange of ideas. Partnering with the World Bank or the African Development Bank for funding, as some already established programs have done, could significantly decrease or even eliminate tuition, a barrier to most poor rural youth. Whether several weeks or a much longer curriculum, agribusiness training programs are essential and positively impact rural youth. Findings indicate that "...these programmes could fill the experience gap faced by many young people and equip them with the necessary skills for better agribusiness performance. Better performance in turn could contribute to wealth creation and facilitate the acquisition of productive resources, which could result in increased productivity, higher income, and food security" (Adeyanju et al., "Impact").

Finally, addressing the need for more agribusiness mentorship available to rural Ugandan youth is necessary. Acquiring basic technical skills is essential for entry into this career path, but providing ongoing support and continuing education will allow these youth to prosper. By connecting young farmers to innovative technology and supporting their agricultural practices, especially during the early stages of business development, there is less chance for crop failure, improving food production and increasing food security (Adeyanju et al., "Assessing").

One area of focus could be strengthening the presence of agriculture extension offices and their advisory services, as "...having access to extension services increases the probability of being food secure by 16%" (Adeyanju et al., "Assessing"). In Uganda, the Ministry of Agriculture, Animal Industry, and Fisheries (MAAIF) provides extension services. However, these services are lacking due to an exploding population and severe underfunding. Drawing in private sector organizations could allow greater access to extension services. Non-profit entities, or non-governmental organizations (NGOs), typically support social development issues and "often prioritize poverty reduction, food security, gender equality and capacity building for disadvantaged communities" (Gomez et al.). A successful example is Food for All International, established in 2002. It has actively trained over 15,000 small-scale farmers in Nigeria on modern crop and livestock production ("Food for All").

Looking to the for-profit private sector would also lead to valuable partnerships. Utilizing the expertise of multi-national agribusiness companies, such as Cargill, Syngenta, or John Deere, could offer knowledge of new technologies and innovations or even teach functional soft skills necessary to interact in the business world. Ventures like this could be modeled after programs supported by the Dutch government, where private companies such as SolarNow and Holland Greentech act as mentors, offering internships and job opportunities and providing knowledge on innovations from solar energy to greenhouse technology ("Training"). For the greatest success, pairing public and private sector resources will increase the availability of agricultural extension services, ultimately benefiting rural farmers through added support and continuing education.

While these solutions are promising, each of them has potential pitfalls that should be addressed to optimize outcomes. One category to consider is cultural misalignment. Media campaigns can fail if they do not resonate with cultural norms. For this reason, involving local youth and influencers to create content will help insure its cultural relevance. Training could fail if it does not take into consideration local practices. Therefore, it is important to collaborate with local training centers to ensure that programs are tailored to the local cultural context. Programs and mentorship that model foreign institutions may fail if they do not align with local cultural practices. For this reason, it is imperative to develop program structures to fit local agricultural practices while also incorporating international best practices. By addressing these potential pitfalls, the proposed solutions can become more effective and impactful.

In Uganda, agriculture is the backbone of the economy and the primary means of livelihood for most citizens. However, they face significant challenges when it comes to ensuring food security, education, and youth employment opportunities. A multi-faceted strategy has been proposed to tackle these issues, centered around improving youth agribusiness education. Rural youth can establish thriving agribusinesses by changing the perception of agriculture as a career, providing relevant skills training, and offering ongoing support through mentorship. With the proper partnerships and investments, Uganda can successfully harness its abundant agricultural resources and engage its young population to create a robust agribusiness sector, develop sustainable economic growth, and achieve food security for its people.

Works Cited

- Adeyanju, Dolapo, et al. "Assessing Food Security among Young Farmers in Africa: Evidence from Kenya, Nigeria, and Uganda." *Agricultural and Food Economics*, vol. 11, no. 1, Feb. 2023, https://doi.org/10.1186/s40100-023-00246-x. Springer. Accessed 17 Mar. 2024.
- ---. "Impact of Agribusiness Empowerment Interventions on Youth Livelihoods: Insight from Africa."

 Heliyon, vol. 9, no. 11, Nov. 2023, p. e21291, https://doi.org/10.1016/j.heliyon.2023.e21291.

 Accessed 16 Jan. 2024.
- ---. "Youth Agricultural Entrepreneurship: Assessing the Impact of Agricultural Training Programmes on Performance." *Sustainability*, vol. 13, no. 4, Feb. 2021, https://doi.org/10.3390/su13041697.

 MDPI. Accessed 17 Mar. 2024.
- "Cuisine and Etiquette in Uganda." *Peace Corps*,

 www.peacecorps.gov/educators/resources/cuisine-and-etiquette/cuisine-and-etiquette-uganda/.

 Accessed 13 Jan. 2024.
- "Customs and Cuisine of Uganda ." *Together Women Rise*,
 togetherwomenrise.org/customsandcuisine/customs-and-cuisine-of-uganda/. Accessed 13 Jan.
 2024.
- "Food for All International of Nigeria." *Www.ffai-Ngo.org*,
 www.ffai-ngo.org/#:~:text=Food%20for%20All%20International%20is. Accessed 23 Mar. 2024.
- Gómez, Miguel, et al. *Private Sector Extension Activities Targeting Small Farmers in Developing Countries*. 2016,

 meas.illinois.edu/wp-content/uploads/2016/01/MEAS-Report-2016-Private-Section-Extension-Activities-Small-Farmers-Gomez-Mueller-Wheeler.pdf. Accessed 17 Mar. 2024.
- Green, Donald, et al. Silence Begets Violence: A Mass Media Experiment to Prevent Violence against

 Women in Rural Uganda . 9 Jan. 2018,

 poverty-action.org/sites/default/files/publications/Green et al.pdf. Accessed 15 Mar. 2024.

- Hague Justice Portal, www.haguejusticeportal.net/wp-content/uploads/2023/07/LRA-background.pdf.
 Accessed 13 Jan. 2024.
- "Human Capital Project -October 2020." World Bank, 2020,

 databankfiles.worldbank.org/public/ddpext_download/hci/HCI_2pager_UGA.pdf. Accessed 15

 Jan. 2024.
- Kakuba, Christian, et al. "Who Accesses Secondary Schooling in Uganda; Was the Universal Secondary Education Policy Ubiquitously Effective?" *International Journal of Educational Development*, vol. 83, Mar. 2021, https://doi.org/10.1016/j.ijedudev.2021.102370. Elsevier. Accessed 15 Jan. 2024.
- Koira, Alemayehu Konde. Agribusiness in Sub-Saharah Africa: Pathways for Developing Innovative

 Programs for Youth and the Rural Pool. 2014,

 mastercardfdn.org/wp-content/uploads/2018/06/Agribusiness-in-Sub-Saharan-Africa-2014-access
 ible.pdf. Accessed 16 Jan. 2024.
- Namuleme, Hildah. "Youth Unemployment: The Case for Vocational Training." *Economic Policy Research Centre*,

 eprcug.org/blog/youth-unemployment-the-case-for-vocational-training/#:~:text=A%20UBOS%20 conducted%20labour%20force. Accessed 15 Jan. 2024.
- "National Education Profile: Uganda." *Education Policy and Data Center*, 2018, www.epdc.org/sites/default/files/documents/EPDC_NEP_2018_Uganda.pdf. Accessed 15 Jan. 2024.
- Oosterom, Marjoke, et al. "Family Dynamics and Implications for Young People's 'Struggles' in Rural Areas of Post-Conflict Northern Uganda." *Disasters*, vol. 46, no. 2, Mar. 2021, https://doi.org/10.1111/disa.12484. Wiley. Accessed 17 Mar. 2024.

- "Sustaining the Gains in the Education Sector." *Unicef*,
 www.unicef.org/esa/media/13251/file/UNICEF-Uganda-Education-Budget-Brief-2023-2024.pdf.
 Accessed 15 Jan. 2024.
- "The World Bank in Uganda: Overview." *World Bank*, 27 Sept. 2023, www.worldbank.org/en/country/uganda/overview. Accessed 13 Jan. 2024.
- "Training Uganda's Farmers of the Future ." *Nlplatform.com*, nlplatform.com/articles/training-ugandas-farmers-future. Accessed 23 Mar. 2024.
- "Uganda Country Commercial Guide." *International Trade Administration*, 13 Oct. 2023, www.trade.gov/country-commercial-guides/uganda-agricultural-sector. Accessed 13 Jan. 2024.
- "Uganda Economic Growth." *U.S. Agency for International Development*, 23 Nov. 2022, www.usaid.gov/uganda/economic-growth. Accessed 13 Jan. 2024.
- "Uganda the World Factbook." *Central Intelligence Agency*,
 www.cia.gov/the-world-factbook/countries/uganda/. Accessed 13 Jan. 2024.
- Uganda Bureau of Statistics 2021 Statistical Abstract.
 www.ubos.org/wp-content/uploads/publications/01_20222021_Statistical_Abstract.pdf. Accessed
 15 Jan. 2024.
- Wooldridge, Ellie. "Family Dynamics in Uganda ." Simone's Kids, 2 Mar. 2022, www.simoneskids.org/family-dynamics-in-uganda/. Accessed 14 Jan. 2024.
- Yami, Mastewal, et al. "African Rural Youth Engagement in Agribusiness: Achievements, Limitations, and Lessons." *Sustainability*, vol. 11, no. 1, Jan. 2019, https://doi.org/10.3390/su11010185.
 MDPI. Accessed 15 Mar. 2024.