# Changing the Narrative of African Youth

ORIGINA

Stories of Change, Resilience, and Transformation

#### Changing the Narrative of African Youth

#### Published By:

Regional Universities Forum for Capacity Building in Agriculture (RUFORUM) Plot 151/155 Garden Hill, Makerere University Main Campus P.O Box 16811 Wandegeya | Kampala, Uganda Telephone: +256 417 713 300 Website: www.ruforum.org ORUI

Copyright @RUFORUM 2022

**All Rights Reserved.** No part of this book may be reproduced or transmitted in any form or by any means, electronic or mechanical including photocopying, recording, or in any information storage or retrieval system, or via the internet without permission in writing from the author and the publisher.



#### Foreword

frica's rapid population expansion is set to continue, with its inhabitants doubling from 1.2 billion to 2.4 billion between 2015 and 2050, and eventually reaching 4.2 billion by 2100 with projections by UNICEF indicating that the future of humanity is increasingly African. More than half the projected 2.2 billion rise in the world population in 2015-2050 is expected to take place in Africa with current trend projections showing that within 35 years, 1 in every 4 people will be African, rising to 4 in 10 people by the end of the century.

Approximately 95% of this expansion will occur in low and middle-income countries. Sub-Saharan Africa's population is expected to double by 2050, with approximately 60% of the continent's population under the age of 25, making Africa the world's youngest continent.

The continent's growing youth population presents both an opportunity and a challenge, providing an opportunity for the continent to address Africa's long-term development challenges while tapping into the creativity and innovation of its young people to drive the continent's economic transformation. Every year, an estimated 11 million young people enter the African labor market, but the continent only creates 3.7 million jobs. Africa urgently needs to prepare its young professionals for roles as development leaders and change agents in the future. The potential of a young people to act and thrive.

The partnership between the Mastercard Foundation and the Regional Universities Forum for Agriculture (RUFORUM) takes a novel and practical approach to transforming how universities working with Technical Vocational Education and Training (TVETs) respond to Africa's most pressing challenges of youth employment and food security.

This collaboration exemplifies why fostering co-creation, collaboration, and synergies that transform Africa's agricultural landscape through youth skilling is critical. In addition, the Mastercard Foundation's Young Africa Works strategy launched in Uganda in 2020, intends to provide dignified and fulfilling work opportunities to more than three million young people by 2030.

Today, the partnership has seen great success over the years thanks to specially designed university programs focusing on youth skilling and upscaling agri-enterprises championed by Gulu University in Northern Uganda and Egerton University in the Rift Valley, Kenya. Despite the devastation caused by the Lord's Resistance Army (LRA) civil war in Northern Uganda, over the last two decades, there has been tremendous growth in the post-conflict times. 90 percent of the population is practicing subsistence agriculture, the groundwork for young agri-entrepreneurs to engage with the community and add value to the products and commodities produced by these farming communities is abundant while maintaining the link between universities through demand-driven research.

Universities play an important role in community transformation by developing demand-driven research and development solutions to emerging challenges in Africa such as nutrition, food security, increasing household income, and youth skilling. While fulfilling their roles, universities must also encourage better access for students from low-income or rural backgrounds.

In 2016, the Mastercard Foundation, in collaboration with RUFORUM, launched a program to provide placement to rural students to increase equal access to quality education and encourage agribusiness entrepreneurship to reduce youth unemployment. The stories in this publication are a demonstration of this formidable partnership.

<sup>4</sup> Changing the Narrative of African Youth



### Introduction

his publication chronicles the successes and challenges encountered by Young African agriculturists from various African countries as part of the TAGDev Program hosted by Gulu University in Northern Uganda. The storylines are intended to inspire and uplift young individuals who have an interest in pursuing Agri-business possibilities, developing skills, and advancing their professional careers in Africa's Agricultural Higher Education Sector.

We tell the stories of young people who have overcome adversity to live dignified, purpose-driven lives and become change agents in their communities.

Each story, each unique to its purpose, evokes the "Never Give Up" mentality, which is essential for success and overcoming adversity in the pursuit of a better life for themselves, their families, and the communities they serve and live in.

Through the scholar program, the TAGDev flagship program leaves a legacy of youth mindset shifts, confidence building, self-awareness, and a desire to contribute to society and make the world a better place.

Stories of Change, Resilience, and Transformation 5

Regardless of the adversities that these young women and men faced earlier on in their lives across the continent, their tenacity has allowed them to thrive given the scholarly opportunity they received to advance in life. They have utilized this chance overwhelmingly well!

In these stories, scholars from Benin, Burundi, Nigeria, and Uganda who have benefited from the TAGDev program share their experiences and relive moments that we hope will inspire readers to take action.

These success stories weave through the TAGDev program's intention to cause the desired change in university education systems, ensuring that African universities remain relevant in solving the burgeoning youth unemployment crisis, and are community centered in their knowledge sharing, research, and innovation.

Beginning with two universities in Kenya (Egerton University) and Uganda (Gulu University), the program has now grown to sixteen African universities, delivering a new Model of Agricultural Education that empowers students to become entrepreneurial agents with a strong sense of social responsibility.

This shift has seen the widespread adoption of experiential learning and entrepreneurship in universities. In addition to their education, students working with communities embrace community challenges and develop agribusiness solutions that increase their household incomes and provide employment for the community.

Gulu University takes pride in nurturing young professionals with a passion for service and giving back to local communities. The Faculty continues to play a pivotal role in training young agribusiness entrepreneurs for the region and Africa to transform the economic development of the continent and contribute to the global Sustainable Development Goals (SDG).

This publication illustrates the need to recognize the important role humanity plays in advancing Science, Technology, and Innovations to better respond to the pressing needs of communities and the continent as a whole.

6 Changing the Narrative of African Youth

#### Contents

Forward	3
Introduction	5
A Sweet, Rich, and Alluring tale of a Vanilla Farmer in Central Uganda	9
Carefully Crafted Rich and Delicious Nutty Peanut Butter	13
Combating Climate Change with Earthy SHEA Butter Production	17
Connecting Agricultural Extension Services to Farming Communities	21
Affordably Priced, Delectably Creamy Corn and Fruit Venture	25
Research and Policy Alliance Advancing Sustainable Food Systems	29
Reaping the benefits of the Untapped Fashion Market	33
Promotion of Safe, Nutritious, and Ecofriendly Smoked Fish Technology in Benin	37
Providing Alternative Affordable Protein Sources for Animal Feeds	41
Making wine from Fruits - A one-stop shop for Refreshments in Gulu	45
Providing Clean Water for Rural Communities to fight diarrhea	49
Turning Organic Mangoes into Marmalade	53
Vertical Farming Comes to the Aid of Refugee Families	57
Improving Nutrition in Rural Communities through Food Technology	61
Fostering long-term Agricultural Supply Chains for Smallholder Farmers	65
Conclusion	69

#### YOUNG WOMEN AND MEN RESPONDING TO THE GLOBAL SUSTAINABLE DEVELOPMENT GOALS (SDGs)



### 1 Poverty Matarian

## A SWEET, RICH, AND ALLURING TALE OF **A VANILLA FARMER** IN CENTRAL UGANDA

KAWOOYA JOSEPH

ounting up to 15m in length, with thick stems and greenish-to-yellow flowers, the orchard plant climbs and clings to host trees, displaying its long and thin pods of vanilla fruits. Blossoming in the warm climate, vanilla is one of the most important, high-value cash crops in central and western Uganda. This profitable crop is harvested twice a year, from June to July and December to January.

Growing up in a village where his family was primarily dependent on agriculture, Kawooya Joseph began engaging with farming communities at a young age, sharing experiences and learning from Farmers. This involvement fueled his desire to invest in agriculture, propelling him from providing farmers with extension services to launching his Vanilla trading business. Kawooya, a recent Gulu University graduate under the TAGDev scholarship, founded the Divine Vanilla Enterprise in Bukasa village, Wakiso District, Uganda. The company adds value to plain vanilla products. Kawooya, the CEO of this company, buys vanilla beans from farmers, processes them, and sells them to potential export companies. While working as a data collection agent for Food Truck Uganda, an agricultural export company, Kawooya was urged to invest in vanilla by Isaac. The vanilla business was too lucrative to pass up, with a kilogram of raw vanilla selling for 250,000 shillings (66 dollars). With little knowledge and advice from Isaac, Kawooya began growing his vanilla on a small scale and connecting farmers to better markets.

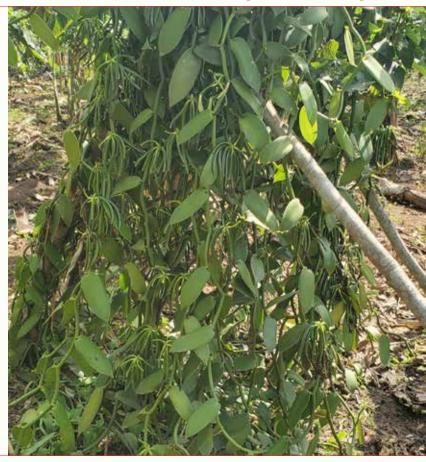
As a scholar under the TAGDev program, Kawooya saved up some of his stipends, which he later used as start-up capital for his enterprise. Five years later, the capital has multiplied to be worth over 200,000 Million shillings (53,000\$). Vanilla is a highly addictive and lucrative business that commands more than 532,500 Shillings (149\$) per kilogram in 2022.

Working with farming communities and providing vanilla farmers with extension and advisory services increased the quantity and quality of vanilla Kawooya observed. Offering farmers higher prices for their harvested vanilla has allowed them to raise their living standards.

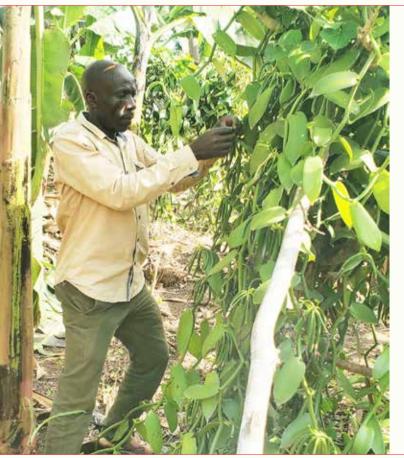
A Sweet, Rich, and Alluring tale of a Vanilla Farmer in Central Uganda

The Enterprise currently employs seven people who are well-versed in vanilla production and have the necessary skills and knowledge. The team at Divine Vanilla Enterprise has trained farmers on how to add value to their harvested vanilla, allowing them to fetch more premium prices than they could earn by selling fresh green vanilla beans. Under Kawooya's leadership, the enterprise provides vanilla farmers with soft loans – loans with no or low interest rates – before harvesting. The farmers use this money to finance their farming activities as well as other household needs such as paying school fees for their children.

Because of the lucrative income generated by vanilla, farming communities continue to experience early harvesting as well as rapid theft due to a lack of banking facilities. Kawooya recommends that commercial financial institutions establish themselves in rural areas to improve cashless transactions and the security of money transactions among farming communities. He also promotes community farm policing to prevent early vanilla bean theft.



A Sweet, Rich, and Alluring tale of a Vanilla Farmer in Central Uganda



According to Kawooya, most educated people dismiss jobs in agriculture because they believe they have no monetary value. Most young people do not plan for alternative employment opportunities after university, which leads to frustration when looking for formal employment. He advises young people to develop a saving culture while still in university and to invest their savings. He observes that investing in agriculture produces profitable financial returns with the right short-term skill enhancement. Kawooya did not have to look for work like most young people; instead, he is now self-employed and hiring others.

Kawooya hopes to expand his business and employ over 200,000 people over the next five years. He intends to expand his vanilla production on a large scale, not only to buy from farmers but also to increase the quantity of supply, allowing him to engage in the export business. He intends to pursue a master's degree to supplement his experience in the agricultural sector.



### CAREFULLY CRAFTED RICH AND DELICIOUS **NUTTY PEANUT BUTTER**

JOSHUA AYIRI **Bayahkebe** 



oshua Ayiri Bayahkebe, a Nigerian Agri-entrepreneur known as "Oga" by the people of Gulu City, is working to improve the quality of peanut butter consumed in Northern Uganda. Working with farming communities and youth, Ayiri is producing "Gulu Peanut Butter," a rich and delicious groundnut paste that complements meal times at family tables in surrounding communities.

Groundnuts are a low-cost protein source grown by African farmers and widely consumed in Uganda's northern region. Traditionally, groundnut paste is used in soups, stews, and sauces. Because of its nutritional benefits and proven ability to combat malnutrition, many urban communities have increased their consumption of groundnut paste at breakfast as a spread on bread and added to vegetables and smoothies.

Groundnut paste, also known as "odi" is a much-needed supplement to the diets of many African families. Production of high-quality groundnut paste remains a challenge, especially given volatile market prices, seed quality, and farmers' poor post-harvest practices. Ayiri engages in seed quality control while working with farming communities in Gulu because it affects his final product. "Most of the time, when we talk about food security, we don't talk about food quality," Joshua says firmly but passionately.

Ayiri recalls attending a lecture at Gulu University where the tutor expressed concern about how iron filings from machines used in groundnut production affect the quality of paste and increase aflatoxins in food with their associated defects over time. This got him thinking about how he could improve the manufacturing process and promote safe consumption.

At the time, a friend approached him and asked him to assist in the quality assurance of the maize milling process, which provided the ideal opportunity for his cause to take off.

They began by purchasing a high-quality machine, and he hasn't looked back since, producing some of the cleanest maize flour in Gulu and high-quality peanut butter with the assistance of a team of about six people.

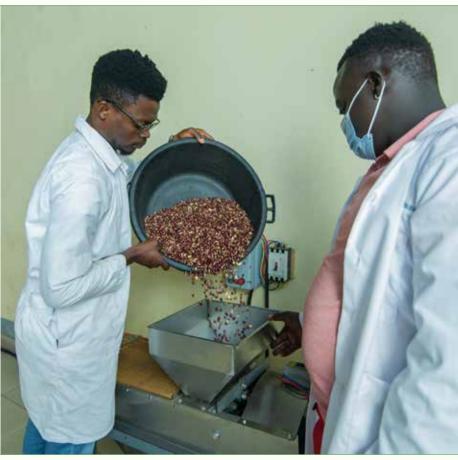
<sup>14</sup> Changing the Narrative of African Youth

#### Carefully Crafted Rich and Delicious Nutty Peanut Butter

Ayiri believes that his involvement with farming communities and the young people he employs has had an impact on their lives, ranging from on-farm skilling in post-harvest handling with farmers to quality food processes by the youth at his business. He takes pride in employing youth and market access to farmers' produce.

"They have improved their skill set by learning good food processing practices and personal hygiene, which is required for them to present a health fitness certification monthly." He acknowledges with a blissful smile.

Traveling from Nigeria to study and later work with local communities presented challenges. However, Ayiri is humbled by his experiences in Gulu, which he refers to as his "second home."



#### Carefully Crafted Rich and Delicious Nutty Peanut Butter



He is confident that when he returns to Nigeria, his siblings will look up to him. Ayiri attributes his transformation to the TAGDev program, which taught him to "be the change you want to see."

He encourages his peers to be resilient, to never give up, and to work hard. "Take your academics seriously, but also consider what you will do when you leave and no longer receive the stipend," Joshua emphasizes.

He hopes to continue his education in a field related to sustainability.



### MaiLy Shea SHEA BUTTER HAIR FOOD & Body Cream

PURE SHEA BUTTER

Hand & Body Cream

PURE SHEAR

Hand & Body CH

### COMBATING CLIMATE CHANGE WITH EARTHY Shea Butter Production

HAIR FOOD PURE SHEA BUTTE

COCONUT OIL

Maily Sha

HAS

ACHIENG SARAH

hea butter, a creamy, semisolid fat derived from the seeds of African shea trees, contains a variety of vitamins (including vitamins E and A) and skin-healing compounds. Shea butter is a moisturizer for the skin as well as an oil in foods like chocolate. Its significance inspired Achieng Sarah to begin commercially producing Shea Butter. Northern Uganda has a geographical advantage when it comes to growing shea butter trees (Vitellaria paradoxa), an important oil-producing tree species found in the drier areas of Northern and North-Eastern Uganda. Because of its cultural significance and conservation status, increasing economic value will hasten the conservation and regeneration of Shea landscapes. This will increase carbon sequestration, assisting in combating climate change.

Women in Africa face several obstacles in their pursuit of higher education, including poor family background, early marriage, and gender-based violence. Following a two-decade Lord's Resistance Army (LRA) war that has left many families homeless and besieged, Northern Uganda offers an opportunity to rebuild its human development and infrastructure by skilling its youth and providing a better life for its farming communities. Achieng's story is one of perseverance, having been raised by a single parent - her mother. Achieng volunteered at the community youth club to help make ends meet after being forced to drop out of school to support her family. When a good Samaritan in the community offered to help her finish her undergraduate degree, her faith allowed her to return to school. Achieng was still unemployed despite having completed her undergraduate studies in development studies. Her desire to better herself and her family led her to apply for a RUFORUM scholarship through the Mastercard-TAGDev program.

In cohort three (3) recruitment, Achieng was the only female student from Northern Uganda to secure a MasterCard Scholar opportunity. She is very proud of this opportunity and hopes to increase access to Organic Shea butter products both nationally and internationally by pursuing a master's degree in Agriculture Enterprise Development at Gulu University. She believes that for transformation to occur and benefit communities in Northern Uganda, shea butter production should be geographically located from tree growth to production. Achieng employs a group of women for everything from production to processing and packaging, which has greatly improved not only her family's but also the families of the women she employs. After the LRA war

ended in 2006, people who had relied on food donations from the government and other charities for years went into the charcoal business. As a result, there was an increase in demand for undisturbed forest land.

The Shea tree is extremely important to the people who live in its geographic area, both socio-culturally and economically. Its leaves, stems, and roots bark are used in traditional medicine to treat a variety of diseases and injuries such as stomach aches, headaches, and fever. Achieng hopes that her communitybased business, in addition to providing employment and raising awareness of the benefits of Shea butter, will address the issue of climate change by increasing shea tree planting and thus reducing deforestation. The fruit butter is used locally as both a food and a cosmetic product for the skin and hair. Achieng has created organic shea butter for hair and body use in collaboration with women in her community. Achieng is concerned with ensuring that her products are certified and meet or exceed guality standards, and she recognizes the importance of packaging in exportation. Her products have found their way into Namibia, Sweden, Israel, and Somalia. In recent years, there has been an increase in commercial and industrial demand for shea products, and Achieng hopes to expand her Shea butter production to ensure that it is available both in Uganda and globally.



Combating Climate Change with Earthy SHEA Butter Production





## CONNECTING AGRICULTURAL EXTENSION SERVICES TO FARMING COMMUNITIES

OKELOKOKO NOBERT

Relative the scorching sun on a bumpy road in Pader district, Okelokoko Nobert ponders on his life journey from staying in an internally displaced person camp to pursuing a Master's degree at Gulu University. He currently works as an Agricultural Extension Officer in the department of production and marketing in Pader Local Government in Northern Uganda heading Ogom and Pukor sub-counties.

Okelokoko's upbeat demeanor signifies that his difficult days are behind him. Starting a Motorcycle spare parts and repair shop to supplement the family income, investing in the lucrative cabbage growing business, and working with farming communities to extend government advisory services as an Agricultural extension worker, Okelokoko can only feel happiness and relief knowing that he is on the right track to fulfilling his life purpose of transforming his community by training more youth in agricultural practices while he continues his work as a civil servant.

Despite the challenges posed by climate change, such as extended dry seasons and flooding, Okelokoko began cabbage farming a year ago as a quick way to supplement his monthly salary as an agricultural extension worker because cabbage matures faster than other grains such as sim-sim and rice. During this business venture, he interacts with young people in the community, teaching them agricultural and business skills so that they can each replicate the idea to provide income for their families. The TAGDev scholarship degree, combined with his life experiences as a motorcycle mechanic and a vegetable farmer, would later prepare him for a life-changing opportunity when he receives his appointment as the Agricultural Extension Officer in Pader district.

Okelokoko rides his motorcycle to deliver government services to farming communities. His assistance includes providing technical advice and quality assurance on agricultural extension and advisory services; strengthening interinstitutional linkages among research, educational, and farmer institutions; promoting agribusiness services, enterprise development, and agricultural value chain development in close collaboration with the private sector; and supporting training skills, manpower development, and farmer institutional development in the agricultural sector.



#### Connecting Agricultural Extension Services to Farming Communities



Okelokoko appreciates the skills he gained during the TAGDev orientation week and graduate program, which prepared him to confidently engage with various stakeholders along the agricultural value chain, including farmers, the private sector, and policymakers. He is passionate about involving youth in crop production throughout the value chain, from value addition to post-harvest handling.

Reflecting on his journey, Okelokoko notices a shift in his mindset and sees himself as a role model for the youth who work alongside him. He encourages young people to put what they have learned into practice. Farmers have moved from one farming season to two farming seasons as a result of his work, and the impact on farming communities can be felt.

Working with farming communities, Okelokoko has noticed increased productivity and the use of small technologies like crop irrigation to combat climate change, as well as value addition to their products like milling maize into flour and packaging it for commercial consumption. There is increased access to improved seed varieties in farming communities and farmers' confidence has increased as they are now setting better prices for their products, as opposed to when buyers set the prices, leaving farmers at their mercy.

In five years, Okelokoko hopes to advance to a managerial position and increase access to improved seed varieties in farming communities in Northern Uganda while skilling youth in agricultural practices.



### AFFORDABLY PRICED, DELECTABLY CREAMY CORN AND FRUIT VENTURE

eam

KOBUSINGE RACHEAL

s you walk from the city to Gulu University, you will notice a simple but well-curated sanctuary where you can seek refuge from the scorching sun that rises early in the morning. This is Kobusinge Racheal's "Scoop and Chill" business.

Kobusinge, an Agri-preneur, former Gulu University student, and TAGDev program alumnus, turns raw milk into ice cream and fresh fruits into organic juice as part of adding value to perishable agricultural products. Both are high in vitamins and minerals. Scoop and Chill Cafe serves organic juice, ice cream, and snacks as accompaniments to its clients, who are mostly university students.

After realizing that farmers in the community were struggling with low sales and milk wastage, Kobusinge decided to venture into raw milk value-addition. She partnered with a local farmer in Unyama county, Gulu, from whom she purchases at least 15 liters of raw milk daily. This single mother will be eternally grateful because she previously struggled to sell her milk.

Kobusinge believes that adding value to the milk and selling

it as the ice cream is more profitable than selling a cup of raw milk for 1,000 Ugandan shillings (less than a Dollar). She further explains that on a good day, 10 liters of milk with a cost implication of about 50,000 shillings (13\$) can earn up to 130,000 shillings (34\$), a skill set she acquired from various TAGDev training on Agricultural food processing.

Given the hot weather and the readily available market of university students, the ice cream business is very profitable in Gulu. She contends that her secret is in developing her distinct recipe that distinguishes her product from others in the same business. She complements the ice cream with juice for customers who do not consume milk products; juice, she explains, is not as profitable as the ice cream, but it is a great compliment to the business.

Kobusinge is pleased with her accomplishments thus far, even though the cafe has only been open for a little more than five months. She believes it has benefited the community by supporting local farmers and providing employment opportunities for three more young people who assist in the production process and serve customers. She has been able

26 Changing the Narrative of African Youth

#### Affordably Priced, Delectably Creamy Corn and Fruit Venture

to teach others the fundamentals of ice-making while also supporting her younger brother to attain an education.

Giving back to the community gives her great satisfaction. "TADGev has changed my life since I came from the village; I will never go back," Kobusinge declares firmly.

All of this is not without its difficulties and shortcomings. The most significant impediment is power outages, which disrupt ice cream production and juice preservation. As a result, purchasing a standby generator becomes increasingly important in the future.

She also finds it difficult to obtain some fruits because they are seasonal, such as passion fruits, which can cost up to 500 shillings per fruit, reducing her profit margin. Kobusinge obtains ice cream flavors and cones from Kampala, which raises her production costs because they must be transported by bus to Gulu.



#### Affordably Priced, Delectably Creamy Corn and Fruit Venture



Nonetheless, Kobusinge is focused on expanding to a standard cafeteria, one with allaround fast foods, as well as possibly several branches in Gulu, Kampala, and Fort Portal, where she is from.

Her pearl of wisdom for the youths is to give business time, start small, and be patient. She observes that many young people abandon startups in favor of more traditional jobs, which is unfortunate because businesses provide greater financial benefits when properly managed.



### RESEARCH AND POLICY ALLIANCE ADVANCING SUSTAINABLE FOOD SYSTEMS

JOHN MUYONGA

ohn Muyonga, an agribusiness professional, had no idea that an orientation class at Egerton University in 2017 would have such an impact on his professional career five years later. TAGDev Organised student Orientation Weeks are critical in preparing students for life-changing events. Muyonga attended this orientation as part of his studies for a Master of Science in Agri-Enterprise Development at Gulu University through the TAGDev program, which led to him working in research institutions to better understand food system problems and find sustainable solutions. Muyonga's research interests are in food systems, specifically the theory of change and the necessary transitions to enable a food system transformation. This stems from his desire to have an impact on vulnerable communities suffering from food scarcity, malnutrition, and a lack of access to proper health care.

The covid-19 pandemic and the war in Ukraine demonstrate how the global food system is vulnerable. Shocks that disrupt supply and distribution chains cause widespread hunger and poverty, particularly in low-income African countries. Muyonga actively participates in studies aimed at facilitating food system transformation, and he believes that his research contributes to policy, research, and practice relevant to resolving Africa's perplexing problems. Mugonya co-developed the Business Readiness course in his current role as Programme Manager -Uganda at Agripreneurship Alliance to equip participants with basic business skills and knowledge needed to fully participate in and contribute to the economic life of their communities. This course focuses on the needs of actors in the African Micro and Small agri-food sector and contributes to a thriving ecosystem of businesses that generate wealth and employment, promote food and nutrition security, and respond to climate change challenges.

Muyonga is at the forefront of the Agripreneurship Alliance course delivery in Entrepreneurship in Agribusiness in ten Universities across five African countries to meet the needs of Technical Vocational Education and Training (TVET) institutions and business communities with low numeracy and literacy levels, as well as limited access to digital tools. Muyonga expresses gratitude for the TAGDev scholarship opportunity, which has enabled him to become a better writer, communicator, and researcher. He has been able to demonstrate his leadership skills as the program manager,

#### Research and Policy Alliance Advancing Sustainable Food Systems

in Uganda while also providing for the welfare of his immediate family by applying these skills. In collaboration with research institutions such as the International Crops Research Institute for the Semi-Arid Tropics, Muyonga's research team conducted a study in 2021 to contextualize private sector-based seed system development for sorghum (ICRISAT). Localization and diversification of seed delivery channels in both formal and informal seed systems, promotion of sorghum-based product innovation to encourage private sector participation, and promotion of sorghum trade and consumption were all suggested.

In another study conducted by the World Food Program in Mogadishu, Somalia, the team developed a theory of change to support an index to assess transitions from emergency response to livelihood reconstruction. Currently, the team is working on indicators to help program managers make decisions about when and how to transition beneficiaries from emergency response to rebuilding livelihoods. According to his observations, young people must have a can-do attitude. Many graduates lack a self-drive mentality. To position themselves for success, youth must use available resources such as internet connectivity and engage in "out of the box" activities. Patience and trustworthiness are two rare qualities in young people. Mugonya envisions himself leading a development-oriented Non-GovernmentalOrganization infive years.



and Policy Alliance Advancing Sustainable Food Systems

93

**RK BEAUTY SHOP** 

Dealers In Clothes Of All Kinds Like Trousers, Jump Suits, Dresses, Tops T-shirt, Skirts & Shoes And All Types Of Men's Wear

0779-645

0750-855 870

"Class Meets Elegance



### REAPING THE BENEFITS OF THE UNTAPPED FASHION MARKET

KOBUSINGE RACHEAL

11 100007/1

"What we wear tells the story of who we are or whom we want to be." According to Google Arts and Culture, fashion is the second most important global economic activity in terms of trade intensity, employing over 57 million people in developing countries, with women accounting for 80 percent of the workforce.

"RK Beauty Shop" is strategically located across from the Gulu University Main Gate. A women's clothing boutique opened four years ago to meet the increasing student demand for fashionable and affordable clothing. Clients can also get styling ideas from the beauty shop. Kobusinge is a fashionista who enjoys styling and combining different outfits to create one-of-a-kind looks for her clients.

When Kobusinge first arrived at Gulu University, she noticed that there was no fashion shop. Seeing a need in her community, she seized the opportunity and launched her first business, which later provided funding for her second venture, Scoop and Chill Café. Both businesses are running smoothly under her watchful eye. New fashion trends have a huge influence on today's youth, who want to be seen as trendy. With an increasing number of university students, a fashion shop is a profitable business because trends change and there is always a demand for new styles.

Clothes are neatly displayed on Body Mannequins as part of her morning routine, creating a more realistic and intimate idea of what that item will look like on the shoppers themselves or someone they are shopping for. The ability to see clothing modeled on a "human body" is critical to the overall decisionmaking process.

Fashion and Style provide a sense of freedom and expression for today's youth. Having one's own distinct personal style helps one maintain a positive self-image while also providing a service, personal development, and, most importantly, a significant amount of enjoyment. Because of its location, Gulu provides fewer options for a fashion stylist like Kobusinge, whose products are sourced from Kampala. This increases her business costs which affect the prices of the items being sold. Kobusinge employs one person to manage the current

#### Reaping the benefits of the Untapped Fashion Market

business, which sells clothes and shoes. She is proud of her first business because it provided funding for her second venture, Scoops and Chills Cafe.

Kobusinge, who studied Agri-Entrepreneurship and Communication Management at Gulu University, benefited from internship placements in local radio stations such as speak FM, where she learned editing and presentation skills. These experiences enhanced her communication skills and boosted her confidence, propelling her to brand herself and win a \$1000 grant that she hopes will help her business ventures.

Kobusinge markets her products through digital platforms. Using social media platforms such as WhatsApp and Instagram, she promotes her products to a larger online community, which helps to expand her market with their networks. This is beneficial to business, she says.

The TAGDev Program encourages students to identify and solve community-specific problems. Personal development and expression are essential components of any graduate university experience. Kobusinge continues to overcome adversity to better herself and the community she serves. She continues to encourage her peers to invest in the business and provides assistance where she can.



( BCBG /



# PROMOTION OF SAFE, NUTRITIOUS, AND ECOFRIENDLY **SMOKED FISH TECHNOLOGY**

SIMONE MAHOUSSI ASSOCLE

he cultural transition from a French-speaking country to an Anglophone country did not deter Simone Mahoussi Assocle, a TAGDev beneficiary traveling from Contour, Benin. She was barely able to speak and understand English when she arrived in Egerton, Kenya for the student orientation week. Mahoussi considers herself extremely fortunate to have had a tutor who assisted her in learning English, allowing her to complete her course and graduate among the top performers with a first-class degree. Her excellent command of the English language has enabled her to work at the International Fund for Agricultural Development (IFAD), where she pitches and explains her ideas on a global scale.

Mahoussi, a passionate food scientist and nutritionist with four years of experience in nutrition, processing, and quality control of food products, is the founder of "Benin AgroTrans," an innovative social enterprise that produces delicious smoked fish while adhering to the principles of green economy. She promotes the use of renewable energy equipment, biodegradable packaging, and spices through this technology. Mahoussi was inspired to find an eco-friendly solution after witnessing her mother's numerous customer complaints resulting from smoking fish using wood. Given that fish is a staple food in Benin, the need to improve its quality and shelf life compelled her to pursue her research further. Fish conservation remains a common issue in tropical regions due to a lack of adequate infrastructure, technology, and environmental and climatic conditions that contribute to spoilage. The traditional wood smoking method is primarily used in the country for fish preservation. This technique, however, gives the smoked fish a two-day shelf life. The fish which is not packed is vulnerable to a variety of hazards, lowering the quality of the product and increasing food insecurity.

Furthermore, poor microbial quality, poor hygiene, and the use of wood, which emits a lot of smoke on the fish, leave some cancerogenic residues, affecting the health of fish processors and the environment. It also shortens the product's shelf life and makes it unsafe for human consumption. Benin AgroTrans improves the technology of smoked fish processing in Benin and using appropriate corrective measures to provide Beninese with safe and nutritious fish products. Mahoussi has a consistent supply of fresh fish that has been thoroughly cleaned and washed thanks to the collaboration with local fish farmers. The fish is then seasoned with spices, which are essential for increasing shelf life. It is then marinated for about 30 minutes to allow the spices to penetrate. Following that, the rolling process is used to allow the water to dry out, which usually takes about half an hour. The fish is then placed in the solar oven, where it is constantly monitored for nearly two hours. After that, the fish is allowed to cool for fifteen minutes before being packaged in biodegradable packaging and labeled as ready to sell.

The company employs four people: two women and two men who assist with fish cleaning, washing, processing, and delivery. As a result, the business has impacted livelihoods by employing over 500 households with a minimum of three family members. In Western Benin, the business has an indirect impact on over 1500 community members who have increased their nutritious food intake.

The goal of this initiative was to reduce the use of wood and increase the use of solar equipment for fish smoking. Mahoussi says she is looking forward to working with local hotels and sensitizing other fish smokers throughout Benin to further protect the environment and promote nutritious feeding in households. The absence of a nearby water source poses a challenge because they must travel a certain distance to collect water, which is a critical component of their manufacturing process.



**Traditional Technology** 



Renewable Energry "Solar Oven

There is a need to obtain cutting-edge cleaning materials because what they are currently using is rudimentary and the workers occasionally cut themselves, slowing down their work.

The demand for fish has also increased, putting a strain on their current production capacity, and necessitating the installation of more solar ovens. Mahoussi would also like to digitize her business's marketing and possibly have a website in place.



# PROVIDING ALTERNATIVE AFFORDABLE PROTEIN SOURCES FOR ANIMAL FEEDS

ELIAS MUNEZERO

ne-third of all food produced globally is lost or wasted, resulting in an estimated \$1 trillion in economic losses per year and 37 percent of its total in Sub-Saharan Africa. Despite increased efforts to increase food production, Africa has few innovative solutions to reduce food waste.

Agricultural waste offers limitless opportunities for converting "waste" into useful products that can drive innovation and create long-term jobs.

This is the story of three young Agri-entrepreneurs who are improving farmers' animal nutrition in Africa. Earlier this year, Elias Munezero of Burundi, along with colleagues Caleb Adewale and Neema John, devised a plan to produce an alternative to the market's current high-priced protein sources for animal feeds using agricultural waste. They founded the Goshen Maggot Farm with a focus on protein maggot production from black soldier fly larvae to enable farmers to purchase animal protein feed at a reasonable cost.

Maggots are a protein source for feeds that accelerate the growth of poultry, fish, and pigs using organic waste as a

medium. In livestock feed formulation, maggots have the highest amount of crude protein of any animal or plant protein source. They are nutritious and less expensive than other animal protein feed sources. Munezero and his colleagues collect food leftovers from restaurants and mangoes that fall under trees to use in the manufacturing process. To ensure continuity, they hired a resident student at Gulu University to oversee the project, so now that they are finalists, they have decided to discontinue the project in Gulu and instead implement it in their respective home countries of Burundi, Nigeria, Tanzania, and Uganda.

Despite its short lifespan, the impact on the community and the Agri-entrepreneurs is palpable. The team has taught many farmers in Amuru and Gulu about the value of maggot protein feeds and how to use them on their farms. Because of the low cost of maggot feed, poultry and fish farmers were able to reduce their production costs. They have attended several fellowships as a result of their innovation, including the Michigan Fellows Agribusiness fellowship and the Young Innovation Leaders fellowship in Kenya.

<sup>42</sup> Changing the Narrative of African Youth

Providing Alternative Affordable Protein Sources for Animal Feeds

They were able to participate in fairs at Gulu's Peace Grounds and the RUFORUM Secretariat in Kampala. "Without TAGDev, we would not have gotten to these places," Elias exclaimed. His team is keen to share this knowledge with their communities in their respective countries. The Goshen Farm Project won a grant at Gulu University as they submitted a proposal to the Entrepreneurship Alliance and emerged best against two other projects. They decided as a team to keep the money and invest in their home countries at a later time.

Munezero reveals that the TAGDev project has helped him improve his personal qualities. He couldn't speak English when he arrived in Uganda because the education system in Burundi is based on French. During his studies, he was assigned a tutor who assisted him, and he is proud to say that he now has a strong command of the English language. Munezero has also gained research skills, which he did not have when he first started the program.

This initiative has not been without its challenges; they have encountered a few along the way. According to Munezero, the community has a negative perception of maggots and considers the process a dirty job.





Farmers' introduction of this feeding routine to their livestock creates a need for consistency and continuity, which has resulted in an overwhelming demand for their product. A halt in feeding has a negative impact on livestock growth, which is a major issue for farmers.

Munezero hopes to use his knowledge and experiences to become a lecturer in Burundi in a field related to Agribusiness or Agripreneurship. He would also like to establish an innovative enterprise, collaborate with other players such as veterinary students, and expand Goshen Maggot Farm in Burundi. If feasible, develop livestock feeds containing Maggot as a protein source; he believes the product has high market potential.



### MAKING WINE FROM FRUITS A ONE-STOP SHOP FOR REFRESHMENTS IN GULU

EST

ic 8% vol

NECTAR

RED WINE

JULIET OCHAMA



45

ulu, which recently gained city status, has become a lucrative business center with enormous potential for those who dare to exploit it. Juliet Ochama, a TAGDev scholar, is one of those who has taken up the mantle to capitalize on this market potential through her business "Nectar Point."

Ochama is a former TAGDev scholar who says the program helped her get her Masters' degree at Gulu University while also supporting her with tuition and research. She acknowledges that the program helped shape her into the businesswoman she is today. "I was taught to be a job creator, not a job seeker," she adds. As her colleagues discussed joining institutions such as the United Nations, she says her mind was set on starting a business.

Nectar Point serves ice cream, coffee, juices, wine, and cocktails, as well as fast food for those on the go. This place, located along Gulu's bus park street, just adjacent to the Kakanyero hotel, is a haven for those looking to hydrate from the intense heat, catch a breath after a long day's work, or simply quench their thirst.

Ochama says her juice usually goes bad at the end of a business day, so she tried heating it up and adding yeast one day, but it didn't work out. She then began reading about winemaking and is now able to produce commercial wine from organic fruits.

She attributes her current business success to the skills she learned as a TAGDev scholar, which include business financing and bookkeeping. She reveals that as part of the Agripreneurship alliance, they were taught the business model canvas, which she now incorporates into her business transactions and has seen success.

Ochama also wants to expand, possibly to the neighboring district of Adjumani, which she claims is only a two-hour drive away. She notes that what distinguishes Nectar Point from other competitors is that they invest plenty of time in their products, hence a high-quality output, and the customer care offered to their clientele.

She notes that what distinguishes Nectar Point from other competitors is that they invest a significant amount of time

#### Making wine from Fruits - A one-stop shop for Refreshments in Gulu

in their products, resulting in high-quality output, as well as the customer service provided to their clients.

Ochama believes Nectar Point Wine is a small but growing business and emphasizes the need to expand production and storage in order to obtain expansion certification. Due to regulatory requirements, she requires at least three rooms in the manufacturing process.

As a result, her solution is to look for space and rent in the suburbs, which comes with additional overhead costs. Another challenge she is currently facing is competition from imported products that customers are accustomed to.

On the bright side, Ochama has had an impact on the lives of the eight women she employs. Following the COVID-19 pandemic, these single mothers were disillusioned. These individuals are now able to support themselves and their children by working at Nector Point.

She advises young people to be consistent in everything they do and to prioritize networking because all businesses nowadays thrive on social capital.



Making wine from Fruits - A one-stop shop for Refreshments in Gulu

EST.

RED WINE

alc. 8% vol

RED WINE

ac 8th vol

5L

2014

. B

State .

WHITE wind

an Division

0

HEGTAL

WHITE WAR

.

2 CLEAN WATER AND SANITATION

# PROVIDING CLEAN WATER For rural communities **To fight diarrhea**

OLIVIER NIHIMBAZWE



n Burundi, Olivier Nihimbazwe is walking the walk. Olivier is a 28-year-old former Gulu University student who participated in the TAGDev project. He completed a Master's degree in Food Security and Community Nutrition in 2021. During their orientation training at Egerton University in 2019, they were challenged to think of something that would benefit the community. This is where he got the idea for a humanitarian project in Burundi.

Reflecting on the challenges in his community, he considered the widespread child diarrhea in Northern Burundi, which affects at least 23% of children under the age of five. This predicament is largely due to the use of contaminated water in households.

Nihimbazwe designed the project during the COVID-19 lockdown because the university was closed. He also began the registration process, which was dubbed "Water for Development."

Working virtually with colleagues in Burundi, he applied for the first grant under the E-prize global competition, and they won

USD 16,000, allowing them to launch the project's pilot phase. He recently signed a Memorandum of Understanding with the National Rural Water Supply and Sanitation Agency, which will see the project scaled out across the country.

This project allows people to treat water at the point of collection by using a chlorine dispenser, which they put drops in before collecting the water. They also supply chlorine to those with access to piped water systems. Over 4800 people have benefited from the project. He hopes to expand to other communes that require assistance.

They are also targeting schools to improve access to hygiene services. This will be accomplished by installing hand washing facilities for over 5600 students and staff, as well as providing chlorine for hand washing. Global Youth Mobilisation is funding this project.

Nihimbazwe is convinced that the project has so far had an impact on the communes because people can now treat their water, reducing the use of contaminated water. The organization is expanding, with more young people joining, and they have been working on another project titled "Local youth capacity building and engagement on climate action" since August 2022, which is funded by the Global Green Plants Forum.

Despite this, they have faced several difficulties. These included having to import chlorine from Kenya and Uganda, which had begun to jeopardize the project's sustainability. As a result, they have taken steps to begin producing it locally by purchasing a chlorine-producing machine. It has also been difficult to register the organization and secure some partnerships for it.

Nihimbazwe hopes that the project's impact will spread throughout Burundi in the coming years.

He observes that most entrepreneurs give up and seek formal employment, but he believes they should persevere and see that their dreams of social transformation come true. He also advises young people to have a clear goal in life.





#### TURNING ORGANIC Mangoes into **Marmalade** Rose Modyo

2 ZERO HUNGER



Representation on the text of tex

She then considered her home district of Moyo, where each household has two or more mango trees, which means that mangoes go unused during peak seasons because there are so many and market demand is so low. Mangoes are left to rot in markets, along roadsides, and in compounds during peak seasons.

Some people remove the flowers during the flowering season to reduce the number of fruits. Some people go so far as to cut down mango trees, which worries her because indigenous mango breeds are becoming extinct. She then decided to make mango jam to maximize the value of mangoes. She is currently developing and improving the product through various lab analyses. After completing this process, she hopes to expand, gain more market share, and employ more people because her current production is on a small scale, making it impossible to meet customer demands satisfactorily.

Mooyo claims that her jam is better for bread because it contains more nutrients than eating mangoes. She is seeking anyone interested in eating organic jam without preservatives, as well as anyone concerned about their health.

Even though her initiative is still in its early stages of commercialization, she is proud to say it has had an impact on a couple of people so far. She works with about ten farmers who earn money from the mangoes they sell to her, which allows them to meet their basic needs.

She used to be completely reliant on the orphanage, but now she can fend for herself and even gives back to the orphanage once in a while. Mooyo can afford to pay school fees for about five orphans, making her a source of inspiration for the orphans because she was once like them. Mooyo says she has now successfully settled in the community to the moment that she has recently purchased land in Paboo on which she hopes to establish a farm for her project. She recently applied for the Generational Foods grant, which has put her in tandem to travel to Belgium as a Ugandan youth ambassador to discuss the practice of sustainable agriculture. Mooyo also mentions several challenges, such as people's aversion to changing and trying new products because they are accustomed to existing products such as orange marmalade and margarine. She is also constrained by a lack of capital to assist her in producing on a large scale. "Despite the challenges, there is always something you can do," she says, encouraging everyone to stay committed and focused.

Mooyo hopes to pursue a master's degree in sustainable agriculture in the future so that she can speak more about sustainability. She would also like to expand her business and possibly build a factory on the land she purchased in Paboo. Finally, she hopes to establish a demonstration farm on this property where people can learn about the agroecological aspects of sustainable agriculture.





# VERTICAL FARMING COMES TO THE AID OF REFUGEE FAMILIES MONIQUE MEDEDODE SOGNIGBE

onique Mededode Sognigbe and colleagues set out to teach the community about sustainable farming at the Imvepi refugee settlement in the newly established Terego District in the West Nile region of Uganda's Northern Region. This was accomplished through the use of vertical farming. Vertical Farming in Refugee Settings (VEFIRS) - A Tool for Fostering Intergroup Relations and Social Integration demonstrates that in the last decade, Uganda has seen an influx of refugees from South Sudan, Burundi, and the Democratic Republic of the Congo, raising issues of limited agricultural land.

Nelson Papi Kolliesuah of Liberia, Monique Mededode Sognigbe of Benin, Iyaloo Nghinaalo Sheyavli of Namibia, Marveen Nafula of Uganda, and Aaron Ekipetot Nanok of Kenya worked on the VEFIRS project and would later represent Africa at the Geneva Challenge 2022 on advancing development goals focusing on social inclusion in addressing extreme poverty. The demand for land in refugee settlements continues to rise rapidly, causing tensions between refugees and host communities. As a result, refugees continue to face exclusion from social, economic, and political affairs in the country. Through a multi-storey vertical farming approach, the VEFIRS project aims to increase the adaptive capacity of refugees and the host community in areas with limited land and rocky soil. The goal of this initiative is to assist refugees in becoming self-sufficient to overcome food scarcity and poverty, both of which are causes of unethical behavior. Sognigbe and her team encouraged the refugees to use vertical farming to skill the youth, provide employment opportunities, and generate income from the extra harvest.

Refugees in settlements are given the freedom to cultivate crops rather than rely solely on government-supplied food rations. They were still confronted with the problem of inaccessible land, which was generally rocky and thus unsuitable for farming. The Team aimed to assist refugees in adopting vertical farming as an effective and efficient solution to the current situation. This technology is a low-cost solution to growing land scarcity and soil infertility. It is also desirable for settlements where the population is rapidly increasing. This technology is available in three forms: stacked growth surfaces, multi-floor towers, and cylindrical growth units.

Vertical Farming Comes to the Aid of Refugee Families

The plan was to teach the refugees how to scoop soil from elsewhere and build towers over rocky areas so that they could plant vegetables, which they did but were unable to continue. This is because four of the students were international students, and they were concerned about the project's sustainability if they left. As a result, they collaborated and handed over the project to a Non-Governmental Organization (NGO) called Andre Foods International to ensure its continuity and success. Sognigbe recalls one challenge they faced along the way. It was difficult because the refugees were hostile to non-governmental organizations. They had the impression that they were being used to obtain funds and thus felt entitled to handouts. They didn't realize Sognigbe and her colleagues were students with limited funds who wanted to make a positive impact in the community.

As a beneficiary of the TAGDev program, Sognigbe hopes that the program can be expanded to reach more vulnerable youth, particularly women seeking a better future for themselves. She advises young people to begin creating opportunities for themselves so that when bigger opportunities arise, they can leverage their previous engagements' experience, skills, and knowledge. She hopes to become a Regional Manager for Africa at her current job within the next five years and to establish a scholar's training center for vulnerable young women as her life mission.







# IMPROVING NUTRITION IN RURAL COMMUNITIES THROUGH FOOD TECHNOLOGY

MELAS CAYROL ADOKO

utrition is at the heart of everything in life; the food we eat is our first medicine. What you eat is what you are and who you are," Adoko emphasizes, adding that everything you put into your body has an impact on your health. Growing up in a relatively deprived community in Benin, Adoko witnessed malnourished people. As a result, after receiving his Bachelor's degree, he sought out a path and began with food technology to solve local problems of food production management and nutritional value addition. He was enthusiastic about it because it would benefit the community.

This is the story of Melas Cayrol Adoko, a Food Fortification and Nutrition professional currently working with the World Food Programme (WFP) in Rome, Italy. Adoko witnessed the effects of malnutrition on rural communities while growing up in rural Benin, particularly among vulnerable children and women. This infused in him a desire to find a solution to this problem in his community, prompting him to apply for RUFORUM scholarships through the TAGDev Program.

Adoko earned a Master's degree in Food Security and Community Nutrition through the TAGDev Program at Gulu University. Adoko's passion for nutrition is intertwined with his research, work, and projects. From working on research on how the addition of orange-fleshed sweet potato and ironrice beans improves sensory nutrition to working on a chlorine dispenser challenge, he continues to advocate for nutrition benefits for humanity.

Working with communities in Gulu, Adoko educated refugees on how to add value to the meals they consumed as part of the food value addition project, which won him a Field Attachment Programme Awards (FAPA) grant from RUFORUM. This grant encourages post-graduate students to engage in community work, allowing for cross-learning between students and communities. Adoko was able to return to the community and educate the residents on the importance of eating nutritious foods.

Entrepreneurship is emphasized at Gulu University, and students are encouraged to develop business ideas. Adoko concentrated on a business that he describes as "translating my research findings into a business idea."

<sup>62</sup> Changing the Narrative of African Youth

Improving Nutrition in Rural Communities through Food Technology

He decided to come up with a nutritious food idea or enrich what was already available, so he started selling nutritious pancakes, which are a popular delicacy in Gulu.

Adoko has received several grants over the years to assist him in pursuing his passion. He attributes his success to better idea presentation and extensive research. The FAPA grant, for example, assisted him in realizing his dream of making a difference in the community. He taught the community how to make nutritious pancakes with the help of this grant, which had an immediate impact on increasing their nutritional consumption. This skill enhanced their business acumen, and they were able to make a living from it because food fortification enabled them to raise prices and gain a larger market share. In 2019. Adoko was one of 200 Africans chosen from over 7000 applicants for the African Union Youth Volunteer Corps, and his Water4Life project won the D-Prize 2021, allowing him to lead the installation of ten chlorine water dispensers in Benin's most vulnerable communities. He attributes his success to his strong communication skills, honesty, and work ethic, as well as his confidence and teachable demeanor.

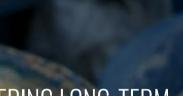




Adoko's advice to young people is to always be on the lookout for better opportunities, to take advantage of any opportunity that comes their way, and to always strive to exceed expectations.

"It is also critical to be teachable and willing to learn, as well as to have exemplary attitudes toward peers and mentors." He confirms. He emphasizes the importance of improving your communication skills to package your ideas and effectively communicate them to the rest of the world.

Adoko hopes to hold more senior technical and strategic roles in the future to broaden my areas of expertise while serving vulnerable communities and contributing to the improvement of global food systems and relatedissues.



## FOSTERING LONG-TERM AGRICULTURAL SUPPLY CHAINS FOR SMALLHOLDER FARMERS

ROBINE **OKELLO** 

2 ZERO HUNGER inding the right market for grains at the right price is difficult, especially in farming communities in Northern Uganda. Meet Robine Okello, a TAGDev scholar who studied Agri Enterprise Development at the Master's level at Gulu University. He is currently a volunteer at the African Union Commission in Ethiopia, where he is in charge of industrial policies and Agri-value chain analysis.

The COVID-19 Lockdown forced Okello to flee Gulu for Lira, where he worked to support farmers in the community as part of his social enterprise course requirement. He founded LAPIT Blessed Produce Store (SMC), also known as "Family Store Produce Enterprises," to provide small-scale farmers with consistent market access at reasonable prices for their grain production.

Okello also aimed to digitize agricultural value chains and build sustainable agricultural supply chains to boost smallholder farmers' incomes and confidence in investing in production. This creates rural employment opportunities, particularly for youth as village agents, and enables agribusinesses to source sustainably and create shared value. His savings from the stipend provided the initial financial contribution for the business, which was followed by a USD5,000 grant from RUFORUM and a USD20,000 grant from ImpactHer. The store sells a variety of goods, including rice, beans, sesame, and posho. He decided to add value to maize so that it could be distributed to schools.

The business's distinguishing feature is that it sells higherquality products than its competitors, giving customers exactly what they want. He has linked his business to a community model and established a network of local farmers from whom he sources produce. Farmers are encouraged to continue producing because they expect to profit from their output, and he does not defraud them.

To date, the business has made an impact by connecting over 300 smallholder grain producers to smart markets, supporting over 20 individual enterprises along agricultural supply chains, covering and serving eight districts in Northern Uganda's Lango sub-region, and empowering and connecting over 30 youth and women groups to livelihoods and markets.

Fostering long-term Agricultural Supply Chains for Smallholder Farmer

There have been a few setbacks along the way, such as the disruption in the supply chain caused by the COVID-19 pandemic, but consumers have remained optimistic. As a result, he raised his prices because he did not want to compromise on quality. He also had to take drastic measures to ensure sustainability, such as laying off some employees. Transport costs were also high due to the government's stringent regulations. Finally, he mentions that production costs have been high, in addition to registration and licensing fees.

When it comes to the future, Okello is excited about the prospect of establishing a national Non-Governmental Organization (NGO) focused on food insecurity and hunger. He admits that its preparation is nearly complete and that documentation, licensing, and a website are in the works.

It will be called "Hunger Relief Africa," and he hopes to have a larger team across Africa with country offices in the neediest countries. This Organization's unique approach will be to use technology to distribute excess food from supermarkets, households, and restaurants, which they will then aggregate and distribute to those who are less fortunate. Okello says in his closing remarks that it is critical for the youth to be patient and respectful because it will help propel them to unfathomable heights.



Fostering long-term Agricultural Supply Chains for Smallholder Farmers

CONTRACTOR PLANNING

### Conclusion

niversities continue to play an important role in community transformation by developing demanddriven research and development solutions to emerging challenges in Africa through university science solutions such as improved crop varieties, value addition technologies, climate-responsive technologies, social innovations, and business models. While fulfilling their roles, universities must also encourage better access for deserving students from low-income backgrounds.

For the past six years, the Transforming African Agricultural Universities to Meaningfully Contribute to Africa's Growth and Development (TAGDev) program has catalyzed how African universities serve and lead as knowledge centers.

Beginning with two universities in Kenya (Egerton University) and Uganda (Gulu University), the program has now grown to sixteen African universities, delivering a new model of agricultural education that empowers students to become entrepreneurial agents with a strong sense of social responsibility. This shift has seen the widespread adoption of experiential learning and entrepreneurship in universities. In addition to their education, students working with communities embrace community challenges and develop agribusiness solutions that increase their household incomes and provide employment for the community.

According to Dr. Eric Fredua-Kwarteng, the role of universities in development is to develop and produce relevant and impactful graduates with the skills, knowledge, and disposition required to meet the needs of wherever the university is located. Despite a two-year global Covid-19 pandemic that hampered the implementation of some activities, the last six years have seen incredible success. The adoption of experiential learning and entrepreneurship programs across Bachelor, Master, and Doctoral programs has increased from four to 55 in Egerton and Gulu Universities, respectively.

### Conclusion

The partnership between Mastercard and RUFORUM has witnessed 11 universities implement Community Action Research Projects (CARP) for value chain development; 15 spinoff businesses generated and running at the community level; 74,037 smallholder farmers directly engaged and improving their livelihoods; 11 TVET institutions engaged and trained 1,040 students, and several out-of-school youths equipped with skills and alternative livelihood sources. For this impact to be long-lasting, policy changes in African higher education institutions' learning processes are required. According to Assoc. Prof. Anthony Egeru, the Programme Manager for Training and Community Development at RUFORUM, different tracks for academic staff promotion must be recognized so that those who have dedicated themselves to community service, as well as quality teaching, are recognized.

Assoc. Prof. Egeru also believes that incorporating experiential entrepreneurship into university systems and calendars will be important to students' training experiences. It is critical to facilitate the strategic evolution of leadership capacity development within universities to allow for the intentional growth of leaders within universities, thereby addressing the leadership crisis that has been observed in many African universities.

Finally, the adoption of cross-learning and certification through joint degrees within Africa will ensure that African universities and countries begin to value qualifications within and across the continent, thereby increasing labor mobility within the continent. As universities continue to position themselves at the forefront of development and community transformation, focusing on demand-driven research, knowledge generation, and creating an enabling environment for youth skilling in agribusiness, it is critical to recognize key partnerships that facilitate this co-creation, influencing, and changing the lives of millions of people across Africa. The Mastercard and RUFORUM alliance is a significant demonstration of this astounding Partnership.

Author Joan Apio

Editing and Storytelling KAVIBE Uganda Ltd www.kavibe.com

> Field Photography Ivan Ssebuma

Design & Layout Gilbert Labeja



UFORUM Carefy Bulleting In Agricultury

Regional Universities Forum for Capacity Building in Agriculture (RUFORUM) Plot 151/155 Garden Hill, Makerere University Main Campus P.O. Box 16811 Kampala, Uganda Tel: +256 417 713300 (Office) Fax: +256 414 534153 Email: secretariat@ruforum.org • Website: www.ruforum.org Knowledge Repository: www.respository.ruforum.org

y ruforumsec

f ruforumnetwork

blog.ruforum.org

ruforumnetwork

•• ruforumnsec RUFORUM Network