

STORIES *of* Change

**HORTIHEROES: 40
STORIES SPARKING
CHANGE ACROSS
THE HORTICULTURE
SECTOR**

**KEY MILESTONES
SINCE 2021**

**CAN YOU FIND THEM?
INNOVATIONS, PRACTICES,
PLACES, AND PEOPLE OF
HORTINIGERIA**

**A PROMISE MADE,
A PROMISE KEPT**

Opeyemi Wasiu Ajibola

**Cultivating Voices for Change in
Nigeria's Horticulture Sector**



Baliquees Salaudeen-Ibrahim, CEO of Green Republic Farms and winner of Sterling Bank AgroPitch 2023

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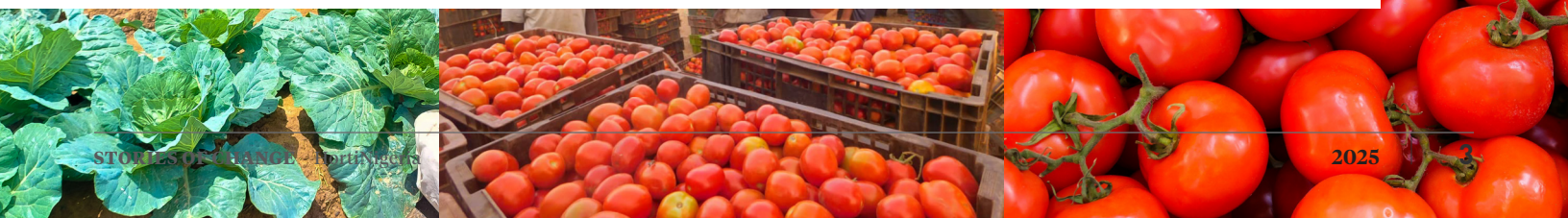
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This publication was produced as part of HortiNigeria's efforts to document and share the program's journey, impact, and legacy (2021–2025).



Contents

- 10 /** Improving Farmers' Livelihoods Through Agribusiness Clusters
- 11 /** Building Inclusive Seed Market Systems in Nigeria's Horticulture Sector
- 12 /** Strengthening Agro-Input Supply and Demand for a Viable Horticulture Sector
- 13 /** Opening New Opportunities Through Digital Marketing
- 14 /** Building Better Harvest and Opening New Opportunities
- 15 /** Redefining the Horticulture Sector in Ogun State Through Financial Innovations
- 16 /** Building Climate Resilience with Weather Forecasting
- 17 /** Eco-Efficient Solutions Powering Year-Round Farming
- 18 /** Fostering Innovation Through Dutch-Nigerian Partnerships
- 19 /** Building Sustainable Knowledge Hubs Through Partnerships
- 20 /** Unlocking Women's Potential in the Horticulture Sector Through Financial Support
- 21 /** Nurturing Youth Entrepreneurship Through Innovative Pilot Initiatives
- 22 /** Building A Future in Nigeria with Vegetable Production and Digital Skills
- 23 /** Tackling Post-Harvest Losses Through Cold Storage Solutions
- 24 /** Breaking Barriers Through Financial Knowledge and Access
- 25 /** Crate Rental: A Simple Innovation Cuts Losses and Creates Jobs
- 26 /** Knowledge Transfer: Bridging the Gap in the Horticulture Sector
- 27 /** Reducing Waste and Creating Jobs in Kaduna State Through Value Addition
- 28 /** Zero Energy Cooling Chambers: Spreading Post-Harvest Innovation from Ogun to Kano
- 29 /** Youth Leading the Way in Nigerian Horticulture
- 30 /** Opeyemi Wasiu Ajibola: Cultivating Voices for Change in Nigeria's Horticulture Sector
- 33 /** Driving Private Investment Through Policy Reform in Nigeria's Horticulture Sector
- 34 /** Deploying Strategic Partnerships to Address Tuta absoluta
- 35 /** Leading Community Transformation with Demonstration Plots
- 36 /** Igniting Innovation in the Horticulture Sector Among Youth
- 37 /** Fostering Rural Entrepreneurship in Nigeria Through Agro-Dealership
- 38 /** The Sweet Taste of Innovation: Muhammadu's Success with Hybrid Seeds
- 39 /** Strengthening Rural Businesses Through Structured Horticulture Supply Chains
- 40 /** Strengthening Small Businesses to Build an Inclusive and Sustainable Horticulture Sector
- 41 /** Sterling and HortiNigeria Partnering to Empower Agripreneurs
- 42 /** Growing Nigerian Farms and Livelihoods with Improved Access to Finance
- 43 /** Bridging the Financial Gap Between Farmers and Financial Institutions
- 44 /** RecordKeeping Builds Stronger Businesses for Agripreneurs
- 45 /** Making Farms Safer Through Market-Driven Solutions
- 46 /** Strengthening Farmer Voices in Nigeria Through Association Development
- 47 /** Addressing Soluble Fertilizer Accessibility Challenges with Strategic Partnerships
- 48 /** Creating Markets Through Digital Apps
- 49 /** Sustaining Year-Round Vegetable Trade in Nigeria Through Farmer-Offtaker Partnerships
- 50 /** Tomato Wine: A Solution to Extend Shelf Life and Expand Markets
- 51 /** Building Knowledge to Boost Agro-Dealer Business Growth



FOREWORD

HortiNigeria is more than a development program - it is a story of people, partnerships, and progress. Over the past four years, we have witnessed how targeted support in knowledge, technology, finance, and policy can transform lives, strengthen value chains, and position horticulture as a driver of economic growth in Nigeria.

In these pages, you will meet farmers who have doubled their yields, young agripreneurs, or I would want call hortipreneurs, who have turned their ideas into thriving businesses or what I would call HortiPreneurs, and women who are shaping the future of their communities. You will also see the impact of innovations - from cold-chain solutions that reduce post-harvest losses to policy advocacy that creates a more enabling environment for market access.

These achievements reflect the dedication of our partners: the Embassy of the Kingdom of the Netherlands, our consortium members, government agencies, private sector actors, and research institutions. Most importantly, they showcase the resilience and adaptability of Nigeria's farmers - the true heroes of this transformation.

While this magazine celebrates the milestones reached, it also points to the road ahead. The successes documented here prove that with sustained investment, strong collaboration, and continuous innovation, Nigeria's horticulture sector can secure its place as a pillar of food security, job creation, and inclusive growth.

On behalf of the HortiNigeria team, I thank you for being part of this journey. Let these stories inspire us all to keep building, keep innovating, and keep believing - the best is yet to come.

Mohammed Salasi Idris

Program Director,
HortiNigeria



A Promise Made, A Promise Kept

As you flip through the pages of this material, you will encounter heroes in many forms - a farmer, a product, a community, a company — each one transformed, transforming, or sparking transformation. From the hinterlands of Kano to the bustling markets of Lagos, ripples of change are coursing through Nigeria's horticulture sector. These stories capture the progress made and resilience built.

When HortiNigeria started in 2021, we made a promise to the donor: to facilitate the goal we set; to facilitate the development of a sustainable and inclusive horticulture sector that will contribute to improving food and nutrition security, but in truth, it was a promise kept to both the Embassy of the Kingdom of the Netherlands and to Nigeria. Today, that promise lives on in the voices of young people who have found their voice and opportunity; in families where livelihoods have improved, nutrition is better, and children can go to school with confidence; in farmers who are more resilient, equipped with knowledge of good agronomic practices and eco-efficient solutions.

It lives in the soil itself - healthier, more productive, and better able to sequester carbon. It lives in partnerships strengthened through brokerage and linkages; in boardrooms where policy dialogue and finance institutions are awakening to the potential of an underserved sector; and in classrooms where new curricula prepare the next generation for meaningful jobs in a once overlooked industry.

What began as a commitment has grown into a movement: one of inclusion and sustainability. As a friend and partner of the program, Farmer Samson Ogbole says, *"If food is a right, then hunger is a crime."* We therefore invite you to join this movement, by reading these stories not just as records of change, but as a foundation, a strong platform for all stakeholders, local and international, to leap together into a future where Nigeria's horticulture sector is sustainable and inclusive, improving food and nutrition security and ending the crime called hunger.

Feyikemi Adurogbangba

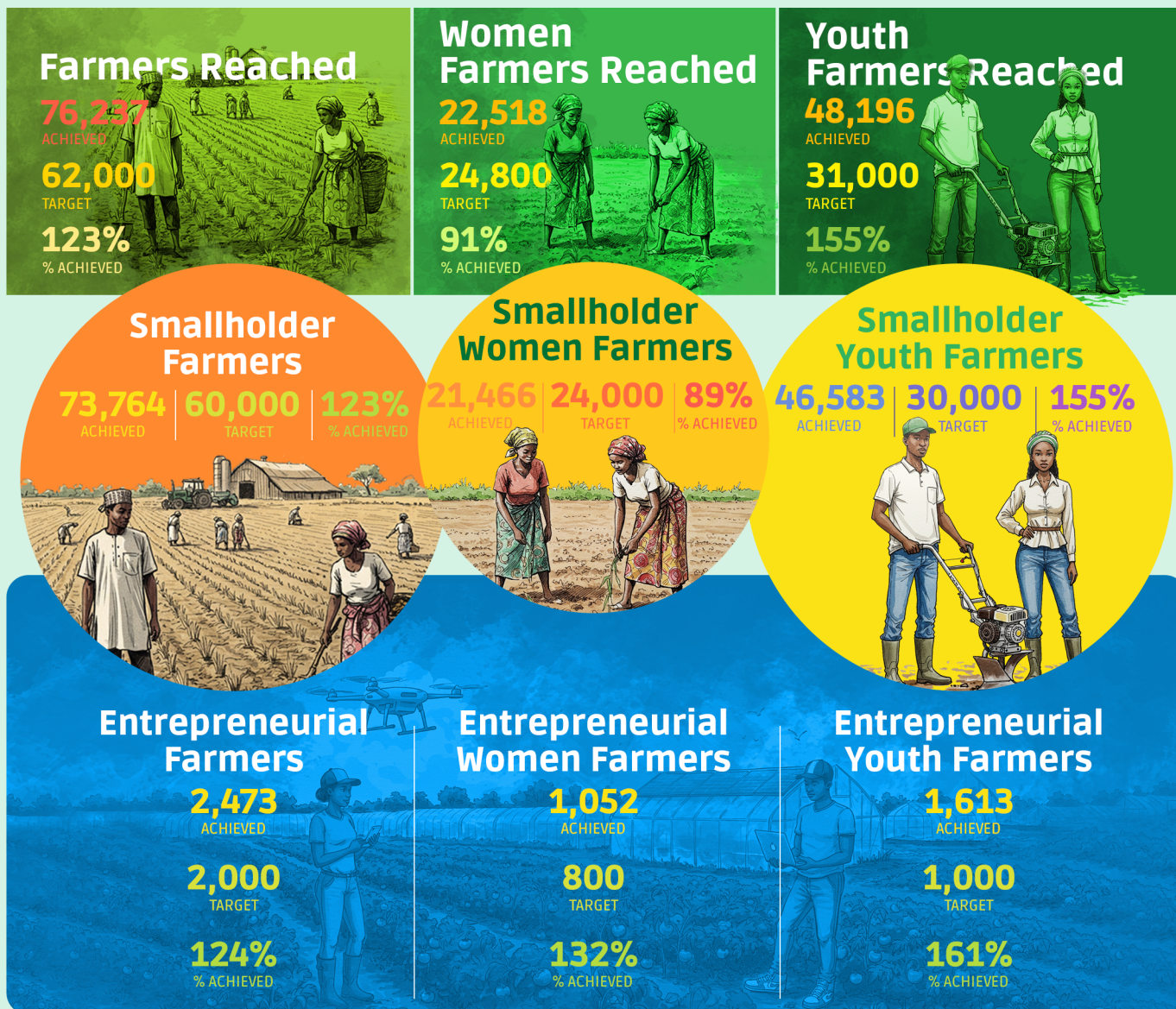
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HortiNigeria at a Glance

Since 2021, **HortiNigeria**, funded by the Embassy of the Kingdom of the Netherlands (EKN) in Nigeria, has been implemented by the International Fertilizer Development Center (IFDC) together with its consortium partners: East-West Seed Transfer Foundation (EWS-KT), Wageningen University & Research (WUR), and KIT Institute.

The program has been implemented in **Ogun, Oyo, Kaduna, and Kano States**, focusing on developing a sustainable and inclusive horticulture sector that strengthens food and nutrition security in Nigeria. This objective aligns with both Dutch and Nigerian priorities on food security and private sector development, while also contributing to the broader transformation of food systems in Nigeria and supporting progress toward the Sustainable Development Goals (SDGs).

Some key milestones achieved since 2021 include:



Funds Mobilized (€)

4,150,000
ACHIEVED

6,000,000
TARGET

69%
% ACHIEVED

MSMEs Trained

898
ACHIEVED

690
TARGET

130%
% ACHIEVED

Jobs Created

617
ACHIEVED

1,000
TARGET

62%
% ACHIEVED

B2B Partnerships Brokered

106
ACHIEVED

100
TARGET

106%
% ACHIEVED

Policies Improved

1
ACHIEVED

2
TARGET

50%
% ACHIEVED

% Reduction in Post-Harvest Losses

83
ACHIEVED

60
TARGET

138%
% ACHIEVED

KEY SDGs HORTINIGERIA DIRECTLY CONTRIBUTES TO



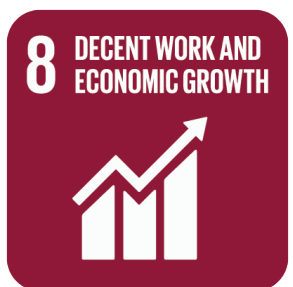
By increasing incomes of smallholder farmers, improving market access, and supporting agribusiness ventures.



Through enhanced vegetable production, improved access to inputs, and reduced post-harvest losses to ensure more food reaches consumers.



By actively empowering women farmers, entrepreneurs, and processors with resources, training, and access to finance.



Creating jobs for youth and women across the horticulture value chain, supporting agribusiness startups, and encouraging innovation.



Reducing waste through processing and improved storage (e.g., tomato wine, solar dryers, and cold storage) and promoting sustainable farming practices.



Promoting climate-smart agriculture, water-efficient irrigation systems, and sustainable technologies that reduce environmental impact.

DONOR AND CONSORTIUM
PARTNERS

Kingdom of the Netherlands

Embassy of the Kingdom of the Netherlands (EKN)

In its multi-annual country strategy, the Embassy of the Kingdom of the Netherlands (EKN) aims to contribute to sustainable development of the Nigerian horticulture sector.

In 2024 the Netherlands ranked as the seventh-largest donor country on the Organisation for Economic Cooperation and Development (OECDs) Development Assistance Committee (DAC).

**International Fertilizer Development Center (IFDC)**

IFDC has been working since 1974 to promote agriculturally led local economic development “from the ground up.” IFDC’s vision is healthier soils and plants for a food-secure and environmentally sustainable world. Since 2001, IFDC has worked in Nigeria to bring together innovative research, market expertise, and strategic public and private sector partners and to scale sustainable solutions for soil and plant nutrition that benefit farmers, entrepreneurs, and the environment.

IFDC leads the consortium implementing the HortiNigeria program.

**East-West Seed Knowledge Transfer Foundation (EWS-KT)**

EWS-KT, the non-profit foundation of EWS recognized as a public benefit organization (ANBI), brings 20 years of experience training smallholder farmers and service providers in partnership with local and international organizations. The foundation leverages a market-based approach to catalyze innovation and systemic change in less developed countries. The mission of EWS-KT is to improve the livelihoods of smallholder farmers.

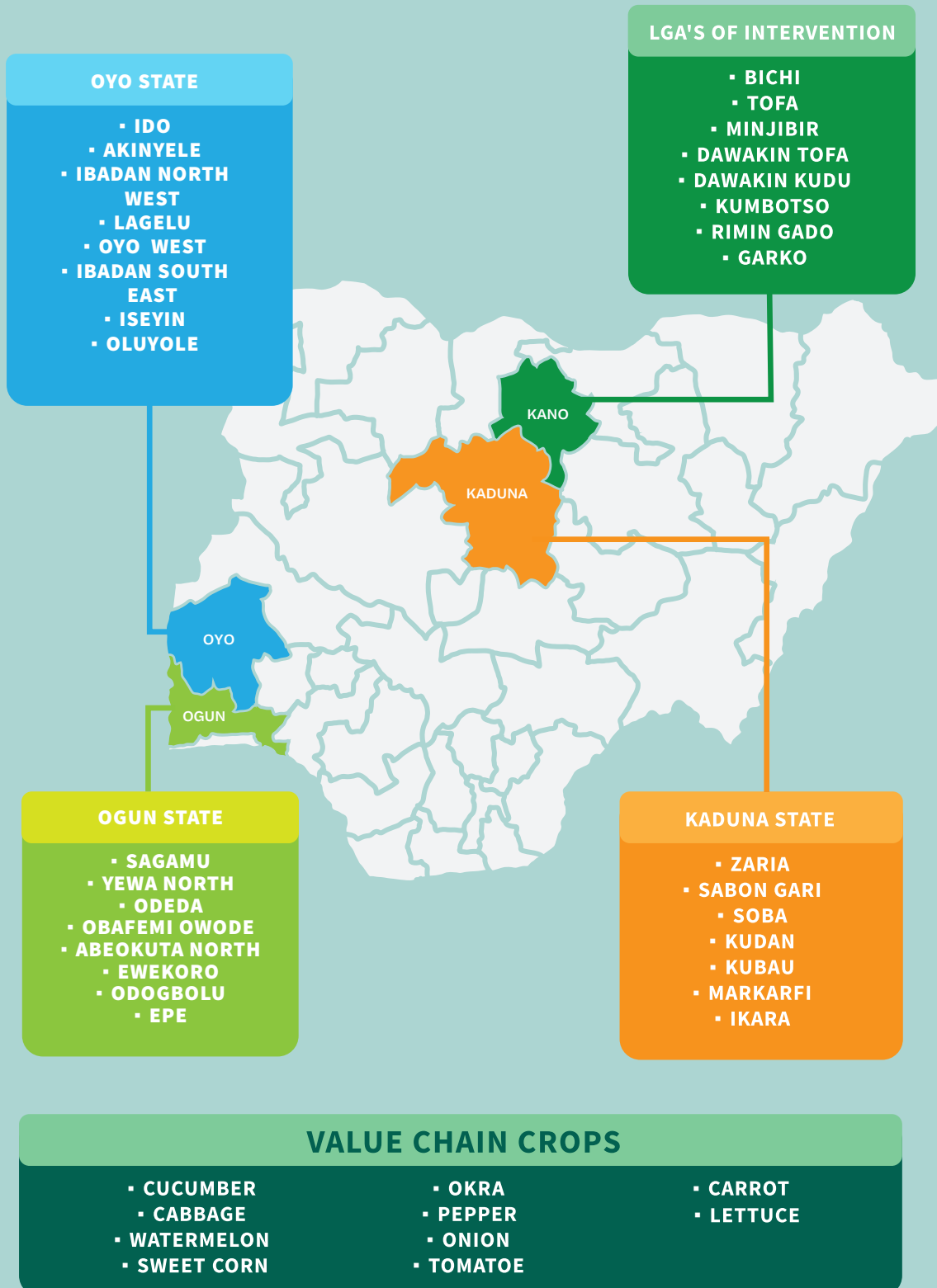
**Wageningen University & Research (WUR)**

Wageningen University and Research (WUR). WUR is one of the leading agricultural universities worldwide headquartered in the Netherlands, with approximately 30 locations and students from more than 100 countries. WUR works together with academic partners, companies, government organizations, and non-governmental organizations (NGOs) on global, regional, and local challenges and transitions.

**KIT Institute**

KIT Institute is an applied knowledge institute with 85 international experts in the fields of health, sustainable economic development, and gender. KIT produces applicable insights from practice and theory and offers reliable, insightful data, policy recommendations, and proven tools, methods, and advice to catalyze systemic change.

PROGRAM LOCATIONS



Improving Farmers' Livelihoods Through Agribusiness Clusters



For 33-year-old Abubakar Garba, a father of two from Zaria Local Government Area (LGA), Kaduna State, farming had long been a solitary struggle. Relying on traditional methods passed down through generations, he worked tirelessly on his small plot, yet low yields and limited market access kept profits slim. Financial stability felt like a distant dream.

That changed in 2022 when Abubakar began working with Horti-Nigeria. The program introduced Good Agricultural Practices (GAP) and eco-efficient solutions to his community - and, more importantly, unveiled a transformative idea: agribusiness clusters. These cooperatives bring together 50–70 farmers, each with a defined role in production, marketing, and distribution, turning individual efforts into collective strength.

In 2023, Abubakar joined the Gamayyen en Kasuwa da Manoma cluster and was elected its first secretary. “We meet twice a month to discuss what’s happening in the cluster,” he explained. “We’ve all learned so much.”

Cluster membership quickly began to reshape his farming journey. Together, members plan each season, share information on input prices, and coordinate planting schedules. This collaboration has opened new markets: Abubakar and his fellow farmers now sell directly to buyers in Abuja, Port Harcourt, and Warri - bypassing middlemen and delivering fresher produce at better prices.

By adopting improved spacing, pest control, mulching, and post-harvest handling techniques, Abubakar increased his yields by 50%. Thanks to coordinated marketing, higher productivity translated into higher income for his family and others in the cluster.

“Our lives have

changed,” Abubakar said. “Some of us have bought more land, more inputs, and many other things we could not afford before.”

For Abubakar, the transformation is deeply personal. He has expanded his farm, built a new mud house for his family, and now pays his children’s school fees with confidence. Looking ahead, he plans to reinvest in his farm—and has set his sights on buying a car, a milestone that once seemed far beyond reach.

Did You Know?

The Netherlands is the second largest agricultural exporter in the world. One secret to this success is its use of agribusiness clusters, where farmers, suppliers, researchers, and distributors work in close-knit networks. In regions in the west, vegetable growers share greenhouses, technology, and logistics systems, enabling them to produce high-quality crops year-round and sell their produce to over many European countries and beyond. //

Building Inclusive Seed Market Systems in Nigeria's Horticulture Sector

For years, smallholder farmers in Nigeria's horticulture sector have faced a critical challenge: limited access to high-quality vegetable seeds and seedlings. With few options, many have relied on low-grade or recycled seeds, leading to poor germination, stunted crop growth, and reduced yields. This persistent gap in input quality has weakened the entire value chain.

At the same time, rural women, such as those in Gadama Village of Kumbotso LGA in Kano State, have historically been relegated to supporting roles in the sector, working hard but rarely being recognized as business actors or decision-makers. With limited access to capital, training, and markets, their potential has been overlooked and underutilized.

Recognizing both the gap in quality seed and the underrepresentation of Nigerian women in horticulture, The Seed Project, a pioneering seed company based in Kano, partnered with HortiNigeria to establish a women-led seedling outgrower program with the objective to improve input quality while driving inclusion.

For Binta Kabiru, a 40-year-old mother of eight and leader of the Gadama Unguwar Akwai Women Farmers Group, this partnership would prove life-changing.

Binta never imagined herself as a business owner. Like many women in her village, she worked long hours with little reward. However, after participating in a HortiNigeria training event on good agronomic practices in 2022, she decided to pursue and master seedling production, a surprisingly profitable business.

With no formal business experience and minimal access to capital, others might have hesitated. But Binta pushed forward, supported by HortiNigeria's mentorship and backed by the trust of her women's group. Her nursery operation became a viable enterprise, supplying seedlings to local farmers.

Recognizing her skill, drive, and community influence, The Seed Project recruited



Binta into its women-led outgrower program, through which she produces seedlings, distributes seeds and other agricultural inputs, and shares extension services with farmers, especially women and youth, in her community.

The Seed Project's outgrower program creates structured market entry for women by offering technical support on nursery management and seedling propagation, facilitating offtake agreements and market linkages, and providing inputs and materials such as trays, seed varieties, and fertilizers.

This system integrates women at the first stage of the production cycle, making them active market actors, input suppliers, and businesswomen who are boosting their own earnings and exercising their decision-making power. "This journey has changed how I see myself and how others see what women can do," Binta remarked. "I want my daughters and other young women here to know they

don't have to wait for opportunities. They can create them."

Binta's journey is one example of how inclusive seed market systems are taking root in Nigeria. By placing women at the center, these initiatives are improving input quality, strengthening supply chains, and ensuring that growth in the horticulture sector benefits everyone."

Did you know?

Nigeria holds approximately 40% of Africa's U.S. \$3.15 billion seed market (Mordor Intelligence, 2025), meaning more than US \$1.2 billion in potential annual value. By enabling women like Binta Kabiru to operate professional seedling nurseries, The Seed Project helps keep more of that value within rural communities, creating local economic opportunities and supporting better farming outcomes. //

Strengthening Agro-Input Supply and Demand for a Viable Horticulture Sector

For Nigeria's horticulture sector to thrive, farmers need access to quality inputs, such as fertilizer and improved seeds, while input suppliers require reliable markets. Yet smallholder farmers often struggle with the affordability and accessibility of improved seeds and technologies, while agro-input companies face weak distribution networks that limit their growth.

In 2023, the HortiNigeria program, improved hybrid seeds from Royal Blue Contractors, and a guaranteed buyer for their produce with Tomato Jos; moreover, Royal Blue Contractors, and a guaranteed buyer for their produce with Tomato Jos, on the other hand, Royal Blue secured a stronger and more reliable supply chain.

The results were impressive. Farmers achieved yields of up to 13 metric tons per hectare – more than two times the national average – boosting incomes and demonstrating the combined power of hybrid seed technology and good agronomic practices. Across the participating farmers' fields, about 100 hectares of farmland were brought under improved production, ensuring higher productivity and stronger livelihoods.

Sufyan Ismail, a participating farmer from Kubau in Kaduna State, reflected, "We received good seeds – better than what we normally used – and the results showed."

To build on this success, HortiNigeria expanded its support in 2024 by engaging Royal Blue in its Field Days and HortiFairs. These events gave the company a platform to show-



case its products to farmers, agro-dealers, and a wide range of other stakeholders. As a result, Royal Blue expanded its farmer customer base, reached underserved rural markets, and forged new business relationships with agro-dealers.

The fairs opened new opportunities for agro-dealers such as Saidu Yakubu, who explained, "I have expanded my network of suppliers through the fairs, getting direct contacts with reliable companies like Royal Blue Contractors."

The impact was equally clear for the company: Royal Blue Contractors Managing Director Ahmad Muhammad declared, "The partnership has increased our sales in the intervention areas and helped us contribute di-

rectly to boosting food security. The hybrid seeds we provide have doubled yields for farmers. We look forward to more opportunities to serve the horticulture sector."

Through these interventions, HortiNigeria is strengthening both agro-input supply and farmer demand, creating a more sustainable and viable horticulture sector where businesses can grow, farmers can prosper, and Nigeria's food security can be secured.

Did you know?

Royal Blue Contractors, based in Kano State, is one of the major distributors for East-West Seed in Nigeria, bringing high-quality seeds closer to smallholder farmers. //

Bringing Greenhouse Management into the Classroom

When Abdul Wasiu Lawal first saw a greenhouse as a child, he was fascinated by its structure. Yet, like many others, he grew up without ever learning how it worked or how it could enhance farming.

This gap in knowledge reflects a broader challenge. In fact, many universities across Nigeria, particularly those under government ownership, have yet to revise and modernize their agricultural curricula to reflect the latest industry innovations.

One such innovation is greenhouse management, a critical skill for boosting productivity, ensuring year-round cultivation, and improving resource efficiency. While the gap in adoption persists in many institutions, the Federal University of Agriculture, Abeokuta (FUNAAB) is setting the pace to adapt to new trends.

"I used to see greenhouses all the time, but I never understood how they functioned. Now, I've been trained to manage one from start to finish. That knowledge is power, especially for a young person like me," Abdul said.

Now a postgraduate student at FUNAAB Abdul has become a skilled, confident, and employable young man, thanks to a strategic partnership between HortiNigeria and the university. As a result of this collaboration, FUNAAB has integrated greenhouse management into its academic curricula, combining theory with hands-on training for students such as Abdul.

"I used to see greenhouses all the time, but I never understood how they functioned," Abdul explained. "Now, I've been trained to manage one from start to finish. That knowledge is power, especially for a young person like me."

Greenhouses have become much more common across Nigeria, but many have fallen into disrepair due to a lack of technical expertise. With formal training now embedded into higher education, students are being equipped to fill that gap, with the ability to turn unused infrastructure into opportunity.

For Abdul, gaining greenhouse management skills goes beyond academic achievement. "There are greenhouses out there with no one to run them.

Having these skills makes me more employable," he states.

With the education he received, Abdul was able to secure a position with Jubaili Agrotech Group, where he put his new knowledge into practice. Though he has since moved to another role outside greenhouse management, the experience proved how valuable these skills are in opening doors to employment opportunities.

By introducing practical, industry-relevant training into academic programs, the HortiNigeria-FUNAAB partnership is ensuring that the next generation of agricultural professionals is not only prepared to work but also to lead the future of modern farming.

Did You know?

The Netherlands is home to world-class institutions that specialize in agricultural and greenhouse technology education, such as Wageningen University & Research and KIT Institute. These institutions partner with governments, private companies, and educational bodies worldwide to modernize agricultural training. //



Building Better Harvest and Opening New Opportunities

For Abdulkadir Tahir, a young farmer in Zaria, Kaduna State, the turning point in his farming journey came not just from better seeds or new techniques, but from joining the Noman Lambu Facebook group, hosted by HortiNigeria. With over 450,000

members from across Nigeria, the group is a bustling digital marketplace where farmers share market prices, post photos of their produce, and connect with buyers, transforming social media into both a marketing platform and an intelligence tool.

Abdulkadir began working with HortiNigeria in 2023. Through the program's training sessions, he mastered techniques such as mulching, using hybrid seeds, and trellising, which tripled his yields. But as he says, "Getting increased yields is one thing, but marketing the produce is another."

By posting his fresh produce on Facebook, Abdulkadir attracted customers from within and beyond Kaduna State, with orders reaching as far as Katsina and Kano. He carefully packages and dispatches the produce to buyers who value its quality and freshness. The group also gives him access to real-time price updates, enabling him to decide where to sell for the best returns.

Abdulkadir is now running a more profitable farm while serving as a community field trainer. In this role, he teaches others how to combine improved agronomic practices with smart digital marketing. Abdulkadir's story shows how, with the right training and the right networks, rural farmers can expand their markets, secure better prices, and build sustainable livelihoods.

Did you know?

Before the rise of farmer-led social media groups, most smallholders in Nigeria relied on local middlemen for pricing information. Because of their lack of bargaining power, the farmers often sold their produce at undervalued rates. Today, platforms like the HortiNigeria social media pages allow farmers to compare prices from multiple states instantly, helping them decide where to sell for the highest return, just as Abdulkadir does when weighing offers. //



Redefining the Horticulture Sector in Ogun State Through Financial Innovations

In southern Nigeria, young people face limited access to agricultural financing. They are often excluded from accessing formal credit despite their potential due to a lack of collateral, experience, or institutional trust. Furthermore, onion production has long been considered unfeasible in the south due to climatic and knowledge barriers, causing heavy reliance on northern supply.

In 2023, HortiNigeria, in partnership with Eupesia Place Limited, launched a youth-targeted pitch competition in Ogun State. The initiative was designed as a financial innovation: rather than offering loans or subsidies directly, youth were invited to pitch scalable agribusiness ideas and compete for access to grants. This demand-driven approach gave young people a voice in shaping the interventions they wanted to pursue and created a pathway to unlock ideas that might otherwise have been abandoned.

One of the standout participants in the competition was Abraham Ogundijo, a young man with a bold proposal: to scale onion production. Through the HortiNigeria program, Abraham had learned about improved agronomic techniques, quality seeds, and market-focused strategies in onion production. In 2023, Abraham won the pitching competition but ended up losing his yields. Undeterred, he entered another competition in 2024 and went on to win. Abraham is now making great strides as he continues to gain knowledge on onion production.

Abraham, alongside nine other winners, was awarded a grant of ₦1,000,000 Naira (approx. U.S. \$650) to bring his idea to life. He used this money to purchase inputs, such as seeds and fertilizers, and drip irrigation equipment. He then established a 500 square meter onion demonstration plot. With well-placed drips and excellent onion spacing, the plot promised a fruitful harvest. The proceeds

allow him to continue to reinvest in his farm and expand his operations.

Abraham's resilience and initiative have inspired other youths in the community, showing that access to knowledge and financial support can transform lives. Abraham now mentors other young people, serving as an example of what is possible.

"My plan is to train many others, so they can also start onion farming in their communities. If more youth see that this works, we won't just be growing onions, we will be growing opportunities, improving food and nutrition security," Abraham explained.

What made Abraham's dream possible was not just the funding, it was the structure of the funding. By requiring young people to pitch their ideas, the HortiNigeria program empowered them as co-creators of solutions, rather than passive recipients of aid. This grant mechanism functioned as a financial innovation.

The success of Abraham's pilot has sparked broader interest in onion production across the south, as he uses social media to showcase his outcomes, offering a new path for job creation, food security, and agribusiness diversification. More importantly, it has demonstrated how financial innovations can accelerate inclusion and entrepreneurship in agriculture, particularly the horticulture sector.



Did you know?

Nigeria's first formal agricultural financial product came through the Nigerian Agricultural Bank (NAB) in 1973. Over time, the bank merged with the People's Bank and the Family Economic Advancement Programme to become today's Bank of Agriculture (BOA), which continues to finance smallholder farmers while integrating newer products such as digital loans and agribusiness grants. (Bank of Agriculture, n.d.).

Building Climate Resilience with Weather Forecasting

For over a decade, smallholder farmers like 33-year-old Abubakar Ibrahim from Dawakin Kudu, Kano State, faced one of the most persistent threats to their livelihoods - climate unpredictability. Farming decisions were based on guesswork: observing the skies and hoping the rains would arrive on time. But with erratic weather patterns driven by climate change, these methods were no longer enough. Crops began to fail more often, and incomes shrank with each unexpected drought or flood.

Abubakar remembers years of loss from late planting and failed germination. “We relied on the old ways, watching the sky and hoping for the best,” he said. “Without accurate information, many farmers in my community lost entire seasons [of production].”

That changed in 2023, when the HortiNigeria program, in partnership with Ignitia, introduced a localized weather forecasting initiative to strengthen climate resilience among smallholder farmers. Abubakar’s village was chosen as one of the pilot sites, giving

him and 500 other farmers access to daily SMS forecasts tailored to their exact microclimate.

Now, Abubakar starts each day not by scanning the horizon, but by checking his phone. The messages are simple, clear, and actionable, telling him when to plant, irrigate, fertilize, and harvest. This precision planning has eliminated the guesswork that once defined his farming.

By aligning his work with forecasted rainfall and temperature patterns, Abubakar reduced crop failures and made better use of his inputs. In his first season using the service, Abubakar planted tomatoes and leafy vegetables, high-value but climate-sensitive crops he had never risked before. Abubakar’s yields increased, and his income from vegetable sales nearly doubled compared to his previous staple crop harvests.

“Before, a single missed rain could ruin my season,” Abubakar said. “Now, I know when to take action. My crops are healthier, and my profits are higher.”

Beyond his own farm, Abubakar has become a local champion for the technology. He holds small group sessions to explain the forecasts to farmers who cannot read, sharing tips on how to apply the information effectively.

The pilot’s success has sparked interest in expanding the service beyond Dawakin Kudu. By delivering actionable climate information to farmers, the HortiNigeria-Ignitia partnership is helping communities turn uncertainty into opportunity.

Did you know?

Inconsistent rainfall is one of the biggest risks to smallholder farming in Nigeria. With hyperlocal forecasts from companies like Ignitia, farmers can reduce crop failure risk turning unpredictable seasons into planned successes. //



Eco-Efficient Solutions Powering Year-Round Farming

For around a decade, Alex Oparinde worked the soil in Ibadan, Oyo State, with quiet determination. But despite his hard work and deep commitment, profit was elusive. Erratic rainfall threatened crops, irrigation incurred steep costs, and skepticism from family and friends grew louder with each passing season.

“I was looking lean. People were genuinely concerned about me. Some told me to find another venture,” Alex recalled.

However, Alex’s story changed when he came across the HortiNigeria program. The program, as part of its drive to promote sustainable, climate-smart agriculture, selected Alex to pilot a solar-powered irrigation system on his farm. He now calls this opportunity “life-changing.”

With reliable, low-cost water access powered by the sun, Alex was able to irrigate consistently, farm year-round, and increase his yields. He no longer needed to wait on rain or pay for an expensive diesel pump. The freedom to plan, plant, and harvest on his own terms unlocked a level of productivity he had never before experienced. With the savings from this innovative system, Alex can now buy more seeds and fertilizers for his farm.

“My income grew astronomically. People who used to pity me now want to know what changed. I prospered – and so did other farmers in my hub.”

The transformation in Alex’s enterprise was striking; it attracted attention from far beyond the fields. His younger brother, who had been working at a commercial bank, made a bold decision: he left his job and joined Alex on the farm.

“When he saw how much I was earning, he said, ‘Teach me.’ And now we farm together,” Alex noted.

Alex currently cultivates 2 hectares of land, located on a plot allocated to him by the National Horticultural Research Institute (NIHORT). But with demand rising, Alex is preparing to expand, demonstrating the confidence he now has in his production system. Alex’s next goal is to grow his operations to 5



hectares, more than doubling his capacity. This means he will need to increase his infrastructure, expand his labor force, and strengthen his supply chain. For Alex, this effort is not only about scaling up; it is about using his momentum to build a truly sustainable business.

Today, Alex is more financially secure and is thriving in every sense; He is healthier, happier, and more hopeful about the future. “I embraced this one innovation, and it has changed my life,” he said.

Alex’s journey is proof that the right tools in the right hands can have a profound impact on people’s lives.

Did you know?

Solar-powered irrigation systems can cut operation costs by up to 70% (IFDC, 2025) compared to diesel pumps, while enabling farmers to grow crops year-round. For farmers in Oyo State like Alex, this means turning unpredictable harvests into consistent profits. //

Fostering Innovation through Dutch-Nigerian partnerships



When BIC Farms Concepts began in 2006, it was guided by a clear vision: to contribute to food security while empowering agripreneurs across Africa with the knowledge, tools, and innovations they need to thrive. Yet, like many local businesses, it faced significant challenges, such as limited access to advanced technologies that could make farming truly profitable.

Over the years, BIC has worked to address this need for innovation in Nigeria's horticulture sector and consistently adapt global knowledge to local realities. One way it does this is by prioritizing fairs and industry events to learn from peers, spot opportunities, and use new insights to address Nigeria's agricultural challenges.

One of such event occurred in 2024: the first edition HortiFair held at Awowo, Ogun State, where local agripreneurs connected with Dutch counterparts. It was there that

representatives from BIC met those from the Dutch agritech company Horti XS, which specializes in greenhouse solutions. This initial meeting would spark a transformative, groundbreaking collaboration.

To cement a new partnership, BIC's Managing Director, Debo, traveled to the Netherlands for a learning exchange with Horti XS. Mutually satisfied by the experience, both parties signed an agreement in 2024, and Onafowora now serves as Horti XS's official representative in Nigeria, bringing Dutch expertise and innovation to Nigerian soil.

In 2025, BIC and Horti XS are set to launch their first joint project in Nigeria. Together, they will introduce custom-made greenhouses that promise extraordinary results: tomato yields of up to 6 tons from an area of just 200 square meters – nearly four times more than traditional greenhouse tunnels. Importantly, these solutions integrate local content, such

as rice husks, as substrates, ensuring the technology is both cutting-edge and context-specific.

For Debo, this collaboration represents more than a business deal; it is a crucial step toward his bold ambition of empowering 1 million agripreneurs across Africa. To achieve this goal, he aims to support 100,000 businesses, each employing at least 10 people, creating ripple effects of opportunity.

Reflecting on his experience, Onafowora offered this advice to Nigerian agripreneurs: "What you cannot see, you cannot become. Attend events, meet people, and learn from those who have gone

ahead of you. That is how you create the change you seek."

For BIC Farms Concepts, HortiFair was not just an exhibition; it was a turning point that opened a new chapter of opportunity, innovation, and growth for Nigeria's horticulture sector.

Did you know?

Horti XS is a Dutch agritech firm that specializes in offering complete greenhouse solutions, from inception to operation. The company's services span engineering, project management, construction, electrotechnical systems, water and heating installations, auxiliary equipment, agronomic support, and even staff training. //

Building Sustainable Knowledge Hubs through Partnerships

In a bold step toward long-term impact, HortiNigeria partnered with the Centre for Dryland Agriculture (CDA) in Kano State to establish a horticulture learning site. This initiative will have an impact beyond the program's life cycle by embedding knowledge where it is needed most.

Located in a region where vegetable production is a vital source of livelihood, the new site serves as a permanent hub for knowledge-sharing, practical demonstrations, and innovation in climate-resilient horticultural practices. More than a physical structure, the learning site is a living classroom, where farmers, students, extension agents, and other stakeholders can continue to learn, experiment, and refine their practices long after HortiNigeria ends.

By co-creating the site with a nationally recognized institution like CDA, HortiNigeria is placing sustainability at the core of its approach. This collaboration ensures that capacity is not only built but retained and that training and research in horticulture continue under local leadership. Already, the learning site is playing a key role in:

- ▶ Demonstrating good agricultural practices and eco-efficient solutions.
- ▶ Exposing smallholder farmers to affordable yet innovative technologies.
- ▶ Providing hands-on training to students and future practitioners.

It stands as a model for how development programs can leave behind more than short-term results; they can leave behind resilient systems that grow, adapt, and serve generations.

"With this learning site, CDA is now positioned as a knowledge hub for high-tech yet affordable innovations," said Dr. Mustapha Bello. "We're responding to what stakeholders have asked for – practical, but affordable, innovative technologies.

As Nigeria continues to build a food- and nutrition-secure future, this partnership shows that sustainable development begins when capacity is strengthened and knowledge is embedded locally for lasting impact.

Did you know?

The Centre for Dryland Agriculture was established at Bayero University, Kano, in 2012, with support from the MacArthur Foundation. In 2014, the Centre won a grant from the World Bank to become an African Centre of Excellence. Its mandate spans cutting-edge research, innovation, and training for dryland farming systems. (Centre for Dryland Agriculture, 2022). //



Unlocking Women's Potential in the Horticulture Sector Through Financial Support



In Yewa North, Ogun State, 28-year-old Boluwatife Maybee never imagined she would become a farmer as a law graduate. Her journey into horticulture began with a fight for her life. In 2018, she was diagnosed with a serious kidney condition that forced her to reevaluate her lifestyle and, more importantly, her diet.

Determined to stay healthy, Boluwatife began growing vegetables in her backyard. What started as a survival tactic soon became something more – a passion for producing nutritious food for herself and others.

With limited capital and the systemic barriers facing women in agriculture, expansion seemed nearly impossible to Boluwatife. “It’s hard to get financial help in farming if you are a woman,” she said. “People often don’t take us seriously.”

In 2023, Boluwatife’s connected with the HortiNigeria program, which recognized her potential and drive. Through the program, she received a letter of recommendation, a document that did more than affirm her status as a farmer.

That endorsement unlocked the next opportunity: ₦500,000 (approx. \$380) from a private investor. For the first time, Boluwatife had the backing she needed to grow beyond her garden plot and invest in her future.

With new funding, Boluwatife installed an irrigation system on her farm. No longer reliant on rainfall or exhausting trips to fetch water, her team could redirect their energy toward planting, harvesting, and managing crop cycles more effectively.

More importantly, irrigation allowed for year-round farming, turning Boluwatife’s seasonal output into a steady supply of produce

for local markets. “It changed everything,” she reflected. “My health improved, my farm became more productive, and I started earning more consistently.”

What began as a health necessity had now evolved into a sustainable agribusiness, fueled by innovation, and enabled through strategic support.

Boluwatife’s journey from backyard gardening to full-scale production illustrates the life-changing impact of targeted support and accessible resources.

Boluwatife now serves as an employer of labor, contributes to the local food supply, and inspires women in her farming community. “The support changed my life and has made me an active participant in the horticulture value chain, giving me and other women a voice.”

According to Boluwatife, HortiNigeria has unlocked a future where women are recognized as capable entrepreneurs in the horticulture sector. A future where support systems like HortiNigeria continue to unlock the potential of everyday people giving them opportunities needed to thrive.

Did you know?

Women borrowers often outperform men in repaying loans. Global studies show that women clients in microfinance are associated with lower portfolio risk, fewer write-offs, and fewer credit-loss provisions compared to men (D’Espallier et al., Guérin, & Mersland, 2011). In fact, women’s average repayment rate has been found to exceed men’s by as much as 17 percentage points, even after controlling for age, education, marital status, and assets (Kevane & Wydick, 2001). ▀

Nurturing Youth Entrepreneurship Through Innovative Pilot Initiatives



In a country where youth unemployment remains a pressing concern, Adejole Florence saw opportunity in vegetable production in Nigeria. Raised in a society where women are not typically thought to be interested in farming and where young people face limited career prospects, Florence is defying the odds.

Now studying at the University of Ibadan, Florence has immersed herself in agriculture. With a vibrant passion for vegetable farming, she has long envisioned a future where agriculture is more than a fallback option; for her, it is a platform from which to transform lives and reshape the nation's economic narrative.

In 2024, Florence participated in the HortiNigeria Youth Day Campaign, an activity designed to inspire and elevate young

horticulturists. Her unique ideas and interest in sustainability stood out among the crowd of aspiring farmers and students, earning her a grand prize package that included a weeding machine, potting soil, seeds, and seedling trays.

In addition to this valuable prize, the Youth Day event introduced Florence to advanced agricultural techniques and current trends in vegetable farming, and it gave her the confidence to pursue her vision more boldly.

Following her win, Florence noted that, although the University of Ibadan has multiple campus farms, none were dedicated to vegetables. Seeing unexplored potential, she collaborated with the university to establish a vegetable farm on campus.

Florence's goal for this university vegetable farm is twofold: to supply fresh produce to the university community and to create a learning center where other students can gain hands-on experience in profitable and sustainable vegetable farming. "It's not just about crops," she said. "It's about building something that gives back."

As a young woman in a male-dominated sector, Florence's ambition has not always been welcomed. She has faced skepticism, underestimation, and the pressure to choose a more conventional path. But instead of retreating, she has used every challenge as a stepping stone, determined to prove that age and gender are not limitations, but unique strengths.

With exposure to best agronomic practices and knowledge from the classroom, Florence shares knowledge with peers, champions the importance of youth participation, and is building a strong foundation for future ventures in agribusiness.

"Agriculture is about empowerment. It's a way to create jobs, build businesses, and drive national growth," Florence declared.

Did you know?

Seventy percent of Nigeria's population is under the age of 30, yet many young people face unemployment or underemployment. Agriculture - particularly horticulture - remains an often overlooked sector, despite its vast potential for youth entrepreneurship and job creation. With the right support, including access to modern tools, training, and market opportunities, young people like Adejole Florence are redefining farming as a profitable, innovative, and socially impactful career. //

Building a Future in Nigeria with Vegetable Production and Digital Skills

In Dawakin Kudu, a farming community in Kano State, Nigeria, Saudat Kabir is redefining what it means to be a woman in the horticulture sector as she enjoys the income and respect that come with successfully cultivating tomatoes on her newly acquired plot.

Like many others in her community, Saudat initially did not see the real business potential in farming. That perspective changed in 2023 when the HortiNigeria program and its partners were introduced in her community. Through structured training on good agronomic practices delivered on demonstration plots, Kabir learned step by step how to raise healthy seedlings, space crops effectively, and control pests. She discovered the importance of using improved seed varieties and when to use mulch and trellising.

In 2024, Kabir made her first profit from her own harvest, earning ₦130,000 (approx U.S. \$85). With part of her earnings, she invested in goats to provide fresh milk for her family and diversify her income. Kabir remarked, “I have learned so much, and that knowledge has made me earn more ... to support my entire household. I am also more confident in the decisions I am making.”

Kabir's transformation did not end at her farm. With support from HortiNigeria, Saudat, along with nine other female entrepreneurs on the project, was nominated—along with nine other female entrepreneurs on the project—during the call for applications to the Digital Skills for Entrepreneurs training implemented by GIZ, GOPA, and Elevate Her Innovation Space digital transformation center.

She earned a certification in Digital Skills for Entrepreneurs (DSE), enabling her to showcase her fresh vegetable produce on social media platforms. This not only helps her reach buyers beyond her community but also strengthens her decision-making, boosts her competitiveness, and contributes to economic growth.

Saudat's success has made her a respected voice in the community, especially among women farmers, who now see her as a role model.

Equally inspiring is the ripple effect at home. Saudat's husband has become one of her biggest supporters, openly encouraging other men in the community to invest in women's training and empowerment.

Saudat's success shows the importance of appropriate support and resources – such as the training HortiNigeria offers on good agronomic practices and digital media. With these skills from HortiNigeria, its partners, and the belief and support of her family, Saudat is an example of how women can thrive as smallholder farmers in horticulture.

Did you know?

In Nigeria, mobile adoption among farmers is remarkably high - 96% of surveyed farmers in the North-West own a mobile phone, with 70% using them to purchase farm inputs and 65% to access market information (Akinwale et al., 2019). In the South-West, exposure to agricultural smartphone apps has driven adoption rates ranging from 43% to 58% among farmers, highlighting how rapidly digital tools are reshaping agricultural practices (Adegbite et al., 2024). //



Tackling Post-Harvest losses through Cold Storage Solutions



The partnerships facilitated by HortiNigeria have allowed Ecotutu to:

- ▶ Extend access to clean, renewable energy-based storage for rural and peri-urban farmers.
- ▶ Support smallholder profitability through extended shelf life and minimized spoilage.
- ▶ Strengthen youth-led agribusiness ecosystems in Ogun State through collaboration with local champions.

In recognition of its pioneering role in tackling post-harvest losses, Ecotutu was awarded Agro-preneur of the Year by the Netherlands Consulate in Nigeria. This international recognition celebrated the company's innovation and also positioned it as a credible player in advancing climate-smart solutions within the

In Nigeria's horticulture sector, small- and medium-sized enterprises (SMEs) are critical drivers of innovation. Yet without access to strategic markets and infrastructure, many operate far below their potential. This was the challenge for Ecotutu, a Lagos-based company founded in 2017. Focused on reducing post-harvest losses through solar-powered cold storage, Ecotutu began offering eco-friendly cooling solutions. However, the company struggled to break into critical markets due to space constraints and limited connections.

Things started to change in 2022, when Ecotutu participated in a business linkage event organized by the HortiNigeria program in Ogun State. The event brought together producers, traders, input suppliers, and innovators to facilitate partnerships. Ecotutu Chief Executive Officer Babajide Oluwase directly engaged with stakeholders from Mile 12 International Market, Africa's largest fresh produce hub, advocating for sustainable storage solutions that could reduce waste and protect market traders' income.

Shortly after, Ecotutu secured space to in-

stall a 10 metric ton solar-powered cold room at Mile 12. This marked the company's entry into a high-demand market and laid the groundwork for broader expansion.

With continued support from HortiNigeria, Ecotutu took its vision even further in 2023 and 2024, collaborating with two of the program's business champions to install two 30 metric ton cold storage facilities in Ogun and Oyo states. The first was set up at Soilless Farm Lab, also known as Eupepsia Place Limited, in Awowo and the second at the National Horticultural Research Institute (NIHORT) in Ibadan.

These installations are more convenient as they are closer to farmers' production sites, helping them reduce spoilage, stabilize income, and gain stronger control over market timing. With these storage facilities, farmers and aggregators can now manage surpluses more strategically and respond to price shifts without compromising product quality.

"There is a great opportunity for businesses like ours within the market, as many sellers experience losses due to the perishability of their goods," said Oluwase.

food system.

Ecotutu's journey is a powerful example of how innovation, coupled with the right partnerships, can scale sustainability. From market linkages to infrastructure rollout, Ecotutu is changing the narrative of access to cold storage facilities in Nigeria's horticulture sector.

In the future, Ecotutu plans to continue expanding the cold storage network in collaboration with other private sector actors, ensuring that climate-smart technologies become a standard feature in Nigeria's agricultural landscape.

Did you know?

HortiNigeria has cut down post-harvest losses by 83% in its intervention areas by introducing and deploying cold storage facilities and other strategies. Off-grid cold storage solutions, such as Ecotutu's solar-powered facilities, can extend the shelf life of fresh produce by up to 21 days, allowing farmers to reduce waste, sell at better prices, and boost their income. **///**

Breaking Barriers Through Financial Knowledge and Access

Since 2022, Kamilat Balogun has tended her modest farm of 1.5 acres in a remote area of Akinyele, Oyo State, with determination and an entrepreneurial spirit, nurturing a vision of transforming it into a thriving horticultural enterprise. Yet like many farmers across Nigeria, one element remained out of reach: financial security. Crop loss, pest invasions, and fluctuating markets left her vulnerable, and the dream of building a sustainable agribusiness began to feel distant.

In 2023, Kamilat learned from the HortiNigeria business champion WeFarm Hub in Oyo State about a financial capacity building workshop scheduled for later in the year in Abeokuta, Ogun State. Focused on unlocking opportunities for herself, Kamilat attended the workshop, unaware of the extent it would reshape her entire approach to vegetable farming. “The session was a gateway into the world of agricultural finance, demystifying everything from accessing credit to understanding crop insurance,” she recalled.

For the first time, Kamilat was introduced to structured financial systems tailored to farmers. She engaged with banks, insurers, and microfinance institutions, gaining insights into savings, loans, and – most eye-opening – insurance products designed specifically to protect farmers from climate- and pest-related risks.

“The idea of insuring my farm was something I never fully understood,” Kamilat admitted. “Even though I am educated, insurance seemed abstract. But now, I see it as a shield that lets me farm with confidence.”

At the workshop, Kamilat discovered how insurance could preserve her cultivating capital in the face of unforeseen events. She learned how to assess policies, navigate application processes, and evaluate coverage, empowering her to make informed decisions for her business.

Kamilat returned to her farm with knowledge and a plan to take action: she applied for crop insurance through one of the financial institutions with whom she had networked at

the workshop, and with her crops now protected, she has installed innovations, such as a drip irrigation system, on her farm.

The safety net of insurance has given her confidence to take calculated risks, knowing that a bad season will not break her.

With this positive mindset and her growing financial awareness, Kamilat took another bold step - to participate in the 2024 Access Bank Womepreneur Pitch-a-ton. Kamilat found herself among the winners, bringing home a prize of ₦1,000,000 (approx. U.S. \$651.45). This additional capital helped her to launch into 2025 by diversifying her produce and scaling her operations.

Crediting HortiNigeria for unlocking crucial opportunities, Kamilat is working her way toward total financial freedom and becoming a model of resilience and professionalism for other farmers, especially women, across her region. “I no longer fear the unknown - I’m prepared for it,” she concluded.

Did you know?

Introducing farm insurance to young Nigerian agripreneurs encourages them to see agriculture as a viable career. By reducing risk, insurance builds confidence to invest in innovative, high-value crops. //



Crate Rental: A Simple Innovation Cuts Losses and Creates Jobs

Since 2021, HortiNigeria has been working to build a sustainable and inclusive horticulture sector to boost food and nutrition security in Nigeria. One of the program's most significant challenges has been addressing post-harvest losses, which have now been reduced by an impressive 83% in program's intervention areas thanks to targeted strategies.

Instrumental to HortiNigeria's strategies are business owners such as Kabir Bala, who runs his own crate rental business and is a member of the National Plastic Crate Association.

Before venturing into the crate business, Kabir had been a vegetable trader at Lagos's Mile 12 International Market. He had seen, day after day, how farmers' produce spoiled before it ever reached the market, sometimes within just two to three days. "It was bad for the farmers, bad for customers, and bad for my business," Kabir remarked.

In 2023, Kabir connected with HortiNigeria,

which offered members of the National Plastic Crate Association an opportunity to expand their businesses through a tripartite partnership with Celplas and LECON Finance Company Ltd. (a subsidiary of Bank of Industry) to unlock funds to manufacture plastic crates, he scaled up. Before the partnership, he owned just over 2,000 crates but aspired to grow to meet the rising demand. With HortiNigeria's support, Kabir owns over 5,000 crates, renting them out to local farmers and aggregators for a small fee per use. "Before, in two to three days, tomatoes would start to rot before they got to market. Now, they arrive in better condition, sell faster, and I earn too," he said with a smile.

Kabir's business has grown so much that it has become a source of employment for others. What started with just two assistants has now grown to a team of over 20 staff across multiple states. Together, they operate a farm-to-market micrologistics system, delivering

crates to farmers and traders in various markets, collecting them after use, and keeping the cycle moving.

It may seem simple, but Kabir's business model addresses one of the biggest barriers in Nigeria's horticulture sector: post-harvest loss. And it does so while advancing multiple United Nations Sustainable Development Goals (SDGs): SDG 1, No Poverty; SDG 8, Decent Work and Economic Growth; and SDG 12, Responsible Consumption and Production.

For farmers, Kabir's success means reduced losses and higher profits. For Kabir himself, it means a stable income and a business he can keep growing. For the horticulture sector, it means better practices are catching on – not because they are enforced, but because they work.

That is what HortiNigeria is about: catalyzing real change in real lives. From large-scale policy work to small daily actions, such as renting a crate, it all adds up to something bigger – a horticulture system that works better for everyone.

Did you know?

There is a significant investment opportunity in plastic crates within Nigeria's horticulture sector. Meeting just 30% of the annual tomato production - estimated at 2.3 million metric tons - would require more than 34 million crates (HortiNigeria, 2025). This demand highlights a substantial market for investors, one that directly contributes to reducing post-harvest losses, improving produce quality, and increasing farmers' incomes. //



Knowledge Transfer: Bridging the Gap in the Horticulture Sector

At just 24 years old, Maryam Sadiq Ismail, a recent graduate of the Soil Science Department at Ahmadu Bello University and a mother of two, quickly realized something many overlook: there is a gap between classroom theory and the real-life demands of agriculture. During her internship as a farm manager at Macks Farm Nigeria Ltd., this disconnect became even clearer.

Maryam also recognized the untapped potential of agriculture to empower women, especially in vegetable farming; yet she also saw how many were held back by limited access to relevant information. Determined to bridge this gap, she committed herself to learning, growing, and giving back. That commitment led her to join the 2023 cohort of the HortiNigeria Sector Professionals Training of Trainers (ToT) program.

Through the ToT program's practical hands-on training, Maryam expanded her expertise in sustainable vegetable production, mastering skills such as calculating precise fertilizer ratios, applying integrated pest management techniques, and adopting innovations that reduce waste and increase yields.

But this program offered more than technical knowledge; it connected Maryam with a broader network of horticulture professionals and exposed her to real-world success stories across the value chain.

In December 2023, Maryam was selected among the top-performing professionals in the program to take part in a learning visit to Benin. There, she explored leading agricultural institutions such as the World Vegetable Center; the Genetics, Biotechnology, and Seed Science Unit (GBioS); and the Songhai zero-waste farm. These experiences opened her eyes to scalable, sustainable practices, including solar-powered irrigation, organic production methods, and seed innovations.

"I was impressed by their innovative irrigation systems using solar panels, their organic farming practices at Songhai, and the seed improvement and preservation techniques at GBioS. It all showed the powerful



role innovation can play to boost productivity," Maryam reflected.

Inspired and equipped, Maryam returned home determined to create impact. She began volunteering with Vertical Farm Ventures Ltd., where she led practical training sessions for over 30 women and young people in her community. Using demonstration plots, she showed that sustainable vegetable farming is ultimately a working solution in reducing the local vegetable supply gap.

Her training was not only about improving harvests; it largely focused on building a community of informed growers. She helped participants see how vegetable farming could be more productive, profitable, and sustainable.

Maryam's story is a clear example of the ripple effect that knowledge can create. With HortiNigeria's investment in her, a whole community of women and youth are now more informed, more confident, and more equipped to thrive in agriculture.

Her growing reputation as a local trainer is

shifting perspectives, helping others see horticulture as a viable and empowering path.

Maryam plans to expand her outreach. She believes that Nigeria's agricultural challenges can be best solved by local solutions, driven by local leaders, and she is ready to lead that change.

Did You Know?

When the World Vegetable Center was founded in 1971, its goal was simple but powerful: fight malnutrition with vegetables. Over the decades, it has developed and shared hundreds of improved vegetable varieties rich in vitamins and minerals (World Vegetable Center, n.d.). By strengthening local seed systems and teaching farmers how to grow nutrient-dense crops sustainably, WorldVeg is helping communities worldwide tackle hidden hunger and boost health. **///**

Reducing Waste and Creating Jobs in Kaduna State Through Value Addition

Nigeria has one of the largest youth populations in the world, yet their unemployment and underemployment remain persistent challenges. This reality continues to undermine progress toward several key United Nations Sustainable Development Goals (SDGs), including SDG 1, No Poverty; SDG 2, Zero Hunger; SDG 8, Decent Work and Economic Growth; and SDG 12, Responsible Consumption and Production.

One business helping to change that narrative is Simkay Foods Ltd., a growing agribusiness based in Kaduna State that specializes in vegetable processing and value addition. In 2023, Simkay Foods was equipped to expand its operations through strategic support from the HortiNigeria program.

After Simkay Foods received a grant from the African Development Bank (AfDB) to acquire solar dryers, an important step in ensuring energy-efficient processing and reduced food waste, HortiNigeria built on the opportunity by facilitating access to a facility at the Zaria Fertilizer Complex, which eased infrastructure constraints and enabled structured production. The company was also received a generator from HortiNigeria, which guarantees a stable power supply and minimizes spoilage during processing. Most significantly, HortiNigeria provided business-to-business linkages for Simkay Foods to a network of over 100 trained vegetable farmers, establishing a consistent supply of quality tomatoes, onions, and peppers for processing.

Simkay is now pioneering the use of UV solar dryers that will be installed directly in

farming communities. These dryers reduce logistics costs, create jobs in rural areas, and minimize post-harvest losses. Over the past 12 months alone, they have enabled the company to offtake over 250 metric tons of vegetables that would have otherwise gone

Nigerians, including women, in many roles, from sorting and processing to packaging and logistics. These jobs provide decent livelihoods and offer training, dignity, and financial stability.

“Knowing that people’s jobs depend on my ability to keep this business running is what keeps me going,” said Rejoice Usim, founder and Chief Executive Officer of Simkay Foods. “It pushes me to grow.”

The story of Simkay Foods shows that value addition does more than reduce post-harvest losses – it multiplies impact by creating employment, supporting smallholder incomes, and strengthening rural economies.

With continued investment and collabora-

tion, businesses such as Simkay Foods can drive a new era of youth-led, value-driven transformation in Nigeria’s horticulture sector, advancing national development while contributing meaningfully to the SDGs.



to waste, directly supporting farmers while strengthening the value chain.

These interventions helped Simkay Foods bridge the gap between smallholder production and formal markets, transforming what would have been waste into profits. Farmers now produce with confidence, recognizing their harvests will not go to waste and that they will be paid fairly for their effort.

“I’m using the best practices I’ve learned to help me get the highest yield possible so I can supply Simkay and earn more income. I’m happy to have a reliable market nearby that I know will buy from me,” remarked Abdulkadir Tahir, a vegetable farmer from Soba.

Today, Simkay Foods employs 25 young

Did you know?

Simkay Foods’ 60,000 metric ton climate-friendly processing plant runs on eco-efficient systems like solar dryers and cooling hubs, enabling over 20,000 smallholder farmers across clusters to boost their earnings through direct partnerships and input loan support. (Simkay, n.d.).

Zero Energy Cooling Chambers: Spreading Post-Harvest Innovation from Ogun to Kano

In Nigeria's hot climate, harvested vegetables can lose their freshness within hours, reducing quality for consumers and income for farmers. For many smallholders, the lack of affordable cold storage is a constant challenge, one that often leads to significant post-harvest losses.

The introduction of the Zero Energy Cooling Chamber (ZECC) to the HortiNigeria Learning Site at Sa'adatu Rimi University of Education in Kano, therefore, marks a breakthrough. First promoted in Ogun State in collaboration with Kaspharyn Solutions, a Business Champion under the program, this simple yet highly effective technology relies on locally available materials such as charcoal, bamboo, wood, and thatch to create a natural cooling environment. By harnessing the principle of evaporative cooling, the chamber extends the shelf life of vegetables by several days without electricity, thereby, reducing post-harvest losses, preserving quality, and increasing market value.

HortiNigeria identified this innovation during a visit to Kaspharyn Solutions at Odeda, Ogun State. It was subsequently promoted among other program partners such as Soilless Farm Lab in Awowo, where it was adapted into an improved model with the addition of tiles and an asbestos ceiling to enhance cooling efficiency. The innovation was later replicated at the program's learning site in Kano following a group field visit to Kaspharyn Solutions, ensuring its dissemination to a wider


audience, particularly smallholder farmers. At Sa'adatu Rimi University, agriculture students, youth groups, and sector stakeholders now have hands-on access to the chamber, learning not just how it works, but how to build and maintain one themselves.

The impact of the ZECC technology goes beyond technical know-how. Young people see firsthand how low-cost, climate-smart technologies can solve real problems in their communities. Local farmers visiting the site leave with practical solutions they can replicate at home. And for traders, the promise of fresher produce means better sales and reduced waste.

By bridging regions and bringing innovations closer to those who need them most, the ZECC at Sa'adatu Rimi University is

more than a storage solution; it's a dynamic classroom, an inspiration for climate-smart agriculture, and a step toward a more sustainable and inclusive horticulture sector in Nigeria.

Did you know?

Did you know that Zero Energy Cooling Chambers (ZECCs - also known as evaporative cooling chambers - were first developed in India in the 1980s (Roy & Khurdiya, 1985). These innovative, electricity-free storage units create a cool environment through evaporation, reducing temperatures by up to 18 °C, thereby extending the shelf life of harvested fruits and vegetables by 3 to 15 days (Rayaguru et al., 2010). 



Youth Leading the Way in Nigerian Horticulture



At just 20 years old, Irene Jacobs is redefining what it means to be a young farmer in Nigeria. Irene has long been passionate about agriculture, and now, as a senior at the Federal University of Agriculture, Abeokuta (FUNAAB) in Ogun State, she is specializing in agricultural extension and rural development. Motivated to farm smarter and grow faster with her own cultivation, she turned to horticultural crops, such as cucumber and amaranth, for their high value and potential for quick return on investment.

But even with her drive, Irene faced the same challenge many young farmers in South-west Nigeria confront: how to grow consistently, profitably, and sustainably in a region historically dependent on vegetable imports from northern Nigeria?

In 2023, Irene joined a HortiNigeria-supported FUNAAB Hub, one of 22 entrepreneurial hubs piloted in Ogun and Oyo states

that equip young farmers like Irene with access to innovations, training, and practical tools to increase productivity and reduce the region's dependency on the northern region for vegetables.

Through the FUNAAB Hub, Irene was introduced to a range of modern agricultural technologies that shifted her entire approach. Among the most impactful for Irene was the solar irrigation pump.

"This technology has given me and other entrepreneurial farmers in the hub a competitive advantage," Irene shared. "We no longer have to wait for the rainy season to irrigate our farms, which means we can produce vegetables year-round and ensure consistent income."

Irene also learned advanced seedling production methods involving seedling trays and coco peat, which are more effective than the traditional broadcasting method. Making this

change in her farming practice has allowed Irene to improve germination rates, reduce waste, and save time, setting a new standard for her small but growing enterprise.

Today, equipped with better knowledge, confidence, and tools, Irene is planning to expand into pepper farming. She also hopes to formalize her agribusiness and become a recognized voice among youth in agriculture, reaching agricultural extension workers and other young farmers through her new YouTube channel that shows her daily routines and practices. With growing confidence and experience, she also aspires to explore agritech solutions that can further streamline production and improve market access for smallholder farmers.

Irene's dream is to own a model farm that not only feeds her region but also inspires a new generation of farmers to

build profitable, sustainable careers in horticulture.

Irene's path to horticultural success illustrates the power of targeted support, especially when innovation meets youthful ambition. By investing in young visionaries such as Irene, HortiNigeria is helping to build a future in which Nigeria's horticulture sector is productive and driven by young entrepreneurs.

Did you know?

From greenhouse vlogs to farm diaries, young farmers are using digital media to change how agriculture is perceived. Irene Jacobs has joined this movement, sharing her horticulture journey on YouTube to inspire fellow Nigerian youth by blending global digital storytelling trends with local farming realities. Follow her at https://youtube.com/@nimi.the.farmer?si=Ep6L_XJRb5N2yBn /

Opeyemi Wasiu Ajibola

Cultivating Voices for Change in Nigeria's Horticulture Sector

From two small plots of land in 2013 to 8 acres of climate-smart farming today, Opeyemi Wasiu Ajibola has cultivated more than crops - he has cultivated innovation, and opportunity for his farming community, aboke village in Oyo State.


Rooted in Vision

As a second-year student at the Federal University of Agriculture, Abeokuta (FUNAAB), Opeyemi made a bold decision. While friends dreamt of corporate jobs, he knew his life would be built on the farm.

"There's no way humans can live without food. I knew farming was my field, my passion, and where I could make a real difference."

At first, his family thought he was wasting his education. "Maybe I didn't know what to do with my life, sitting in the bush," he said. But Opeyemi was determined. He saved from small ventures, bought land, and started with just two plots. With no reliable labor available, he cleared the land, built nursery beds, and installed irrigation himself.

It was back-breaking work, but he had youth on his side and a vision bigger than his circumstances.



**"WITH EIGHT PANELS
GENERATING 2,400 WATTS, I
CAN RUN MY PUMP RELIABLY
WITHOUT COSTLY FUEL. IT HAS
MADE MY FARM EFFICIENT,
SUSTAINABLE, AND
PROFITABLE."**

Innovation in Action

Today, Opeyemi's enterprise, Agricwas, operates on 8 acres and employs five permanent staff. He cultivates sweet corn, tomatoes, and cabbage, and grows cucumbers occasionally when the market is right.

His farm is designed for efficiency, with sequential planting that ensures weekly supply to restaurants and companies. The biggest transformation came when he installed a solar-powered irrigation system.

Previously, he spent nearly ₦432,000 a month on fuel, using up to 150 liters weekly just to keep his pump running. With solar power, those costs disappeared, and productivity increased.

"With eight panels generating 2,400 watts, I can run my pump reliably without costly fuel. It has made my farm efficient, sustainable, and profitable."

In 2025, this innovation earned him a global spotlight when CNN's Inside Africa featured his story, bringing his voice to an international audience.

Opeyemi's Story at a Glance

Expanded from 2 plots to 8 acres of climate-smart farming.

- ▶ Grows sweet corn, tomatoes, cabbage, and seasonal cucumbers.
- ▶ Employs 5 permanent staff and seasonal workers.
- ▶ Saved ₦4 million in 10 months by switching from fuel to solar irrigation.
- ▶ Harvested 20 cycles of sweet corn in one year.
- ▶ Has educated 30+ children at NutriFuture Academy.

HortiNigeria: A Catalyst for Growth

In 2022, Opeyemi won the HortiNigeria Youth Challenge in Oyo State. The climate-smart inputs he received boosted productivity and reduced the workload for his team. Even more importantly, the recognition gave him visibility across the horticulture sector, connecting him to new partners, mentors, and peers who broadened his network and opened fresh opportunities.

Beyond visibility, Opeyemi joined HortiNigeria's trainings, which gave him vital business skills.

"The program was an eye-opener, especially in the area of access to finance. I have learned the art of recordkeeping and the



critical dos and don'ts of running a business," he said.

Recordkeeping transformed Agricwas into an investable enterprise. For the first time, Opeyemi could track exactly how much seed, fertilizer, and inputs went into each plot - and measure real profits. This business discipline, coupled with his expanding visibility, positioned him as one of the most promising young agripreneurs in Nigeria.

Beyond the Farm: Nurturing Futures

But Opeyemi's vision has always extended beyond the soil. Disturbed by the lack of teachers and schools in Aboke village, where his farm is located, he and his wife founded NutriFuture Academy.

He once drove his children to distant schools every day because he did not like seeing them idle. Realizing this was not sustainable, he built an academy that now serves over 30 students, ages 2 and above, with four teachers providing both formal education and agricultural skills.

"My growth was possible because of mentorship. I can't be running a business here while the children around me waste away. I must also give back."

Even the village chief took notice - offering Opeyemi a chieftaincy title in recognition of his contributions.

Recognition and Inspiration

The CNN feature was not just a personal milestone - it was validation of years of hard

work. It opened doors to partnerships, speaking opportunities, and credibility with organizations like OCP Africa.

"The HortiNigeria program and opportunities like CNN's platform have transformed my farm and my life. I am grateful, and I am committed to passing on that impact to others."

Opeyemi is now widely regarded as a model for youth-driven, climate-smart agribusiness in Nigeria.

Future Plans

Opeyemi envisions Agricwas as more than a farm. He expects it to be a hub of innovation, training, and impact. In the next decade, he sees branches across Nigeria, exporting food internationally, and raising a new generation of farmers through NutriFuture Academy.

"I believe in Nigeria. Even if given money to japa (to flee), I would remain here. Our country is good - you can succeed here."

Did You Know?

Media platforms such as CNN's Inside Africa are helping to redefine agriculture for a new generation. By sharing stories of young innovators, they not only celebrate success but also change perceptions, showing that farming is about technology, entrepreneurship, and sustainability. This global visibility inspires more youth to see agriculture as a career of choice, not a last resort. //

Driving Private Investment Through Policy Reform in Nigeria's Horticulture Sector



Plastic crates are a proven solution for horticulturalists – durable, reusable, and perfect for protecting produce from bruising during transport. But for many small- and medium-scale agribusinesses, the up-front cost of crates remains a major barrier.

Accessing finance for crate procurement has traditionally been difficult, as financial institutions typically view lending to agricultural businesses as high-risk. This is where the Nigeria Incentive-Based Risk Sharing System for Agricultural Lending (NIRSAL) Credit Risk Guarantee (CRG) program plays a critical role: by covering a percentage of the lender's risk, it enables banks to extend loans with greater confidence.

Until recently, the CRG for plastic crates stood at just 30%, which limited the scale of lending. Through targeted policy advocacy, HortiNigeria worked with government stakeholders, financial institutions, and value chain actors to present a strong case for increasing the CRG to 50%. Using evidence-based data, HortiNigeria demonstrated that higher guarantee coverage would encourage more banks to finance crate purchases, leading to wider adoption and improved post-harvest handling across the horticulture sector.

In 2024, a formal memo proposing the CRG increase was submitted to the National Council for Agriculture, the highest regulatory body for the sector. The proposal was

approved, marking a significant policy milestone for horticulture in Nigeria.

The policy shift to a 50% CRG is a game-changer. Reducing lenders' perceived risk is expected to unlock significant private sector investment in crate manufacturing, leasing, and distribution. Agribusinesses and farmer groups can now more easily access affordable finance to buy or rent crates, improving product quality, increasing market value, and reducing losses.

For potential investors, the CRG increase signals a more secure and supportive environment. Local manufacturers can scale up production knowing there is a growing, finance-backed market. Financial institutions can expand their agricultural lending portfolio with reduced exposure. Farmers and aggregators can

handle produce more efficiently, boosting incomes and strengthening Nigeria's horticulture value chain.

By championing this reform, HortiNigeria has demonstrated how strategic policy engagement, backed by high-level government approval, can remove financial barriers, stimulate innovation, and build a more competitive, investor-ready horticulture sector.

Did you know?

The Credit Risk Guarantee (CRG) is a financial tool that protects lenders by covering part of their potential losses when they finance agricultural businesses. This reduces the perceived lending risk and encourages banks to lend more to farmers and agribusinesses. //

Deploying Strategic Partnerships to Address *Tuta absoluta*

Few pests strike such fear in the minds of Nigerian tomato farmers as *Tuta absoluta*. This tiny yet devastating moth can wipe out entire fields in weeks, causing huge losses for farmers and reducing the supply of fresh produce in communities. In some areas, infestations have been so severe that farmers have abandoned tomato cultivation altogether.

Recognizing the urgent need for action, HortiNigeria partnered with Afri Agri (<https://www.afri-agri.com/>) and Koppert (<https://www.koppert.com/>) to equip farmers with the knowledge and tools to address *Tuta absoluta* infestations. Together, they organized a series of interactive webinars that reached over 200 farmers, extension workers, and agribusiness service providers across the program's intervention states.

The sessions combined Afri Agri's local agronomic expertise with Koppert's proven biological pest control solutions. Farmers learned how to identify *Tuta absoluta* early, understand its life cycle, and implement an integrated pest management approach, which includes the safe and effective use of biological controls, pheromone traps, and improved monitoring practices that reduce reliance on harmful chemicals.

Designed to be highly practical, the webinars featured case studies and photos, enabling participants to easily apply the lessons to their own fields. Early feedback was encouraging, with several farmers reporting

that they could identify the pest for the first time and take preventive action before damage spread.

"With the information received from the webinar, many farmers are now equipped with the right knowledge to address this menace," said Dr. Abidemi, a Deputy Director at Ogun State Agricultural Development Pro-

gram (OGADEP). "They can spot it early and take the right steps to protect their farms."

To reinforce the training, Koppert recently provided pheromone traps to Tomato Jos, one of HortiNigeria's key partners, to help them prepare for the coming tomato season. These traps, introduced during the webinars, serve as both an early warning system and an effective first line of defense.

According to Sebastine Agada, East-West Seed Knowledge Transfer Foundation Technical Specialist, "In 2024, the infestation reportedly declined by over 90% on HortiNigeria *Tuta absoluta* demonstration plots in Kaduna and Kano states. The difference was clear: where the strategies were applied, the pest was under control."

By working together, HortiNigeria, Afri Agri, and Koppert have transformed a major threat into a manageable challenge. Beyond the immediate gains, this partnership is building a network of informed and well-equipped farmers who can share knowledge in their communities, ensuring Nigeria's tomato value chain is more resilient, productive, and prepared for the future.



Did You Know?

Under warm conditions, *Tuta absoluta* can complete its life cycle in approximately 24 - 38 days, enabling it to produce 10 - 12 generations per year, which makes infestations particularly difficult to control (IRAC, 2009). ▮

Leading Community Transformation with Demonstration Plots



Umar Hussain, a 42-year-old farmer and technician from Dawakin Kudu in Kano State, Nigeria, has taken bold steps to change his story, and his community's. With no formal education but possessing a keen desire to learn, he pursued solar and electrical certifications – skills he would later creatively integrate into his farming.

Since the age of 18, Umar had farmed alongside his father, cultivating cereal crops. Despite years of experience, traditional methods could only take him so far. Limited access to improved practices, erratic yields, and inefficient irrigation techniques continued to restrict growth. Like many farmers in Nigeria, he was seeking not just knowledge, but transformation.

Then, an opportunity arrived in 2021 when Umar discovered a HortiNigeria demonstration plot in his community, where he witnessed tomato farming in a new light.

Intrigued, he joined HortiNigeria's training sessions, absorbing each detail and learning techniques such as using raised beds, ensuring proper spacing between plants, and trellising. These methods all revealed a smarter, more efficient path to tomato production, and Umar mastered them all.

In 2022, HortiNigeria saw how he excelled and selected Umar as a Key Farmer, entrusting him to manage a tomato demonstration plot and mentor others. It was a defining moment for both Umar and his community.

Farmers from the surrounding villages of Angwan Maniki, Rimin Gawro, and beyond visited Umar's demonstration plot. Through practical demonstrations and peer learning, he introduced them to techniques such as integrated pest management, mulching, and trellising. After an outstanding delivery of his training sessions, Umar was named a Community Field Trainer, a role in which he

would continue to provide extension advisory to farmers after HortiNigeria's the program's implementation cycle.

In 2023, Umar embraced another productive course of action in his own farming when he installed a drip irrigation system, where his certifications in solar and electrical work came in handy resulting in better water use, healthier crops, and a significant yield boost. His tomato harvest exceeded 200 crates, earning him over ₦500,000 Nigerian naira (Approx. U.S. \$326.72) in profit – more than many community members thought possible.

Umar expanded his impact as a Community Field Trainer in 2024 when he offered extension advisory services to over 100 farmers, tailoring his approach to accommodate different learning levels and emphasizing inclusion by reaching women and youth farmers, who are often excluded from training opportunities.

For Umar, farming has become more than a livelihood – it is a means of change. His increased income has enabled him to enroll his children in a quality school, ensuring they have access to the education he never had. He has also purchased a vehicle, improving his ability to manage both farm logistics and community outreach.

Umar's most lasting achievement is the confidence he has instilled in others. Farmers he has trained now see innovation as accessible, not intimidating. Knowledge-sharing has become contagious: "Umar's guidance helped me increase my yield and income. His dedication inspires us all," shared Maniru Badamai, one of his mentees.

Did you know?

Farmer-led demonstration plots started over a century ago, pioneered by agricultural educator Seaman Knapp in the United States in 1903. His goal was to show cotton farmers the benefits of adopting best practices during a boll weevil outbreak. //



Igniting Innovation in the Horticulture Sector Among Youth

At 27, Nana Lawan Garba, a graduate in soil science from Kano University of Science and Technology, found herself in a tough situation. Despite years of study and a genuine passion for agriculture, she faced the same challenge as many young Nigerians: limited job opportunities and an uncertain future. She dreamed of earning her own income and building a career, but opportunities seemed scarce.

Nana's situation changed when a friend who had recently graduated from the Youth in Agribusiness: Enabling Scaling of Innovative Technologies for Sustainable Food Solutions (YAS) program told her about the program, delivered by the International Institute of Tropical Agriculture (IITA) in partnership with HortiNigeria. YAS, known for developing agribusiness hubs as incubation and acceleration centers for youth, joined forces with HortiNigeria to teach practical skills and provide access to resources on horticulture. Together, they are addressing youth unemployment by equipping young individuals with knowledge and skills to drive change in Nigeria's horticulture sector.

Determined to seize the opportunity, Nana applied for the October 2024 to April 2025 YAS cohort and was accepted after a competitive selection process. Her training took place at HortiNigeria's learning site at Sa'adatu Rimi University of Education, where

she received hands-on instruction in sustainable vegetable production, crop planning, pest and disease management, irrigation techniques, and post-harvest handling. For the first time, she could apply her academic knowledge in a real-world setting, raising seedlings, preparing farmland, and adopting innovations that make vegetable farming more productive and profitable.

Since completing the YAS program, Nana has launched a home garden comprising tomatoes and cucumbers, and she intends to supply the market with whatever she harvests. She plans to ultimately expand to a bigger farm, where she will begin to employ other young people over time.

For Nana, the YAS initiative was more than a training opportunity; it was a pathway to independence. Her success – both during and after the program – reflects a growing movement of young Nigerians gaining the skills, confidence, and connections to drive the future of the country's horticulture sector.

Did you know?

HortiNigeria has reached over 48,000 youths across its intervention states, equipping them with knowledge of new technologies and innovations. Youths like Nana Garba are now driving change in the sector while also creating employment opportunities. //

Fostering Rural Entrepreneurship in Nigeria Through Agro-Dealership

At just 32 years old, Dahiru Sunusi, an agro-dealer in Kano State, has built a business that strengthens Nigeria's horticulture value chain. Through his shop, he connects smallholder farmers to the inputs and advice they need to grow better harvests and secure their livelihoods.

With a diploma in agricultural science from the Leventis Foundation School, Dahiru began supporting farmers in 2017. He was passionate and technically skilled, but his business faced serious constraints: weak networks, limited capital, and a lack of business management expertise. As a result, his annual profits stayed below ₦1 million (Approx. U.S. \$651), and his customer base remained small. Farmers were forced to continue relying on uncertified inputs and only limited access to reliable extension services.

"Although I had technical knowledge," Dahiru reflected, "I didn't have the business skills or networking platform to grow my enterprise."

In 2022, Dahiru joined HortiNigeria's agro-dealership training. Through a mix of classroom and hands-on sessions, he gained practical skills in business management, customer relations, recordkeeping, and modern input supply techniques. The program also opened doors to trade fairs and networking events, where Dahiru connected with suppliers, fellow agro-dealers, and farmers' associations.

Equipped with new insights, Dahiru began applying strategies that quickly transformed his business. He introduced input credit programs for loyal farmers, improved his record-keeping, and tailored his advisory services to



farmers' specific crops and needs. By the end of 2024, his shop was attracting more customers than ever before, both locally and from surrounding villages.

This shift in business drove Dahiru's annual profits from less than ₦1 million (Approx. U.S. \$650) to over ₦4 million (Approx. U.S. \$2,600). He reinvested his earnings by purchasing a larger shop, stocking products from reputable suppliers, and creating two new jobs for local youths. Beyond wages, these youths are gaining ongoing technical training to become the next generation of agripreneurs.

Dahiru's success has extended beyond agriculture. With his increased income, he has purchased three plots of land for his family and plans to launch a tailoring business with his wife, strengthening their household resili-

ence and creating another source of rural employment.

"Now, I am running a profitable business and also helping farmers in my community achieve better harvests," Dahiru remarked. "When farmers succeed, the whole community grows."

Did you know?

Local input dealers are more than retailers; they are potential strategic business partners for international suppliers. Companies such as Koppert, East-West Seed, Rijk Zwaan, and Syngenta can work through agro-dealer networks in Nigeria to expand distribution of certified seeds, crop protection products, and fertilizers. //

The Sweet Taste of Innovation: Muhammadu's Success with Hybrid Seeds

For over 20 years, Muhammadu Murtala, a farmer from Minjibir in Kano State, has cultivated onion, pepper, tomato, and watermelon. Despite his experience and hard work, his initial reliance on local seed varieties had limited both his productivity and his income. Watermelons grown from local seeds, for example, offered low yields, poor shelf life, and little market appeal, selling for as little as ₦200 (Approx. U.S. \$0.13) per fruit. Like many farmers in his community, Muhammadu faced the frustrating reality that his efforts were not translating into meaningful returns.

In 2024, Muhammadu's farming career took a turning point when he was introduced to Sangria hybrid watermelon seeds on a HortiNigeria demonstration plot. He tried these hybrid seeds, and the results were remarkable: the hybrid variety not only germinated more reliably but also produced larger, sweeter fruits with better tolerance to common field diseases than the local varieties. Their longer shelf life reduced post-harvest losses, while their early maturity allowed Muhammadu to reach the market ahead of competitors.

Using Sangria hybrid watermelon seeds brought about a striking economic transformation for Muhammadu. He nearly doubled his yield per hectare, and his revenue per plot rose from around ₦20,000 (Approx. U.S. \$13.02) with local seeds to over ₦100,000 (Approx. U.S. \$65.10) with hybrids – a fivefold increase. While his local-variety watermelons fetched ₦200 (Approx. U.S. \$0.13) each, the hybrid fruits sold for ₦1,000 (Approx. U.S. \$0.65) or more each.

"I was shocked," Muhammadu recalled. "The taste, the size, the shelf life – it was all better. But what surprised me most was how much people were willing to pay. For the first time, I could see the value of a good practice in my hands."

Encouraged by this success, Muhammadu has become a local advocate for hybrid seeds, sharing his experience openly with other farmers in Minjibir. Already, several of his peers have begun experimenting with hybrids, inspired by his results. Through HortiNigeria's field days and agro-dealer linkages, farmers in his community are gaining confidence to invest in hybrid seeds and other modern inputs.

Muhammadu's success has tangibly improved his life beyond his own farming. With his increased earnings, he has purchased additional land so that his wife can begin cultivating, helping her directly position herself to take advantage of agribusiness opportunities. He is also reinvesting part of his profits to fund his children's education, ensuring they have broader opportunities beyond the fields.

Did you know?

The sweet Sangria F1 watermelon hybrid is prized by farmers for its early maturity (70-75 days), high yields, and large, uniform fruits weighing 7-10 kg each. It produces deep red, sweet flesh with excellent taste and longer shelf life, reducing post-harvest losses. Sangria F1 also shows tolerance to common field diseases, making it a reliable choice for farmers in Nigeria and across West Africa who want to earn premium prices in local markets. //



Strengthening Rural Businesses Through Structured Horticulture Supply Chains



For Hamisu Abdullahi, a 35-year-old from Jenau in Kaduna State, Nigeria, life has always followed a familiar rhythm. After finishing his junior secondary education, he stepped into the path set by his father, a seasoned transporter who had spent more than 60 years moving farm produce across the region.

From a young age, Hamisu learned the business while riding beside his father between Dutsen Wai and Kurmin Kogi, two key agricultural market sites in Kaduna State. Learning this job from his father helped him understand the market and the needs of both farmers and traders, prompting him to prioritize the need for produce to reach the market in good condition, even though his income and opportunities may not be perfectly predictable.

In 2023, Hamisu's business as transporter

became more structured when he was introduced to HortiNigeria through the National Association of Tomato Growers, Processors and Marketers (NATPAN), when the program partnered with Tomato Jos to launch an outgrower strategy designed to benefit 2,000 local farmers. In this transformative model, farmers would grow tomatoes, and Tomato Jos would guarantee a ready market by purchasing the produce directly.

For Hamisu, this initiative was an opportunity to work within a reliable system. He was contracted to transport tomatoes from farms in Kubau straight to the Tomato Jos processing facility in Igabi. Unlike the traditional market runs, where prices could fluctuate and demand could be unpredictable, this arrangement came with certainty.

Over the course of the supply period,

Hamisu delivered four truck-loads of tomatoes, each carefully packed with about 200 crates weighing 25 kilograms each. He reported the total value of their transportation services to be nearly ₦500,000 (approx. U.S. \$325).

The income stood out to Hamisu, but importantly, so did the stability. The guaranteed market meant there were no wasted trips and no bargaining under pressure. He could plan his work, manage his time, and see the results clearly in his earnings.

"This was different," Hamisu reflected. "The market was waiting for us. We just had to deliver, and we knew we would be paid."

The HortiNigeria program opened Hamisu's eyes to a new way of doing business – one that brought steady income.

In helping to build a viable tomato value chain in Kaduna State, he was part of a system that worked effectively and efficiently, for himself and for others involved.

Did you know?

The cost of transporting tomatoes in Nigeria can increase prices by more than 400% between farm gates and destination markets. For example, a large basket that sells for ₦7,500 in Kano or ₦8,000 in Kaduna is resold for an average of ₦39,500 in Benin and as high as ₦53,500 in Port Harcourt. Streamlining logistics and reducing levies could make tomatoes—and other fresh produce—more affordable for Nigerian households (HortiNigeria, 2024). ▮

Strengthening Small Businesses to Build an Inclusive and Sustainable Horticulture Sector

For Aminat Sani, a 35-year-old mother of four from Kano State, Nigeria, entrepreneurship began in the kitchen. While preparing meals for her family, Aminat often made tomato paste, a staple in local soups. Neighbors who tasted the product always asked for more, and soon, demand outgrew what she could supply. What started as a simple recipe quickly revealed itself as a business opportunity.

As Aminat explored the tomato value chain, she discovered a striking reality: thousands of tons of fresh tomatoes in her region were being wasted every year due to poor storage and limited processing facilities. Determined to turn this waste into value, she founded Mix Condiment Paste in 2014 as a registered business after winning a grant that gave her visibility and seed capital. With years of steady growth, the enterprise was formally upgraded to a limited liability company in 2021.

In 2022, HortiNigeria invited Aminat to collaborate with the program – support that proved instrumental for her next stage of growth. Through this collaboration, she participated in business development training on financial management, recordkeeping,

and quality standards; product development and food safety sessions; and trade fairs, food fairs, and exhibitions that boosted her product visibility and market connections. She also engaged in networking and stakeholder forums, which helped her build lasting partnerships.

Today, Mix Condiment Paste is more than a food business; it is a market anchor for over 100 farmers from Bichi, Kumbosto, and Dawakin Kudu. They supply her facility with fresh tomatoes, peppers, and onions, which allows them to enjoy stable income streams and reduced post-harvest losses.

With this steady supply, Aminat's company has scaled impressively. The facility can process 500 kilograms of fresh tomatoes, peppers, and onions per batch, running two batches daily, and can produce 3-3.5 tons of paste every month, depending on raw material availability and demand. This not only reduces waste but also creates a guaranteed market for local farmers.

Beyond her supply chain, Aminat has built a growing workforce. Mix Condiment Paste employs 12 people, including production staff, quality control specialists, and administrative personnel.

"From my kitchen to the factory, I am now serving my state – creating jobs, benefiting farmers with a guaranteed market, and providing families with nutritious food," Aminat reflected.

Aminat and her team are determined to expand the company's impact. Plans are underway to increase production capacity, introduce 70-gram sachet packaging for affordability, and establish a solar-powered centralized drying and processing hub to further cut post-harvest losses.

Through her vision and the collaboration with HortiNigeria, Aminat shows how strengthening small businesses can empower farmers, create markets, and drive transformation across Nigeria's food systems.

Did You Know?

Nigeria is Africa's second-largest tomato producer after Egypt, cultivating more than 2.3 million metric tons annually. Strengthening small businesses like Mix Condiment Paste helps turn potential post-harvest losses into value - reducing waste, creating jobs, securing farmer incomes, and transforming markets for a more inclusive and sustainable horticulture sector. //



Sterling and HortiNigeria partnering to Empower Agripreneurs



In 2023, when Sterling Bank held its AgroPitch competition, Baliquees Sa-laudeen-Ibrahim almost did not apply. The competition was designed to offer agribusiness entrepreneurs the opportunity to promote their innovative business solutions. Baliquees eventually submitted her entry on the last day, with little expectation that it would be successful. On the day of the pitch, she stood among hundreds of competitors. However, out of more than 800 applicants, Baliquees emerged as the winner, securing the grant and access to a facility with the bank.

Green Republic Farms, Baliquee's farm located in Olokuta Village, Oluyole LGA of Oyo State, along the Lagos-Ibadan Expressway, became the base from which she began to scale. The grant enabled her to introduce sustainable greenhouse farming practice to the existing controlled-environment open field practice, while enhancing horticulture cultivation. "We only had a demo greenhouse and our controlled environment open field before winning the grant that also enabled us access facility from Sterling," she explained. "With the funds, we purchased three new greenhouses, which gave us the chance to improve our cultivation in a more resilient way."

But the support from Sterling Bank went far beyond the prize. The financial institution checked in regularly to monitor her progress and encourage her growth, ensuring that she was never left to navigate the journey alone. "I think of Sterling Bank as a farmer's best friend," Baliquees said, "because they stood by us during the good and bad times."

The award also included a scholarship to the Agribusiness Management Program at the Lagos Business School, where she sharpened her business skills and gained new strategies for growth that is now leading Green Republic Farms to the next level. The experience broadened her outlook, connected her with mentors and peers, and helped her position her farm as a credible enterprise.

It was after this win that Baliquees was introduced to HortiNigeria. The program helped her fast-track the process of accessing her prize. With HortiNigeria's backing, she gained new visibility that opened doors to further funding and partnerships. "I am so grateful for my partnership with HortiNigeria," she said. "The team is always ready to support, advice and provide as much help as possible with swift responses."

Like many agripreneurs, Baliquees faced her share of obstacles. Security challenges, theft, and the lack of skilled workers made farm operations difficult in the early days. "But we are mastering the system," she reflected. "Now we have security at the farm, and we are building a team of competent, trusted, and committed staff." These measures have given Green Republic Farms a stronger foundation to grow and protect its

investments.

Storytelling has been one of Baliquees's most powerful tools. She has used it to share her journey, the challenges, the wins, and the lessons learned in entrepreneurship in a way that changes the narrative about women and youth in agriculture, especially horticulture. It was also one of the strategies that helped her stand out during the AgroPitch competition in 2023, making her vision real and relatable to judges and stakeholders.

After the SheSustain Acceleration program, Baliquees emerged as one of the top finalists; winning a funding that contributed to constructing their fourth greenhouse.

In 2024, Baliquees was among the 26 Agripreneurs who won the first-ever Agrithon by the Lagos State Ministry of Agriculture and Food Systems. Systems, showcasing the importance of her work in cultivating fresh and nutritious peppers and vegetables closer to Lagosians while cutting down on post-harvest losses and transportation emissions. Green Republic Farms supplies its harvest; 90% of its produce entering Lagos weekly.

Baliquees work and advocacy continue to gain recognition. In 2025, she was selected as one of the finalists for the Women Agripreneurs of the Year Award (WAYA) at the Africa Food Systems Forum in Dakar. Baliquees emerged as the winner of the West Africa Region of the Young Women Agripreneurs Rising Star Category, joining other women whose efforts are transforming food systems across the continent.

Today, Baliquees is expanding her agribusiness on over 15 acres of land and four greenhouses, cultivating all types of peppers and vegetables with future plan of processing, ensuring value addition and consistently supplying direct customers, open markets, and corporate clients. In the near future, Green Republic Farms aims to carve a niche for itself in the peppers value chain, producing year-round and serving as a reliable supplier across Nigeria. ▀

Growing Nigerian Farms and Livelihoods with Improved Access to Finance



For years, smallholder vegetable farmer Buhari Bello from Dawakin Tofa in Kano State struggled with the same challenge faced by many farmers in Nigeria: lack of access to finance. Without credit, he could not expand his farming operations to improve yields and income. Many financial institutions considered it too risky to lend to farmers in his position, leaving his ambitions to expand stalled.

In 2023, HortiNigeria facilitated a linkage between Buhari, along with other members of his producer organization, and LAPO Microfinance Bank. For the first time, Buhari was able to access an agricultural loan tailored to smallholders. With a loan of ₦800,000 naira (Approx. U.S. \$520.69), Buhari expanded his farm from 1 to 2 hectares and invested in productivity-enhancing inputs. With more land and better inputs, his yields doubled and boosted his

income. HortiNigeria also provided training on financial literacy, which equipped him with the tools to manage his loan responsibly, in addition to training on better production to keep boosting his yields and maintaining his farm.

Buhari reflected, “I am grateful for this opportunity. Before, I did not know I could successfully access a loan or even insure my farm. Last season, I lost money because I wasn’t insured. Now, I know better. With this knowledge and support, I can feed my family better, take care of them, and grow my business as a farmer.”

The partnership has also been valuable for LAPO. Working with organized farmer groups supported by HortiNigeria reduced lending risks and opened a new customer base in the horticulture sector. Jacob Danjuma, Agribusiness Developer at LAPO, explained, “Since 2023, we have worked with

HortiNigeria to support farmers, and I am happy to see repayment rates remain strong.”

Buhari’s story demonstrates what happens when the right partnerships come together between farmers and financial institutions: farmers gain access to credit, increase productivity, and secure their livelihoods, while financial institutions lower their risks and strengthen their role in the sector.

Did you know?

Over 80% of smallholder farmers in Nigeria lack access to formal credit, and the estimated financing gap in the horticulture sector ranges between ₦400 billion and ₦600 billion (over U.S. \$260 million to over \$390 million). //

Bridging the Financial Gap Between Farmers and Financial Institutions



In 2009, Lawrence Kehinde, an entrepreneurial farmer in Ogun State, ventured into vegetable production, focusing on tomato and pepper. From the start, he faced a major challenge: lack of access to finance. Without credit, he could not afford the quality inputs and technologies needed to expand his farm operations.

Fast forward to 2024, and Lawrence's story has changed. Through HortiNigeria's facilitation, he successfully accessed, for the first time, an agricultural loan of ₦1 million (Approx. U.S. \$650.79) from FCMB Microfinance Bank, tailored specifically for small-holder producers. With this financing, he worked with other farmers in his entrepre-

neurial hub to bulk-purchase inputs such as improved varieties of seed for tomato, pepper, and sweet corn, lowering costs and increasing efficiency.

Combined with HortiNigeria's support in water management, the improved inputs translated into remarkable results. Lawrence's yields increased significantly, giving him a return on investment of over 200%. He also participated in training on recordkeeping and was equipped with a farm logbook—tools that helped him manage credit well and run his farm like a successful business.

Reflecting on his experience, Lawrence shared, "Access to credit has boosted my productivity. I am happy that banks are becom-

ing more confident in lending to farmers like us, giving us room to grow."

For FCMB Microfinance Bank, the partnership has proven both enlightening and valuable. Timothy Bamise, Agribusiness Officer for FCMB, explained, "A major challenge in lending to the sector is lack of documentation. But working with HortiNigeria stakeholders was easy because the farmers had been trained and made bankable, with proper records. Prior to our engagement with HortiNigeria, we did not operate in this space."

Through partnerships like this one linking Lawrence and his peers with FCMB

Microfinance Bank, HortiNigeria has demonstrated that farmers, once excluded from finance, are reliable borrowers if equipped with the right knowledge and opportunities.

Did You Know?

Financial inclusion extends beyond having a bank account; it involves enabling people to access and use a wide range of financial products and services, such as loans, insurance, remittance, and financial literacy tools, that allow them to invest in, grow, and protect their futures. //

Recordkeeping Builds Stronger Businesses for Agripreneurs

For many smallholders, entrepreneurial farmers, and agro input dealers in Nigeria, one of the less conspicuous but most critical barriers to growth has historically been the absence of proper recordkeeping. Without accurate records, farmers cannot track production costs or measure profits, while agro-dealers struggle to monitor sales, manage inventory, and demonstrate creditworthiness when applying for loans.

To close this gap, HortiNigeria introduced targeted training on recordkeeping as part of its financial inclusion efforts in the various states of program implementation. These sessions went beyond theory, equipping participants with practical tools to track income, expenses, input use, and sales. Farmers learned to record planting dates, input costs, yields, and sales revenue, while agro-dealers practiced methods for managing inventory, monitoring cash flow, and documenting customer credit.

Farmers who once operated blindly now have clear insights into their businesses.

"Before, I never knew exactly how much I

was making. After HortiNigeria's training, I started writing down my costs and sales. Now, I know my profit and I can show this to a bank when I need a loan," shared Saidu Yakubu, a farmer in Kano State.

For agro-dealers, the training has proven equally impactful. Ifeoluwa Oyeyemi, an agro-input dealer from Kano State, explained: "With proper stock records, I can see which products move fastest and which ones need promoting."

These new practices are also unlocking access to finance. Financial institutions, once hesitant to lend, are now more willing to work with farmers and dealers who can present reliable records. This documented credibility has opened doors to loans for seeds, fertilizers, irrigation equipment, and business expansion.

According to Friday Nwokolo, Head Business Development at FCMB Microfinance Bank reflected, "When a farmer or dealer shows us their records, it improves the confidence we have in the business, recognizing that lack of documentation has always been

a challenge with businesses in the sector. We can see their capacity to repay, and that changes everything."

By fostering a culture of recordkeeping, HortiNigeria is strengthening financial literacy and laying the foundation for more resilient, business-minded farmers and agro-dealers. This simple yet powerful practice is helping stakeholders across the horticulture value chain grow stronger, operate more transparently, and connect more easily to new opportunities.

Did You Know?

Recordkeeping dates back more than 7,000 years to ancient Mesopotamia. Early accounting records found in Babylon and Assyria show lists of expenditures and goods traded. Farmers of that time used simple methods to track the growth of crops and herds, proving that the need to keep accurate records has always been at the heart of farming as a business. //



Making Farms Safer Through Market-Driven Solutions

Muhammed Bukhari, a 28-year-old young man from Sabon Gari in Kaduna State, Nigeria, once saw his dream of becoming an agricultural professional cut short. Although Muhammed had enrolled in the National Certificate in Education (NCE) program to study agriculture, financial constraints forced him to drop out. Yet, he never lost his passion for farming.

As a teenager, Muhammed learned about spray service provision from a friend, driven by the pest challenges affecting livestock and crops in his community. For years, he worked from farm to farm, with limited knowledge of safety practices or modern techniques.

That changed in 2024, when Muhammed learned about HortiNigeria. He joined the program's training on spray service provision, where he gained practical skills on us-

ing personal protective equipment, accurately measuring pesticides, and identifying genuine versus counterfeit agro-inputs. "My knowledge has expanded immensely," Muhammed said, reflecting on the training.

With upgraded skills, Muhammed reshaped his trade into a professional business. He now ensures proper use of protective gear and educates customers on safe practices, charging ₦5,000-6,000 per hectare compared to just ₦2,000-3,000 before the training. Farmers quickly began to notice the difference and have reported healthier crops and fewer losses.

HortiNigeria integrates private input suppliers such as Miagro into its spray service provision training model. This has allowed Muhammed to extend his work beyond individual farms. These private input suppliers

connect service providers like Muhammed with their networks of agro-dealers, who in turn refer their customers to the trained service providers. This system benefits farmers through safer services, strengthens the spray service providers' businesses, and boosts input sales for suppliers. The approach marks a critical shift from short-term interventions to a market-driven model that embeds professionalism and safety into the agriculture sector.

Muhammed envisions expanding his enterprise into a formal company that delivers spray services and structured training for youth. His journey illustrates how knowledge and opportunity can catalyze not just personal growth but systemic change. ▮





Strengthening Farmer Voices in Nigeria Through Association Development

In Nigeria's South-West, vegetable farmers once exclusively worked in isolated pockets across the country. With no representation, they paid full price for inputs, struggled to find reliable labor, and watched cheaper imported produce undercut their prices. Opportunities often bypassed the region because farmers were not organized into a single group or body. Even when support programs reached them, promised inputs sometimes failed to materialize. As one farmer reflected after nearly a decade in the sector, the issue was not effort; it was organization and voice.

To address these challenges, HortiNigeria supported vegetable farmers and sellers in forming the South-West Association of Vegetable Farmers and Sellers (SWAVFS), a unified platform that works to organize scattered farming efforts in the region. HortiNigeria convened early meetings and invested in the association's foundation by training leaders

and members in governance, finance, and business models, first in Ogun and Oyo. SWAVFS further scaled this virtually across the remaining South-West states.

By 2025, SWAVFS has grown to roughly 3,000 members across six states. Under a new president, 35-year-old Abdul-Azeez Awaliya, the association has adopted a simple rule for the first year: no dues or fees; deliver value first. Monthly meetings sustained momentum while a new membership database portal began onboarding more farmers and positioning the association to credibly engage with state and federal institutions.

"HortiNigeria has been a transformation to the vegetable farmers' culture in the South-West," declared Awaliye.

Backed by HortiNigeria, SWAVFS has advanced to provide structured access to knowledge on best agronomic practices. The partnership amplified the association's voice through events, dialogues, and radio,

and notably proved its value in 2024 when SWAVFS led region-wide awareness campaigns on the tomato pest *Tuta absoluta*, helping farmers recognize, prevent, and manage outbreaks to protect yields and livelihoods.

Momentum continued in 2025 as the government recognized SWAVFS as a channel for delivering farm inputs, clearly indicating the association is gaining the attention it requires from institutions. To shift pricing power toward farmers, the association also signed memorandums of understanding with private aggregators for fairer prices and dispute resolution while working with state governments to secure farmer-run market spaces where members sell directly at farmer-set prices. Finally, to address farm labor needs, SWAVFS is advancing light mechanization and brokering access to equipment on subsidized or installment terms with governments, non-governmental organizations, and private partners.

SWAVFS now aims to cement its role as the recognized channel for reaching South-West Nigeria's vegetable farmers by completing its member database, expanding installment-based input and equipment access programs, securing state-backed market spaces, and turning partner conversations into signed, farmer-centered programs. The goal is simple: when opportunity comes, it should meet organized farmers who can act together.

From isolation to organization, from one-time support to structured access, the efforts of SWAVFS are organizing solitary farming endeavors into a stronger, fairer horticulture economy for farmers in Nigeria's South-West.

Did you know?

The Netherlands, one of the world's top agricultural exporters, owes much of its success to strong farmer associations and cooperatives. Organizations such as FrieslandCampina show how collective action can give farmers direct influence in global markets. By pooling resources, sharing knowledge, and advocating together, Dutch farmer associations have transformed small-scale farms into a powerful, internationally competitive sector, proving that unity is key to success. //

Addressing Soluble Fertilizer Accessibility Challenges with Strategic Partnerships

For years, fertilizer availability and accessibility have remained critical challenges for Nigerian farmers, particularly in the horticulture sector. High costs, inconsistent supply chains, and limited access to specialized fertilizers have made it difficult for vegetable farmers to maximize yields and maintain commercial viability. The challenge has been compounded by the national ban on nitrogen, phosphorus, and potassium (NPK) fertilizers, which severely disrupted the importation of soluble fertilizers, a vital input for vegetable production, especially in controlled environments like greenhouses.

In response, HortiNigeria leveraged partnerships to find local, sustainable solutions. Working with Candel Company Ltd., a Nigerian agrochemical and fertilizer producer, and

Kartlos Farms, a commercial farm in Ibadan, Oyo State, the program piloted a new locally produced soluble fertilizer called Candel Foliar Plus Complete 12-6-6+TE, which was specifically formulated to meet the fertilizer needs of vegetable farmers.

The pilot trials, which were carried out at Kartlos Farms, involved over 500 smallholder farmers from the Akufo Farm Settlement – an agrarian community known for tomato production – and compared the performance of Candel's fertilizer against conventional fertilizers.

The results were promising, showing that Candel Foliar Plus Complete, enriched with micronutrients and bio-stimulants, significantly boosted vegetative and reproductive growth in tomato crops. Additionally, tomato yields reached 3.44 kg/m², far outperforming yields from conventional fertilizers,

which ranged from 1.80 to 1.92 kg/m². The incidence of blossom End Rot (BER), a major issue for tomato growers, dropped markedly over the course of the trial, improving both yield and marketability.

Despite initial challenges, such as labor shortages and early BER, the trial demonstrated the long-term productivity benefits of adopting the locally produced soluble fertilizer. Farmers now have access to a cost-effective alternative, reducing dependency on expensive imports and strengthening Nigeria's local input systems.

Stakeholders hailed the pilot as a breakthrough. According to Odeyemi Mayowa of Kartlos Farms, this partnership has solved the problem of accessibility to soluble fertilizer. Echoing this assertion, Charles Anudu, Chief Executive Officer of Candel Company Ltd., declared, "We were happy to do this, producing a tailor-made product for vegetable farmers ... The results have been outstanding, and we are looking forward to scaling this up, expanding to new markets."

By facilitating this partnership and supporting farmer-led trials, HortiNigeria has shown how collaboration can turn policy restrictions into opportunities for local innovation. The introduction of a locally produced soluble fertilizer is a technical win, but more importantly, it is a considerable step toward strengthening local businesses and improving food and nutrition security in Nigeria.

Did you know?

Micronutrients such as zinc, iron, and manganese are especially effective as fertilizers when applied through foliar sprays, since it is harder for roots to absorb them from certain soils. //



Creating Markets Through Digital Apps



In 2022, behind a hostel at the Federal University of Agriculture, Abeokuta (FUNAAB), rows of vegetables sprouting in bags began to draw curious glances. For most, it looked like a hobby. For Samuel Oyediran, it was survival. Determined to pay his way through school, Samuel turned a small corner of bare ground into his first farm and sold what he harvested.

Samuel's vegetables quickly became popular among students. On market days, word spread fast, and his produce often sold out with-

in hours. But Samuel was not content to rely on chance or word of mouth. He joined WhatsApp groups and student networks to announce harvest times and prices, creating a buzz and building a loyal customer base. What began as a small hostel garden transformed into a real business.

In 2023, Samuel connected with the HortiNigeria program through its hub at FUNAAB, where he met Seyi Awolola, a HortiNigeria coach and the Chief Executive Officer of OLED Farms. With guidance on production, finance, and market entry, Samuel began to sharpen his agribusiness skills. It was more than just training; it was the moment that changed the direction of his journey.

"Through the hands-on training, improved production practices, and wider network opportunities we gained, our team has been able to transform knowledge into action," Samuel explained.

Together with his peers, Samuel helped set up demonstration farms, where learning moved beyond the classroom into the field. There, participants could observe and implement good agricultural practices. Over time, Samuel and his team trained more than 2,000 young people, including women and rural dwellers across Southwest Nigeria. One of the biggest changes came from irrigation support from HortiNigeria. It enabled Samuel to scale from a small backyard setup into a tech-driven demonstration farm. With this, he moved into larger-scale production, cultivating cucumber, habanero pepper, tomato, sweet corn, and okra.

After graduating from FUNAAB in 2024, Samuel fully embraced agripreneurship. With his level of earnings, he no longer worries about basic expenses. Samuel is supported by structured market linkages with organizations such as Pricepally, a digital platform that connects farmers directly to urban consumers.

"Though I started farming just to survive, I am now equipped to live well while feeding people with nutritious foods," Samuel stated.

Samuel's growth is not only measured in his revenue but in the lives he continues to influence. Like Samuel, thousands of young people in Nigeria now see agriculture as a real opportunity.

Did you know?

Nigeria is home to a growing network of Federal Universities of Agriculture dedicated to advancing agricultural research, education, and innovation. They include the Federal University of Agriculture, Abeokuta in Ogun State; Federal University of Agriculture, Makurdi in Benue State; Michael Okpara University of Agriculture, Umudike in Abia State; Federal University of Agriculture, Zuru in Kebbi State; Federal University of Agriculture, Bassam-Biri in Bayelsa State; Federal University of Agriculture, Mubi in Adamawa State; Federal University of Agriculture, Iragbiji in Osun State; and the Federal University of Agriculture, Oke-Iho in Oyo State. //

Sustaining Year-Round Vegetable Trade in Nigeria Through Farmer-Offtaker Partnerships

For more than three decades, Ibrahim Shehu Usman has been a fixture in the vegetable trade in Kano State. Known today as one of the most trusted offtakers at Yankaba Market – the largest market hub for perishables in northern Nigeria – his journey has not been without challenges.

Despite his excellent reputation, Ibrahim's business once faced a certain persistent challenge: seasonal scarcity. During the off-season, when farmers could not produce consistently, he often ended his workdays with limited income. This inconsistent supply strained his abil-

ity to meet the demand of loyal customers and placed pressure on his family's livelihood. "For years, there were months I simply could not get enough produce to sell," Ibrahim recalled.

That changed in 2023, when Ibrahim connected with HortiNigeria through a sensitization effort led by the program. The program linked him with trained smallholder vegetable farmers in Kano and Kaduna who had learned new practices, such as using hybrid seeds and improved irrigation methods. With this support, participating farmers were able to grow beyond the traditional season, creating a reliable, year-round supply of vegetables for offtakers like Ibrahim.

According to Ibrahim, shortages do not define his trade anymore since he obtains a more consistent supply of sweet corn and tomatoes from program-linked farmers. He now purchases an average of 1,000 cobs of sweet corn weekly, paying between ₦200 and ₦400 naira per cob (Approx. U.S. \$0.13 and \$0.26), depending on the season. This consistency has transformed his business. "Now, I don't worry about gaps in supply. My customers know I will always have fresh produce," he remarked.

The economic impact goes beyond business figures: with access to a consistent supply of vegetables, his household enjoys nutritious foods, and with his increased income, Ibrahim has been able to send his children to private schools. "I have been blessed," he said proudly.

Ibrahim also plays an important role in maintaining the farming ecosystem. He helps farmers access improved hybrid seeds, particularly from Dutch companies such as East-West Seed, ensuring higher yields and better-quality crops. By connecting farmers to markets, and markets back to farmers, he has become a critical link in the value chain.

Ibrahim hopes to expand his network of farmers and continue to strengthen the trust between producers and offtakers. His story shows how reliable connections, supported by programs like HortiNigeria, create thriving businesses across the sector.



Did you know?

Established in the early 1980s, Yankaba Market is one of the largest markets for perishable produce, specifically vegetables, in Northern Nigeria. ▮

Tomato Wine: A Solution to Extend Shelf Life and Expand Markets

In Nigeria, vegetable farmers often face a frustrating reality: a bumper harvest can still mean financial loss. When market prices crash or fresh vegetables are not sold quickly enough, perfectly good produce spoils before it can reach consumers.

For years, this cycle of post-harvest loss has eroded farmers' incomes and discouraged investment in the sector. At the National Horticultural Research Institute (NIHORT), however, researchers intend to break this cycle.

NIHORT scientists have developed a unique solution: tomato wine. By processing surplus fresh tomatoes into a shelf-stable, value-added product, they have created a new market pathway for farmers – transforming excess produce into a premium beverage with a longer shelf life and year-round sales potential.

However, introducing such a novel product to consumers is not without challenges. Tomato wine is unfamiliar, and like any new product, it will require visibility, credibility, and demand to succeed. Thus, HortiNigeria has stepped in to facilitate business linkages and identify ways to boost the product's marketability.

So far, tomato wine has been featured at agricultural fairs and exhibitions, including the 2023 Lagos State Agro Fair, where thousands of visitors had the chance to sample the beverage and learn about its potential to reduce waste and generate new income streams for farmers.

To build on this momentum, HortiNigeria is working to scale up promotion through dedicated radio talk shows and targeted social media campaigns. These platforms will provide opportunities for NIHORT experts and partners to raise awareness, address consumer questions, and introduce tomato wine to wider and more diverse audiences. Plans to engage retailers to stock the product are also underway.

For farmers, this means fewer losses and more reliable income. The collaboration between NIHORT and HortiNigeria shows how pairing innovations with market linkages can turn agricultural challenges into new business opportunities. For HortiNigeria, this is another step toward building a sustainable and inclusive horticulture sector.



Did you know?

Unlike grape wine, tomato wine is particularly rich in lycopene - a powerful antioxidant associated with reduced risk of cardiovascular disease and certain cancers. Fermentation enhances the flavor but also makes some of these bioactive compounds more available, turning tomato wine into both a functional and enjoyable drink. //

Building Knowledge to Boost Agro-Dealer Business Growth



around 100 farmers weekly, up from 20 previously. This growth has significantly boosted his revenue and restored confidence in the business.

Beyond classroom training, Jibril also took part in a demonstration of Apex-10, a biological enhancer promoted by Selema Agro in collaboration with HortiNigeria. The experience gave him hands-on exposure to innovative products and positioned him as a local champion of sustainable solutions. Today, Jibril represents Selema Agro as a dealer, offering Apex-10 in his shop and educating farmers on its benefits.

In 2024, Jibril reached another milestone. For the first time, he participated in the Kano Trade Fair, an experience he describes as transformative. At the fair, he connected with farmers both within and outside Kano, allowing him to expand his customer network and establish relationships with major input suppliers.

"It was good for my business," Jibril said. "I met so many people and made connections that I know will help me in the future. I am really grateful for the opportunities HortiNigeria has given me."

From a young man who stepped into his father's shoes with little knowledge, Jibril has grown into a respected agro-dealer, trusted by farmers and recognized by suppliers. His journey shows how access to the right training, innovations, and platforms can transform uncertainty into success and how youth can keep their family's legacy alive while building new opportunities for their communities.

In 2015, Jibril Abdullahi suddenly found himself responsible for running his family's agro-dealer business in Dawakin Kudu, Kano State, after his father passed away. Jibril had little knowledge of the business, and every decision felt like guesswork. What had once been a steady enterprise now seemed fragile in his hands. Jibril's lack of technical expertise meant that farmers did not see him as a trusted adviser, and for years he struggled to grow the business.

By 2022, Jibril's fortune began to change.

He met one of the HortiNigeria coaches in his community and decided to partner with the program. For the first time, Jibril was exposed to structured training on recordkeeping, various products, and customer engagement. The change was dramatic.

"Before HortiNigeria, I didn't really understand how to manage the business properly. Now farmers come to me to buy inputs and seek my advice," Jibril explained.

With this new knowledge, Jibril's customer base expanded rapidly. He now serves

Did you know?

Apex-10 is an organic soil enhancer that does more than nourish crops - it revitalizes soil health. By stimulating beneficial microbial activity and improving water retention, Apex-10 boosts crops' resilience to stress. Field trials by the manufacturer (Selema Agrosience) in partnership with HortiNigeria show that Apex-10 can cut chemical fertilizer use by up to 50% without reducing yields, leading to healthier, more pest-resistant plants. //

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HORTINIGERIA CROSSWORD SEARCH

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1	E	O	O	R	A	E	G	R	E	E	N	H	O	U	S	E	D	N	E	N	N	R	O	C
2	U	Y	X	Y	K	T	F	Y	E	N	K	M	K	X	T	X	Q	Y	D	C	E	L	D	O
3	O	E	U	A	S	H	P	T	U	A	A	R	K	L	O	M	R	M	I	M	I	M	B	Q
4	L	I	N	C	T	E	K	A	D	R	U	E	H	H	A	Z	R	A	A	J	E	U	O	L
5	H	O	V	O	V	R	A	U	K	L	P	H	R	K	S	H	Y	I	O	G	U	N	G	W
6	Y	C	N	D	Y	L	N	E	Y	J	O	E	O	N	O	I	T	A	G	I	R	I	A	A
7	G	H	L	F	I	A	T	V	W	R	P	V	D	T	O	M	A	T	O	Q	H	Y	M	E
8	O	S	P	U	C	N	R	E	T	P	E	N	C	J	G	D	R	W	U	J	I	B	T	N
9	O	W	Y	D	M	D	H	I	E	C	R	S	A	O	S	G	R	E	C	O	T	U	T	U
10	O	T	F	G	W	S	N	P	N	D	O	M	L	Y	O	N	I	O	N	G	K	X	U	N
11	R	I	Z	T	I	I	P	A	G	L	T	K	V	G	I	D	W	F	B	Z	E	U	H	Z
12	J	M	W	A	G	Y	N	Q	A	A	U	B	S	R	D	E	Z	H	M	X	O	Y	X	R
13	S	P	E	E	R	I	G	R	E	E	N	R	E	P	U	B	L	I	C	F	A	R	M	S
14	O	S	R	U	F	C	A	B	B	A	G	E	I	P	M	N	V	S	D	J	F	P	S	Z
15	G	I	W	X	B	J	E	W	S	K	T	E	X	S	Q	G	F	U	N	U	A	Q	K	G
16	A	D	H	C	O	O	L	O	O	K	S	L	G	N	E	X	Y	V	J	Z	G	G	C	N
17	L	P	Y	K	E	M	R	E	S	O	E	O	X	V	X	I	U	T	H	N	R	A	F	I
18	M	Z	P	B	K	I	T	I	N	S	T	I	T	U	T	E	R	K	P	T	E	I	W	N
19	I	F	O	G	K	O	K	R	A	K	V	N	C	L	E	C	D	O	K	V	U	R	R	I
20	S	J	B	N	W	R	F	M	Y	X	L	U	T	J	H	K	X	A	T	N	Z	O	C	A
21	P	R	E	B	M	U	C	U	C	P	T	Z	G	H	C	T	U	D	O	S	I	P	Y	R
22	A	M	V	C	E	L	A	F	X	G	V	P	P	P	F	Y	S	Y	J	R	O	C	I	T
23	F	B	Q	C	O	H	S	R	G	N	P	A	F	Q	L	S	D	T	C	R	A	T	E	S
24																								

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