



## **TECH**

Let's explore how technology & innovation are transforming the agricultural industry.

## **SOME TIPS FOR GROWING UP YOUR AGRI-BUSINESS**

## **START-UP**

### **THE FACE BEHIND THE BRAND!**

Sharon Idahosa is leading an industry-specific public relations & communications firm.

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**LET'S TALK AGRICULTURE**  
MAGAZINE

## IN THIS ISSUE

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### **1 THE FACE BEHIND THE BRAND**

*A leading advocate for agricultural development in Africa*

Sharon Idahosa

### **2 BUSINESS TIPS**

*Utilizing public relations for business growth.*

Sharon Idahosa

### **3 SUPPLY CHAIN & LOGISTICS**

*Revolutionizing African Agriculture for Global Impact*

Micheal Okunoye

### **4 FARM METHODS OF TOMORROW**

*A look at the past, present and future of farming*

Toluwani Biyi

### **5 TECHNOLOGY & NUTRITION**

*Using technology to scale nutrient-enriched crops.*

Jenny Walton

### **6 BRIDGING TECHNOLOGY GAPS**

*The Technology Gap: An In-depth Analysis*

Bako Notsa

### **7 SIGNATURE DISH**

*The Yoruba signature ewa-agoyin history*

### **8 WOMEN IN AGRICULTURE**

*Interview with women in agriculture playing key roles*



# Sharon Idahosa

## The Face Behind the Brand

Sharon Idahosa: A Leading Advocate for Agricultural Development in Africa.

Sharon Idahosa is a well-known personality in the agricultural arena, renowned for her advocacy for rural farmers and agricultural development in Africa. As CEO of Let's Talk Agriculture, a public relations and communications firm, she has become an influential voice in promoting the significance of agriculture and its impact on society.

Sharon's passion for farming and desire to effect positive change led her to establish the lifex Agriculture Initiative, a non-governmental organization committed to inclusivity among rural farmers in Africa. Through this initiative, she has implemented various programs and initiatives aimed at empowering farmers, improving their access to resources and technology, and promoting sustainable farming practices.

Sharon's expertise and dedication have earned her recognition beyond her organization. She currently serves as the Country Chair for Nigeria in the G100, a worldwide organization focused on farming, agritourism, and agritech. In this role, she works to foster collaboration and drive innovation in the agricultural sector, positioning Nigeria as a leader in agricultural development. Furthermore, as Mission Director at the Global Alliance for the Future of Food and Agriculture (GAFFA), Sharon leads initiatives that address global challenges in food security, agricultural sustainability, and the future of farming. Her contributions to GAFFA have been vital in shaping policies and strategies that prioritize equitable and sustainable agricultural practices worldwide. In addition to her work with the G100 and GAFFA, Sharon serves as the events director at the Nigeria-India Business Chamber of Commerce.

Sharon Idahosa's unwavering commitment to advancing agriculture has earned her recognition and accolades throughout her career. Her visionary leadership and tireless advocacy have made a significant impact on the lives of farmers and communities across Africa. With her holistic approach to agricultural development, Sharon continues to inspire and empower individuals to embrace the transformative potential of agriculture for a better future.

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## Business Tips: How to Utilize Public Relations for Your Business Growth As Women in Agriculture

BY SHARON IDAHOSA

Running a business requires significant physical, emotional, logical, and financial investment. Although the idea of owning a business may be thrilling, the critical question is whether it can thrive in the long run. Women entrepreneurs must always bear in mind the challenges they face in scaling their businesses. Aspiring business owners should also consider these obstacles and evaluate their ability to overcome them.

**The Invisibility of Women in Agriculture**  
Women are a significant, yet often overlooked, force in the agricultural industry. Consider the following statistics:

- Globally and in developing nations, women make up 43% of the agricultural labor force.
- In Latin America, women account for 20% of the agricultural labor force, while in Eastern Asia and Sub-Saharan Africa, that number jumps to 50%.
- Women are responsible for an impressive 60-80% of food production in developing countries.

Women in agriculture face challenges such as limited access to land due to cultural norms and lack of collateral for financing.

Women in agriculture face limited access to finance due to biases and other factors, which can hinder the growth of their businesses. However, supporting women in agriculture is crucial to building a more equitable and sustainable food system.

To overcome gender bias in male-dominated industries, women can build personal brands as Queens. Personal branding builds trust, visibility, and thought leadership for individuals and their businesses. By staying up-to-date with the latest trends and developing personal identities, women can increase their visibility and thought leadership.



To gain a competitive edge, agricultural businesses can use digital tools to increase visibility and establish thought leadership through public relations. Understanding the difference between public relations and advertising is crucial for success.

Agricultural business owners can expand their market share by becoming a thought leader through strategies such as hosting outreach programs, webinars, and conferences with industry experts, participating in podcasts, attending events and speaking engagements, and utilizing media outlets to increase visibility. These methods can help build trust and establish the brand's credibility and thought leadership, leading to business growth.

Partnering with a public relations firm can boost brand visibility and tell compelling stories about a business. To ensure successful collaboration:

- set objectives
- create a budget
- research potential firms
- set clear expectations
- onboard the PR company.

Intentionality in all processes is key to building a successful business. Consider exploring our public relations plans.

# Revolutionizing African Agriculture: A Supply Chain and Logistics Overhaul for Global Impact.

**By Micheal Okunoye**

Africa's agricultural history dates back thousands of years, and it remains a critical player in global agriculture. However, despite its vast arable land and diverse ecosystems, the continent faces challenges in maximizing its agricultural output and achieving global synergies. The pivotal role of supply chain and logistics in enhancing global synergies for African agriculture is discussed, and its transformative impact on the continent's future is highlighted. Over 60% of Africans rely on agriculture for their livelihoods, but several factors hinder the realization of Africa's agricultural potential.

Agricultural challenges in Africa include fragmented markets, post-harvest losses, limited access to finance, climate change, and inefficient supply chains. To address these issues and unlock the sector's potential, global synergies are needed through collaborations between governments, international organizations, private sector companies, and local communities. Synergies can take the form of knowledge sharing, technology transfer, investment, and trade partnerships.

Efficient supply chain and logistics networks are transforming African agriculture by improving market access, reducing post-harvest losses, promoting technology adoption, and providing access to financing. Additionally, they facilitate global collaboration and knowledge sharing.

An example of this is the East African Community, which comprises six member states and has made significant strides in enhancing agricultural productivity through regional integration and efficient supply chains.

The success of the African Continental Free Trade Area (AfCFTA) depends on the establishment of an effective supply chain network and logistics infrastructure. The East African Community's (EAC) example illustrates how these systems can promote economic growth, technology transfer, and intra-regional trade. With a robust supply chain and logistics structure, the AfCFTA could achieve improved trade efficiency, economic growth, technology transfer, and productivity.

### The AfCFTA Initiatives and Their Potential Successes for African Agriculture

The AfCFTA initiatives aim to improve supply chain and logistics across Africa, leading to increased intra-African trade, better agricultural value chain development, and economies of scale. An efficient structure can also encourage infrastructure development critical to efficient movement of agricultural goods. Improved access to regional markets can diversify agricultural exports, reducing reliance on limited export commodities and making African agriculture more resilient to global market fluctuations.

# Revolutionizing African Agriculture: A Supply Chain and Logistics Overhaul for Global Impact

(Continued)

Enhancing African agriculture through improved supply chain and logistics requires addressing infrastructure gaps, building local capacity, and harmonizing policies and regulations across African nations to facilitate the movement of goods and agricultural products.

Developing and implementing climate change strategies is vital for the resilience of African agriculture in the face of changing weather patterns.



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Encouraging private sector involvement is essential for sustainability and innovation in supply chain development and logistics.

In summary, supply chain and logistics play a pivotal role in unlocking Africa's agricultural potential and facilitating global partnerships. Enhancing market access, reducing post-harvest losses, promoting technology adoption, and building global collaboration are some of the ways these key components can transform African agriculture.

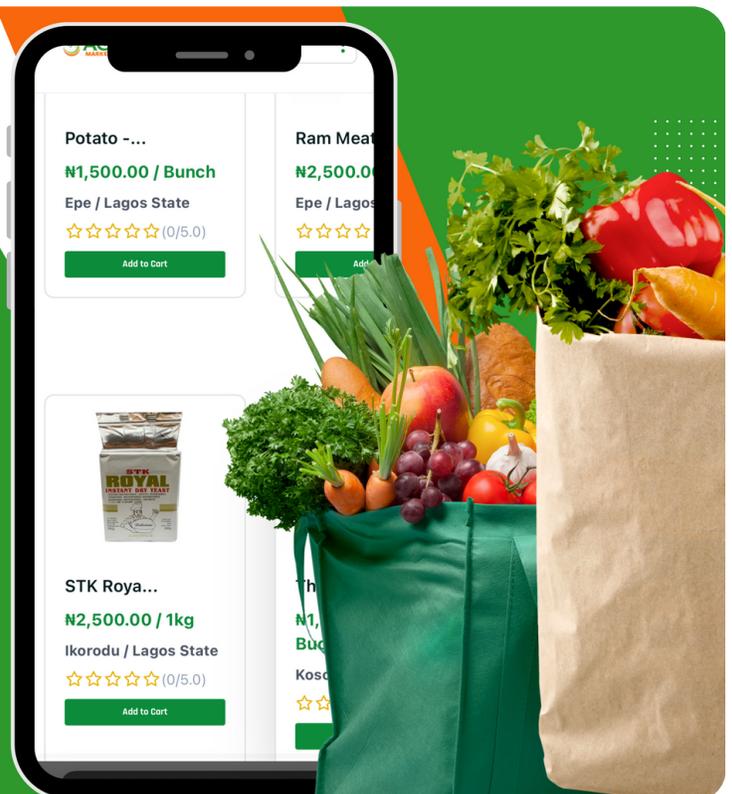
To fully realize Africa's potential in the global food production industry and enhance regional development and the well-being of its people, governments, international organizations, private sector players, and local communities must prioritize and invest in improving supply chain and logistics. By doing so, Africa can become a critical player in the global agricultural landscape.

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## ADOPTING THE FARMING METHODS OF TOMORROW

### A Look at the Past, Present and Future of Farming..

I can recall as a little girl, wondering what the future would hold, and envisioning a world where robots had taken over.

Little did I know how accurate my prediction would be. Sometimes, I imagine going back in time to tell my great-grandfather, a farmer, that in the future he wouldn't need to endure the scorching sun to water his crops. He probably wouldn't believe or comprehend the new possibilities in farming.

Sadly, many farmers today still use traditional techniques, much like my great-grandfather did.

I vividly remember an assignment I had in junior secondary school, where I was asked to draw three different farming tools. Back then, I drew a hoe, cutlass, and bucket. Today, if given the same task, I would draw an electric tractor, an irrigation sensor, and an automatic harvester. The world of farming has come a long way, and it's exciting to see what the future holds.

Innovation and technology have revolutionized the agricultural industry with advancements such as GPS, monitoring sensors, farming drones and robotics. These systems provide benefits including increased productivity, data-driven decisions, resource efficiency, and sustainability. Embracing innovation in agriculture allows farmers to address the increasing demand for food and sustainability concerns. It's crucial for farmers to continually seek new ways to boost productivity and reduce cost.

Allow me to share some of the latest innovations with you and suggest ways in which you can integrate them into your farming practices.

Three innovative techniques to enhance farming practices are:

Robotics for automation of tasks such as planting, crop monitoring, and aerial surveillance.

Internet of things (IoT) for precision farming that saves resources by providing the right quantity of materials needed by crops per time.

Smart sensors monitor soil moisture, temperature, and humidity to prevent mistakes.

Vertical farming, which stacks crops on vertically inclined structures, maximizing small spaces.

Hydroponic or aeroponic systems with LED lighting ensure optimal growing conditions for crops, enabling indoor soil-free farming.

Embracing new technologies is essential for staying innovative, tackling challenges, and securing a brighter future in farming. Practical ways to incorporate new technologies include using management software, employing IoT and sensors, utilizing drones, investing in renewable energy, and implementing robots for enhanced efficiency. Online platforms and mobile apps can also connect farmers with customers and expand their market.



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**LET'S TALK  
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## Using technology to scale Nutrient Enriched Crops – building sustainable, digitized, nutritious food supply chains.

**By Jenny Walton** Head of Commercialization & Scaling, HarvestPlus

HarvestPlus is dedicated to and adopting new technology and digital tools to increase the use and reach of nutrient-enriched crops. In 2023, HarvestPlus will celebrate its 20th anniversary by reaching 100 million people worldwide through biofortification, a proven, cost-effective strategy to improve the nutrient content of staple foods. With competitive crop varieties and a successful delivery model, HarvestPlus aims to reach a billion consumers by 2030.

Investigating the possibilities for technology and digitization was initiated through FCDO support in 2018. Before covid, where the work was conceptual, developing think tanks with high energy, innovative tech start-ups. The program team had to act quickly to maintain the program activities in a non-contact environment which propelled the digital projects into action, a positive outcome of the pandemic.

Some of the ideas are still conceptual where we are working with experts and service providers to bring projects to life through new funding opportunities. There are total of 27 different digital projects in the HarvestPlus program, 7 completed, 7 are active and the remainder in the pipeline.

All projects are developed with sustainability in mind so an initial push using donor funds propels the ideas to be free standing in the commercial marketplace.

Six years ago, a scaling and commercialization strategy was implemented, and research with 250 businesses revealed a lack of a clear value proposition as the main obstacle to scale. Stakeholder research and expertise in market, consumer, and business research helped to identify and document the value for all stakeholders. Standards in the value chain were evaluated, and regulatory and policy reviews were conducted to fill gaps with commercial standards and training information. Understanding the rules and regulations around commercialization of nutrient-enriched seeds, grains, and foods was essential before addressing traceability.



INITIATIVE ON  
Digital Innovation

### The Importance of Traceability in Food Production

Traceability refers to the capacity to track the food supply chain, from seed to consumption, including animal feed and fertilizers used in food production. It plays a significant role in the food industry, and consumers rely on it for various reasons:

**Food safety:** In the event of food contamination or food-borne disease, traceability allows for the identification of the source of the issue and where it occurred in the food chain. This information enables the determination of the responsible party, specific actions, and how to prevent future occurrences.

**Customer and consumer interest:** Consumers want to know where their food comes from to make ethical purchases, such as avoiding child labor in the supply chain or working with responsible businesses that pay their staff fairly. Knowing the origin of their food instills trust in the businesses they patronize.

**Value protection:** Traceability is vital in protecting the values of food traits or processes, such as Fair Trade and organic. It is especially important in the process of biofortification as it monitors and

Traceability is crucial for both consumers and businesses in the supply chain. It helps avoid food safety risks, maintains quality, and improves production efficiency. Accurate traceability also aids in pricing and cost-saving initiatives. Basic paper record-keeping and passing information to the next user is a traditional method. However, digitization of traceability is essential, and the HarvestPlus program is focusing on this aspect.

The article discusses various solutions for traceability, including SourceTrace, Vibe Imaging Analytics, and a custom build for rice in Indonesia with Tangen. QR codes are considered an easy solution for traceability from seed production, allowing farmers to register their purchases and receive digital training services.

Oritain, which applies forensic and data science to verify product origins, offers commercial and food system tracing applications to monitor nutrient content changes.



Figure 1. logo tested and developed to use on commercial seed, grain and food products.

Digital services are available for seed production, enabling monitoring and documentation of production and sales. These services can predict yield and support businesses to be efficient, globally competitive, and promote traceability. Certification and standards protect the value of nutrition, businesses, and consumers.

Digitizing agricultural extension can improve farming productivity and yield, with reports of up to 25% increase for wheat crops. HarvestPlus partnered with PXD to digitize extension and advisor services, aiming to reach 100,000 Pakistani farmers remotely. However, findings suggest that investing in a new digital advisory service for smallholder farmers has a high failure rate, especially in the public system. Learning from success stories and participating in forums like the Digital Agrihub and CGIAR Digital Initiative can help share knowledge and prevent mistakes. The use of apps and digital platforms for farmer training is increasing, with projects in the pipeline with partners like Viamo and eprod in Zimbabwe.

In Nigeria, the Biofort team has developed BiofortStat, an information management platform for biofortified commodities, and BiofortX, a mobile application for digitizing aggregation transactions and connecting marketplaces. Both services have completed a successful pilot phase and require investment for scaling. BiofortX, developed by El-Kanis and partners, aims to monitor offtake volumes and create digital marketplaces.



Figure 2. The interaction between and codependency of standards, digitization and certification.

HarvestPlus offers digital quality management systems for food production, and cost-effective digital communication for marketing and awareness campaigns. Its biggest successes in digitization are in digital communication and marketing, particularly in Pakistan where they engage farmers and value chain actors on biofortification, create demand for seeds, grain, crops, and food processors, and provide training and awareness on malnutrition. The entire chain must be linked to specific value propositions for creating consumer demand and increasing seed production.

Viamo is a suitable partner for HarvestPlus as they specialize in connecting hard-to-reach communities with critical information through their platform and services. With nearly half of the world's population without internet access, Viamo provides a connection through simple mobile phones, enabling life-changing information exchanges for underrepresented communities. Their services benefit the international development and business sectors.

Digitization of data collection and management presents opportunities to collect live data and track seed sales, crop growth rates, grain trade, and food sales. Live data can be used to predict the future, nutritional impact, and potential food shocks or crises. Predictive modeling enables governments, donors, and policy makers to take timely and specific actions to address malnutrition and influence policy and investments. However, data governance is crucial to protect beneficiaries and their data, always ensuring users can opt in or out and never share data without their consent.

Working with technology and digitization involves inherent risks, requiring multiple solutions, service providers, and backup options for each project. Solutions must benefit program beneficiaries, especially smallholder farmers, and be sustainable without relying on continual donor funding. HarvestPlus's digital strategies prioritize women, who are disproportionately affected by malnutrition and the digital divide. The program addresses the gender gap in access to digital technologies by employing gender-sensitive tools and educating male farmers and household members to promote access to women. However, efforts to bridge the divide through more traditional methods must continue and not be deprioritized in the rush to adopt technologies.

Efforts to bridge the gender gap in digital technology access rely on traditional methods, including education, access to agricultural extension, and targeted programs such as female-only farm days. These methods should not be deprioritized in the push to adopt new technologies.

**ABOUT THE PROJECT**

Youth Entrepreneurship and Women's Empowerment in Northern Nigeria (Nigeria WAY) – aims to improve the business capacity and environment for entrepreneurs and small-scale businesses in the rice, groundnut, and soybean value chains in Bauchi State from 2017-2024.

Projects clients are primarily youth and women-led businesses focused on value-added processes in 3 value chains of Rice, soybeans, and groundnut. Using a market system approach, WAY invests in and acts to increase access to markets, financial and business development services, information, and labour-saving technology; incorporate environmentally sustainable practices, and increase profitability for clients, contributing to a vibrant agro-processing sector.



WAY also aims to stimulate dialogue with families and communities to create a better understanding of the social risks to young adults, particularly around early and forced child marriages.

This Seven-year project is funded by the Government of Canada through Global Affairs Canada (GAC). MEDA implements in Bauchi, Dass, Toro, Warji, Ganjuwa, Katagum and Jama'are LGA's of Bauchi State, Nigeria.

**7-YEAR PROJECT TARGET**

WAY will benefit 41,000 people, particularly women and youth, family members and communities.

- \* 16,000 entrepreneurs and small-scale businesses will improve their business capacity and business environments.
- \* 25,000 families and community members will become better educated on the consequences surrounding early and forced child marriage.

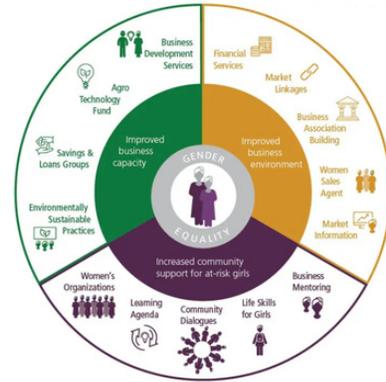


**ACHIEVEMENTS OF THE MEDA WAY PROJECT**

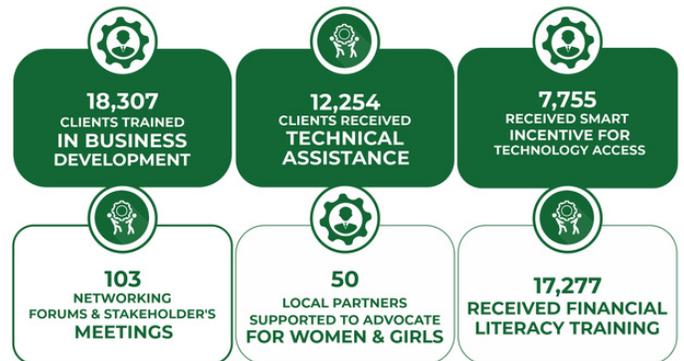
- A total of 294 small-scale businesses (SSBs) have been identified and successfully registered.
- The project set up a network of over 509 Saving Groups (SLGs) across 443 communities of the 7 Local Government Areas (LGAs).
- Within a span of 3 years, local rural women engaging in agribusiness have generated over 700 million Naira through the savings groups.
- The project has led to the creation of over 11,000 sustainable and decent jobs.
- The project supported the creation and establishment of the first women-owned microfinance institution in Northeastern Nigeria the *Women in Business Financial Institution (WiBFIn)* in Bauchi.
- A total of 7 Empowerment Learning Centers (ELCs) has been set up across the seven-project implementation Local Government Areas (LGAs). These centers cater to various groups, including Small Entrepreneurs (ENs), Enterprising Entrepreneurs (EENs), GALS Champions, Women Sales Agents (WoSAs), Village Agents (VAs), and LGA focal persons and serve as the project's sustainability strategy to replicate its interventions after the end of the project activities.
- The project trained 18,307 clients in Business Development, which involves learning strategies and skills to help businesses grow and succeed.
- The project provided technical assistance to over 16,000 clients, offering expert guidance and support to help them improve their skills in environmentally sustainable practices for women and youth-owned businesses.
- The project distributed smart incentives to over 9,000 project clients, granting them access to environmentally sustainable productive equipment at a discounted rate. The total value of these incentives is estimated to be about CAD 350,000 (NGN 198,237,968).
- It offered more than 30 matching grants to support Small Scale Businesses in upgrading their technology and enhancing their market presence. The total value of these grants amounted to CAD 492,035.12 (NGN 278,685,836.15)
- Disbursed over 30 Performance-Based Grants to market actors within the rice, groundnut, and soy value chains. These grants were awarded to enhance their market positioning and specialization. The total value of these grants amounted to CAD 109,456.33 (61,995,430.02).
- Organized 103 networking forums and stakeholder meetings, creating platforms for individuals and groups to connect, share ideas, collaborate, and discuss important matters.
- Provided support to 50 local partners to actively advocate for the rights and well-being of women and girls.
- The project facilitated life skills training for over 1,000 boys and girls.
- Delivered financial literacy training to 17,277 project clients, equipping them with essential knowledge and skills to effectively manage their finances.
- The project Identified and trained over 150 village agents linked to savings and loan groups. These agents support and help spread the saving groups initiative within and outside

**THEORY OF CHANGE**

- IF THE BUSINESS CAPACITY AND BUSINESS ENVIRONMENT FOR ENTREPRENEURS AND SMALL SCALE BUSINESSES IMPROVED
- TO BETTER SERVE WOMEN AND YOUTH, AND IF GIRLS HAVE
- INCREASED RESILIENCE THROUGH BUILDING LIFE SKILLS AND FAMILY SUPPORT
- THEN WOMEN AND YOUTH CAN CONTRIBUTE TO A VIBRANT AGRO PROCESSING SECTOR.



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**NIGERIA WAY PROJECT**  
*Creating business solutions to poverty*



**MEDA GLOBAL**

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**NIGERIA WAY PROJECT**

Youth Entrepreneurship and Women's Empowerment in Northern Nigeria (Nigeria WAY) – aims to improve the business capacity and environment for entrepreneurs and small-scale businesses in the rice, groundnut, and soybean value chains in Bauchi State from 2017-2024.

# Bridging the Technology Gap in African Agriculture for Global Synergy

BY BAKO NOTSA

**African agriculture, a vital contributor to the continent's GDP, faces a technology gap hindering productivity and sustainability. Despite being the largest employer, African farmers often lack access to the tools and innovations necessary to ensure food security. Bridging the technology gap is imperative for global synergies.**

## The Technology Gap: An In-depth Analysis

The technology gap in African agriculture refers to the disparity between modern agricultural practices and technology available in Africa versus more developed regions. Limited access to these innovations hinders smallholder farmers in Africa.

The Consequences of the Technology Gap in African Agriculture  
The technology gap in African agriculture has had numerous negative effects across the sector. Some of the most significant consequences include:

- **Limited Access to Information:** The lack of access to information on weather patterns, market prices, and best farming practices puts African farmers at a disadvantage when making critical decisions about crop planting and harvesting.
- **Lack of Mechanization:** The limited availability of modern farming machinery compared to global counterparts hinders African farmers' ability to compete on the global market and adapt to shifting market demands..

- **Outdated Farming Practices:** The continued use of traditional farming methods leads to low yields and heightened vulnerability to climate change, exacerbating the technology gap.
- **Poor Post-Harvest Handling:** Inadequate storage and processing facilities contribute to high post-harvest losses in Africa, resulting in economic losses and posing a severe threat to food security in the region.

The implications of the technology gap in African agriculture are far-reaching, impacting various sectors, including:

- **Low Productivity:** Low agricultural productivity perpetuates poverty and exacerbates food insecurity and malnutrition, impacting the overall quality of life for millions of Africans.
- **Vulnerability to Climate Change:** Access to weather forecasting and climate-smart technologies is essential to mitigate the impact of climate change on African agriculture.

- **Market Access Challenges:** Without real-time market information and digital platforms, farmers struggle to connect with buyers and obtain fair prices for their produce.
- **Youth Apathy:** The technology gap influences the youth's perception of agriculture, leading many to view farming as unattractive and outdated, posing a challenge for the sector by jeopardizing the continuity of farming traditions.

## The Imperative for Global Synergies: Bridging the Divide

Bridging the technology gap in African agriculture is a formidable challenge, that necessitates concerted efforts at the local, regional, and global levels. To make significant strides in this endeavor, several key strategies should be considered. In the quest to bridge the technology gap in African agriculture, it is essential to recognize the multifaceted nature of this challenge and explore comprehensive solutions that can catalyze transformation across the continent.

## Enhancing Agricultural Research and Development

A crucial aspect of bridging the technology gap is investing in agricultural research and development (R&D) specifically tailored to African conditions. Allocating increased funding to agritech solutions research is not just a financial commitment but a strategic investment in the future of African agriculture. This investment can lead to the development of technologies and practices that are not only accessible and affordable but also adapted to the unique challenges faced by African farmers.

Moreover, R&D efforts should focus on sustainable agricultural practices. By integrating technology with environmentally friendly farming methods, Africa can take significant strides towards mitigating the adverse effects of climate change. This approach will not only bolster food security but also reduce agriculture's environmental footprint.

## The Significance of Public-Private Partnerships (PPPs) in Bridging the Technology Gap

In today's world, Public-Private Partnerships (PPPs) have emerged as a crucial strategy in narrowing the technology divide. By working together, governments, private sector companies, and non-governmental organizations (NGOs) can expedite the adoption of technology on a large scale. While the public sector is responsible for providing the necessary regulatory framework and policy incentives, the private sector can bring its resources and expertise to develop and implement innovative solutions.

An excellent example of a successful PPP is the partnership between governments and telecommunication companies to expand rural internet connectivity. This initiative not only improves farmers' access to information but also opens doors for digital agriculture applications such as mobile payment systems, crop monitoring, and market access platforms.

Capacity building is crucial for farmers to adopt technology successfully, requiring comprehensive training programs that educate farmers on practical aspects and emphasize the direct benefits of technology adoption. Reliable internet access is also necessary, especially for farmers in underserved rural communities, and investments in broadband networks and low-cost, high-quality internet solutions can help reach even the most remote communities. Initiatives to subsidize data costs for farmers can also improve their ability to access online resources.

Access to financing is crucial for agricultural technology adoption. Microfinance programs customized for agriculture offer flexible loan terms and low-interest rates, making it easier for farmers to acquire modern equipment and innovative technologies. Engaging young people through technology-based initiatives is a promising strategy to revive African agriculture. Showcasing modern agriculture possibilities, encouraging entrepreneurship, and portraying farming as a dynamic and forward-thinking sector can motivate young people to consider farming as a viable and rewarding career option.

To address the technology gap in agriculture, it's necessary to create a supportive ecosystem for agritech, including nurturing start-ups, innovation hubs, and networks for collaboration and knowledge sharing among stakeholders. This can drive continuous innovation and progress in the agricultural sector.

## Bridging the Technology Gap in African Agriculture: A Global Imperative

The technology gap in African agriculture is a global challenge that affects poverty alleviation, food security, and sustainable development. To address this, investment in research, public-private partnerships, empowering farmers, digital infrastructure, finance access, youth engagement, and agricultural technology ecosystem is crucial. With the right strategies and collaborations, African agriculture can increase productivity, enhance food security, and contribute to global sustainable agriculture. Global synergies can help create a future where African agriculture thrives, benefiting both the continent and the world.



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# SIGNATURE YORUBA DISH

*Ewa Agonyin: A Tasty and Nutritious Delicacy from Western Nigeria*

## Cooking From The Heart

Ewa Agonyin is a beloved dish in Lagos State and throughout Western Nigeria. It is essentially mashed beans paired with a unique sauce made from onions, pepper, and spices. The name itself is derived from the Yoruba word for beans (Ewa) and the Agonyin tribe from Togo and Benin Republic.

To make this dish, the beans are cooked until they are soft and then mashed to create a creamy texture.

The sauce is what sets Ewa Agonyin apart, providing a delightful combination of spicy, tangy, and savory flavors. The dish is typically served with plantains and bread, making for a satisfying meal.

Not only is Ewa Agonyin delicious, it is also packed with nutrients. It is high in dietary fiber, protein, and vegetables, making it beneficial for digestive health. It can also help with constipation and other digestive issues. Don't miss out on this flavorful and nutritious dish – it's a must-try!





WOMEN  
IN AGRICULTURE

# ABOUT NDDI OKONKWO NWUNELI

Ndidi Okonkwo Nwuneli is an expert on food ecosystems, entrepreneurship, social innovation, and philanthropy. She has over 25 years of international development experience and is the founder of LEAP Africa and African Food Changemakers. She is also the co-founder of Sahel Consulting Agriculture & Nutrition Ltd. and AACE Foods Processing & Distribution Ltd.

Ndidi serves on the boards of the Rockefeller Foundation, AGRA, Nigerian Breweries Plc. (Heineken), Godrej Consumer Products Ltd. India, Stanbic IBTC Group, the Young Global Leaders of the World Economic Forum, and the Bridgespan Group.

Ndidi holds an M.B.A. from the Harvard Business School and an undergraduate degree with honors from the Wharton School of the University of Pennsylvania. She was a Senior Fellow at the Mossavar-Rahmani Center for Business & Government at the Harvard Kennedy School, a visiting Scholar at Max Bell School of Public Policy at McGill University, an Aspen Institute New Voices Fellow, and an Eisenhower Fellow.

Ndidi is a TED speaker, was recognized as a Schwab Fellow and a Young Global Leader by the World Economic Forum and has received numerous awards and recognitions including a National Honor by the Nigerian Government and the 2021 Harvard Business School Distinguished Alumni Award. She is the author of "Social Innovation in Africa: A Practical Guide for Scaling Impact," and "Food Entrepreneurs in Africa: Scaling Resilient Agriculture Businesses," both published by Routledge and "Walking for God in the Marketplace."



## INTERVIEW

*Ndidi Okonkwo Nwuneli*

**Can you tell us about your journey into the agricultural industry and what inspired you to pursue a career in this field?**

As a child growing up in Enugu Nigeria, I planted vegetables in our home garden and agriculture was my favorite course at Federal Government College Enugu. I moved to the United States at 16, and was shocked to discover that the face of Africa was a hungry child. This identity followed me around campus – when my classmates would joke that their parents used to tell them to finish their dinner because they were hungry children in Africa. This image made me very sad, because it represented a single story of Africa – and single stories are dangerous because they limit the world's view of our potential, and invariably seep into our own consciousness.

**What are some of the challenges you have faced as a woman in the agricultural industry, and how have you overcome them?**

I have faced my share of gender biases and discrimination at the highest levels, and had to prove myself repeatedly as an expert given that I did not study agriculture in university.

I have been fortunate to have an extremely supportive family – parents – Prof. Paul & Rina Okonkwo and siblings – Adaora, Una, Nwando and Aneto who have encouraged me to use my voice, skills and talents and served as my biggest champions and critics. I call them God's greatest gift to me. I also have had an amazing village of close friends, mentors, sponsors and champions – locally and globally, angels who God has used as destiny helpers in my life.

## **Can you tell us about your journey into the agricultural industry and what inspired you to pursue a career in this field? ( Cont.)**

I'm committed to transforming the food ecosystem in Africa to promote the growth, profitability, and sustainability of African food/agriculture businesses, ensuring food and nutrition security across the continent, and changing global narratives for a better future. The author strongly believes in Africans shaping the future of their countries and continent by creating wealth, jobs, fostering equity, inclusion, and leaving no one behind.

## **What are some of the challenges you have faced as a woman in the agricultural industry, and how have you overcome them?( Cont.)**

AACE Foods and Sahel Consulting have supportive Boards of Directors and management teams who believe in the organization's vision and values. Clear boundaries and safe spaces are established for women at AACE Foods, with zero tolerance for harassment, prejudice, and discrimination.

## **In your opinion, what are the key factors contributing to your success in the agricultural industry, and how have these factors influenced your career?**

Integrity, excellence, and humility are the most important values for me. I strive to produce excellent work with integrity, and constantly raise the bar by deepening my expertise through research, writing, and publishing. I believe humility is key to success, and recognize that grace and favor are crucial factors in sustaining me.

a) As a leader, I learned the importance of leading by example and reflecting ethical, innovative, and merit-driven values through their actions. They operate an open-door policy and hold themselves to the same standards as their team members.

b) To attract and retain high-achievers, I invest in their development and provide opportunities for growth. My organizations have robust training programs and recognize team members' contributions. Entry-level staff benefit from a range of programs and benefits, including adult literacy, emergency funds, and health insurance.

c) I am vulnerable and share the joys and pains with the senior team, building loyalty and ownership. The senior leadership has full visibility into the organizations' financials and equity opportunities.

## **How do you balance the demands of work in the agricultural industry with your personal life? What strategies have you found effective in maintaining that balance?**

A wise woman once said, you can have it all, but not all at the same time. Juggling my roles as a wife, mother, daughter, sister, friend, entrepreneur and board member has not been easy.

I have been blessed by a community of support – including family members, close friends, and colleagues who have been angels in my times of need. I am not afraid to ask for help and sometimes allow myself the luxury of saying “no” to projects or opportunities that I cannot accommodate. I am always happy to open doors for others who are better suited for opportunities that may be offered to me.



## **What are some of the significant trends or changes you have observed in the agricultural industry, especially regarding the role of women? How do you see these trends shaping the future of agriculture?**

The agriculture and food ecosystem faces challenges such as climate change, economic and political crises, and health issues related to malnutrition and overnutrition. The emergence of data, innovation, and technology creates opportunities for female entrepreneurs to solve problems and take leadership roles in the landscape.

The Leading Women in Food Fellowship (LAWFF) was founded earlier this year to support emerging female leaders across Africa through training, mentorship, visibility, and access to financing and markets. The program aims to create a sisterhood among the participants, providing support and encouragement as they rise. The founder has been inspired by the women involved.

Nigerian women are naturally entrepreneurial, but they need training, mentoring, affordable financing and access to markets to truly achieve their highest potential. There is an urgent need for policies that stipulate clear financing windows for women from banks, financial and non-financial institutions, and incentives for companies that prioritize women in their supply chains and distribution channels.

## **What advice would you give to young women interested in pursuing a career in the agricultural industry?**

I am so thrilled to welcome more young women in the agriculture and food ecosystem. We need women in all aspects of critical value chains as employees, entrepreneurs, and policymakers from farm to fork. I would encourage young women to consider opportunities as input providers, agric tech enablers, policy makers, processors, logistics providers, financiers and insurance providers, chefs, wholesalers, retailers, story tellers, and the list goes on.

Addressing Africa's agriculture and food challenges requires Africans to drive and own the transformation. Entrepreneurs across different value chains must lead the way, with support, knowledge, financing, and tools to scale their businesses and leverage technology and innovation. The sector is projected to exceed \$1 trillion in market value by 2030, providing significant opportunities for those prepared to maximize them.

The book "Food Entrepreneurs in Africa: Scaling Resilient Agriculture Businesses" aims to inspire and support African female entrepreneurs to build successful agribusinesses, while also encouraging policymakers, development partners, and researchers to create an enabling environment for agribusinesses to thrive. The author is inspired by the African proverb "Do not follow the path, go where there is no path and leave a trail," and encourages women to innovate, develop solutions, and serve as change agents in society while blossoming into leaders in their sector.

## **How do you engage with and support your local community through your agricultural work? Are there any initiatives or projects you are involved in?**

The organizations founded or co-founded by me focus on community and national transformation. AACE Foods works with smallholder farmers to improve their livelihoods through training, technology, and financing. They also provide complementary food to vulnerable communities during crises.

Sahel Consulting offers the Sahel Scholars Program which provides leadership programs and opportunities in food and agriculture to students in Nigerian universities. The program offers internships and scholarships to deserving students and has reached thousands of students in Nigeria and Africa since its launch in 2017.

## How do you engage with and support your local community through your agricultural work? Are there any initiatives or projects you are involved in? ( Cont.)

Sahel Consulting, African Food Changemakers, and Sahel Capital support vulnerable communities through impactful programs, including launching community gardens, rehabilitating homes, and providing health and education interventions. African Food Changemakers helps African entrepreneurs start and scale sustainable agribusinesses that feed Africa and the world by providing training, funding opportunities, and trade linkages.

BRACE: Building Resilience Against Climate and Environmental Shocks (BRACE) is an intensive capacity program that empowers agri/food SMEs, through training and technical support, to implement sustainable solutions for scaling their agribusinesses in the face of climate change.

LAWFF: Leading African Women in Food Fellowship (LAWFF) is an annual six-month program which identifies outstanding female disruptors, ecosystem enablers, entrepreneurs, policy makers, chefs, trendsetters and storytellers in the African food ecosystem and provides them with training, mentorship, visibility and a community of support to advance their work and enhance their impact.

SEP: The Scaling Export Program (SEP) engages an annual cohort of agri-food SMEs to build their capacity to export healthy, nutritious agri-food products across Africa and access international markets, through training, trade linkages, and business support.

WE CHANGE NARRATIVES!!! We actively create original content and curate regional and global events that promote awareness about Africa's contribution to the global food ecosystem and celebrate our diverse and exciting food heritage.

AfDB. 2018. Africa agribusiness, a US\$1 trillion business by 2030. Accessed: <https://www.afdb.org/en/news-and-events/africa-agribusiness-a-us-1-trillion-business-by-2030-18678> (25 August 2020).

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# COUNTRY FOCUS: NIGERIA, REDEFINING AGRICULTURE; THE NIGERIAN WAY

BY FAVOUR IDIAGBONYA

**Nigeria's agriculture sector accounts for over 20% of its GDP, with subsistence smallholder farmers producing 90% of the country's food. The rural workforce, comprising 70% of the population, farms crops like maize, cassava, guinea corn, yam, beans, millet, and rice. It is crucial to prioritize agriculture to ensure the country's growth and development, given that 70% of households are engaged in crop farming.**

## Challenges Facing Nigeria's Agricultural Sector and its Effects on Food Sufficiency

Nigeria's agricultural sector faces an array of issues, including poor access to land due to an inadequate land tenure system, limited irrigation development, and low adoption of research and technology. The high costs of farm inputs, lack of credit access, and inefficient fertilizer procurement and distribution processes further hamper agricultural productivity. Insufficient storage facilities and poor food processing add to the sector's problems. Consequently, the agricultural sector's contribution to the country's GDP has reduced, and food imports continue to rise due to population growth and a decline in food sufficiency. The majority of Nigeria's farming practices are rainfed, making them unsustainable and vulnerable to climate change.

Despite these challenges, some states have shown intense dedication to agriculture, including Benue, Delta, Ebonyi, Niger, Ekiti, Cross River, Oyo, Kaduna, Ogun, and Osun. Nigeria is also a leader in palm oil, cocoa beans, and rubber production. The country's agricultural land area is 70.8 million hectares, 34 million hectares of which are arable land, 6.5 million hectares used for permanent crops, and 30.3 million hectares designated as meadows and pastures (Statista, 2023).

Nigeria's agricultural sector is undergoing transformation through innovative extension services, which aim to improve organization, service delivery, productivity, and food security. By leveraging new technologies and communication strategies, information and knowledge are disseminated to farmers, extension workers, and stakeholders.

## Redefining Nigerian Agriculture: The Role of Agribusiness and Innovation

One approach to revamping the smallholder perspective of the agriculture sector is by introducing it as an agribusiness. By utilizing innovative approaches, agricultural entrepreneurs are able to improve financial strategies and yield better results. This involves the use of modern farming techniques and technologies to increase crop yield and productivity. Ultimately, redefining the Nigerian agricultural sector requires

- The adoption of new technologies and innovations
- The development of agricultural entrepreneurship
- The implementation of effective communication strategies to improve productivity and enhance food security.

#### Urban Agriculture: A Growing Trend in Nigeria

With an increasing population and growing settlements, urban agriculture is becoming a popular choice in Nigeria. It can be an essential tool in fighting poverty and promoting food security, particularly in highly urbanized areas. Lagos, Nigeria's commercial hub, boasts the highest concentration of urban farms in the country. The southeast region of Nigeria has a variety of agro-enterprises, including crop production, livestock production, and agro-processing. This sustainable agricultural practice is being carried out by both government and private individuals who are passionate about improving Nigeria's agricultural landscape. Here are some of the notable players in the urban farming scene:

- Angel Adelaja's stackable container farm: Angel Adelaja is a pioneer in urban farming in Nigeria. She invented a stackable container farm that is affordable and accessible to everyone. The farms are unique to Africa and are made in Nigeria. Angel's project has been successful because she creates teams based on skill matching.
- Youth Initiative for Sustainable Agriculture (YISA): YISA is a non-governmental organization that promotes sustainable agriculture in Nigeria. They have several programs, including the Environmental Sustainability Project, the Youth Agricultural Reorientation Program, and the Market Linkage Program.

Peri-urban agriculture (PUA) in Abuja: A study examined the practices of peri-urban agriculture (PUA) in Abuja by identifying its prevailing opportunities, challenges, and farmers' perceptions of the practices. These successful urban agriculture projects in Nigeria demonstrate the potential of urban farming to improve food security, create employment opportunities, and alleviate poverty.

Hands are on deck to redefine agriculture in Nigeria, the rural system is continuously evolving and innovations for sustainable and climate-smart practices are being adopted. The collaboration of all stakeholders in the sector is the spice required to completely redefine agriculture in the giant of Africa.



Favour Idiagbonya  
Environmental Conservation  
Researcher



**WOMEN**  
IN AGRICULTURE



## INTERVIEW

*Grace Fosen*

### **Can you tell us about your journey into the agricultural industry and what inspired you to pursue a career in this field?**

My Passion for Agriculture: A Personal Journey

I am grateful for your question, as it gives me the opportunity to reflect on my journey. From a young age, I discovered my love for the soil, gardening, and nurturing plants to grow. I remember how devastated I would feel when my siblings would pull out what I had planted just to get back at me. While in university, my concern for people's well-being initially pushed me towards the medical field. However, I eventually found my way back to my roots, studying agricultural economics.

I am now a proud farmer and thoroughly enjoy working with other farmers as an extension officer. At the start of my career, I provided capacity building and advisory services through the Special Program for Food Security.

Later on, I joined UNDP's Millennium Villages Project, where we supported farmer education and training on the best agronomic practices. Now, at MEDA, we continue to provide technical assistance, technology upgrades, and other services to entrepreneurs in the agricultural food systems space.

### **What are some of the challenges you have faced as a woman in the agricultural industry, and how have you overcome them?**

The male counterparts are preferred when it comes to engagement etc. As much as we talk about gender equality, there is clear male gender preference when it comes to decision making. I commit to excellence in service delivery and that has helped me stand out and make impact in the work I do.

**In your opinion, what are the key factors contributing to your success in the agricultural industry, and how have these factors influenced your career?**

My success in the industry can be attributed to my perseverance, focus, and determination to succeed.

**How do you balance the demands of work in the agricultural industry with your personal life? What strategies have you found effective in maintaining that balance?**

Maintaining a Healthy Work-Life Balance: Tips for Leaving Work at Work.

Leaving work behind after you exit the office is crucial in maintaining a healthy work-life balance. When you retire, family is often the only thing you have left, so it's important to prioritize them now. Show your loved ones that you value them by intentionally creating quality family time. Try not to bring work home, although sometimes it's unavoidable! 😊

**What are some of the significant trends or changes you have observed in the agricultural industry, especially regarding the role of women?**

Dr. Dorathy and Dr. Kalibata are just a few examples of women who are breaking barriers in agriculture. This trend extends to rural communities, where women are increasingly taking on leadership roles in agriculture production and value chain alliances. It's amazing how much progress has been made in just a few years.

**What advice would you give to young women interested in pursuing a career in the agricultural industry?**

Chase Your Aspirations and Overcome Obstacles  
Never give up on your dreams, even when faced with hurdles. Keep pushing and aim for excellence in everything you do – there are no limits to what you can achieve. Believe in yourself and take pride in your accomplishments, even if no one else does.

**How do you engage with and support your local community through your agricultural work? Are there any initiatives or projects you are involved in?**

Supporting Local Communities through Innovative Value Chain Production and Sustainable Agricultural Practices.

Our organization engages with local communities to help them gain knowledge and technical assistance on sustainable agricultural practices. Through this, we build their capacity on value chain production, support market linkages, and facilitate alliances amongst actors. In addition, we provide a platform for local communities to share knowledge, which they may not have had access to before.

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[hello@letstalkagriculture.com](mailto:hello@letstalkagriculture.com)

## Achieving United Nations SDGs through Renewable Agriculture: A Pathway for Entrepreneurial Startups in Africa

This article urges African Union Assembly communities to collaborate on a technical approach to align with the United Nations Sustainable Development Goals (SDGs). The SDGs aim to end poverty, inequality, and climate change by 2030 while ensuring a safe and sustainable planet for all. Agriculture is essential to achieving these goals, as it encompasses food safety, security, and healthy diets. Creating a more sustainable and circular economy through renewable agro food systems in Africa is crucial for achieving the SDGs.

### Nigeria's Agriculture on the World Map

Nigeria has abundant agricultural resources and the sector is a major contributor to the country's economy, providing livelihoods through crop production, livestock, forestry, and fishery. Nigeria has been a top global producer of various agri-food commodities including roots and tubers, legumes, oilseeds, cocoa, cereals, grains, fruits, and vegetables.

However, despite having fertile land and a growing population, factors such as climate change, industrialization,

and globalization have led to a gap in the agri-food system, leaving many without sustainable diets.

Nigeria has the potential to become a major agro-allied commodity processing hub and contribute to the growth of agriculture in Africa. However, to solidify its position on the global map, it needs to work collectively with other regions and focus on regenerative natural resources for a sustainable agri-food system.



By Alvin Peterside,

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## AFRICA'S AGRICULTURE ON THE WORLD MAP

Agriculture is a significant contributor to Africa's job market, accounting for 17% of the region's GDP and employing 226 million people in the primary sector in 2021. The region has 1,119 million hectares of agricultural land, representing 40% of its total land area.

The FAO's Strategic Frameworks 2021-2031 aims to create efficient, inclusive, resilient, and sustainable agri-food systems that benefit all.



The recently published report on agri-food in Africa in 2022 highlights progress made in the four key areas: production, nutrition, environment, and quality of life.

The report acknowledges the changes African agriculture has undergone, such as rapid urbanization, economic growth, and climate change, and recognizes that more work needs to be done.

## CURRENT GLOBAL TREND OF AGROFOOD SYSTEM

There is a global shift towards adopting a Circular Economy approach to industrialization, with heads of government supporting the move. This strategy is seen as a way to transform natural resources into a sustainable production system, and has been endorsed by environmental sustainability experts and industrial giants after extensive research and deliberation.

The circular economy is a framework driven by design to eliminate waste and pollution, keep products and materials in use, and regenerate natural systems. It's an economic concept linked to the Global Development Goals and a green economy, based on three principles: eliminate waste and pollution, keep products and materials in use, and regenerate natural systems.

Many global leaders and multinational companies, like China, the EU, and IKEA, have adopted a proven strategy. National governments and regions, particularly in Europe, support startups and ventures in the agrofood system through funding, entrepreneurial education, and partnerships with organizations like the European Institute for Innovation and Technology.

A circular material flow system provides a sustainable alternative to the linear economy model, which contributes to the depletion of natural resources. This approach transforms waste into resources, mitigates material loss, and reduces environmental impact.

It also makes resources accessible to an ever-growing population. However, hunger and food waste remain pressing issues, with 750 million people worldwide suffering from hunger and 30% of food lost in the supply chain and food services.



Diagram 1.2 showing comparison between Linear Circular Economy

Implementing circular agrofood systems in Africa could help address the region's undernourishment rates and contribute towards sustainable food production. The agriculture industry is responsible for depleting many of the planet's resources, and with the population projected to reach 9.5 billion people by 2050, urgent action is needed to combat food waste and create a more sustainable industry.

A shift towards a low-meat diet satisfying nutrition guidelines could reduce greenhouse emissions by up to 50% and decrease premature mortality rates by around 20%. Achieving this involves halving per capita global food waste by 2030 and implementing a regenerative, natural, and sustainable food system to prevent food loss or waste. Food systems include all activities from production to disposal of food products.

The Sustainable Food System (SFS) delivers food security and nutrition without compromising the economic, social, and environmental foundations that support future generations. It should be economically profitable, socially beneficial, and environmentally sustainable with a neutral or positive impact.



Diagram showing benefits of Circular Agrifood Systems

Africa's agriculture industry faces challenges in meeting rising food production demand by 2050, compounded by climate change. However, population and income growth, as well as migration, create opportunities for domestic agriculture and agribusiness to flourish. Responding to demand growth and consumer preferences for healthy and sustainable diets is critical. Sustainable intensification, public goods, and private investment across the entire value chain must be supported by research and development and the improvement of agricultural frameworks and regulations.

Strategic public investments can improve the swift functioning of Agric commodities, locally and internationally, reducing hunger and malnutrition in rural and urban communities.

While efforts are already underway, elaborate and synergistic public frameworks are necessary across Africa.

In conclusion, It's crucial that we work together to make the transition to circularity within the agri-food system. This can be achieved through a comprehensive approach that involves entrepreneurship innovations, education, skills training, and startups. It's essential to start from the basics and work our way up to ensure that the shift towards a 'Farm to Plate' system is successful.

Recommendation for Africa's Economic Growth.

To enhance economic growth in Africa, it is highly recommended that the government agencies, research institutes, investment banking sectors, and business leaders work together to establish unified research and innovative centers linked with entrepreneurial development centers. In line with current global research, a focus on circular agri-food systems can help address issues such as protein malnutrition, food and nutrition security, and inefficient farming mechanization systems. Additionally, digital traceability can help with cultivation, pre- and post-harvest technology, and prevent food theft, fraud, and adulteration throughout the supply chain.

