

Impact

Towards Africa's Agricultural Transformation



African Intellectual sought Innovation in African Agriculture

Time to measure Africa's agricultural takeoff

Impact Source:
The difference AGRA is making on the ground

African agriculture: who will own the future?

AGRA is catalyzing an inclusive agricultural transformation in Africa by increasing incomes and improving food security for 30 million farming households in 11 focus countries.

Since 2006, AGRA and its partners have worked across Africa to deliver a set of proven solutions to smallholder farmers and thousands of indigenous African agriculture enterprises. The alliance has built the systems and tools for Africa's agriculture: high quality seeds, better soil health, access to markets and credit, and coupled by stronger farmer organizations and agriculture policies.



Package of Interventions



Input Systems

Strengthening agricultural input systems, technology & adoption

AGRA is supporting and partnering with both the public and private sectors to develop the systems that ensure sustained availability, delivery and adoption of improved seed and fertilizers, with a particular focus on getting these inputs into the hands of women farmers. AGRA believes that once a farmer can profitably invest in seeds, fertilizers and associated good agronomic practices, the market becomes the real driver of agricultural transformation.

Through our work in seeds and soil health, AGRA is building on its experience, expertise and partnerships to take innovative crop varieties and soil and crop management techniques to scale, to help farmers confront local constraints to production and emerging threats such as climate change.



Agribusiness Development & Innovation Finance

Strengthening business growth and finance & risk management

AGRA is working to develop the capacity of local agri-businesses to access markets, support local and national financial institutions. This includes providing affordable financing to smallholder farmers and local SMEs in a bid to transform farms and businesses into sustainable and profitable enterprises. In its interventions AGRA catalyzes public investments impact in supporting farmers and leveraging private sector investment in agriculture to build sustainability and contribute to overall economic development.

Critical to this is the participation of both in providing solutions for Public Private Partnerships in the agriculture sector. AGRA has a clear role in catalyzing and facilitating the realization of public and private investments in specific value chains where the private sector has shown interest by helping to get these value chains functioning efficiently.



Resilience Building

Growth for structured markets for quality produce & operational capacity of output systems

AGRA is promoting interventions that enhance the resiliency of the production system to climate change and climate variability. This includes developing more efficient marketing systems, introducing post-harvest technologies to close yield gaps and ensure farmers can sustainably sell quality product to consumer markets.



Policy & Country Support

Strengthening national and regional level systems and reducing impact of agricultural volatility

AGRA has been and will continue to shape the continent's CAADP implementation through support to the African Union Commission for country National Agricultural Investment Plan (NAIPS) review as well as playing a critical role in supporting the biannual review process through technical assistance. We are building government capacity to strategize, fund and deliver on agricultural strategies while supporting sector coordination and accountability.

As agricultural development is significantly influenced by national level policies, investments, and institutional arrangements, AGRA has developed custom-tailored business plans for individual countries and within each agro-ecology. By analyzing and advocating for critical policy reforms, AGRA is working with governments to strengthen national capacities to deepen and sustain the gains made through policy decisions and encourage significant investments of public resources into the agriculture sector.

Africa must take charge of its destiny

Agriculture captures the African story like no other economic activity - both the ties and traditions of the past, and the promise of a bright future. Etched in our history, farming tugs us back to the land in our villages, whilst offering the promise of a modern, vibrant and prosperous future.

Its value goes beyond providing our basic human needs – food. It grows our economies and, more importantly, it changes society. I am not only convinced about this, I know it to be true, having spent my entire life in agriculture. Starting out first as a young girl, growing up on a small farm that my parents tilled – which, like many sons and daughters of African farmers, afforded us an education that gave us a shot at a decent life - and, later, the various leadership positions I have been privileged to hold shaping agricultural decisions and driving action.

Why does Agriculture hold such promise? It's all in the numbers. For starters, the sheer number of Africans - 70% of the population - that directly depend on agriculture for their livelihood, means that we should and must give the sector more attention.

If we invest in these farmers, mostly smallholders, by giving them access to appropriately adapted seeds and fertilizer and by ensuring availability of information on proper farming practices, farm yields will double and even triple in many instances- link them to functional national and regional markets, at the bare minimum, their incomes will double.

What does this look like in reality? Let's take Uganda as an example to illustrate this possibility. With a population of 40 million, doubling incomes would raise per capita income to around US\$ 1,200 up from the current US\$ 600. This would not

only get the country closer to its aspiration of becoming a middle income nation by 2020, it would also improve the lives of farmers and rural economies significantly with access to otherwise hard to reach services like quality education, health services and off-farm jobs.

The good thing is that we are starting to see evidence of this. According to IFPRI, countries like Burkina Faso, Côte d'Ivoire, Ethiopia, Ghana, Kenya, Rwanda and others that have made big investments in agriculture have seen productivity on existing farmlands rise by up to 6% per year, spurring an average annual GDP increase of over 4%.

However, for Agriculture transformation to move the continent's economic needle and deliver prosperity for all, many more countries need to join in. The urgency for Africa and its people is that we lack the luxury of time. The recent news of the drowning of over 20 young girls in the Mediterranean Sea, like many before them, broke my heart. Young lives with endless potential snuffed out. Gone because they had lost hope in the continent to deliver their aspiration for a decent future. Sadly, they join the grim and growing statistics of young Africans that have perished making the perilous journey to Europe.

If we sit and do nothing, African youth will continue making this journey to look for jobs. Jobs that we have, ironically, largely exported through our inordinate food imports that cost the continent a staggering US\$ 40 billion annually. Inaction will see this cost rise to an estimated US\$ 110 by 2025.

Fortunately, these trends can and should be reversed. Indulge me here in my back-of-the-envelope calculation which indicates that if the US\$ 40 billion was invested to produce food made in Africa,



we would create employment for over 11 million youth paying them wages equivalent to what they would get in Europe. This is almost all the 10-12 million youth that are entering the job market in Africa every year - 70% of whom cannot currently find employment.

Our choices are, therefore, very clear. Continue as a net food importer and face peril or seize the business opportunities presented by the continent's food market valued at US\$ 300 billion and projected to rise to \$1 trillion by 2030 to build wealth and prosperity through agriculture.

For me, there is only one logical choice; taking charge of our destiny. To do this, we must improve systems, infrastructure, policies and institutions that support agriculture. There are no excuses for not doing it. Multiple lessons abound from regions that launched their economic success on the back of a strong foundation in agriculture. The most recent examples are from South East Asia where governments that consistently invested 15% - 20% of their national budgets in agriculture for 10-15 years ushered in a period of rapid economic growth that quickly diversified to industries and services. At this level of investment, it is possible to unlock the private sector potential in ways that would sustain the agriculture sector with minimal public intervention.

I am encouraged by the many positive signs of progress that we are seeing across the continent. The private sector is stepping up to the plate in a big way. As an example, the partnership between DSM, the Government of Rwanda and a number of other partners including the UN World Food Programme and CHI comes to mind. This joint venture saw the setting up of a US\$ 60m state-of-the-art baby food factory in Kigali producing nutritious foods for infants and mothers.

Besides improving access to nutritious baby food, the company has directly created jobs for hundreds of Rwandans and offered a market for close to 9,000 local farmers giving them a stable and sustainable income. DSM is also in very good business; in fact, they cannot satisfy the regional demand right now.

This success is directly attributed to strong leadership at the public and private sector levels. I could cite similar examples in other countries including Ethiopia where, due to committed investment in agriculture, poverty rates are reducing at a rate of 5% per annum.

For avoidance of doubt, I am not trying to downplay the complexity of issues that underpin a successful agriculture sector. The emphasis is on possibilities and, more importantly, the need for a determined, visionary and unwavering leadership that is critical to making agriculture work.

There will be no shortcuts out of the poverty that grips a majority of our people. Whatever choices we make, a population with some spending power is critical for the success of Africa's economies and right now, for the majority of our people, a thriving agriculture would provide that opportunity.



Agnes Kalibata

Dr. Agnes Kalibata, President, AGRA
@Agnes_Kalibata



Editor's Take

Africa's agricultural transformation scorecard in 2018

We are in 2018, the African Union presents the Biennial Review Report to the AU Assembly of Heads of State and Government in Addis Ababa in January. For the heads of state to speak to the merits of measurement, country by country, and government accountability in delivering an agricultural transformation is a major milestone for Africa.

The Africa Agricultural Transformation Scorecard (AATS), the first of its kind in Africa, captures the continent's agricultural progress based on a pan-African data collection exercise led by the African Union Commission's Department of Rural Economy and Agriculture (DREA), NEPAD Agency and Regional Economic Communities in collaboration with technical and development partners. Countries were assessed on the seven commitments in the Malabo declaration, across 43 indicators.

The AATS tracks progress in commitments made by AU Heads of State and Government through Comprehensive Africa Agriculture Development Programme (CAADP) and the Malabo Declaration to increase prosperity and improved livelihoods for transforming agriculture. The indicators chosen to track the performance categories were defined on the basis of the strategic objectives derived from the Malabo Declaration.

These initiatives have been bolstered by recent pushes for greater accountability and monitoring within African agriculture and food security efforts. The 2016 Africa Green Revolution Forum (AGRF) held in Nairobi yielded a commitment from AGRF partners to develop an agricultural transformation scorecard ahead of the CAADP biennial review. The scorecard measures and tracks indicators covering financial and policy commitments to ensure accountability and action in the CAADP process.

These efforts represent critical steps towards development that is sustainable and country-owned. The more governments adopt policies to complement agricultural development efforts, the greater the gains we will see in economic growth and food and nutrition security on the continent. Here is to a prosperous and accountable Africa in 2018.

David Maingi, MCIPR, Head, Communications, AGRA
@raslimali



IMPACT is a quarterly publication by AGRA. The views expressed here are those of the authors and do not necessarily represent those of the institutions with which they are affiliated.

Alliance for a Green Revolution in Africa

Head Office - Kenya
West End Towers, 4th Floor, Kanjara Road
P.O. Box 66773-00800, Nairobi, Kenya
Tel: +254 (20) 3675 000, +254 703 033 000
Web: www.agra.org

IMPACT Editor
dmaingi@agra.org

Cover Photo

H.E. Olusegun Obasanjo with the 2017 Africa Food Prize Award laureates, Prof. Ruth Oniang'o and Mme Maimouna Sidibe Coulibaly

Concept & Editing

David Maingi

Graphic Design & Layout

David Maingi

Contributors

Kofi Annan, Akinwumi Adesina, Joe DeVries, Agnes Kalibata, Boaz Keizire, Adeel Hassan (New York Times), Waiganjo Njoroge & David Maingi

Photo Credits

AGRA & Shutterstock

Printing

Ecomedia Ltd.

1

Progress will continue
if we focus on
agriculture - Africa's
path to prosperity
Pg 8

5

Africa must measure
it's agricultural
transformation
takeoff
Pg 18

2

Africa Intellectual
Sought Innovation in
African agriculture
Pg 10

6

New book highlighting
PASS journey to
better seeds for Africa
launched
Pg 20

3

African agriculture:
who will own the
future?
Pg 14

7

Impact Source: Stories
of the difference
AGRA is making on
the ground
Pg 22

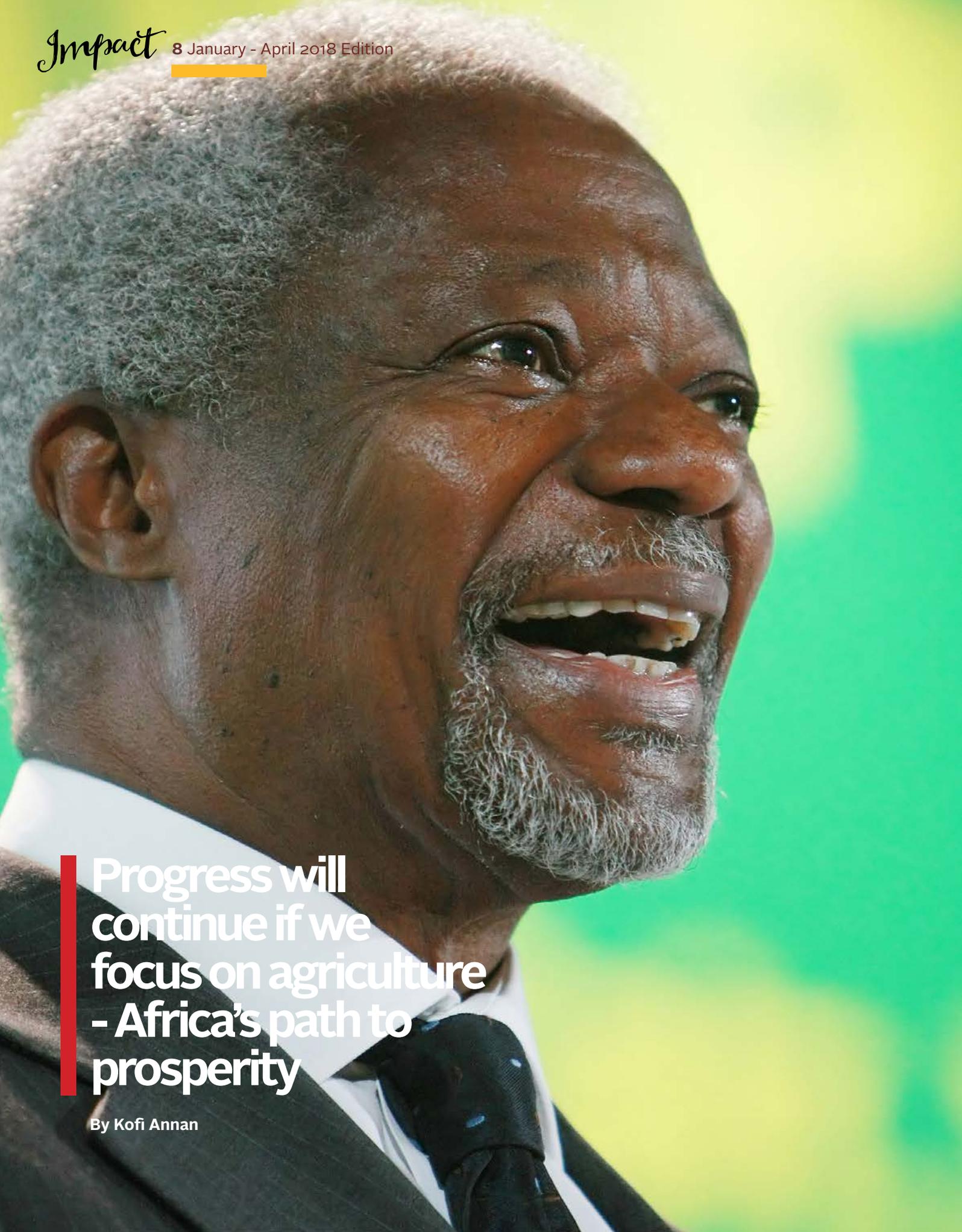
4

Seeding the
continent's efforts to
stop hunger
Pg 16

8

TurnTable: Farmer's
daughter telling
farming stories at
BBC
Pg 44

Contents



Progress will
continue if we
focus on agriculture
- Africa's path to
prosperity

By Kofi Annan

Africa is witnessing a quiet revolution which holds out real hope of banishing poverty and hunger and driving economic growth. This transformation is not in sectors like oil and gas, minerals or tourism, which grab global headlines, but in agriculture, which remains the backbone of the continent's economy.

Despite the rapid growth in the services sector, agriculture still accounts for more than a third of its GDP. Africa is urbanizing rapidly, but agriculture still employs two-thirds of the workforce. Evidence has shown that growth in agriculture is up to 11 times more effective in reducing poverty than growth in any other sector. If we want to end poverty and hunger in Africa by 2030, agriculture needs to be right at the heart of the strategy.

African agriculture and smallholder farmers have too often been forgotten. The result is that Africa, despite the hard work of its farmers, does not grow enough to feed its own people. One in four of the continent's population is undernourished, a huge barrier to better health and development. There is a direct economic cost, too, with \$35 billion spent on importing food annually – a figure which could almost triple by 2025 unless Africa increases agricultural productivity.

To compound this, political failures and violent conflicts have put millions of people at risk of starvation. Earlier this year, the UN warned that 20 million people across north-east Nigeria, Somalia, South Sudan and Yemen were at risk of starvation, a humanitarian crisis that is almost entirely man-made.

Fortunately, this dismal picture is giving way to signs of progress.

First, over the last decade, agriculture has received growing attention from governments and investors. For example, at last year's African Green Revolution Forum (AGRF) – a forum I helped launch a decade ago – \$30 billion worth of political, financial and policy pledges were made; the largest ever commitment in the continent's agriculture. This was a turning point. Now, we are taking steps to turn these pledges into results. At this year's AGRF in early September, we witnessed the signing of many agro-business deals amounting to more than \$6 billion.

Second, smallholder farmers are becoming recognized for the small businesses they are. Initiatives like the Farm to Market Alliance, which help smallholder farmers secure long term buyers for their produce are gaining momentum. This gives them the confidence to invest and grow their businesses knowing they have a market when they harvest.

Third, we are changing the way we work together. New partnerships are emerging, like the recently launched, multi-million dollar Partnership for Inclusive Agricultural Transformation in Africa (PIATA). It aims to increase incomes and improve the food security of 30 million smallholder farm households across Africa by 2021. It is the first time we have seen some of the largest funders of agricultural development pooling their resources and efforts towards a common goal. This represents a new way of doing business.

Fourth, with climate change threatening food production as never before, we are prioritizing efforts to help farmers adapt. By embracing, for example, solutions such as drought and heat-tolerant crops, modern weather information systems, and efficient irrigation systems, farmers can cope with the changing weather conditions.

Fifth, we are putting a much bigger emphasis on the quality of our diets, rather than just focusing on quantity. In Sub-Saharan Africa, millions lack the nutrients needed for proper health and development. One of the ways we are tackling malnutrition is by making crops more nutritious.

The orange-fleshed sweet potato, which has higher levels of vitamin A, is an example of our success. When children do not get enough vitamin A, their growth is slowed, immune system weakened, and they risk going blind. Half a cup of sweet potato from these new varieties is enough to give children their daily intake of the vitamin. The result is not only better health, but better economies; experts estimate that undernutrition costs African economies around 11 per cent of their GDP annually.

These signs of progress rarely make the global headlines, but they are slowly and surely transforming economies and improving lives of millions across the continent. Africa is taking control of its own agricultural transformation. This is essential if the continent is to ensure African farmers and companies enjoy the full benefits of its growing food market, which is projected to be worth \$1 trillion by 2030.

In the end, this progress will only continue if we focus on agriculture as our path to prosperity, monitor our progress and hold ourselves to account. Fortunately, at the request of African Heads of State, there is a review of the progress being carried out right now, which will be presented at the African Union summit in January next year. I believe that it will register considerable progress over the last few years; but yet we are just getting started.

We shall reap what we sow. By supporting Africa's smallholder farmers, we can build an Africa free from hunger. We can build an Africa free from poverty. We can build an Africa proud to be economically strong and able to feed itself. That is bountiful harvest that together we can and must achieve.

Mr. Kofi Annan is the founder and Chair of the Kofi Annan Foundation and served as the seventh secretary general of the United Nations. He is the Chair Emeritus at the Alliance for Green Revolution in Africa (AGRA).

African intellectual sought innovation in African agriculture

By Adeel Hassan

Calestous Juma, a prominent global advocate for sustainable development in struggling countries, particularly in his native Africa, could trace his passion for technological innovation to his arduous childhood in colonial Kenya.

One of 14 children, most of whom died of malaria, he grew up on the shore of Lake Victoria in a remote village of mud huts without electricity or running water. The nearest post office was 20 miles away. Flooding was common.

“The family kept getting pushed out of their home and then trying to go back,” his wife, Alison Field-Juma, said. “So there was this sort of constant change in his environment. It was also incredibly challenging. They were forced to innovate. Both his parents were real innovators. I think that’s where that spirit comes from.”

His father, a carpenter, introduced cassava, a starchy root native to South America, to give villagers a more reliable food supply. His mother became an entrepreneur, selling goods at marketplaces so that she could help pay for her son’s schooling.

That schooling led him ultimately to Harvard, where he became a professor of international development at the Kennedy School and directed the Agricultural Innovation in Africa project at the Belfer Center for Science and International Affairs.

He also became the first director of the United Nations Convention on

Biological Diversity and the founder of the African Center for Technology Studies in Nairobi, Kenya, a pioneering group that married government policy with science and technology to spur sustainable development and foster distinctly African perspectives on science.

Professor Juma died on Dec. 15 at his home in Cambridge, Mass. He was 64. His wife said the cause was cancer. At his death he was widely credited as having been an important force in ensuring that biotechnology would play a critical role in improving economic life in many developing countries, especially in sub-Saharan Africa.

“Calestous understood that people often resist the changes that come with innovation, and that overcoming this resistance can be very important in enabling societies to move ahead,” said Douglas W. Elmendorf, dean of the Kennedy School. “So he tried to understand why people resist innovation, and what can be done to make them feel comfortable with change.”

Professor Juma’s latest book, “Innovation and Its Enemies” (2016), described how technological change is often greeted with public skepticism.

Beneath such opposition, he argued, is the belief that only a small segment of society will benefit from potential progress, while the much broader society bears the greatest risk.

Successful policymaking must take into account people's feelings, he believed. When Professor Juma helped design a stove for use in developing countries, its metallic cylinder was replaced with a clay lining to improve efficiency. But the prototype caused less smoke — attracting more mosquitoes — and villagers worried that metal workers could lose their jobs. A later model used metal and clay.

“Ultimately, all development is experimental; no one knows what they are doing,” Professor Juma said with a laugh in 2014. “Africans need the chance to experiment as well. They will make mistakes, but they can learn from them, too.”

Professor Juma could be lighthearted in the classroom or in public in order to make his points. With more than 100,000 followers on Twitter, he shared with them cartoons that teased skeptics of science and innovation. One of his last posts featured a game show called “Facts Don't Matter.” In it, a contestant is told: “I'm sorry, Jeannie, your answer was correct, but Kevin shouted his incorrect answer over yours, so he gets the points.”

“Calestous was very serious about getting his work right, but he was not serious about himself,” Mr. Elmendorf said. “He shared his enjoyment of the research and teaching, though he was working on life-or-death issues for many people. He was incredibly optimistic.”

Professor Juma was born to John Kwada Juma and Clementina Nabwire Juma in the village of Busia, in western Kenya, on June 9, 1953. He grew up nearby in Port Victoria.

“Port Victoria was as remote as it gets — a small fishing village on Lake Victoria at Kenya's westernmost point,” said Ken Kobe, who taught Professor Juma while serving as a Peace Corps volunteer there in 1969-70.

After graduating from Egoji Teachers' Training College in central Kenya in 1974, Professor Juma became a science teacher in Mombasa, a port city on the Indian Ocean. He went on to write so many letters to the editor of the Nairobi-based newspaper *The Daily Nation* that it hired him in 1978 to be its first full-time science and environment correspondent.

Wangari Maathai, the environmentalist who became the first African woman to win a Nobel Peace Prize, hired Professor Juma to work at a nonprofit in Nairobi. Encouraged by Ms. Maathai, he won a scholarship and earned a doctorate in science and technology policy studies in 1987 from the University of Sussex in England.

He met his wife, who also works in sustainable development, at a conference in Montreal. They married in 1987 and moved to Kenya.

Professor Juma experienced two major ecological disruptions in his childhood, Ms. Field-Juma said. One was the introduction of Nile perch to Lake Victoria to help the fishing industry. Though it did benefit the area economically for a time, it also contributed to the depletion, to near-extinction, of stocks of many other types of fish in the lake.

The second change was the British colonial government's deforestation of much of the Port Victoria region, which dried out what had been a wet and fertile area. “The microclimate of that region was irreversibly changed,” Ms. Field-Juma said.

On his return to Kenya with his wife, he sought a scientific solution to the agricultural crisis.

“I started to run into all the people who had collected seeds of fruits and vegetables, mostly fruits, that had disappeared,” he said in an interview in 2003. “And some of them explained to me that those fruits have disappeared because the area had dried up. And they would pose this question to me: ‘You scientists, are you able to grow these fruits in places where there is less water?’ ”

Professor Juma recognized the potential of genetic modification to address such issues and to help solve Africa's broader agricultural problems, distilling his thinking in the 1989 book “*The Gene Hunters*.”

The book helped pave the way for the Convention on Biological Diversity, a United Nations treaty signed by more than 150 governments in 1992 to protect the survival of diverse species and ecosystems.

Besides his wife, he is survived by his son, Eric, and his sister, Roselyda Nanjala.

Until he was hospitalized, Professor Juma had planned to host about 20 international students for Thanksgiving in Cambridge. Instead, he joined them from the hospital by Skype, sharing stories and discussing development with them.

“It was just what he wanted,” Ms. Field-Juma said, “and he wasn't even there.” received growing attention from governments and investors.

The article was published by *The New York Times* online edition on January 1, 2018, with the headline: **Calestous Juma, 64, Dies; Sought Innovation in African Agriculture**



H.E. Olusegun Obasanjo, Chairman of the Africa Food Prize Committee poses with the 2017 Award laureates, Prof. Ruth Oniang'o (left) and Mme Maimouna Sidibe Coulibaly (right) after the award ceremony in Abidjan, Cote d'Ivoire.

Champions for nutrition, food security and agribusiness named winners of 2017 Africa Food Prize

Two women, working at both ends of the agriculture supply chain in Africa, were awarded the 2017 Africa Food Prize. Hon. Prof. Ruth Oniang'o, a professor and advocate of nutrition from Kenya, and Mme Maimouna Sidibe Coulibaly an entrepreneur and agro industrialist, from Mali were awarded for their exemplary efforts in driving Africa's agriculture transformation.

Hon. Prof Ruth Oniang'o was recognized as the leading voice of nutrition in Africa and for her relentless advocacy for the availability and affordability of diverse and nutritious crops for millions across the continent. She pioneered nutrition leadership in academia, research, and policy to improve food security and nutrition. Her groundbreaking work, with farmers' groups and rural communities connects agriculture and nutrition both in research and practice providing a natural link between agriculture and nutrition.

Mme Maimouna Sidibe Coulibaly, on the other hand was feted for her mission to produce and supply improved and high-yielding seed that have led to improved incomes and nutrition for millions in Mali and other West African countries. Through sheer hard work and consistency, she has overcome multiple hurdles to build a leading seed company that is fast becoming a model for Africa's agri-businesses. Her company, Faso Kaba, specializes in the production and sale of a wide range of improved seeds, including cereals, oil seeds, market gardening, fodder and tuber seeds that can improve agricultural yields by up to 40 per cent.

The Prize recognizes and puts a spotlight on shining examples of agricultural projects that are transforming lives and economies. The 2017 Prize winners come from both the public and private sector representing how both groups are

working together to transform agriculture into a high value industry sector. The 2017 AFP awards had over 600 nominees establishing it as the most prestigious prize for African agricultural development.

The Chairperson of the Prize Committee, H.E. President Olusegun Obasanjo of Nigeria, commended Hon. Prof Oniang'o and Mme Coulibaly on behalf of the Committee for their trailblazing efforts that are improving the socio-economic wellbeing of millions in Africa.

"It gives me immense pride that this year's winner are both women. This is a clear demonstration that women in Africa are at the forefront in terms of connecting the rising food needs and the continent's vision for prosperity that is driven by agriculture and agri-business. The fact that the winners work at either end of the agriculture value chain, represent both private and public sector and are from different parts of Africa reflects the wide impact agriculture has in transforming economies and reducing poverty, way beyond the fields," he said.

As a member of Kenya's Parliament (2003-2007), Hon. Prof Oniang'o dedicated her efforts to alleviating poverty and hunger, with special focus on science and technology, agricultural research and productivity, food security, nutrition, bio-safety legislation, use of fertilizer and other inputs, HIV/AIDS and gender issues.

A strong believer in farming being the bridge between humankind and nature, Prof. Ruth Oniang'o spends most of her time with smallholder farmers and women in rural areas helping them to transform their household's ability to produce, purchase and consume foods in higher quality and quantities. She reckons that smallholder farmers are the most valuable part of the market and the entrepreneurial value chain.

"I believe we are what we eat. I realized early on in my life, when I dreamt of being a doctor, that food is the first medicine," said Prof. Oniang'o as she received her Prize. "I am humbled to receive this Prize and believe it highlights the work we have done and more importantly, it will contribute towards shaping our continent's food future. I am a strong believer that Africa shall, one day, feed the world." said Hon. Prof Oniang'o.

For her part, Mme. Coulibaly observed that the opportunities for Africa agribusinesses are endless. She however, decried the enormous challenges African entrepreneurs especially start-ups face as they try to set up businesses.

"I am honored and humbled to receive this Prize. It is, in part, a validation of the hard work that I have put into building Faso Kaba with the support of my family and staff. I would like to say that it has been easy. There are many times when I almost gave up as I struggled to raise to finance the business. I am glad I stayed true to my vision, attended many trainings and worked with partners that believed in my vision," she said.

"Today, we have become a model that many people that are starting businesses come to. I no longer book appointments with the banks. They call me with financing proposal. I look forward to a time when businesses will not struggle to start like I did," she added.

The 2016 winner of Africa Food Prize is Dr Kanayo Nwanze, the former President of the International Fund for Agriculture Development (IFAD). Dr. Nwanze was awarded for his visionary leadership and passionate advocacy to place African smallholder farmers at the centre of the global agricultural agenda, and for his demonstrated success in advancing policies, programs and resources that have improved the lives of millions across the continent.





African agriculture: who will own the future?

By Akinwumi Adesina

Agriculture is instrumental in Africa's poverty; it must also be instrumental in its wealth. Only through agricultural regeneration can growth, diversification and job creation occur for African economies, for no region of the world has ever industrialised without the agricultural sector being first transformed.

In short, the future of Africa depends on agriculture. But Africa cannot develop quickly if farming remains largely a subsistence activity. 60% of the population are involved in farming, yet it accounts for less than one seventh of its GDP, and African agricultural yield is the lowest in the world.

So Africa is late in developing but even this very fact offers a large scale opportunity for international investors and big-ticket entrepreneurs.

Economic diversification and lasting wealth creation begins with a vibrant agriculture sector. Between \$30 and \$40 billion a year over the next ten years is needed to transform African agriculture and create the vibrancy. It's a lot of money, but it is available, even within Africa, if the projects are good enough.

And they ought to be good enough, since such investments will create new markets worth at least \$85 billion per year in added revenue by 2025. That's a potential return of at least 100%. But which producers will own, influence and leverage these markets? Most, surely, should be made in Africa? We must own our development. The commitments of last year's AGRF gave us a flying start with \$30 billion over 10 years.

And with such transformation would come the reduction of Africa's net trade deficit in food, potentially bringing net savings of up to \$100 billion per year. We must bring an end to the costly and damaging anomaly of the net deficit in food. No more should Africa produce what it does not or cannot consume, and no more should it consume what it does not (but could easily) produce.

Other related measures would deliver similarly impressive albeit incalculable financial impacts: fiscal inclusion, tax reform, domestic revenue mobilization,

higher remittances, reduced corruption and better governance.

There are also still huge and unexploited growth opportunities in Africa. The continent is endowed with 65% of the world's uncultivated arable land and huge reserves of water. Sub Saharan Africa also has 10% of the world's oil reserves, 40% of its gold, and up to 90% of its chromium and platinum. And those are just the known reserves – the whole continent is one of the world's largest unexplored resource basins. Africa may suffer from poverty but it is an unimaginably rich continent, even after fifty years and more of commodity exploitation.

But how to bring about this transformation? How to close this potential deal of the century? Public and private sector should be acting together. They are needed to provide significant opportunities for Africa's emerging innovators and entrepreneurs, not to mention its financiers, fund managers and financial advisers.

Over the past few years, the Bank has been able to bring about a comprehensive re-evaluation of the potentially enormous role of agriculture in the transformation of Africa, and the AGRF has been a critical factor in the shared objective with the Bank of bringing about the green revolution in Africa.

The technologies to feed Africa exist already. This is the period of climate change. High yielding drought-tolerant maize can allow farmers to grow a good crop even during droughts. Some cassava varieties can yield 80 tonnes per hectare. High yielding rice varieties that meet or beat international standards of imported rice now exist. Orange-fleshed sweet potatoes allow us to address the problem of vitamin A deficiency. Tropical and drought-tolerant wheat varieties are being grown in Nigeria, Kenya and Sudan.

These technologies need to be scaled up for widespread adoption. This will not happen by itself. It will require specific incentives. In particular, the African Development Bank and the World Bank plan to jointly provide \$800 million through "Technologies for African Agricultural Transformation", a flagship programme for the scaling up of agricultural technologies to reach millions of farmers in Africa over the next ten years

For agricultural transformation more generally, the African Development Bank has committed \$24 billion to agriculture over the next 10 years, with a sharp focus on food self-sufficiency and agro-industrialization.

It's also why we launched the Affirmative Finance Action for Women in Africa (AFAWA), to make an extra \$3 billion available for women entrepreneurs, in order to improve food production levels on the basis that women

are demonstrably more dependable and bankable than men.

Getting our youth involved in agriculture as a business is crucial. That is why the Bank launched the ENABLE Youth program. This program will provide access to capital and capacity to "Agripreneurs" to create about 300,000 agribusinesses and 1.5 million jobs in 30 countries across Africa, with an estimated investment of \$15 billion over the next five years.

With so many entrepreneurs now on the case of farming, an issue to resolve quickly is the current low level of commercial financing for agriculture. Finance and farming have not been easy partners in Africa, and the farming sector receives less than 3% of the overall financing provided by the banking sector.

The African Development Bank is promoting national risk sharing facilities in every country to leverage agricultural finance, similar to the Nigeria Incentive-Based Risk Sharing for Agricultural Lending (NIRSAL), a facility designed to reduce the risks of lending to Nigerian agriculture value chains. The impact in Nigeria was massive. Over four years, 15 million farmers were reached, 2.5 million of them women. Food production expanded by over 21 million tonnes. Today, several African countries are adopting the approach, as well as others such as Afghanistan.

I predict that the next few years will see agriculture emerge fully from poverty and subsistence to become the next big booming business sector of Africa, with entrepreneurs, financiers, inventors and innovators all gathering round a honey pot of bankable projects, programmes and opportunities. After all, who eats copper? And who drinks oil? Africans need to become producers and creators, and not just consumers, in the fast-moving enterprising business of food.

The African Development Bank will play its active role as a catalyst of this activity, and I am confident that we will soon see Africa's first tranche of billionaires coming from the farming and food sectors.



Dr Akinwumi A. Adesina is the President of the African Development Bank (AfDB).

Seeding the continent's efforts to stop hunger

By Dr Joe DeVries



Africa, now home to a population of more than 1.2 billion people which is expected to double by 2050, faces a mounting challenge of feeding its people, growing its economy, creating decent jobs and improving the quality life for its citizens.

Transforming agriculture, the sector that employs the majority of Africans and holds the greatest promise for economic prosperity, will be critical in this pursuit. Yet despite the expenditure of billions of dollars on agricultural development, the most of Africa's farmers continue to harvest one metric ton or of grain per hectare, consigning them to an impoverished, subsistence existence. Experience from the front lines of agricultural development in Africa reveals that a major factor in this dilemma is the lack of access to quality seeds.

The breeding and supply of seed of higher-yielding crop varieties has been the starting point of virtually every Green Revolution experienced around the globe. Yet the critical challenge of seed scarcity among Africa's farmers became evident in the early part of this century almost by accident. At that time, maize farmers in parts of East Africa were battling a serious infestation by a parasitic called Striga that was hitting their yields hard. This prompted research on different maize varieties resistant to the parasite. In the process of doing so, however, the researchers discovered that even farmers who had no Striga on their farms were still getting very low yields. There must be a broader problem than Striga, they concluded.

A broader set of analyses led to the conclusion that a lack of plant breeders and funding to support the creation of new varieties was at the heart of the challenge. Yet every African country had agricultural research stations where the work could be done, and no shortage of eager young agriculturalists ready to learn the science of plant breeding. Equally important, every country possessed its share of seed entrepreneurs and vendors eager to create businesses from the supply of new seeds. In 2006, the Bill and Melinda Gates Foundation and The Rockefeller Foundation came together to establish the Program for Africa's Seed Systems (PASS) within the Alliance for a Green Revolution in Africa (AGRA) to address the challenges associated with supplying Africa's farmers with higher-yielding, locally-adapted seed.

A decade later, crop breeders working in public institutes around the continent have developed over 600 new crop varieties. Over 500 plant breeders have been trained at MSc and PhD levels through the program. Africa's emerging "agripreneurs" have likewise stepped forward in large numbers to work with breeders to fill the seed supply gap, bulking up seed of the new varieties on production plots in 18 countries and selling the seed through local shops known as agro-dealers. The new

seed is in high demand. Approximately 110 recently-formed seed companies are now producing over 130 metric tons of certified seeds every year, sufficient for about 15 million farmers around Africa.

Just as it did elsewhere in the world, the invisible hand of improved seed is broadly lifting farmer productivity in Africa. Crop yields across the continent are shifting upward for the first time in decades. As we travel across the land, the evidence we are seeing is clear: Thousands of smallholder farmers have shown that they can double and triple their harvests, provided they have access to the right seed, fertilizer, and expertise.

The importance of establishing functional, responsive seed supply systems in every African country is now well past the proof-of-concept stage, and represents an imperative for Africa's prosperity. More exciting, the goal of ending hunger in Africa now appears achievable in our lifetimes.

Seeds alone, however, will not get the continent on a path to prosperity. Farmers will require access to credit facilities as well as links to national and regional markets to sell their surpluses. Forward-looking policies that promote the activities of private agri-businesses, and access to capital for their growth are needed to extend the revolution to the outer boundaries of African agriculture.

The task ahead is enormous and the road is long and winding. However, we now have a reliable map. The output of Africa's agricultural scientists and entrepreneurs show that this is a high-return area for investment in alleviating human suffering and providing real opportunities for Africa's growing population of young people.

We are immensely proud of the gains made in the African seed sector. In a new book, *The PASS Journey: Seeding an African Seed Revolution*, we have attempted to document the progress, challenges and next steps, as well as shine a light on a few unsung heroes – plant breeders, seed producers, university lecturers, shop keepers, and others – who work under tough conditions in remote locations to ensure Africa's harvest continues to grow.

The foundation has been laid. With all right investment now, Africa can quickly join the ranks of the world's regions who have overcome their "food hurdle" on the route to greater prosperity and stability.



Dr Joe DeVries is the Vice President for Program Development and Innovation at the Alliance for Green Revolution in Africa (AGRA).

Measuring Africa's agricultural takeoff is set to make billionaires from 'poor men's fields'

By Boaz Blackie Keizire

Asked where the next crop of African Billionaires will come from, the President of the African Development Bank, Nigerian Dr Akinwumi Adesina, without batting an eyelid, declared that they will be farmers. And he is not the only person in his class endorsing agriculture as the next frontier. Technology success Strive Masiyiwa, a Zimbabwean, has indicated more than once that if he was to start over, he would go into farming.

Africa's richest man, Aliko Dangote, too, is now venturing into farming, just recently investing \$4.6bn in Nigerian agriculture. Dangote plans to invest \$3.8bn in sugar and rice and \$800m in milk production in the next three years. Already greatly involved in agriculture, Dangote, through his Dangote Group conglomerate, is out to increase his sugar output by 50 per cent (from 100,000 tons), rice yield by 1 million tons, and start producing 500 million litres of milk a year by 2020.

Masiyiwa and Dangote are successful businessmen in their own right, and being billionaires, they must know something that the average African doesn't.

Yet, for years, and even with front-seat access to data and consultant-advice from real billionaires, the majority of African governments have done little to reposition their economies as agricultural powerhouses. But things may now be set to change.

In 2014, African heads of state met in Equatorial Guinea, and vowed to work together to open up the potential of the region's agricultural industry. This agreement was put into a document, now popularly known as the Malabo Declaration, which stipulated the specific commitments with clear indicators for tracking and measuring agricultural practice that needed attention.

Further, the Malabo Declaration, agreed that a new monitoring system would be set up to ensure that the Heads of State, and their respective authorities, maintained accountability to peers, and to their citizenry in delivering this agricultural transformation.

For this purpose, the Heads of State agreed to review their achievements every two years; popularly known as the biennial review. The first such review is now underway, with a final report set for presentation at the next African Heads of State Summit. In the same way, the Heads of State agreed that there was an urgent need to create a scorecard that would show countries how they are faring on the different goals of the Malabo Declaration.

The scorecard, the first ever pan-African co-operation of its kind, is now under development and will be ready before the January 2018 African Union Summit of Heads of State. Once presented, it will provide a new and powerful tool for all stakeholders in identifying the specific areas of agricultural transformation that need attention.

A complementary tool for the Biennial Review process, the scorecard is powered by data submitted by respective countries on their performance in the 43 agriculture growth indicators agreed on in Malabo. The beauty of the new agriculture scorecard is that it is least concerned with how countries perform against each other and provide an opportunity for sharing lessons.

The hope is that countries that are struggling to reposition their agricultural sectors for takeoff will use it to reach out to those who are proving successful for guidance, allowing the region to grow together, as a block.



This function of the agriculture scorecard, therefore, represents the intent and purpose of the discussions in Malabo, as a pan-African drive, where it has become clear that success is not owed to any country in Africa, and that the only way up is by nations becoming pillars of support for each other.

The scorecard will also be available online to encourage public participation in the interrogation of the information gathered, in the knowledge that by engaging with citizens, Heads of State can benefit from expert advice that may not be immediately available to them. The key principle for presenting the information publicly, however, is rooted in Jürgen Habermas' articulation that public engagement can influence decisions in ways that see key national objectives met more swiftly.

The ultimate goal remains to dispel the myth that scorecards are complicated documents whose aim is to vilify non-performers while rewarding success. The leaders' meeting in Malabo rightly confirmed that Africa is moving into a space where competition in development no longer matters, and that the failure of some countries adversely affects the reputation of the region as a whole.

By the end of the second biennial review process, and with countries actively engaging with the agriculture scorecard, it is foreseen that further improvement in regional integration will have been secured, with key successes in intra-African trade and increased investment in agriculture and hunger reduction efforts.

However, the speed at which the scorecard fuels that success depends on support, from governments and other stakeholders, in pursuing its underlying objective. The active interaction of Heads of State with the tool will introduce them to a new line of questioning that will allow them to identify the specific weaknesses they need to overcome for further development. The hope is that by easily identifying critical areas of failure, the Heads of State can encourage both a policy and attitude shift that will eventually drive the desired changes.

Opinion leaders, such as Dangote, Adesina and Masiyiwa, are helping fellow Africans to appreciate the importance of achieving the Malabo goals. Masiyiwa has already emerged as a major influencer through his interaction with the youth on social media, and his voice is now gradually inspiring a radical shift in favour of agriculture. So are Adesina and Dangote, who are driving a new admiration for farming through their views voiced on television and radio. More of their peers are following suit too, but a lot more mouthpieces are needed around the continent to drive this revolution with the speed it deserves.

As experts note, it is only when the average African realizes that digging dirt is an honorable job, and develops the desire to be actively involved in it because of the financial liberation it comes with, that the continent will begin to achieve its economic development goals.

The Malabo declaration and its biennial review process, as well as the new agriculture scorecard, are now providing a new base to drive that change.



Boaz Blackie Keizire is the Head of Policy and Advocacy at the Alliance for a Green Revolution in Africa (AGRA) and a 2017 Aspen Institute New Voices Fellow.

New book highlights the PASS journey – Better seeds for African farmers



Millions of farmers in Africa are now harvesting two to three times more grain compared to 10 years ago – thanks to improved availability of and access to high yielding, high-quality seed – according to estimates by the Alliance for a Green Revolution in Africa (AGRA).

In a newly-released publication tracking the work of the Programme for Africa's Seed Systems (PASS), an AGRA initiative covering 18 countries, the organization says farmers in many of these countries are harvesting yields of up to 5 metric tons per hectare, up from an average of about 1 metric ton before the programme was started.

Under the programme which spanned 10 years, more than 600 new varieties of major African crops have been bred and released. In addition, 112 local, private seed companies have been established, up from 10 in 2007 in the whole of sub-Saharan Africa excluding South Africa. As a result, over 600,000 MT of high-quality, high-yielding seeds have been produced and distributed to an estimated 15 million farmers, with significant impact on yields and income. The distribution has been done through a network of about 20,000 private, village-based agro-dealers who have been trained and supported to set up small rural shops that bring the seeds closer to farmers.

Speaking at the launch of the book, the AGRA President, Dr. Agnes Kalibata, observed that establishing a viable system for the supply of quality, high-yielding seed is an essential component of agricultural transformation.

"Initiatives like PASS are contributing to a new image of African agriculture that is far from the scenes of low productivity and widespread rural poverty of previous decades. Today, many farming households are getting double and triple yields leading to higher incomes. They also have access to crops that are more nutritious, that are drought and pest resistant, and that cook faster using less firewood and saving both the environment and time," Dr. Kalibata said.

"Increasing the supply of improved seeds will continue to play a crucial role in growing Africa's economies through agriculture, but will be made more sustainable, we believe, through the development of the entire food value chain especially by private local agri-businesses, more forward looking policies, and stronger regulatory institutions," she said.

Dr. Joe DeVries, AGRA's Vice President for Program Development and Innovation, noted that the work of PASS has helped farmers to increase their productivity and wellbeing. "We are really pleased to see that farmers across the continent have adopted the new seed. But, the really good news is that crop yields in several countries are increasing for the first time in decades," said Dr. DeVries.

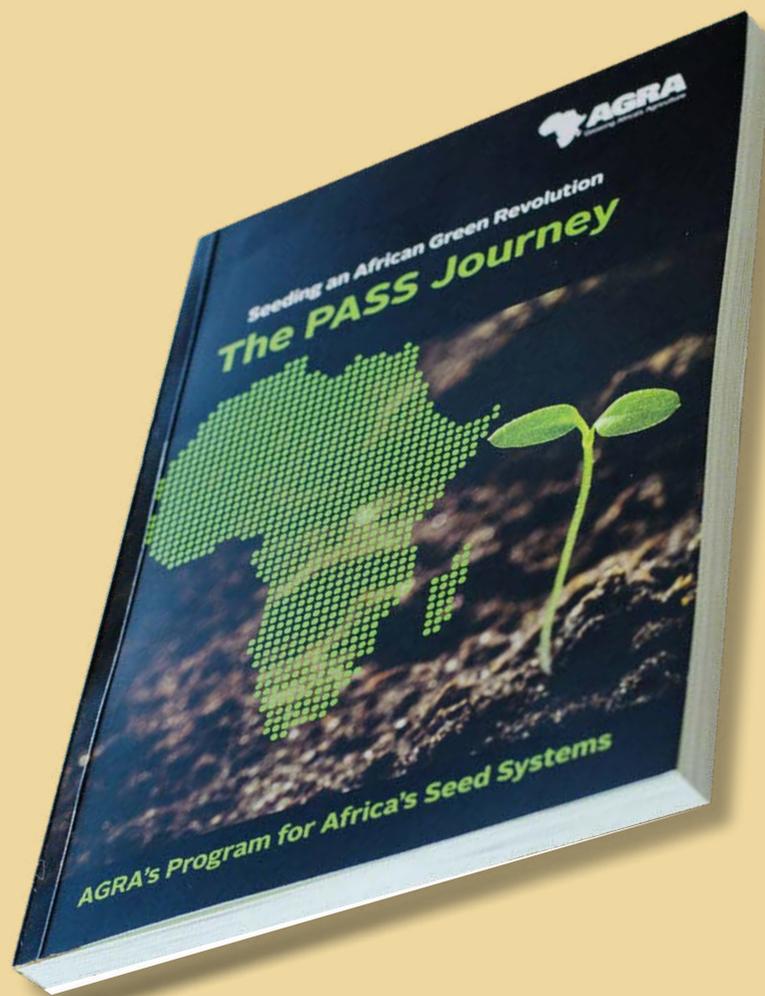
"It is extremely gratifying to see that this catalytic investment of about \$300 million in the national seed sector across the continent over the last decade has yielded a good harvest and laid the foundation for Africa to feed itself," he added.



According to the book, entitled, *The PASS Journey: Seeding an African Seed Revolution*, launched today, the transformation of the agriculture sector is critical to Africa's economic prosperity. An improved agriculture means food security for all and growth of agri-based enterprises resulting in job creation, especially for the youth.

This innovative model of blending de-risking facility with supply and demand side technical assistance is promising good results. The PFIs are willing to engage with farmers and SMEs who have gone through the capacity building program. Besides, the PFIs are adopting value chain financing as a more secure way of lending as this approach enables them to identify where the financing needs are, and how they can address the financing gaps relative to their risk appetite and internal capabilities.

The program aims to reach over 280,000 smallholder farmers and its expected that a larger proportion shall be beneficiaries that would otherwise not been reached by the traditional collateral-based lending.



For Africa to provide sufficient food for a growing population, its farmers must have access to quality seed of high-yielding crop varieties. Toward this aim, in 2006, The Rockefeller Foundation and the Bill and Melinda Gates Foundation came together to create the Program for Africa's Seed Systems (PASS) to support the breeding of improved, adapted varieties of Africa's most important food crops and build private, demand-driven seed supply systems to serve the seed needs of smallholder farmers in 13 African countries.

PASS was an initiative of the Alliance for a Green Revolution in Africa (AGRA). It eventually operated in 18 countries, reaching an estimated 15 million farmers with new, higher-yielding seed.

This is the story of that work, as told by the people who led the program. More than that, the book shines a light on a new generation of determined African agricultural scientists, seed entrepreneurs, agro-dealer shop owners, and others who overcame major challenges to help farmers increase their harvests, and make significant contributions to Africa's unfolding Green Revolution.

The *PASS Journey* describes a new style of initiative which represents a departure from the typical development project, and focuses instead on building applied scientific knowledge, business opportunities and local know-how, creating new markets which grow to serve the critical needs of Africa's most important people; its farmers.



Non-profit branding essential in development

By Mark Irungu

What do other people say about me when I am not in the room? This is – according to Jeff Bezos (Amazon) the essence of a brand – and I agree with him.

But what do non-profits such as AGRA have to do with this? After all, we are not a commercial venture / company driving sales of any product and trying to maximize on profits, are we?

You see, branding is about managing your name in a world of misinformation and disinformation. Our brand constitutes expectations, memories, stories and relationships that, taken together, account

for our ecosystem's experience, feedback, and emotions triggered at the mention of AGRA.

In branding, emotion is King – Establishing emotional connections is critical and has over time surpassed the strength of financial connections. It is about how sold out all our stakeholders (Governments, private sector, funders, grantees and employees) are to our cause. Can they take a bullet for our cause?

AGRA is now focused at developing new strategies that allow this 10-year-old brand to continue serving its mission while sustaining its social impact and staying true to its values.

But branding in the non-profit world is one of the not so easy tasks – understandably so because communication teams are pressed for time and resources whereas building world-class brands requires a lot of time and resources.

Another major concern is that the branding tools and models available for Nonprofit organizations are the

same as those used by the profit sector –these tools associate branding with main organizational ambition of making profits (business101).

A nonprofit organization also aims to raise money, however ideally the main goal should be to leverage their brand to cause a greater social impact and public discourse. Non-profit brand managers need new models that allow their brands to make their expected contributions.

So how do you strike a balance to ensure that the brand is not left out? Borrowing from the Nonprofit Brand IDEA framework - developed by Nathalie Laidler-Kylander & Julia Shepard Stenzel together with Harvard University's Hauser Center for Nonprofit Organizations and collaborators at the Rockefeller Foundation here are four principles that can push your non profit brand a long way:

Brand integrity

The organization's internal identity is aligned with its external image and that both are aligned with the mission. The



word integrity is used to mean structural integrity, not moral integrity.

Internally, a brand with high structural integrity connects the mission to the identity of the organization, giving members, staff, volunteers, and trustees a common sense of why the organization does what it does and why it matters in the world.

Externally, a brand with high structural integrity captures the mission in its public image and deploys that image in service of its mission at every step of a clearly articulated strategy.

Brand democracy

The organization trusts its members, staff, participants, and volunteers to communicate their own understanding of the organization's core identity. Brand democracy largely eliminates the need to tightly control how the brand is presented and portrayed. The appetite for brand democracy among nonprofit leaders is largely a response to the growth of social media, which has made policing the brand nearly impossible.

Brand ethics

The brand itself and the way it is deployed reflect the core values of the organization. Just as brand integrity aligns the brand with mission, brand ethics aligns both the organization's internal identity and its external image with its values and culture. This is about more than being known as an ethical organization, but extends to the organization's use of its brand in ways that convey its values. There are many stories of lapses in brand ethics, such as using pitiful photographs of an organization's beneficiaries to motivate donors.

Yasmina Zaidman, communication director at Acumen Fund, contrasts these exploitive images with Acumen's tagline "Seeing a world beyond poverty." Acumen avoids "images of poverty that ... dehumanize the people whom we want to actually help," she says, instead promoting images of "pride and dignity."

Brand affinity

The brand is a good team player, working well alongside other brands, sharing space and credit generously,

and promoting collective over individual interests. An organization with strong brand affinity attracts partners and collaborators because it lends value to the partnerships without exploiting them. Organizations with the highest brand affinity promote the brands of their partners as much as or more than they promote their own brands, redressing rather than exploiting the power imbalances that inevitably exist in any partnership or collaboration.



Mark Irungu is a Branding & Events Specialist at AGRA.



A rice powered green revolution in Burkina Faso

Six years ago, farmers struggled with access to enough good quality seed of key crops at affordable prices. The formal seed sector was able to meet less than 6% of the national demand for seed. When available, high quality seed was very expensive and often found in shops that were far from farmers' villages. This left farmers with no option but to continuously use self-saved seed, which led to low yields since the health and quality of the seeds were not assured. Naturally, this meant that neither the farmers nor the country as a whole produced enough rice and other important crops.

Bobo Dioulasso is a key agricultural region located southwest of the capital Ouagadougou. Today, 1,300 rice farmers in Bama Province of Bobo Dioulasso are all smiles as they witness the power of using certified seed of improved varieties, coupled with good agronomic practices. Their yields have nearly doubled – from an initial 3.5 t/ha to the current 5.5 t/ha, and they are making a good return from selling the rice seed.

“There has been a real improvement in my livelihood,” says Ouattara Kalifa, a rice seed farmer in the Bama Province. “I’ve acquired three bicycles, a motorbike and much needed cellphones because of my participation in the NAFASO network,” says.

Neema Agricole Du Faso (NAFASO) is a local seed company supported by the Rockefeller Foundation and the Bill and Melinda Gates Foundation is one of AGRA's key partners in the country. NAFASO and its network of farmers produced 3,116 tons of seed rice from 1,371 hectares in 2013. This notably increased the incomes of farmers in the network, and in turn, NAFASO made US\$ 1.8 million that year selling the seed it purchased from participating farmers.

AGRA's partnership with NAFASO involved promoting the production and marketing of improved certified seed of maize, rice and cowpea. Slowly but steadily, NAFASO has changed the face of rice production in the country, beginning with the Bobo Dioulasso region. Through collaboration with the national research institute (Institut de l'Environnement et de Recherches Agricoles), NAFASO accessed seed of high-yielding rice varieties adapted to the region's conditions, which it then multiplied. In addition, the firm worked with the national seed service (Service National des Semences) to get the seed certified. Extension service officials assisted with organizing farmers into viable rice seed production groups and promoting the importance of the use of certified seed and good agronomy. NAFASO also engaged the association of agrodealers in Burkina Faso (AGRODIA) and AGRIFARE, a large private agrodealer, to create a sizeable network of agrodealer shops to increase farmers' access to quality seed and other inputs. Lastly, farmers were

Stories of the difference AGRA is making on the ground



trained in basic financial management, to be able to operate their farms as the businesses they should be. Farmers were empowered to train other farmers in all these aspects, and together these interventions contributed to making rice farming profitable for the region's smallholders.

Life in the community is changing too. By creating employment opportunities and empowering farmers to profit more from their rice farming, NAFASO has had a positive impact on the community. As a result of bountiful local harvests, residents were able to purchase a communal ambulance, and food is being provided to schools and less privileged homes.

Says Abdoulaye Sawadogo, the head of NAFASO, "My partnership with AGRA has made me the business person I am today. I have benefited a lot from the training and technical support AGRA has provided, and it has enabled me to

more efficiently operate this large and growing seed company."

Through aggressive sensitization campaigns on radio, television and print media, complemented by farmer field days organized with the relevant partners, NAFASO created awareness among farmers of the new varieties available and where to obtain them. This has effectively strengthened demand for the high quality certified seed produced by its network of trained seed growers.

Farmers growing seed rice for NAFASO have made an average of US\$ 1800/ha. Buoyed by this success, they have increased the planted area to 1,200 hectares, and earned as much as US\$ 11.9 million in 2015. A green revolution is underway in Burkina Faso, and in Bobo Dioulasso, it is being powered by rice spread to Central Africa, before reaching Zambia and spreading across all of southern Africa.

Farmers and governments have scrambled to respond. Ghana, for instance, declared a state of emergency as the worm swept through its crops. The Zambian government deployed its national air force to transport pesticides across the country for spraying. Likewise, Rwandan soldiers have been diverted to spraying fields. But the impact has been limited, often because the treatment has been applied too late in the worm's life cycle.

There is hope a biological agent could help in future. Lancaster University professor Kenneth Wilson found a virus that killed the loosely related African armyworm. Replicating the same virus in the fall armyworm could create a viable pesticide against the insect.

Lessons can also be drawn from Brazil, which has grappled with the worm for decades, even as the pest has developed resistance to a growing range of pesticides. The country spends some \$600m a year in the battle, but has benefitted from the worm's vulnerability to freezing temperatures, meaning that turning soils in the cold season can kill the pupae and larvae between harvests.

In Africa, cold is not a ready tool, with rising temperature levels further fueling the worm's spread.

Curbing the damage ahead, therefore, requires concerted action, in which the farmer is placed at the heart of the fight.

It is vital to generate a massive awareness campaign to educate farmers on early detection signs, so that infestations are tackled early and at speed. To be effective, farmers also need to know exactly what they need to do - which pesticides are effective, and how they need to be applied. They also need to access supplies, and may require support in applying control measures rapidly enough.

Enabling our agricultural communities with quick and coordinated responses is now essential, to ensure the continent stays ahead of the plague.

African governments are urgently identifying capacity and building strategic alliances with key stakeholders in the agricultural sector to achieve both short and long-term action plans to address this pest.

This drive offers the hope, over time, of delivering an integrated management strategy that can save Africa's agricultural sector, which feeds the continent and is key to Africa's economic transformation.

Other parts of Africa can draw lessons from Southern Africa. Despite major infestation by the worm, the region has recorded bumper harvests this season. Although this greatly attributed to increased acreage under cultivation and higher use of improved seed varieties and fertilizer as a response to the devastating drought, this may also point to greater resilience against the worm.



Ethiopian farmers thriving with the adoption of improved maize seed

Stories of the difference AGRA is making on the ground

In the Southern Nations, Nationalities, and Peoples' Region (SNNP), one of the nine ethnic divisions (kililoch) of Ethiopia, farmers are benefiting from a grain warehouse constructed by Alemayehu Makonnen Farm which was funded by the Rockefeller Foundation and the Bill and Melinda Gates Foundation and implemented by AGRA's seed program.

According to official records, hybrid seed uptake in Ethiopia stands at only 10%, particularly among smallholder farmers. This compares poorly with a country like Kenya, whose uptake of hybrid maize seed is about 60% nationally. A recent report by the International Food Policy Research Institute (IFPRI), titled 'Seed System Potential in Ethiopia', points out that the shortage of hybrid maize seed in the country is a national concern because farmers are unable to access seed in the quantities they need.

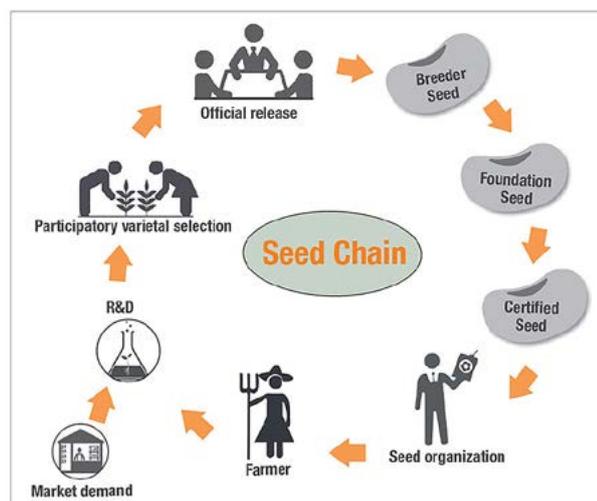
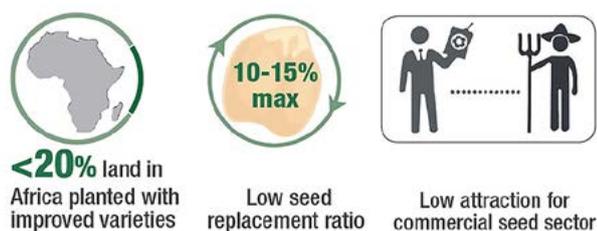
As a result, the average yield of maize in Ethiopia stands at 2 t/ha, which is far lower than the potential average of 6 t/ha, depending on the hybrid variety planted, prevailing weather conditions, and the quality of field management.

To bridge this gap, Alemayehu Makonnen, a large-scale farmer in the SNNP region, is now dedicated to producing hybrid seed as a way of boosting food productivity in the country – and farmers are already taking it up.

"I tried out hybrid maize seed for the first time in 2011, after attending a farmer field day at Makonnen's farm," said Surage, a farmer in the region.

After realizing that the yield from a half-hectare piece of land planted to hybrid maize was higher than that from two and a half hectares planted to non-hybrid seed, he decided to plant the recommended hybrid maize variety and apply fertilizer on his entire 3-hectare piece of land in 2012.

This gave him a yield of 18 tons of maize from three hectares, six times more than he had been harvesting



before. He has continued with this practice, with similar results in 2013 and 2014.

"Many other farmers who have seen my crop have turned to hybrid seeds," said Surage, who is a member of the Adjo Farmer Association.

And Makonnen now reports that he expects to sell the hybrid seed to over 20,000 farmers for the next planting season, as farmers continue adopting the hybrid technology.

Up to 80% of smallholder farmers in the region who planted hybrid seed and used improved management practices over the past three years have realized an average yield of 4 t/ha, with the highest recording 6 t/ha, according to Makonnen.

"From my observation, many people do not use high quality seed and farm inputs simply because they do not know where to find them, and sometimes because they lack the working capital. Experience has shown that a little capacity building can change the situation within a very short period," he said.

In 2011, when he expanded the production of hybrid maize seed using a grant from AGRA, 1,000 farmers from the region purchased it. Their yields were quite impressive, attracting an additional 5,000 farmers in 2012. And in 2013 (the latest available data), 16,000 farmers bought the seed – a clear indication that adoption is growing rapidly. This number is expected to have increased yet again in 2014.

The impact is evident from farmers' testimonies. "Last year I harvested 20 bags (90 kg each) of maize, which is the highest I have ever achieved in my life as a farmer," said Hilda Alem, a smallholder farmer from the region. "This hybrid seed is changing my life!"



Janet Gyimah - Kessie is using cassava to care for her community in Ghana

When Janet Gyimah-Kessie heard of a government initiative to help farmers in Ghana grow new varieties of cassava with a high yield, she soon discovered an exciting way to help her community.

In the early 2000s the government launched an initiative to get more farmers growing the tuber staple for industrial purposes – like creating gari – where it’s cooked and grated to be used in a range of local foods.

Gyimah-Kessie started her cassava-growing career by planting an acre of the crop, figuring out how to grow the tuber as she went along.

“I listened to local farmers and workers, some had very good knowledge of farming...I was literally learning on the job and I am still learning,” she says from behind her desk at her

Josma Agro Industries Ltd processing factory about an hour from Kumasi.

When it came time to harvest her crop in 2002, she found there was no one to produce it. It’s highly perishable, only lasting up to a week – so she decided to start processing the cassava into gari herself, soon finding other farmers coming to her wanting her to process theirs too.

“I started processing it and then realized all the community, far from this place, all had some of the same cassava and

didn’t know what to do, so they started bringing it to me for processing.”

She built a factory to process the gari, eventually employing 51 workers for it. She increased her own farming of cassava to supply the factory, but wanted to get more farmers involved. In 2011 she received a grant of 130,000USD from the Rockefeller Foundation and the Bill and Melinda Gates Foundation through AGRA to help her reach more small-scale farmers in the community to farm the new varieties of cassava, increasing production in the factory and incomes of the farmers.

She was able to produce more planting material to pass on to the farmers, educating and encourage them to grow the the new variety which offered higher yields. With the funding she was also able to reach hard to get to farms – no matter the distance. In the two year grant period she was able to reach more than 1000 farmers, providing over 44, 000 cassava cuttings.

In 2014, Josma Agro Industries Ltd received a second round of funding of 203,000USD provided by funding from USAID and implemented by AGRA’s Scaling Seeds and Technologies Program (SSTP) to further scale up the work. The grant has directly helped farmers in the area pay their school fees and send their children for vocational training which gives her a sense of personal satisfaction – using the crop to help people through the community.



Tackling Ghana's food import dependency, one grain of rice at a time

Rice has become a staple food through Ghana, though the majority is imported. Plant breeder Dr Maxwell Darko Asante is working to remedy this. Dr Asante's love of agriculture started when he was in high school, thanks to a passionate teacher on the subject.

"I developed interest in the subject even though I was the kind who always likes to dress up and look nice so I didn't like the field that much," he says with a laugh from his Crops Research Institute (CRI) office in Kumasi. But I ended up being the best student in the class."

He then went on to university to study plant breeding and then in 1998 was placed at CRI where he has remained – working up the ranks. For Dr Asante, the passion for plant breeding is based on what it can do for society.

"Through plant breeding you will come out to try to change the livelihood for the poor, provide food for the general society as well as turn the economy around."

It will also help to curb the high food imports in the country.

Through funding from the Bill and Melinda Gates Foundation, AGRA sponsored his PhD at the West African Centre for Crop Improvement, which he started in 2008 and focused on breeding for improved grain quality. As imported rice reigned supreme in Ghana, he researched the imported rice using it as a benchmark to create Ghana-grown rice – the outcome he says is comparable to the imported rice.

Local rice had a bad reputation in Ghana, people saw it as inferior to the imported jasmine or long grain rice on the market. Before he did his PhD he worked with a colleague on a jasmine-type rice, funded by the Bill and Melinda Gates Foundation through an AGRA grant. That rice now makes up about 60-70 percent of all local rice in Ghana.

However, a plant breeder's job is never done, Dr Asante says. With a 185,000USD grant from AGRA's capacity building program, Dr Asante has released six new rice varieties, the first time this has happened in Ghana. The rice is expected to help boost rice production and quality, as well as reduce dependence on imports. The six are suitable for lowland and irrigated rice ecologies and are high-yielding. The original AGRA rice is susceptible to the Rice Yellow Mottle Virus Disease, so the new varieties are tolerant of the disease and iron toxicity.

"This grant gave us the opportunity to start our own breeding from scratch – this is the first time we have released varieties from our own breeding programmes. Without AGRA support we would not have been able to do that," Dr Asante says with pride.

He even named one of the six new varieties after his own mother – Aunty Jane.

"We lived on a high school campus and my mum used to sell rice even though she was a school teacher she used to sell rice on a part time basis. She made so much money from selling rice that she went on voluntary retirement at 50."

It's his wish that rice farmers in Ghana enjoy the same success.

The varieties are now being multiplied and seeds are with seed companies, it is expected to be given to farmers in 2018. Ultimately Dr Asante wants these varieties to put an end to importing rice into Ghana – but there needs to be more investment along the value chain he urges.

"I want 100 percent self sufficiency and even if possible export to other countries in West Africa."



Tapping soya potential in Embu County

Elizaphan Gichangi is a small scale soybean farmer in Embu County. Until 2012, Gichangi was among many other farmers in the County who were recording losses every other season as middlemen could buy the pulses at poor prices despite spending a lot to produce the same.

Many farmers abandoned the legumes farming and ventured into economic activities that are relatively free of manipulation of brokers. For Gichangi despite the challenges, he never quit, but instead he devised new ways of surviving in the business and as well record profits.

Today Gichangi is a happy farmer who has for the last five years been undertaking value addition of soybeans over and above continuing farming. Currently, the farmer is now selling soybeans products in the entire Embu County and this year has started expanding the market in the neighbouring Kirinyaga County.

This is over and above participating in local trade fairs in various counties around the country to showcase the soybeans product. Though Gichangi refers himself as a jua kali player since he had no training on how to enrich the crop, he says his entry into value addition business is paying off.

Although he started small scale using a small jiko in his backyard where he used to roast the beans to make soya flour, Gichangi has now invested in new machinery thus increasing production. Unlike other farmers who are contracted by big companies to grow the crop on their behalf, Gichangi earns

more than Sh180 per kilogramme of processed soybean products. He established a value addition centre in Embu County a facility that has enabled him to produce significant products that are in high demand. His wife is in charge of selling the products and other grains to customers.

“I am not able to meet the demand of soybeans products. But I am still progressing and hopes soon I will be able to realize the dream,” he added.

Gichangi 40, produces 800 kilogrammes of raw soya beans from his one acre land and purchases a similar quantity from 100 small scale farmers in the area that he has contracted. He buys a kilogramme of raw soybeans from farmers at Ksh60 and spends another Ksh60 more to process the beans to get various products such as soya drink and soya flour. Further, he mixes the flour with other flour produced from other pulses such as millet and sorghum used for porridge making. The Various products he develops from the soybeans, he sells them at a minimum of Ksh300 for a kilogramme.

“Like majority of farmers, I used to sell raw soya at Ksh50 for a Kg to the middlemen. This was more difficult to earn owing to presence and manipulation by intermediaries in the market. But there were some farmers who were earning an extra income in that situation as they were doing little processing. I equally started in small scale and the returns were encouraging as the products were quickly taken up in the local markets,” he explains.



“I have been able to move from a rented house and bought a parcel of land, built a house and a small industry where I do the processing,” he confirmed.

Soybeans are legumes known for high nutritional value and easy to cultivate unlike other pulses. Majority of farmers in the country have not embraced the crop preferring other grains mainly beans thus leading to low production in the country. It is mostly grown in the Western Kenya where most of the growers are contracted by big companies to grow on behalf.

According to agriculture Ministry demand for soya in Kenya is estimated at between 50,000 and 70,000 metric tonnes a year while production was at 10,000 metric tonnes last year and 5,000 metric tonnes in 2009. Manufacturers like Bidco and Promasidor import soya from USA, Brazil and China — the world’s largest producers to meet demand. Gichangi said value addition of the soya beans is big business yet to be exploited but largely due to farmers’ lack of information and financial capability. Increased awareness on the health benefits and nutritional value of soybean has also seen improvements in the development of the soy bean sub sector.

“I used to process informally, but I got an opportunity in 2012 to be trained under a SoCo project that was funded by the Bill and Melinda Gates Foundation through AGRA’s Soil Health Program to enhance productivity, certification, handling, packaging and marketing of Soybeans,” he added.

Further the project also introduced farmers on how to improve production of soy beans and climbing beans among households in Eastern Kenya.

“I am able to process the beans according to the standards thus enhancing acceptability of the products in the market. I never disappointed the management of SoCo as now I am able to respond to the market requirements,” he confirmed.

Having been able to acquire a significant space in the market within the Embu County and neighboring counties, Gichangi stated that his next plan is to acquire modern processing machines to expand the business.

Lack of awareness has curtailed marketing of the products and farmers venturing into soya bean farming. This he said has affected efforts to contract more farmers. Further, cost of the value addition machinery is expensive and can only be imported.

In order to ensure that he is able to sell in formal retail outlets, Gichangi says that he is in the process of receiving the Kenya Bureau of Standards Certification which is a key requirement in the local market.

The government has been encouraging farmers countrywide to grow soya beans as huge volumes used locally are imported from Uganda, Tanzania and India to meet demand.



Mlimi Wozitsata Project inspiring Malawi farmers to adopt improved seeds



Stories of the difference AGRA is making on the ground

In Sub Saharan Africa, and Malawi in particular, many agricultural technologies with demonstrated productivity gains are not adopted by farmers. Without reliable and persuasive sources of information, farmers may hesitate to adopt new inputs and techniques. Providing performance-based incentives to peer farmers had the biggest effect on technology adoption. Additionally, incentivized peer farmers who more closely resembled village farmers were the most effective at increasing new technology adoption.

Improving food security and agricultural incomes, therefore, depends in part on farmer adoption of these tools and techniques. However, learning about a new agricultural technology is difficult. Farmers need to know that the technology exists, something about its costs and benefits, and how it will interact with their current inputs and planting practices. Agricultural extension services attempt to overcome these information barriers through trainings, demonstration plots, and farmer field schools. Most agricultural extension services do not reach all farmers directly. Instead, most farmers will learn about a new technology through social learning.

A number of concepts to persuade farmers adopt the new technologies have been introduced. The lead farmer model, theatre for development are among the models being used to have more farmers especially small scale farmers adopting new technologies to achieve food security among the mostly poor rural people.

Story Workshop Educational Trust (SWET) has been implementing a project under the Scaling Seed and Technologies Partnerships (SSTP) multimedia project funded by the United States Agency for International Development (USAID) through an AGRA grant. The goal of Mlimi Wozitsata (Master Farmer) project has been to inspire farmers who are growing maize, rice, cassava, sweet potatoes, beans, pigeon peas and cow peas to adopt improved seed varieties and their associated technologies.

The Project has been creating awareness of and demand for improved seed varieties and its associated technologies among small holder farmers, and where to get them through facilitating knowledge and skills sharing. It has also facilitated the sharing of correct and comprehensive agricultural messages among farmers, stakeholders and community leadership in order to address barriers towards use of improved technologies. The third objective has been to advocate for an enabling environment for farmers to access improved technologies.

Using a 3 tier approach of Radio, TV and community cinema and community mobilization through Theatre for Development, targeting 200,000 small holder farmers in Dedza, Lilongwe, Machinga and Zomba. Story Workshop Educational Trust (SWET) had a target of 200,000 small holder farmers to be reached with messages on improved seed varieties and its associated technologies. At the end of the project a total of 594,448 were reached through community open day

functions such as community cinema, theatre for development, sensitization meetings. SWET also received a lot of feedback through SMS calls and a few letters based on radio and TV programs aired.

Mlimi Wozitsata is also known for the competition element where farmer clubs from the four districts are competing and being awarded on how they are adopting the new farming technologies and the efforts they are putting in helping their fellow farmers in using the new farming technologies and the improved seed.

Tiyanjane Farmers Club, in Chingale, Zomba is one of the groups that has participated and benefitted from the Master Farmer project. MacDonald Chikhwasa is the group's Chairperson and shares the road to success as travelled by him and the group members.

"We were sent to a boot camp by story workshop where we were drilled on modern agriculture technologies, theatre for change and extension work." He says. The group started nurseries and demonstration plots where good farming practices were being tried and shared with community members.

"As a group we decided to grow pigeon peas using modern technologies which we were also sharing with other farmers. After harvesting we decided to look for an organised market instead of vendors that come into the villages to buy farm proceeds" Says Chikhwasa adding "for a similar size of land, using old technologies and selling to local vendors we would have sold about K1million (\$1400) but we realised K6.5million (\$9000) by just using new technologies and linking up with good buyers".

Adds Chikhwasa "In our group everyone has a good story to tell. Some are paying fees for their wards without struggles, some have built good iron thatched houses".

The club members work as voluntary extension workers moving from village to village using drama to impart knowledge to their fellow farmers. They also formed 162 baby clubs, 98 of which are still very active and practicing and sharing the technologies.

In the form of edutainment the farmers have been exposed to the other AGRA programs that encompass soil health, market access, affordable financing for farmers and small agricultural businesses, assistance to farmers' organizations and advocacy for national policies that are favourable to smallholder farmers.



Suglo Konbo turns Adam Sheini into a business minded farmer

"Today, I produce enough food to feed my household and still have surplus to sell. I now see farming as a business which is helping me educate my children, even though I have never been to school myself, and take good care of my family. Out of my increasing profits, I have built a house for my family, and also bought tractors to expand my farming business," – **Adam Sheini**

Adam Sheini, 54, is a farmer at Mempeasem in the West Gonja district of the Northern region of Ghana. He has a household comprising fifteen members including his two wives. He has been farming for the greater part of his adulthood as a way of life on a ten acre piece of land devoted only to feeding his family.

Over the years, Sheini used to plant at random local varieties of seeds from his previous harvests, dropping fertilizers at the base of his crops, and harvested his crops at the wrong time, using inappropriate methods. As a result he harvested only two bags (200kg) per acre as a result of low yields and post-harvest losses. When in 2010, upon the advice of a friend, he joined the Rockefeller Foundation and the Bill and Melinda Gates Foundation funded and AGRA supported farmer organization Suglo Konbo, his story started to change. Before then, he was reluctant to join the association because he had very little or no information about the benefits of being a member of a farmer organization.

The project trained Sheini and other members of the farmer association on new ways of growing crops – planting in rows, dibbling and doing band placement of fertilizers, and also harvesting crops at the right time when the crops have physiologically matured. Post-harvest management for quality produce and market linkages were also provided to Suglo Konbo.

As a member of the farmer association, and for the first time in his farming life, Sheini received a quantity of improved seeds and some fertilizer, as well as tractor services to plough an acre of land of a crop of his choice as a start. This helped him increase his crop yields from 2 bags (200Kg) per acre to 8 bags (800Kg) per acre in the first year. Since then, his crop yields have been increasing year after year as he continues applying the new technologies he learned. During the last farming season, he harvested 14 bags (1400Kg) per acre as a result of this intervention.

Having observed the increase in yields and the reduction in post-harvest losses, Sheini decided to diversify his crops to include maize and soybeans, while also expanding his farm from ten acres to fifteen acres.

Through a video show on integrated agriculture and subsequent field demonstrations, Sheini understood that by using droppings from the animals to fertilize crops, and

cutting the crop residue to feed the animals, the productivity of crops and animals increased significantly. Based on this learning, he included livestock production, and observed similar improvements on his own farm. Now that his yields keep increasing, Sheini, just as other members of Suglo Konbo, got himself profiled on the E-soko platform, a market information system, which enabled him to receive regular market information (via SMS and voice mail) using his mobile phone.

With this information, he is able to know the prevailing market prices of the various farm produce at the surrounding market centres. This enables him to negotiate well when buyers come to their community to purchase their produce.

Though Suglo Konbo has access to credit from a local financial institution, Sheini finances purchase of improved seeds, fertilizers, and other chemicals from his own resources – the sale of his livestock, poultry, and farm produce.

He accesses his inputs from the Ministry of Food and Agriculture, and also from local agro-dealers who have also been trained by the project and linked to the Suglo Konbo. “Today, I produce enough food to feed my household and still have surplus to sell. I now see farming as a business which is helping me educate my children, even though I have never been to school myself, and take good care of my family. Out of my increasing profits, I have built a house for my family, and also bought tractors to expand my farming business,” he said.

He is benefiting from sell his produce through aggregation for better prices and profit.

In recognition of his contribution to the development of agriculture in his district, he won the District Best Farmer Award in 2013. For his prize he received a brand new motorbike, among other items. Sheini has become both a symbol and agent of change in his community, always delighted to share his experience with other farmers and help them increase their productivity and improve their livelihoods by joining Suglo Konbo.



Madam Coulibaly already had good business skills and experience building farmer organizations when she created Faso Kaba, a private seed company in Mali that is supported by AGRA. In establishing Faso Kaba, her goal was to help fill the large unmet demand among farmers for good varieties of local crops like sorghum, maize, cowpea, rice and vegetables.

Mme. Coulibaly does something that many seed dealers in Mali and other parts of Africa usually do not do – she keeps her seed prices low enough so that smallholder farmers, who are normally short on cash, can afford to buy it. And instead of packaging seed in large volumes, Mme. Coulibaly provides seed of sorghum, rice, millet, maize, groundnuts, cowpeas, and beans in various size packages, making them easier for farmers to buy, transport and use.

In addition to “being able to take care of me and my family,” from starting the seed dealership, says Coulibaly, she has also been able to expand the business, hire a number of full-time employees, and use part-time staff to help package seed. “Unfortunately”, she says, “it hasn’t been easy to find or hire women agrodealers to reach more women farmers because it’s harder for them to travel”.

To produce and market its seed, Faso Kaba uses contract seed growers – the majority of which are women – and sells the seed through company shops and more than 40 village-based seed merchants. The company works closely with Mali’s national agricultural research institute, its seed certification laboratory, the extension service, local seed and fertilizer merchants, and several farmers’ organizations.

Eighteen months after receiving its first bit of assistance from AGRA’s seed program with funding from the Rockefeller Foundation and the Bill and Melinda Gates Foundation Faso Kaba had already produced and sold more than 300 MT of certified seed. Finally, poor farmers in Mali are able to purchase high quality seed of local food crops through a responsive, independent seed company.

AGRA’s support for Mali’s fledgling private seed sector is part of its comprehensive approach to catalyzing change. In Mali, this includes supporting the national agricultural research organization, l’Institut d’Economie Rurale (IER), to develop improved varieties of Guinea-race sorghum hybrids, rice adapted to various ecosystems, drought- and disease-tolerant maize, disease-resistant millet hybrids, and Striga- resistant cowpea varieties. It is also working to improve farmers’ and farm business access to affordable credit, and is supporting a growing network of agrodealers. AGRA is also partnering with the Millennium Challenge Account-Mali to build market infrastructure, post-harvest systems and value-added processing.



Marketing program in Mozambique opens a world of opportunity for Lucinda

“The sole purpose of marketing is to sell more to more people, more often and at higher prices. There is no other reason to do it.” - **Sergio Zyman**

Lucinda Wilson, a 52 year old widow and mother of 12 from Mancoma Community, Tsangano District, Tete province, Mozambique understands this first hand. She is now raising 6 children – the other 6 having got homes of their own.

Lucinda never had an opportunity to go to school so she cannot read or write. During her early years, education was a luxury that her family couldn't afford. Going to school required her to cross over to Malawi and her parents needed her working on the farm.

Like many African families, her parents were family farmers. They focused on horticulture; mainly tomato, carrot and pepper and they would sell these products in Malawi. Agriculture for her was characterised by hard labour, she had to carry bags of produce on her head to the Malawian border to sell on market days. The income generated would be used for food and clothing.

“This level of effort would yield between \$50 and \$90 per season. Not enough for our survival,” she says.

She attributes this to the fact that they produced sold low quantities and they had no power to set the prices, the buyers would set the prices. She pauses and says, “This has been the case for all these years, and as you can see, this has affected the quality of my life, I could not build a house with conventional material for my children during these years.”

In 2014, her friends who are also farmers introduced her to the Fonte Boa Association – a farmer group in her region. In 2015, her farmer group benefited by getting training from PROAPA – an AGRA funded project co-ordinated by the Beira Agriculture Growth Corridor in Tete province in partnership with UPCT (a provincial farmers union in Tete). The training focused on farmer organization management, Improved technologies to increase production and linked the group to an extension officer living in their community

PROAPA introduced the group to the concept of collective marketing and selling of their produce. To make this possible, PROAPA helped Lucinda's group put up an aggregation center which also functions as the group's headquarters and also linked them to large scale buyers/companies?

“An Aggregation center has immense advantages to smallholders, a major advantage being the fact that the farmers no longer need to worry about storage and post harvest



handling of their produce. With this concern out of the way, farmers do not need to sell their produce in a hurry. They can wait for when the price is right," adds Lucinda.

In this integrated approach supported by AGRA's soil health program funded by the Bill and Melinda Gates Foundation, the farmer group members, each working in their respective farms are benefiting from technical support from PROAPA that boosts their production and after harvest they all take their produce to the aggregation center where the volumes from each farmer are recorded. Because of large volumes, buyers are willing to come to collect the produce.

Lucinda's group has as a result been approached by large companies interested in buying their products: AgroValor, Cargill Commercial LDA, are now buying their beans and soya Bean

while CB Farm Fresh is buying their horticultural products.

"By selling this way, my income has almost doubled," says Lucinda.

Lucinda speaks fondly about October 22, 2015, a day she says she will never forget. She had deposited 2650kg of Soybean to the aggregation center, witnessed the first loading of the soya truck and received a payment of \$954. She says she had never seen so much money in her life.

"With the help of PROAP I have opened an account at Banco Terra, where I deposited part of the money, I used the rest to buy inputs (quality seed of soybean, Maize and fertilizer) collectively with other members from our local agro-dealer. In this season 2015/2016 I have about 5 hectares of soybeans, 15 hectares of Maize and 2.5 Hectares of Beans. The marketing process will be the same – through aggregation center. This year I will have more money. With the money that I made in the last sale, I have already bought 12,000 burnt bricks and 60 sheets of zinc, and when the rain stops I will hire a builder to build my new house with conventional material," she affirms.

AGRA supported collective marketing and selling in Tete has levelled the playing field for negotiations between farmers and buyers. Farmers are now speaking in one voice and are able to negotiate a fair price for their produce. This way we have reduced a situation of economic dependence as was the case in the past where the buyers dictated the rules of the game. As a result agriculture in this region has gone beyond subsistence, farmers like Lucinda are beginning to view agriculture as a business that thrives.



Plant Breeder thrives against all odds in Nigeria

“My overall experience is that of ups and downs. My story is not one of excellent success... I failed and then I succeeded,”- **Dr Moses Adebayo**

A communal war in Moses Adebayo's home town of Modakeke, Osun state was a contributing factor in his decision to further his career in Ibadan, having graduated from the Department of Agriculture at Obafemi Awolowo University (OAU) and obtaining a Masters degree in the department of Agronomy in Ibadan. “At that point things became a little difficult because there was a crisis going on in my place so I couldn't go home and Ibadan was like a safe haven where I could try and find my feet,” he explained.

In 2000, Adebayo applied for a PhD programme in plant breeding at the university of Ibadan even though he was unemployed at the time. Due to his inability to fully fund this

programme, alongside other personal setbacks, he was forced to remain at the proposal stage for nearly 4 academic sessions. But when all hope was considered lost, he received a phone call that would change his life for the better.

“My mentor back at OAU, Prof Shola Ajayi from the department of crop production and protection called and told me to come there and he would supervise me, and so I re enrolled to study seed science and plant breeding. He also sent me a call for applications by the Alliance for a Green Revolution in Africa (AGRA) for the West Africa Centre for Crop Investment (WACCI) Admission to study a course in plant breeding, I downloaded and filled the form... and as they say, the rest is history,” said Dr Adebayo.

Not only did this rare opportunity pave way for the academician to thrive as a certified plant breeder, it singled

him out in a country lacking trained professionals who have mastered the art of changing the traits of plants in order to produce desired characteristics.

In 2012, having completed his PhD programme he decided to apply for another grant to fund his research about the genetic tolerance and drought resistance of Maize. Adebayo's proposal was truly commendable and this saw him emerge as one of the few grantees to be supported by AGRA.

With a grant of \$250,000 from the Bill and Melinda Gates Foundation and through AGRA's capacity development program,, a set of 100 hybrids and another set of 40 hybrids, he was ready to start his evaluations. But sadly, after the first year of this project, something terrible happened. “We were harvesting when Fulani herdsman got into the field and ate all the Maize,” said Dr Adebayo. At the time, there were clashes between herdsman and farmers, and a lot of

Stories of the difference AGRA is making on the ground



the people affected most were not directly involved. And so, Dr Adebayo, and many other farmers, particularly in northeastern Nigeria bore the brunt, and just like him, they were forced to start over.

Animals ate up the crops in year 1 and for this reason, Adebayo was unable to submit his technical report to get any more funding for the next phase of his project. "I couldn't mess with the data and compromise my integrity, so I decided to repeat the work the following year," he explained. He had saved some money from the \$40,000 he was given at the beginning of the project, some of which he used this to buy a vehicle.

In the second year, Adebayo left the International Institute of Tropical Agriculture in Ibadan (IITA) after repeating the process. But just before harvest, he received some shocking news. "We were harvesting and it

was all going well, but on a Monday, when we were coming back to the university I was informed by some of my students that the field we left on Friday was gone...the field had disappeared," he said.

It was alleged that some professors in the department asked students to glean the maize in the field- gleaning is a procedure after harvesting which requires you to pick the cobs. "They ran in and harvested everything, and that was the height of my frustration." This incidence took him to the office of the Vice Chancellor, with the Deputy Vice Chancellor. "I was told that 'Moses there is nothing we can do about this, you have to do it next year. At that point I decided to leave the university."

"I thought that AGRA would have blacklisted me because I didn't deliver, and that was the ultimate nightmare. But I found out they were following up

on my programs," he said. But despite all of these challenges, Dr Adebayo says he is who he is and where he is due to the exposure and endless possibilities provided to him by AGRA.

Currently married with 3 children and building a career in research and product development at Seed Co, Dr Adebayo stresses the fact that the AGRA sponsored PhD programme and subsequent grant indeed changed his life.

"I now have a good standing in the science community and the world as a plant breeder," he said.



Rwanda betting on agriculture for job creation

In March of 2015, Alliance for a Green Revolution in Africa (AGRA) approved the rollout of a \$122,000 grant to a firm, Rwanda Improved Seed Company (RISCO) that was working to avail improved inputs to farmers.

The grant was meant to directly benefit an area of about 20,000 farmers and many more in secondary benefits such as reducing poverty among farmers in the area.

In the remote village of Kagitumba where the farm is located, numerous residents can rely on it not only for farm inputs but also for employment.

For instance, Peter Munyaneza is a small holder farmer whose outputs fall short of meeting his family needs including school fees.

To supplement his income, Munyaneza regularly works at the RISCO farm and has significantly increased his household income. He is now able to afford decent meals for his family and send his children to school.

“In real life am a farmer. I normally get what is enough for my family and don't leave for the market because my garden is too small. However, thanks to RISCO, I always find school fees of my children and leave money for other basic needs. When it's planting and harvesting we get money which supplements our income,” he says.

Going by numerous testimonies of area residents, a major challenge has been that most farmers operate on a very small scale with most of the output being subsistence. Lack of modern technologies and low quality outputs has also negatively impacted their output.

However, the existence of such opportunities courtesy of the grant by AGRA seed program and funded by the Bill and Melinda Gates Foundation, served as a life line enabling area residents supplement their income.

According to John Muvara the Director of RISCO, the firm is able to employ over 100 workers in the harvest season and over 60 workers

during planting.

Explaining the impact of the grant to enable them create employment, Muvara says that they had started the firm in 2012 as seed suppliers but were still operating at below optimum scale.

“We started our company in July 2012 as a supplier of quality seeds to the Rwandan Ministry of Agriculture. Our business was not thriving until AGRA believed in our vision and invested about US\$ 122,000 in the project enabling us improve our systems and increase production manifold,” said Mr. Muvara.

This is among the ways that AGRA's intervention to rural farming projects have had far reaching impacts including in poverty alleviation and improvement in quality of lives.

Increased productivity and demand for their inputs is likely to lead to increased impact in job creation and is in line with the Rwandan Government target of creating 1.5 million jobs by 2024.



Orange fleshed sweet potato to the rescue of farmers in Tanzania

In the wind-swept plains of Kishapu in Tanzania's northern Shinyanga region, Himelda Tumbo has for a few years struggled to grow maize on her farm. "I have suffered huge losses due to drought. The seasonal rains are not enough and the crops are drying up. Maize once grew easily but now I can hardly get enough to feed my family," she complained.

The 53-year old Himelda said she's also struggling with her other traditional crops such as beans, groundnuts and yams. This is the major reason she has now turned to planting drought-resistant orange sweet potato.

"Unlike maize, orange potato can brave most conditions and is also resistant to rust diseases," she said.

Tumbo is among many farmers in the district who have switched to growing sweet potatoes as a strategy to cope with drought and improve food security. In Tanzania's lake regions, thousands are now growing the potatoes, with support from local researchers.

The potato is already in widespread use in Uganda, where 55,000 households now grow it and 237,000 are expected to by 2018,

according to a US State Department initiative to cut global hunger and improve food security.

Kenya's Nyanza region, similarly, is switching to orange sweet potato after farmers in 2012 lost more than 80% of their maize crop to a lethal maize disease.

Researchers say orange sweet potato is more resilient than other crops to extreme weather problems such as drought and flooding caused by heavy rains and it can stay in the ground for a long time after maturity, making the time of harvest less critical.

The crop was first introduced in Tanzania in 2002 by the International Potato Centre as an alternative staple crop in the wake of an increasingly severe drought that had ravaged maize harvests in many parts of the country.

It is included in drought-coping strategies supported by the Mwanza-based Ukirigulu Agriculture Research Institute (UARI), which has worked on producing and distributing quality vines. UARI is supported by AGRA through funding from the Rockefeller Foundation and the Bill and Melinda Gates Foundation.

Everina Lukonge, a senior researcher with UARI, said small-scale farmers in the region are being trained to produce potato seed for use and sale.

"The trained vine growers produce the seeds on their fields in the dry season and sell them during the rainy season," Lukonge said.

Each bundle of 300 potato vines, enough to sow about a third of an acre, is sold for 5,000 Tanzanian shillings (\$2.40) or more.

"When I planted the vines for the first time, they grew very well and I had a lot of potatoes which helped me to feed my children," Tumbo said. "Now I get sufficient income from selling the vine, and my life is better," she added.

Researchers say orange sweet potatoes are particularly valuable in improving nutrition and food security because they are very productive, contain vitamins missing from other foods, and are tolerant to extreme weather. With some varieties, the leaves can also be eaten as a green vegetable.



AGRA making millionaires of smallscale farmers in Tororo

For more than a decade, Charles Openda had been tilling his 40-acre piece of land and planting upland rice with high expectations – those achieving a bumper harvest and making a bumper sale that would turn around the lifestyle of living for his ten-member family.

Season after season, he was pregnant with this expectation that he did not notice that the pregnancy term had taken more than 10 years. His rice, maize and cassava fields could not just yield the much anticipated bumper harvest. So, season in, season out Openda found it hard to provide for his two wives, eight siblings and extended relatives under his care.

However, the problem of “rare bumper harvest” was neither an issue to his family only nor that of his

Papada village, or Gule Parish. It was not either a setback limited to Magolo Sub County. No, the dilemma seemed to be widespread throughout the entire of Tororo District.

“At the onset, I thought it was a curse that had befallen my family land, but after interactions with other farmers from within and without our parish, I came to understand that it was a problem beyond even our district,” says Openda.

What Openda and other small-scale farmers across the three districts of Tororo, Busia and Numuteba did not know then, was that the problem of poor yields was directly connected to soil fertility and the striga problem. The two problems are prevalent in the three districts. “Over the years, in fact over generations, small-scale farmers in the region have tilled land without

considerations on managing soil fertility,” says Ali Mawanda, an extension officer with Africa 2000 Network, Uganda, adding jokingly, “it’s like the striga weed, missing out on the soil nutrients was on a rampage spree to feed on the cereals. This is why there is no bumper harvest for Openda and other farmers across the three districts”.

AGRA through the funding from the Rockefeller Foundation and the Bill and Melinda Gates Foundation, is working with A2N as its major partner to improve smallholder productivity and control striga in Eastern Uganda through scaling up integrated soil fertility management resources.

Through this intervention, farmers like Openda have been able within a short period of less than three years to achieve what has been impossible over many years to become the new

millionaires on the block. Now they are not only making bumper harvests but also are smiling all the way to the bank. "It is amazing how simple things like taking care of the soil can turn around the lives of many farmers," says Openda. The farmer is now able to feed his family and pay school fees for all his siblings and dependants three of whom are pursuing their university education. "What seemed unachievable is now within reach", says an elated Openda whose current school fees budget is above UGsh4.5million.

Before these interventions, Openda says his 40-acre farm could only yield 8-10 bags of rice, 2 bags of soybeans, 6-8 bags of maize and one bag of cassava. Now from the same land his last harvest yielded 30 bags of rice (UGsh150,000 per 90k bag), 12 bags of soybeans (UGsh180,000 per bag), 22 bags of maize (UGsh120,000 per bag) and plenty of cassava and millet both for his family and commercial. He has set aside 20 acres of land for his dairy and livestock animals.

From his dairy project he gets 180 litres per day which he sells at UGsh1,000 per litre and UGsh1.5 million and UGsh2.5 million per year from beef and in-calf sales respectively. Openda uses his oxen for ploughing.

"To achieve these transformations a lot of expertise in previous research work on the prevailing problems of soil fertility resource management and striga had to be brought to the fore," says A2N's monitoring and evaluation officer, Tryphosa Muunga. She says also brought into the equation was the creation of awareness through a farmer-group based outreach. This, she notes, has paid huge dividends in terms of combating the problem.

By end of 2010, three months after launching the project, A2N had "spread the word" effectively and had trained extension staff and farmer facilitators, identified demo farms, trained farmers in maize, soybeans and upland rice agronomy, Integrated Soil Fertility Management (ISFM) and had conducted Parish-level sensitization on striga weed

management.

"Farmers like me benefited from these training sessions and those who took the initial lead are reaping huge financial gains," says Openda. He says two years down the line after AGRA's intervention, he and other farmers through extensive trainings, workshops and demonstrations are now experienced in good seed knowledge, proper ploughing methods, crop rotation, inter-cropping, post harvest handling and storage besides being good students of soil nutrients.

He says he now knows how to use the recycle waste from burns and stocks of rice as organic fertilizer to improve his maize, rice and soybeans farming. "I now know how to incorporate DAP, MAP, Urea, SSD and other fertilizers with organic manure to give me high yields," says the farmer who is in the forefront of training other farmers on these interventions. His farmer group of 30 farmers is all into commercial farming and some, including him have since diversified to poultry and dairy keeping or have become Anglo dealers. "This is the uniqueness of farming and doing business as group members as the members supplement each others' gifts," says the father of eight. Tryphosa says there are over 1000 farmer groups in Tororo making up more than 25,000 farmers.

The farmers under the AGRA project now use herbicides both selective and non-selective to control weed which helps destroy the weeds leaving clean fields, which in turn means minimal tillage. They too, have learned how to practice soil and water conservation. "The result of all this is what I have been yearning for over the years as I can now grow surplus crop which I commercialize to meet my other family obligations," says Openda. He says he too has been able to maximize on land usage and practices continuous farming without leaving any land under fallow through the practice of crop rotation.

Openda is now an employer too. He has four personnel in his compound permanently and during harvest, weeding and ploughing time

he employs as many as 15 workers to help him in his farming activities. He has since hired land to grow his farming business. He now has 60 acres of land under farming. "I spend over UGsh3 million during harvesting period alone," points out the farmer who also hosts a demo farm.

Despite financial restraints, Openda says he and other farmers through their farmer groups have been able to access credit from financial institutions. "Besides, we are also exploring ways such as forming cooperative farmer group associations that will contribute money and lend it out to members. His group has since benefited from this drawing a membership of more than a 23,400 membership. Other challenges are drought and climate change related issues.

"Sometimes the rain won't come and when it does, it comes in torrents and is destructive," he explains. Then there is the issue of pests and crop diseases besides market linkages. However, the farmer says, the farmer groups and the partners are addressing all these issues. He is optimistic that if the problems of soil fertility and striga infestation have been solved, then solutions to all these others will be found.

Another benefit accrued to farmer groups is supplementing labor for members. This is especially for members who have financial constraints. "We organize ourselves as members and help each other in ploughing, weeding or harvesting," notes Openda. Other benefits include women empowerment (women are treated equal to their male counterpart especially in leadership positions), group counseling and guidance on HIV & Aids and other family issues. This is a plus as the three districts are prone to the pandemic.

Farmer's Daughter Telling Farming Stories at the BBC

By Waiganjo Njoroge



Meet **Anna Jones, the Producer of the BBC's Countryfile** - the most watched Sunday night factual program on British Television with up to nine million viewers per week.

Anna met Waiganjo Njoroge, AGRA's Global Media Lead, in Nairobi towards the end of 2016 when she visited Kenya as part of her Nuffield Farming Scholarship. They met again this September at the 2017 African Green Revolution Forum (AGRF) held in Abidjan, Cote d'Ivoire.

After an eventful five days, over 50 sessions with close to 300 speakers and attended by over a thousand participants including six African Heads of State and their representatives, ministers, CEOs and farmers. Waiganjo sat down with Anna for a coffee at the Sofitel Abidjan Hotel Ivoire, the venue of the Forum, to get her views on African agriculture as seen through her journalistic eyes.

It is very good to see you again, Anna.

Good to see you too. It has been an incredible one week. Hasn't it?

It has been. What has your impression of the Forum been?

It is an interesting gathering and I am very pleased to have been here. There is a very good representation of government officials, the private sector and NGOs. However, I feel a slight sense of tension between the private sector and the development organizations. I get the sense that some NGOs are looking at the private sector and wondering 'what are they doing here? Making money off the backs of smallholder farmers whilst selling them potentially harmful chemicals?'. Some private sector actors on the other hand appear to be looking at NGOs from an advocacy perspective. Perhaps they are questioning the sustainability of their engagement.

Hmm, interesting perspective there.

That said, based on what I have seen and heard, there is great value in having these diverse groups represented. If the people that have made commitments stand by them, something great will happen. I do not walk away feeling cynical but I also do not walk away feeling that the job is done. I in the middle with no prejudices. I go with the best obtainable truth.

What truth is that?

All the talk needs to be backed up with more demonstrable action. It's hard to trust until you see some action. 'Show us what you have done, show names and places where action has worked'. I liked what the Ghanaian Minister of Agriculture said in one of the press conferences. He gave real examples of ongoing projects. I would love to follow up and establish if they do, indeed, exist.

Is that the journalist in you speaking?

I am generally an optimistic journalist while remaining careful not to be played or blinded to certain realities. I believe that the old days of journalism, where the pursuit of getting the next Watergate was the main preoccupation, have gone.

What form of journalism do you practice?

Journalism has evolved quite a bit. There is the breaking news type and the investigative kind. The new type, which is what I practice, facilitates the next steps. Constructive journalism if you may. 'Here is the problem, here are the people working on it and here are the solutions they are proposing'. Solutions focused journalism is what I call it.

A lot has been said about getting agriculture to drive Africa's economic growth at this Forum. Do you see that happening based on your experience interacting with farmers across the world?

Africa's population is set to double by 2050. Many farmers in Europe will be rubbing their hands with glee at the prospect of such a growing population providing market for their produce. Based on what I have seen with governments, NGOs, development partners and the private sector committing millions of dollars to Africa's own green revolution, Africa may be more of a competitor than a customer.



Talking about the huge scale of farming that is happening elsewhere, do smallholder farmers, 70% of the continent's population, have any chance?

Large-scale farming, although fairly sophisticated, may not, in some cases, be much more profitable than a smallholder farmer because the market that they're in has driven prices down so low that you have to be big to survive. You're kind of trapped. Unless you can find a way of adding value, you're trapped by your size and scale. You have to get big or get out. Small farms on the other hand, are more resilient. Consumers are also changing; they do not necessarily like the big intensive production. They'll pay for the story.

Is that the way out for smallholder farmers – selling the story?

There's nothing that European consumers love more than a story. If you can say, "This cheese was produced by Mama Jones who lives on a hill with her lovely 10 cows and she's been doing it all her life." They'll be like, "Ooh, I'll pay for that story." It's about making sure you tell your story.

That is an interesting thought

Bringing out the personality of the smallholders is important. We have talked about smallholder farmers so many times this week but no one said who they are. What are their names? Where do they live? What do they do with their lives? What do they do for fun? It's like they're just a group of poor people working really hard. No, they've got families and stories and pastimes. These things need to be told. That said, European farmers are miles ahead. Africa will need to get organized quickly if it is to become globally competitive.

Is this changing people's attitude towards agriculture?

The biggest challenge is that agriculture is not seen as sexy and most don't care about farming. For instance, 86% of Brits are urban with very remote links to farming. Focus should start moving away from agriculture - the soil and the crops and the animals - and more on to the table. This is what the National Farmers' Union said to me when I first started my Nuffield Scholarship. They were like, "We've given up talking about farming because no one cares. We talk about food and that makes us sexy."

Where does media, like the BBC, come in?

I would like to see a documentary come out about Africa's promised Green Revolution, because I just think it's huge and the pictures would be amazing and the stories are amazing. I met a guy from Ghana who grew up on a cocoa farm and never tasted chocolate until he was 22 and I grew up eating chocolate every day and I've never seen a cocoa plant to this day. I think the juxtaposition between the two worlds and how different our experiences are is fascinating. I would love to see a documentary or a season on the BBC just as they did with China, just as they did with India. We had a week of programs looking at what we called BBC's China Season. We did food and transport and politics and economics right across all platforms, TV, radio, online. I want to do that for African agriculture specifically. It probably won't be to the similar scale, but in the same mould.

Have you seen media programmes that got you thinking, “that’s innovative. I like it”?

As part of my Nuffield Farming Scholarship, I was looking at how the media communicates farming to the public. I visited Kenya, Denmark, France, Belgium, Ireland and the United States to compare how media coverage differs between very urbanized countries that are not at all reliant on agriculture like Belgium and countries that are heavily reliant on agriculture such as Kenya. I discovered programs like Shamba Shape Up and Mali Shambani and Seeds of Gold in Kenya that provide media extension. Such programmes do not exist in Europe.

What is your connection with farming?

I am a farmer’s daughter. I come from an upland farm on the beautiful Welsh-Shropshire border and a long line of farmers; at least five generations. We have 300 breeding ewes and a small suckler herd on about 200 acres, which is part-owned and part-tenanted. This might sound like much in Africa but is very small by UK and European standards.

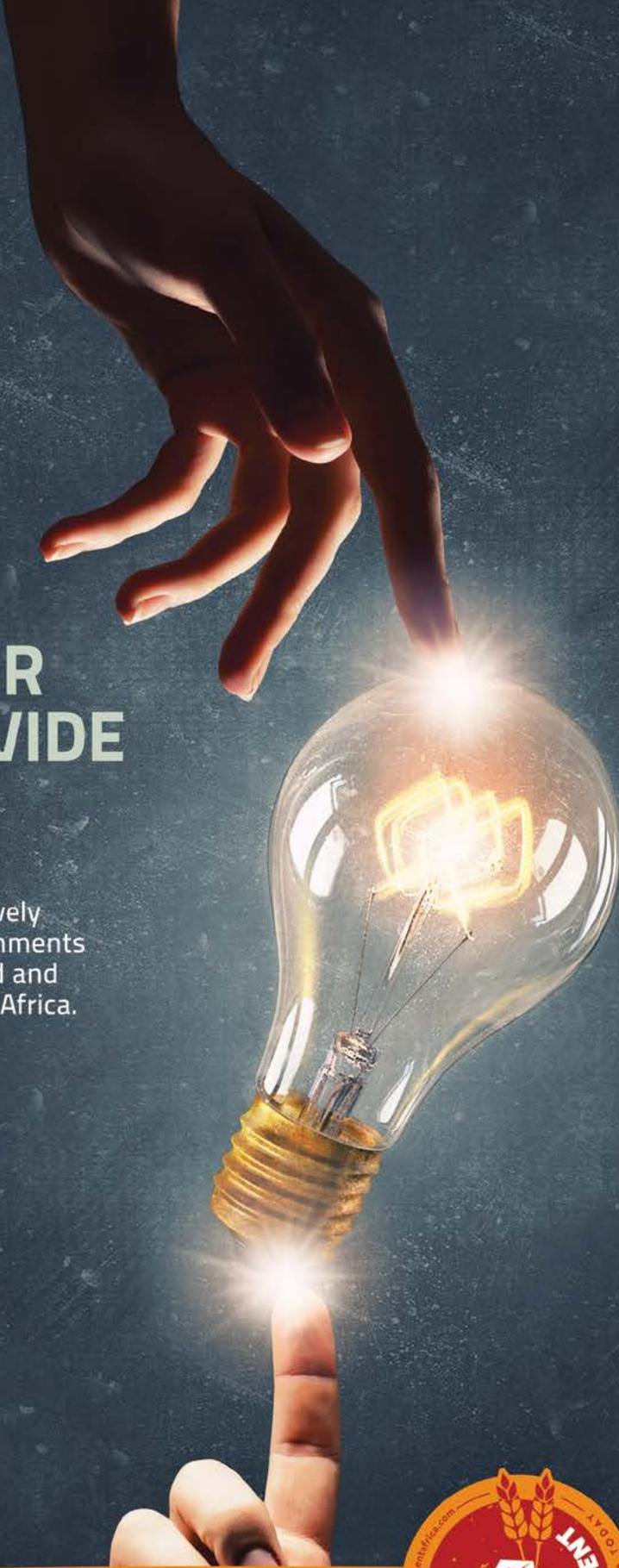
I have been a journalist for about 15 years. I started off in general news in newspapers but I knew that I wanted to specialize in agriculture because nobody is doing it in the UK. Everyone wants to do war correspondence or finance or something like that. I wanted to do farming.

I am a 2016 Nuffield Scholar. My work will be published in autumn 2017 talking about the disconnect between media and agriculture in the UK and how lessons from around the world can help us to have a better relationship.



Waiganjo Njoroge is the Global Media Lead at the Alliance for a Green Revolution in Africa (AGRA)





YOUR PLEDGE: **INVESTMENT.** NOW MAKE YOUR MOVE AND PROVIDE LEADERSHIP

As the private sector, it is time to proactively demonstrate leadership alongside governments in setting the pace for a private sector led and supported agricultural transformation in Africa.

JOIN THE MOVEMENT TODAY;
www.seizethemomentafrica.com

