



Agribusiness in unprecedented times

Challenges and opportunities for CEOs in Africa

Forward

A very warm welcome to the inaugural Africa Agribusiness Outlook. We, the Alliance for a Green Revolution in Africa (AGRA) and KPMG East Africa are delighted to have worked with the Partnership for Inclusive Agriculture Transformation in Africa (PIATA) Partners to deliver this initiative.

We hope that this survey will be the start of a series of conversations with the private sector working within the agribusiness ecosystem in Africa. We intend to give voice to the private sector, many of whom we already work with. We have invited businesses from all over Africa to give us perspectives on what they think, for example, development partners and governments should focus on to improve the business environment.

COVID-19 has presented unique challenges to businesses and through this report, we hope to explore how we can work better together to build back and thrive. Through this report, we strive to answer questions related to business operations and aspirations. We want to know how businesses are coping. We want to explore what businesses are doing differently to deliver services to smallholder farmers in rural Africa. We want to get an understanding of how women leaders are engaged and their contribution to businesses. We want to know if the private sector is ready for the Africa Continental Free Trade Area.

These and many other questions will be discussed in this report.

Access to finance emerged as the greatest priority for businesses. This is not surprising given that, across the continent, less than five percent of commercial bank lending goes to agribusinesses. It is important to note that this issue is not just about access to finance, it is about the cost of finance and availability of financial instruments that are adapted for the agricultural sector. It is also about making agriculture attractive, viable and profitable rather than being looked at as a risky endeavour. Given the importance of the agricultural sector to many African economies, we believe this is an area that needs to be given urgent attention. It is well documented in economic history that agricultural growth was the starting point of the economic transformation of many developed countries. Massive resources, therefore, need to be poured smartly into the sector if we are to achieve industrialisation and economic prosperity goals as a continent. And, there needs to be a mechanism to ensure that resources are used timely where they are meant to be used rather than delayed and recycled year in year out.

We have seen the power of technology. It has enabled companies to respond and adapt their operating models after lockdown measures were imposed across the continent. Going forward, technology will be the lever that will help Africa leapfrog into the future. It is encouraging to see the focus COVID-19 has put on digitization and how countries are becoming more focused on digitalization.

The future of African agribusiness must include the smallholder farmer and in our conversations with businesses, we were pleased to hear of the many different ways that smallholder farmers are incorporated into their business models. This is critical to their (smallholder farmers) sustainability.

We invite you to join us in this conversation. This 2020 Survey will form a baseline for the private sector working in the agribusiness ecosystem in Africa. The intention is to track priorities for agribusinesses over the next few years, to gain insights on what matters most to them at any particular moment in time. We expect that these topical insights will enable policymakers to respond to businesses in a more agile manner.



Dr. Agnes Kalibata

President

Alliance for a Green Revolution (AGRA)



Anis Pringle

Partner

International Development Advisory Services
KPMG East Africa



Introduction

We are living in unprecedented times. What a year it has been. We began planning for this survey in the last quarter of 2019. At the time, COVID-19 was a distant phenomenon, happening somewhere else, in another continent. Before we knew it, and as we launched the survey in March 2020, most countries in Sub-Saharan Africa had implemented lockdown procedures. Travel, in some cases, within country was banned. In 24 hours, many businesses had to close operations to comply with the measures aimed at containing the pandemic. Very few businesses could have planned for this drastic scenario. Governments faced a delicate balancing act – prevent the explosion of a public health crisis and the possible implosion of our health systems or preserve the economy. Either way, it was not an easy choice.

And yet, we must continue. In the midst of the pandemic, we have been heartened by the responsiveness of the African business community to this inaugural Agribusiness Survey. Many CEOs, company founders, senior executives made time and were keen to share their views through one-on-one interviews conducted via Zoom links and through an online survey. A lot of businesses are struggling but they are also determined to survive COVID-19 and emerge stronger.

It is against this backdrop that we seek to understand the priorities, opportunities and constraints for businesses operating within the agricultural ecosystem in Africa. With this report, we seek to give voice not only to the private sector in Africa but to outline potential pathways for actions that would result in a thriving agribusiness sector in Africa.



Methodology

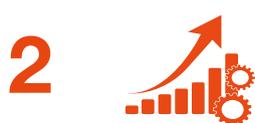
We conducted 39 telephonic interviews with CEOs and C-suite executives across eight African countries. The one-on-one interviews were conducted in countries which currently are AGRA strategic priorities. We then conducted an online survey, extended to the entire continent. This wider survey was completed by 182 executives across 16 countries in Africa.

The following pages provide a summary and reflections on the survey results submitted by industry leaders.

Overall Top 10 Priorities - Agenda for Action



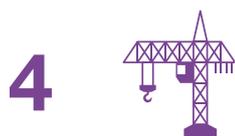
1 Provide more flexible financing structures



2 Increase productivity of smallholder farms



3 Reduce the cost of money



4 Increase advocacy for infrastructure



5 Deliver catalytic finance



6 Increase government spending on agriculture



7 Create more public-private partnerships for infrastructure



8 Increase private sector investment in agriculture



9 Increase massively, financing across value chains



10 Develop affordable technologies for Africa

Survey Context

Survey scope

Overall question

How can the private sector increase investment in agriculture?

Secondary question

How can AGRA increase its engagement with the private sector in Africa?

Primary focus countries

Cote d'Ivoire, Ghana, Kenya, Nigeria, Mozambique, Rwanda, Tanzania and Zambia

Secondary focus: Rest of Sub-Saharan Africa



16

Total Number
of Countries



137

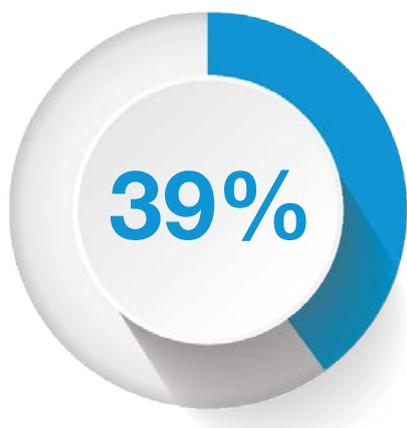
Total Number of
Organizations



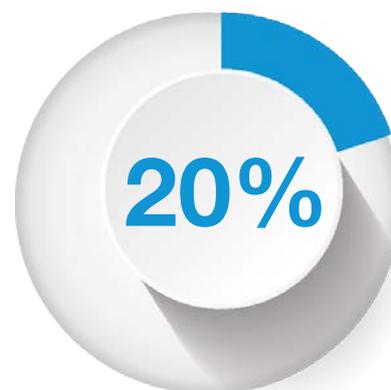
182

Total Number of
Respondents

About the Companies:

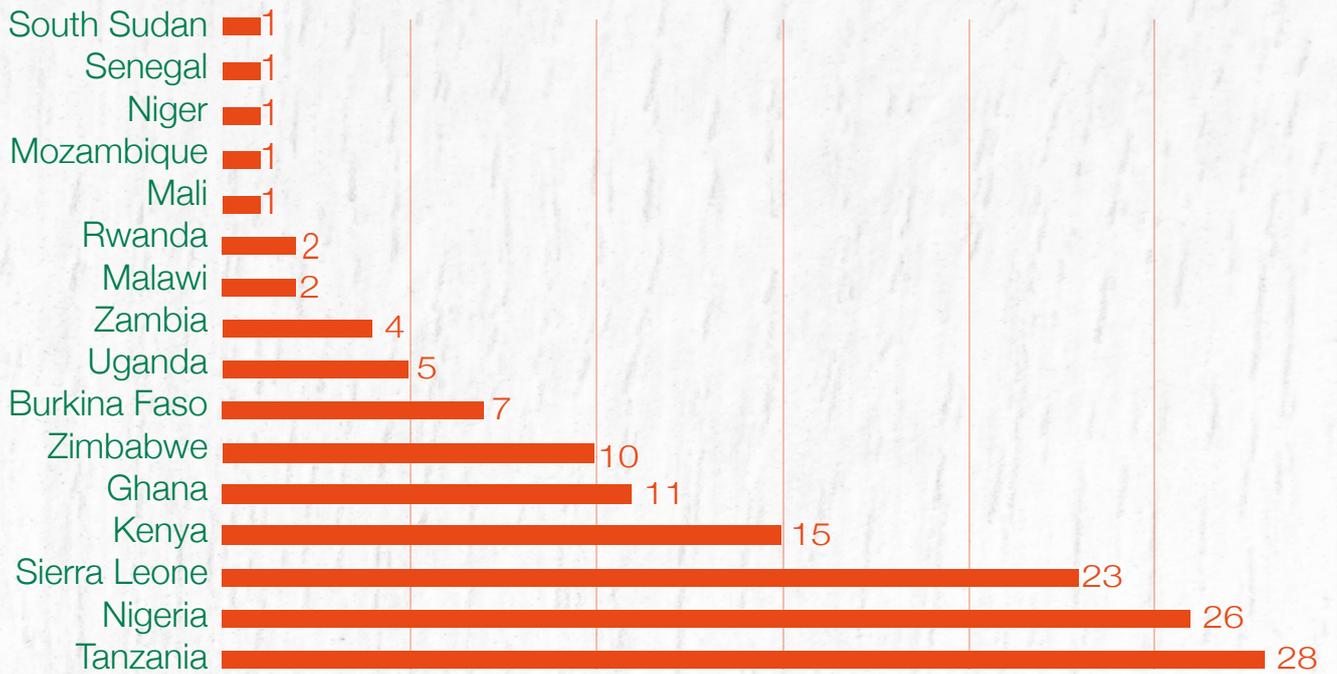


of companies surveyed
have been in operation
for over 10 years

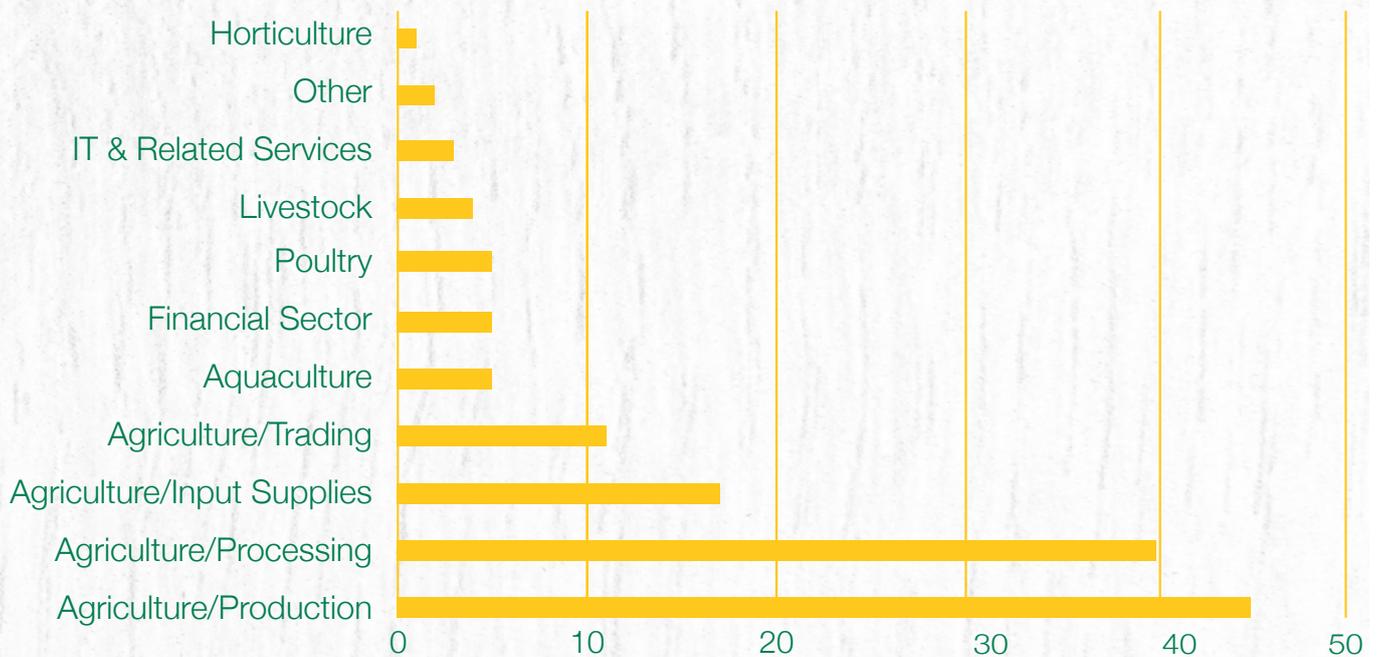


of companies surveyed
have been in operation
for less than 3 years

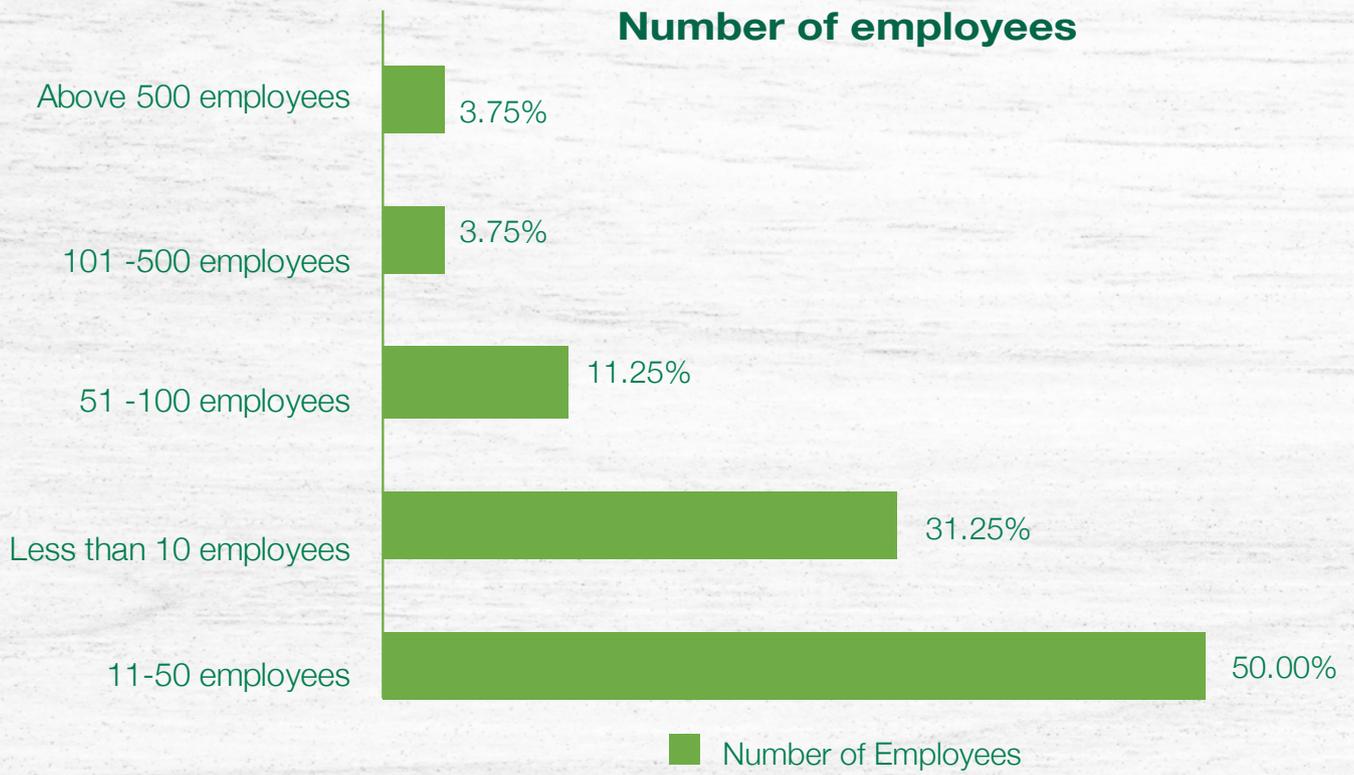
Number of responses by country



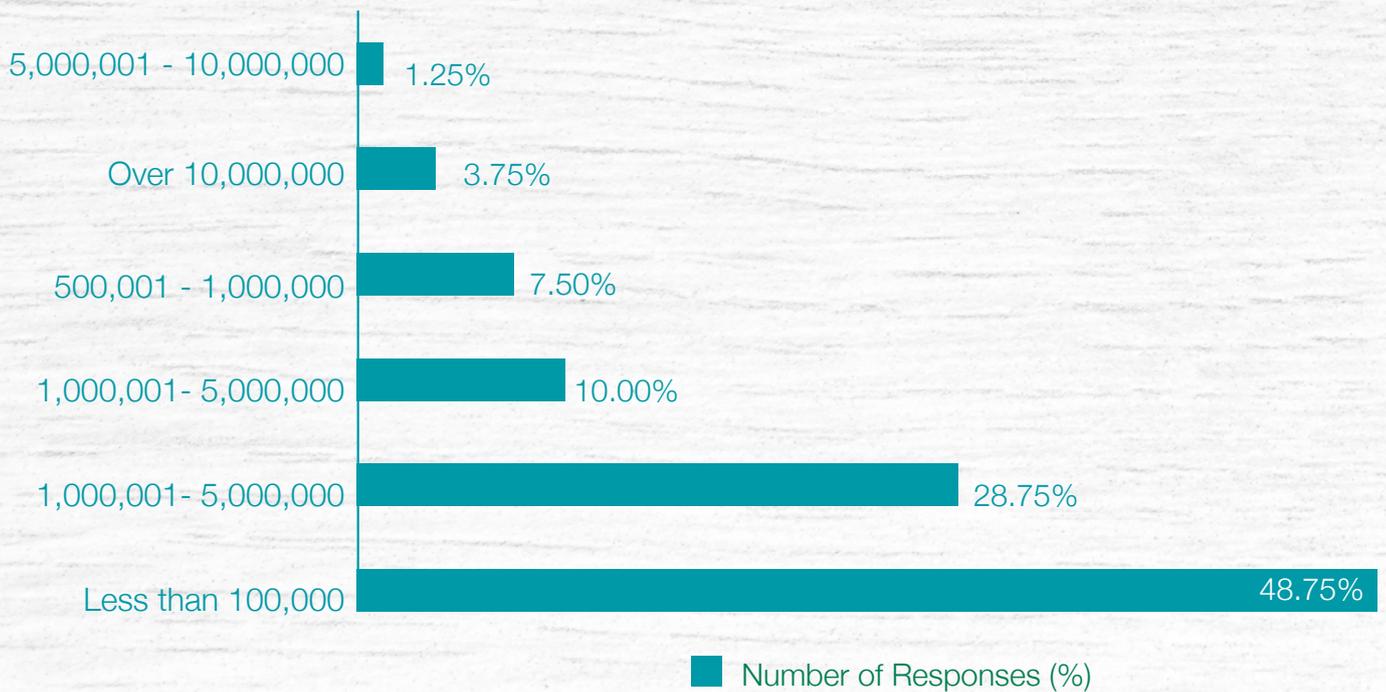
Number of responses by sector



Number of employees



Turnover profile



Transforming Agriculture in Africa: A Business Perspective

Usually the remit of development economists and policy makers, we asked businesses to tell us what, in their view, is needed to transform African agriculture. After all, they should have an opinion. Day in, day out, businesses are engaged in, solving problems and thriving in the sector. Below is a synopsis of their key considerations.

Transforming Agriculture in Africa. A business perspective



a. Increase productivity on smallholder farms

Africa can and should feed the world. A rising middle class on the continent and growing population provide sufficient demand for Africa to increase its production in a significant manner. It is an attainable dream when we consider that Africa holds 65% of the uncultivated arable land left in the world. Moreover to achieve this goal, we would need to greatly increase productivity and investment into the sector. This is the starting point for business and we believe that there is a link between this particular priority and the other priorities cited in this section.

b. Leverage Africa-centric technology to transform agriculture

Across the board, the one thing we heard was that Africa needs to leverage technology. However, it is not a blind adoption of technology from more developed nations. Technology needs to be adapted for the smallholder. Recognising that much of Africa is dominated by smallholders, solutions developed need to be affordable, accessible and relevant. Within this context, technology is broad and encompasses biotechnology, financial technology, industrial technology and ag-tech.

c. Provide last mile services in rural Africa

Not just physical infrastructure but networks that would deliver services and products to the rural areas in Africa. African farmers are not just producers, they are consumers. The businesses we spoke to in Africa understand this and many are grappling with building networks to grow their business in rural areas.

d. Greater investment by the private sector

Perhaps the biggest surprise of this Survey was the result that about 44% of businesses will continue with planned investments despite COVID-19. Beyond that, 70% of the businesses surveyed agreed that the private sector needs to increase investment in the private sector. However, the biggest constraint to great investment is the cost of capital with commercial lending rates at over 20% in many African countries. Unlocking capital therefore is key to achieving greater investment in the sector by business.

e. Value addition in agriculture

There is a huge opportunity to transform Africa's commodities and food produce into high value consumer goods for domestic and international markets. According to Stephanie Angomwile, founder and CEO of Zambian seed producing company, Stewards Globe, "there is a lot of opportunity from farm to fork." At the heart of unleashing the full potential of manufacturing in sub-Saharan Africa is an industrial revolution that would be powered by infrastructure. Not surprisingly, increased advocacy for infrastructure was the fourth most important priority for businesses.

6. Grow business beyond national borders

Nearly two-thirds of the organizations surveyed indicated that intra-African trade is a priority. In our discussions with executives, many expressed an

interest in expanding business beyond their borders to grow a regional business. While there is demand for their products, businesses would need to make significant capital investments to export. Again, we find that access to affordable finance is a significant constraint for many of Africa's small and medium sized businesses.

The Opportunity: The collapse of global supply chains and global markets has devastated businesses in many African countries but has also given rise to the "buy local" movement. No longer able to rely on imported goods as their trade partners diverted resources to protect their own citizens, African countries were forced to adapt and respond in an agile manner. One-dollar COVID-19 tests were developed in Senegal, some breweries diverted beer production to supply much needed ethanol for the production of sanitizers and fashion houses are now mass-producing fabric masks and protective gear, producing opportunities for textiles. There is increased confidence in local industry. This momentum needs to be sustained and developed to its full potential, rapidly.

The enabling environment emerged as a cross-cutting theme. Throughout our conversations, businesses spoke of policies and how they affect their operations. Issues related to regulations included; seed movement, seed policy, technology and how the cost of technology affects access, taxes, policies related to big data and cross-border trade and level of transparency and consistency by government. There is a need to focus on creating an enabling environment for business as it would go a long way towards supporting a thriving private sector. It is also the quickest way to get the private sector to invest in the agricultural sector and one where it would be easy to score easy wins. We see a huge potential in work around improving the enabling environment for agribusiness.



Adapting in a COVID-19 world

2020



Priority Rank 14: Resolve long border queues caused by COVID-19 (8.33)

2020



Priority Rank 65: Leverage technology, it is critical to surviving COVID-19 (7.22)

2020



Priority Rank 41: Prioritise implementation of international food safety standards (8.00)



Cash is king! Right now, our priority is to manage cashflow and tighten financial controls

Ayodeji Balogun,
CEO, AFEX Commodities
Exchange Limited, Nigeria

Surviving COVID-19, managing cash, not going out of business – these are some of the issues that are top of mind for many of the respondents. Indeed this year will prove to be one of the most challenging years in modern history in Africa as key markets collapsed overnight following the imposition of lockdown measures by governments across the continent. In countries where lockdown measures were not as severe, such as Tanzania, respondents interviewed said they remain unsure of the true situation. This is not good for business, given the lack of data to inform decisions.

The size of business was a big differentiator in terms of how they responded to COVID-19. About 43% of companies in the survey, majority of whom are SMEs, indicated they would be reducing their operations due to COVID-19. For these businesses, we found in our interviews that revenues had fallen by 50% and, in some cases, by 80% this year.

Cashflow did not appear to be such a big issue for many of the multinational companies, at least for now. If the COVID-19 situation persists, it is prudent to expect an impact on companies' cashflow.

Essential service

The good news is that the agri-food sector was declared an essential service in countries such as Kenya and Rwanda which allowed for the movement and much needed inputs across towns despite lockdown. While this has provided a lifeline to many small businesses, business confidence remains weak due to a significant drop in demand with many consumers affected by job losses.

Surviving COVID-19 Finance & Technology

In our survey, we found that over 52% of the businesses surveyed have determined that technology is critical to thriving in COVID-19 times. Indeed, many businesses were quick to adapt. For example, Zimbabwean seed producer, SeedCo, said it was now delivering agronomic advice digitally, to smallholders via channels such as Whatsapp. For larger and more sophisticated farmers, Zoom was the main channel of choice. Going forward, this will have implications for the business model. The use of technology has reduced the cost of delivering extension services and several of the companies we interviewed said they were unlikely to go back to their labour intensive pre COVID-19 business model.

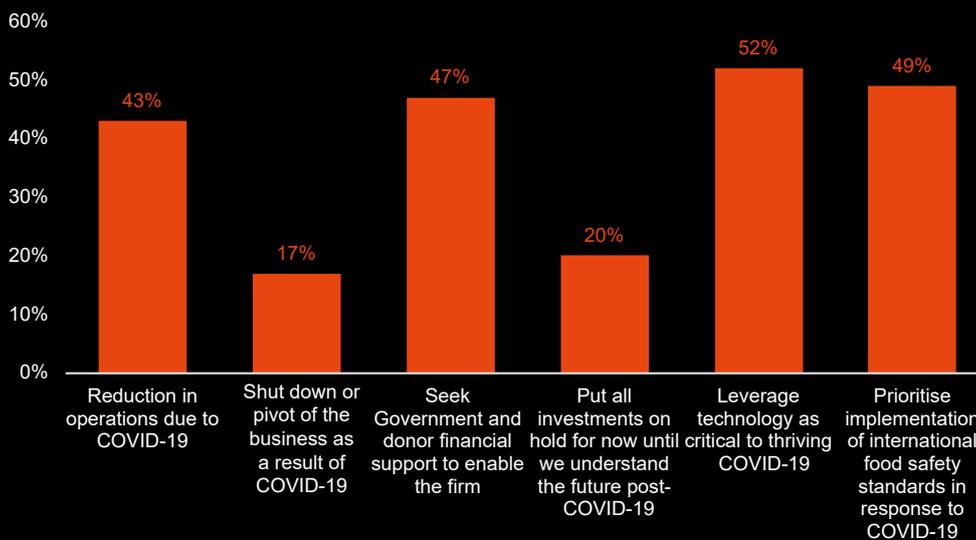
Business continues

It was heartening to see that shutting down or putting planned investments on hold ranked the lowest of priorities overall. About 17 percent said they would shut down or pivot while 20 percent or one in five companies said they would put all investments on hold. Key to surviving this period is financial support with nearly half of the businesses in the survey indicating they need some form of government support.

Wait and see

Overall, we were surprised by the Survey's findings on COVID-19. We attribute these findings to the fact that the agricultural sector has so far experienced a lag effect. By the time many nations implemented COVID-19 lockdown measures, farmers had planted their crops for the first rainy season of 2020. We believe that the real impact of COVID-19 on the agricultural sector and agribusinesses will become clearer towards the end of 2020 and in early 2021. At the farm level, many of the respondents said that farmers were adopting a wait and see attitude given the low demand and disrupted markets. The uncertainty is affecting farmers and particularly their ability to continue investing in their farms.

How Businesses are responding to COVID-19



The Opportunity: Priority must be given to providing financial support to agribusinesses so that they can survive this pandemic period. Many governments have put in place COVID-19 measures, funds. These must be disbursed with urgency. Moreover, development finance institutions, should look to support businesses with special funds beyond their existing portfolio as is the case at the moment.



There is a challenge of how to time demand. Uncertainty has become bigger. Markets have either disappeared or shrunk overnight. Our markets in South Sudan disappeared overnight. Hospitality industry shutdown, retail is also down. People are also shopping less. Mushrooms are out of the shoppers' list

Laurent Demuynck,
CEO Rwanda Best



The African consumer deserves safe food

Food safety is now a top priority. COVID-19 is a failure of food safety and has underscored the important link between the food that we eat and why provenance and food safety practices matter. It is a wakeup call. In the Survey, food safety scored the second highest priority for businesses as part of measures on how they respond to COVID-19.

According to the World Health Organization, Sub-Saharan Africa has the highest number of food-borne illnesses – per capita - globally. In its report, “WHO estimates of the global burden of foodborne diseases,” published in 2015, there were 137,000 deaths in Africa as a result of food safety issues while another 91 million people were affected by food-borne illnesses with the highest incidence recorded in children under 5 years.

Time to put the African consumer at the centre.

Up until now, implementation and enforcement of food safety has mainly focused on export markets. At a domestic level, food markets are dominated by the informal sector, making it difficult to enforce safety standards.

Corruption at both government and business level is also an impediment to providing safe food to consumers. In the wake of the pandemic, the African consumer is now likely going to be more careful about what they eat. It is time to put the African consumer at the centre of our food markets and ensure they have safe food.

Safe food from farm to fork

The private sector has a strong role to play. In providing a market for fresh produce, they are in a position to secure and deliver safe food from farm to fork. Value addition means that companies must adhere to good manufacturing practice, include food safety standards, across the entire value chain. Moreover, it will be very challenging to realise one of the biggest priorities for African businesses – cross-border trade – without good food safety standards. Food safety is therefore critical to a thriving agribusiness sector. Finally, investments in infrastructure such as coldroom facilities, international standard pack and slaughterhouses as well as proper hygienic drying facilities will be required to achieve global standards in food safety.



Cash is king! Right now, our priority is to manage cashflow and tighten financial controls

Ayodeji Balogun,
CEO, AFEX Commodities
Exchange Limited, Nigeria



Financing the Sector- Money Talks

2020



Priority Rank 1: More flexible financing structures for agriculture and agribusiness (8.67)

2020



2020 Priority Rank 3: Develop mechanisms to reduce cost of money (8.59)

2020



2020 Priority Rank 5: Increase catalytic financing beyond technology (8.53)

2020



2020 Priority Rank 6: Increase government allocation for agriculture (8.52)

Constraints from the perspective of KCB Bank.

Value chains in most African contexts are not complete, for example, smallholder farmers do not have a guaranteed market which makes it difficult for banks to lend. Farmers are usually unable to provide evidence of an end-to-end process flow of their business. Financial solutions available to SHFs are small scale, some using digital platforms. Funding provided may not help them grow their agribusinesses as most use the funding for consumption purposes.

Medium and large scale farmers have collateral so it is easier for financial institutions to lend to them. They are also in closed value chains so banks are more comfortable with them as they are assured the payments will come in.

Land consolidation for SHFs could assist with this challenge for example farmers coming together to form cooperatives. This collectiveness would become more attractive to all players in the value chains, including financiers.

Overall, access to finance emerged as the strongest priority for many agribusinesses surveyed with cost of finance cited as the biggest impediment. This is particularly so given that many of the firms surveyed were SMEs.



Current availability of finance

For the larger companies, multinationals, that participated in the survey, availability of finance did not emerge as a major issue. Most get finance from offshore sources such as their parent companies, investors, development finance institutions, grant providers etc.

By contrast, for all other companies interviewed, most said access to finance was a major constraint. Majority of companies, even those that have managed to raise significant amounts of funding, said they had been denied funding in the past.

The available types of finance are as below and differ by providers, requirements, returns required and period of investment.



Grants – limited availability but were noted to be very valuable for innovation and start-ups



Investment funds including private equity and venture capital funds - rates of return required by investors are extremely high and they only invest in high growth

businesses. Primary agriculture seldom delivers such returns.



Debt – Lenders are risk averse (demand at least 120% collateral) and very expensive (in local currency, with rates up to 35%)



Asset based finance e.g. leasing – could be promising but uptake is still relatively low



Trade finance – mainly provided by banks.



Guarantees – have not proved very successful but perhaps could be in future

Finance for smallholder farmers is equally hard to come by. Financial institutions (banks, microfinance institutions, SACCOs) and non-financial institutions (e.g. mobile money providers and fintechs) have made short term finance much more accessible. However such monies are very expensive and only viable for short term trade finance. M-Pesa and other mobile money solutions are valuable as they are efficient and reduce the transaction costs of dealing with large numbers of SHFs. They also help develop a payments and transactions trail that can be used when accessing finance from financial institutions. However, digital payment regulatory barriers are a challenge for farmers. For example, transaction costs are still high, and daily transaction limits low.

Provision of seasonal finance for SHFs remains the biggest problem as banks are reluctant to lend. Serious risks such as poor rainfall, crop failure, pests and diseases could be mitigated by crop insurance, but this has not taken off across the continent.

What is the main issue in relation to access to finance?

More of an access issue as opposed to availability: From our discussions, financiers indicated that finance was available, but SMEs and smallholders were not able to meet the set requirements. SMEs may not have adequate reporting structures, staff capacity or business processes, whilst the major challenge for smallholders, as identified above, is operating in unstructured markets.

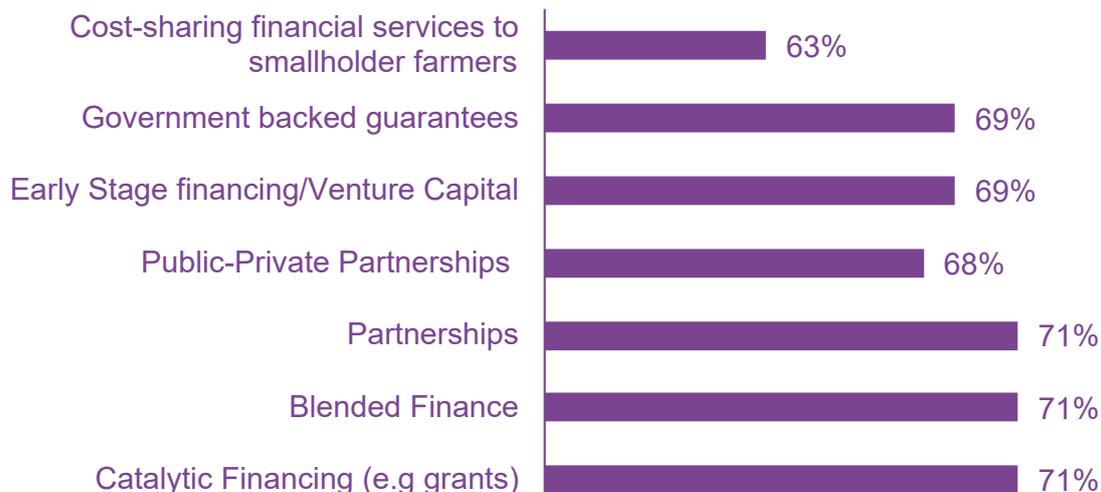
Limited knowledge of available financing instruments and requirements: Most respondents only identified a few sources of financing, pointing to a lack of information on finance sources for the sector. Some entrepreneurs may not have adequate information on where to look for financing.

Respondents also pointed out that some financiers have herculean due diligence processes that discourage them from applying for funding. For example, the credit guarantee offered by USAID often acts as a barrier for companies.

Prohibitive cost of financing: Financing returns were identified as a challenge, both for debt and equity financing. Private equity and venture capital funders ask for high stakes in business which are not a viable option for many agri-SMEs. This type of funding is ideal for companies that can generate high growth and offer exit plans after the investment period. A few respondents mentioned that they have accessed venture capital funding, but also mentioned that the expected returns are high and to meet this, need to scale considerably.

What do agribusinesses want?

What type of financing is attractive to businesses?



The Opportunity: The entire sector has a huge financing gap that needs to be bridged to make real change and reach the required scale. We propose the following series of recommendations;

- Big finance players need to be involved
- More market makers are needed
- Both financiers and SMEs need to bring the right people into the conversations
- Finance that is structured to the sector is needed. This could be anything from longer repayment terms to end of season payments to flexible collateral requirements, to blended finance instruments.
- Governments need to increase spending in the sector to motivate private sector businesses, funders and investors to also invest. Governments could allocate budgets

to provide guarantees to commercial banks to allow farmers to borrow money at concessionary rates and less stringent requirements to allow them to invest in their farms - mechanize, irrigate etc,

- Farmers and AgriSMEs need technical assistance support that goes beyond agronomic services. They need services designed to help improve their chances of securing finance. Firms which provide technical assistance services have an important role to play here in helping SMEs prepare their applications and educating them on the requirements. Role plays to assist in pitching their financing requirements are also valuable especially for smaller SMEs who are not used to sharing information about their businesses



For most agricultural sector players in Africa, there is a need to create the ecosystem (partnerships, infrastructure, agronomists, and links to farmers) for their businesses to grow, as well as focus on their product or service. This is different from other regions where the ecosystem already exists. In Africa, you have to create both and you can only do this with high risk capital

Peter Njonjo,
Co-founder & CEO, Twiga Foods

Technology and Innovation

The Big Opportunity

2020



Priority Rank 10: Transform agriculture with technology (8.41)

2020



Priority Rank 15: Technology is a gamechanger. Increase investments (8.31)

2020



Priority Rank 50: Invest in technology for operational & financial improvements (7.81)

2020



Priority Rank 65: Surviving COVID-19. Leverage technology (7.22)

All hail tech!

Technology has been touted as a game changer in many sectors, and agriculture has not been left behind. For the sector, related benefits include efficiency increases, decreased costs and enabling agri-businesses to become more competitive. Technology emerged as a major theme for all business types that participated in the survey with majority noting they will increase investment in tech and innovation to support operational and financial performance.

AgTech in Africa is nascent, but has a promising future

Precision agriculture is enabling farmers improve food production, lower production costs and increase efficiency. Agricultural technology is becoming prevalent in the region as more modern technology is trialled or expanded into farming operations.

Survey respondents indicated that they use or would like to use soil analytic technologies, drones to move seeds and inspect fields, and predictive analytics to forecast weather patterns. Precision agriculture is going to be more important to larger commercial operations and will eventually trickle down to the smallholder farmer but this will take time. One challenge is that facilities that governments should provide are not available for example fully functional weather centres. Regulations around use of GPS technologies also make precision agriculture difficult at present, and need to change.

There is an opportunity for the region to embrace new farming techniques that allow farmers to engage in production without, soil and for example hydroponics, aquaponics and vertical farming. Respondents indicated promotion of partnerships for R&D with industry, universities in country and research stations, to support innovation in agribusiness as one of the top priorities. Respondents similarly reiterated that agricultural innovations need to be adapted for Africa, and need to be affordable. For example, deploying technology to support seed production technology, hybrid seeds could be a real game changer for the region.

Irrigation continues to pump the sector

Tech in irrigation

SunCulture pumps can pull water from more than 70 metres below ground level. The systems are enabled by Internet of Things (IoT) technology and are able to track information such as how much water is pumped, how many hours the farmer runs the pump, if the water runs out, the system sends a text to the farmer to alert him/her to stop the pump, etc.

The costs of different systems vary according to features. SunCulture's most popular and entry level product, the Rainmaker2 with battery but without TV, has features such as the ability to pump more than 2,500 litres of water an hour, operate up to 9 hours on sunny days, support home lighting and radio/mobile charging as well as four light bulbs. The cost of this product is a total of US\$ 900 with a deposit of US\$ 82 with the rest of the payment spread over a 30 months period. Even at this price, the product is still out of reach for many of Africa's smallholder farmers. To deliver these to SHFs, Sunculture would need to either partner with a financial services provider and/or design or deploy an innovative lending product financed from its own balance sheet.

We believe that irrigation is the lowest hanging fruit to transform agriculture. Moreover, technology around irrigation systems will be very important in

the next 20 years as weather patterns become even more unpredictable. Market awareness is required to help farmers understand the transformative power that these assets have on productivity. Innovations such as solar water pumps are a game changer. The cost of these assets is one of the barriers of adoption and governments and development partners may need to consider introducing flexible financing schemes to boost uptake.

Is agricultural data the new oil?

Companies have been collecting large amounts of data on farmers including geospatial, demographic, production, marketing and payment data. Data is used for various purposes including monitoring trends, enabling traceability of produce, information dissemination, customer assessment, etc. In Rwanda for example, egg and meat consumers are requesting information on date and location of production on produce, prompting producers to introduce stamping.

Companies offering financing solutions are relying more on data analytics to on-board and assess customer profiles than they were before the pandemic. Companies such as Twiga Foods are able to use data to track changes in trends and make immediate decisions. For instance, the company monitors daily supplies to their urban vendors, and, based on this information, are able to see in real time which vendors are struggling due to lack of capital and provide funding to them. Data analytics also helps optimise the company's operations and is used for example in routing trucks to collect produce from farms around Kenya.





The rise of digital technologies

Companies surveyed reported using a wide array of digital technologies for their operations. Companies have been able to do more with technology during this COVID-19 period as a work-around to movement restrictions and social distancing. Companies are using digital platforms for on-boarding farmers, managing sales, sharing information, providing payments and virtual training to farmers, monitoring stock levels and payments to suppliers among others. Farmers across the region are increasingly using digital interventions as well, although respondents mentioned that there needs to be simpler innovation for example more innovation around simple feature phones as opposed to smart phone and apps which not everyone has access to.

Digital financial services have in many countries provided a gateway for provision of financial solutions to the previously excluded last mile, where traditional financial services were constrained due to infrastructure and economies of scale challenges. However, more remains to be done with rural populations still among the most excluded populations. One way to reduce barriers to effective usage of digital financial services could be pricing and one of the important priorities identified was government policies that reduce cost of digital transactions and reach of mobile money, particularly for rural communities.

E-commerce is an emerging channel for agricultural companies. This has currently not been exploited to its full potential but this channel is predicted to grow in relevance over the coming years.

Business environment issues that impact on technology and innovation;

- Technology does not work all the time as there are issues with mobile network, Wi-Fi, LAN, connectivity etc. Poor network connectivity hinders innovation and technology adoption
- Lack of capital is a real challenge. The technologies exist but small farmers do not have finance to purchase them.
- Awareness is another challenge. Companies reported having to conduct customer and farmer training and sensitization which increases their operational costs.
- Difficulties in getting skilled affordable labour. Need for a unified block that allows free movement of labour in East Africa as in the EU
- Withholding tax is applicable to most technologies making them very expensive to acquire
- Policy issues. For something such as crop insurance, interventions in agricultural capital markets can help bring in more digitization and reduce costs.

The Opportunity: Policy regulations on online digital platforms, digital trainings, tax rebates and holidays for investors that have shown impact with their interventions. Incentives are required for companies that are investing in technology to improve agriculture. Support for R&D from governments is required. When new products come on board, are governments able to recognise these and treat them accordingly?

The Future of Smallholder Farming. A new way of engaging, or does the old still work?



2020



Priority Rank 2: Increase smallholder productivity (8.65)

Smallholders make up 60% of the total population in sub-Saharan Africa, and about 18% of the region's GDP comes from agriculture. The smallholder farmer is squarely in the middle of almost every discussion about agriculture in Africa, and yet this group lags behind in access and usage of critical supporting components that can lead to commercializing these farming businesses, and transforming agriculture on the continent. There have been different views about how to transform the smallholder narrative. The survey provided different viewpoints from the respondents.

2020



Priority Rank 12: Partnerships to deliver services to smallholders (8.38)

Smallholders are a strategic priority for most businesses. Most businesses indicated that they view their interaction with smallholders not as a corporate social responsibility (CSR) initiative, but that farmers are an integral part of their business models. For many companies their core business is selling farm inputs to, and buying produce from, smallholder farmers. In some cases the smallholder farmers buy from their customers and are by extension their customers. Global commodities giant, Export Trading Group (ETG) for example states that smallholders are the backbone of their business and has a portfolio of close to 100 million farmers. Another multinational that has farmers at the centre of their strategy is Lonrho, as farmers make up 80% of the company's sales. "Lonrho lives and breathes smallholder farmers."

2020



Priority Rank 21: Support consolidation of smallholders to increase production (8.30)



To be honest, our focus was driven by big markets, big farmers especially when we talk of new technology because big farmers have better capabilities to adopt it. But now we are saying, it's good, it's ok but it's not enough especially when we think of about the long term sustainability of the company. Bayer has set itself an ambitious target to reach and improve livelihoods of 100 million farmers by 2030, a significant number of whom will come from Africa

2020

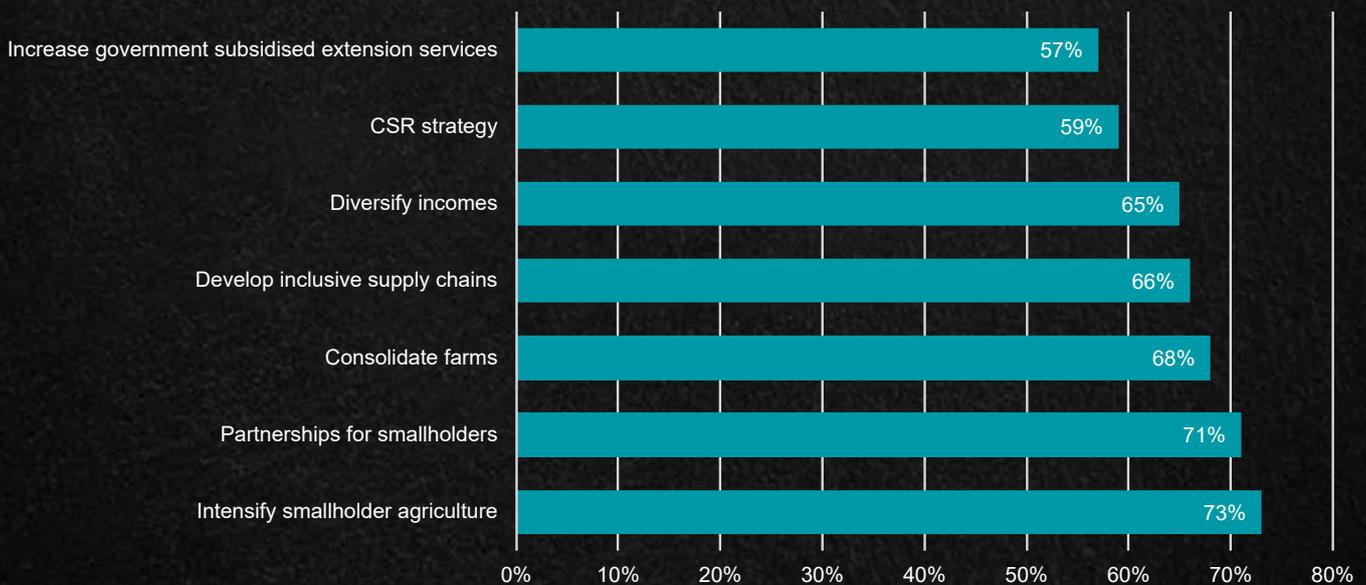


Priority Rank 27: Diversify incomes at farmer level (8.2)

Laurent Perrier, Managing Director, Bayer East Africa.



Priorities for Strengthening Smallholder farming



Companies that source either directly or indirectly from smallholders also have vested interests in moving farmers to the next growth level to safeguard their sustainability plans. For these companies, commercializing smallholder farming is imperative as the goal is to increase supply through sourcing from more farmers or increasing production capacity from existing farmers.

One of the ways that companies are investing in smallholder farmers is through provision of training and support services. This takes different shapes such as farmer field schools, field staff educating farmers on good agricultural practices, trainings on how to use farm assets, and even trainings on how to conduct farming as a business. A number of respondents highlighted the need to develop gender sensitive farmer extension programmes in order to increase female participation at the smallholder level.

Challenges still abound

Respondents indicated that working with smallholder farmers has its fair share of challenges. Reaching farmers is one of them, and some companies have had to build their own innovative infrastructure to serve farmers. For example, SeedCo has invested in agency networks to reach farmers and develop a logistical footprint of distributors, agro-dealers, etc. Another challenge is storage of produce, especially for highly perishable foods. Companies have to invest in their own storage facilities which drives up costs.

Climatic changes such as increased flooding and droughts in the region also present additional challenges. Companies such as SunCulture have developed affordable irrigation systems that are adapted to the African context in order to move farmers from rain-reliant agriculture to all-year production. But even where benefits of such technologies are evident, farmers still need a lot of sensitization coupled with flexible payment schemes for them to take up these technologies.

Respondents indicated that they would like more help from other stakeholders such as governments and donors to develop smallholders' capacity. Additionally, to encourage businesses to continue investing in this segment, companies recommended incentives from governments, for example tax breaks.



The future of the smallholder farmer is the difference between those who are farming as a last resort compared to those who intentionally farm as a business

Hello Tractor

Food security or economic empowerment of smallholders?

Continuing efforts from stakeholders such as governments, donors, the private sector and industry associations are being made to improve smallholder productivity. These efforts assume that if smallholders get access to quality inputs, productive assets, get agronomic advice, markets and finance, then production will increase significantly, and these farmers will be able to improve their incomes and transform the sector.

Some respondents however felt such an approach will not transform agriculture on the continent. For this group, the starting point lies in identifying the right smallholder farmer to work with. Farmers that are not producing solely for subsistence purposes are easier to move to commercialization as they have the capacity and mind-set to grow. Supporting such farmers would lead to better yields and incomes.

Another group of respondents felt smallholders in their current state will not transform African agriculture. According to them, smallholder farmers are not able to produce enough and even with increased inputs, mechanization and extension support, will not meet the food needs of the region and beyond. This group argues that the discussion on improving smallholder productivity needs to be approached from a food security and affordability standpoint. A farmer who has used inputs, has a credit facility, has invested in storage and getting products to the market will invariably add these costs to the final product. This is driving up the cost of food and the model of empowering and supporting the small farms may need to change. These respondents instead proposed different ways of engaging smallholder farmers.

Aggregation of land and farmers into cooperatives was suggested as a more efficient way of transforming African agriculture as opposed to engaging individually with the small scale farmers. This approach does not mean excluding or moving away from smallholders, but working differently with them. The puzzle to solve is how to shift production to be more efficient and lower cost, and pass this benefit to consumers that will in turn lead to higher demand.

Innovative ways of working with smallholders, for example, establish a multi-stakeholder platform across the Continent that would support sourcing and provide markets for smallholder farmers.

“

Smallholders will not disappear, but like Asia, there will be increased amalgamation of farmers into cooperatives that increases their purchasing power, e.g. in the tea and coffee sector and now with mangoes as we are seeing in Makueni, Kenya

Syngenta



Infrastructure investment: laying a solid foundation for agribusiness takeoff

2020



Priority Rank 4: Increase advocacy for infrastructure (8.55)

2020



Priority Rank 7: Accelerate infrastructure development with PPPs (8.46)

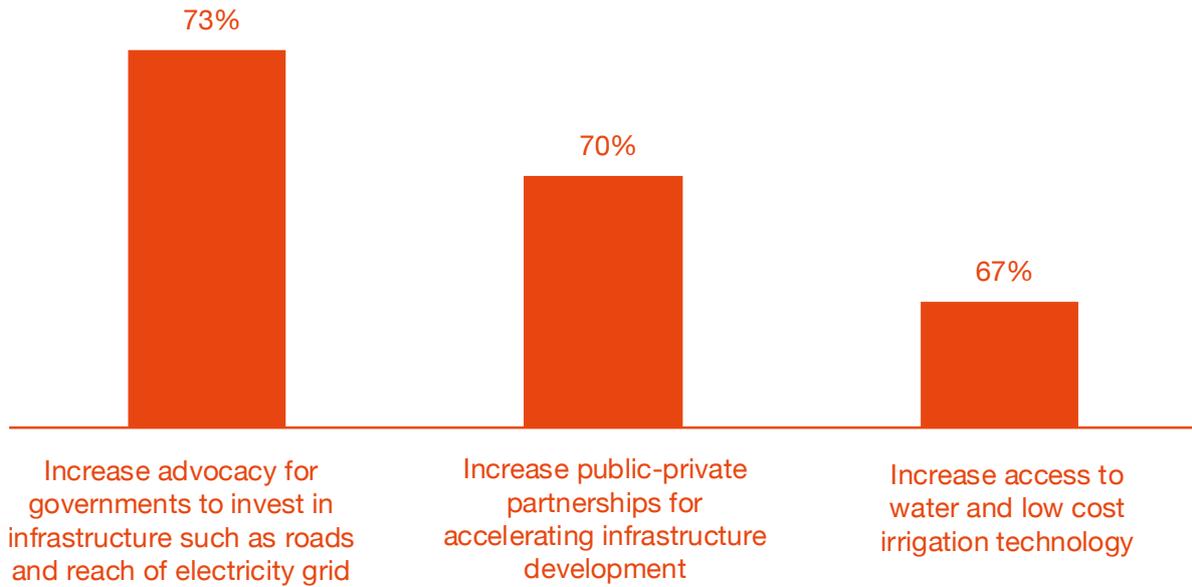
One of the highest priorities for businesses is investment in infrastructure with 73% of respondents requesting for increased advocacy for infrastructure. This specific priority was ranked the fourth highest priority overall in the Survey. This makes sense because access to infrastructure is at the heart of successful businesses. Economic growth factors such as local and international trade, manufacturing, increases in productivity and ultimately industrialisation all rely on good infrastructure. In this particular context, respondents defined infrastructure as roads, rail, sea and air freight, electricity, water and mobile phone penetration to support last-mile delivery of services.

About 70% of businesses indicated that the way to increase investment in infrastructure is through public private partnerships (PPPs), suggesting that business is a willing partner in infrastructure development. By far, the biggest constraint cited was electricity. “When electricity goes off, then we go off,” said Alhaji Musa Ali, founder of Tropical Starch, a processing company based in rural Ghana. Electricity is costly and is unreliable, for example in Zambia, where businesses sometimes go without it for 18 hours in a day. The cost of generating electricity is borne by businesses. Many of our respondents have installed generators and are looking to invest in solar-powered plants for smooth operations. Poor infrastructure coupled with costly finance are the biggest barriers to scaling and deepening of the agricultural sector in Africa. For most companies interviewed, they require huge capital outlays at the outset. Instead they are bootstrapping and rely on grants from development organisations and government. This is obviously not ideal.

Re-imagining the future of infrastructure in Africa

- Infrastructure is the foundation of civilization. Our transport, energy and digital networks form the cornerstones of economic growth.
- Infrastructure is not just an African challenge, it is a global challenge. Today, the world needs to invest around US\$3 trillion in infrastructure each year.
- In its 2018 African Economic Outlook report, the African Development Bank estimates Africa has an annual infrastructure financing gap of US\$68- US\$108 billion.
- Affordable irrigation could transform Africa’s immense natural assets into major economic assets.
- Seamless logistics (roads, rail, water and air transport) is at the heart of thriving trade, both local and international and plays a role in curbing food security.
- Technology has a role to play in the delivery of infrastructure in Africa and, where applied creatively, would help countries leapfrog into the future.

Priorities for infrastructure investment



Preparing for PPPs:

o1 |

Create institutional capacity

o2 |

Prioritise projects and selection

o3 |

Improve project preparation

o4 |

Prioritise projects and selection

o5 |

Improve project preparation

Source: James Woodward, Head of Transport & Infrastructure, KPMG East Africa

The Opportunity: Increasing access to low cost irrigation technologies across the continent is the lowest hanging fruit for infrastructure and would have a transformational effect on smallholder productivity. This is one area where the private sector could innovate and take the lead. Investment support is required to scale existing irrigation companies and deploy these solutions.



Saving Businesses and Livelihoods with intra-African Trade

2020



Priority Rank 33: Open markets for food & commodity trade (8.09)

2020



Priority Rank 34: Complete high quality trade agreements (8.09)

2020



Priority Rank 42: Prioritise intra-African trade (7.89)

2020



Priority Rank 43: Liberalise regional seed trade (7.89)

2020 was to be the year of intra-Africa trade. The AfCFTA agreement came into force on 30 May 2019. Trade under this agreement was scheduled to commence on 1 July 2020 but this has been postponed as a result of COVID-19. To date, 30 out of Africa's 54 nations have ratified the Africa Continental Free Trade Area (AfCFTA). The promise of the AfCFTA is a single common market for African countries which will drive industrialisation, sustained growth and economic development. Among the many benefits it is expected to provide for countries are export diversification, an improvement in food security and stimulation of investment and innovation.

Intra-African trade is a priority for 63% of the businesses in the survey. It was interesting to note that when asked whether governments should prioritise open markets for food and commodities vis-à-vis labour, respondents scored open markets for food and commodities highest. Easing movement of seeds across borders was also deemed high priority as well. Access to good quality seed is critical for smallholders and would boost their productivity levels significantly.

Bring business to the negotiating table

Businesses would also like a seat at the table during negotiations and have prioritised improving their understanding of the AfCFTA so they can contribute to discussions and negotiations. In our interviews, many admitted to not following the conversations despite the fact that the outcome of these negotiations will have a big impact on businesses.

Some of the constraints discussed with respondents on growing their businesses beyond their national borders include capacity to meet demand. For the respondents interviewed, while there is regional demand they cannot expand because they would require significant capital investment.

Securing food through trade

It is sometimes easier to import food than obtain it locally. This means that that more often than not, food insecurity is an artificial construct. Impediments to food trade include political economy issues, corruption, high tariffs, insufficient infrastructure and cumbersome regulations. Breaking down these barriers to intra-African trade could see the end of food insecurity on the Continent.

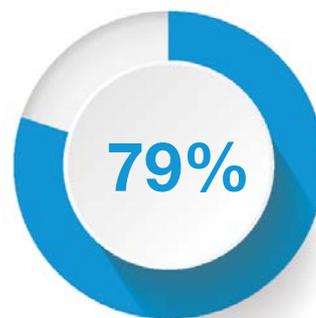
Made in Africa, Grown in Africa

In the wake of COVID-19 and the grim outlook on African economies, facilitating intra-African trade could mitigate economic decline. As discussed earlier, global value chains have been re-arranged as more countries everywhere give priority to their own population. In Africa, we have seen the rise of the “buy local” movement. The disruption of global value chains therefore provides a great opportunity to fill the gap with “Made in Africa” and “Grown in Africa” goods. This is how intra-Africa trade could help save millions of livelihoods on the Continent.

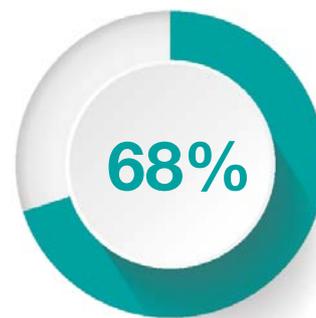
The Opportunity: COVID-19 is now our new normal and will be for a couple of years, at least in the short-term. In the words of Freddie Mercury, legendary lead singer of music giant Queen, “the show must go on.” Africa cannot afford to put implementation of the AfCFTA on hold. Instead, moving this agenda forward needs to be given priority.

As businesses have requested, priority needs to be given to address the bottlenecks that are leading to long queues at borders. This will facilitate trade and provide a much-needed lifeline for businesses.

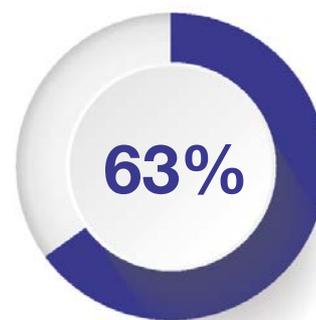
Food Trade: Feeding the Continent



Develop a continent-wide integrity marks system



Resolve long COVID-19 related border queues



Prioritise Intra-African Trade

Growing a regional market with smallholder farmers: East Africa Breweries Ltd (EABL), one of Africa’s largest beer companies, has a local sourcing policy. Eighty percent of their supplies must be locally sourced. According to them, this is how they make a contribution in the countries where they operate and is the rationale for their investments in research & development and farmer support services.

During the COVID-19 lockdown period, the government of Kenya placed restrictions on beer sales in Kenya, resulting in slower beer sales for the company. This in turn had an impact on EABL’s demand for barley and sorghum. The company had already purchased its raw materials for the first season of 2020. While it honoured those contracts, it has had to grapple with higher inventory and higher costs for the storage and maintenance of the grains.

“The key question for EABL is how we manage relationships so that we do not disrupt the value chain. We would like to keep the trust of the farmers for future supplies. EABL is keeping in constant communication with these partners and hopes business will recover once the economy opens up,” Says Lawrence Maina, General Manager, EABL



International food safety standards to facilitate intra-African trade

A New Way of Working Together

2020



Priority Rank 7: Accelerate infrastructure development through PPPs (8.46)

2020



Priority Rank 12: Partnerships for delivery of services to smallholders (8.38)

2020



Priority Rank 36: Innovate through R&D partnerships (8.08)

2020



Priority Rank 40: Multi-stakeholder platforms for agricultural transformation (8.03)

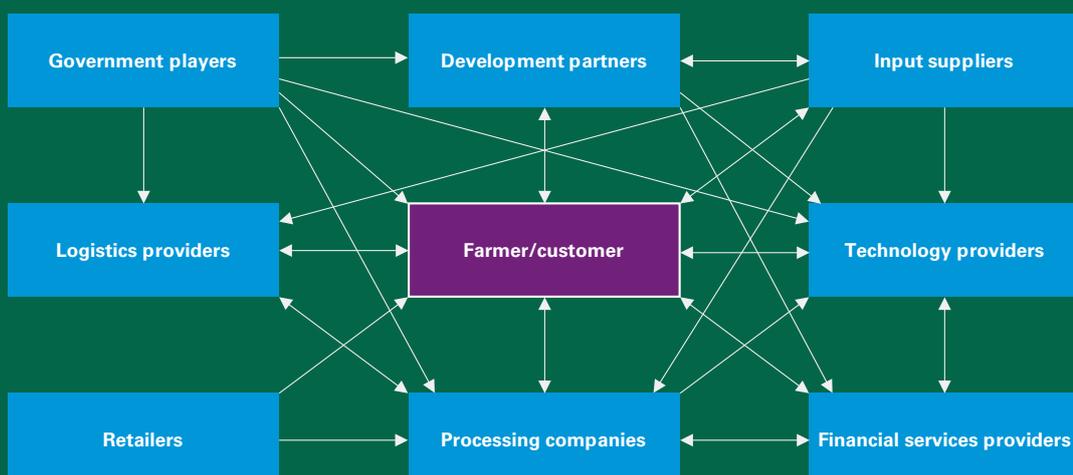
The business community in Africa is clearly ready to work with the public sector. Partnerships emerged as a major theme in the survey. High on the agenda was public private partnerships to accelerate infrastructure development which would create an enabling environment for business to operate.

Other equally important priorities included the need to develop partnerships to deliver services to smallholder farmers. A good example of this is Syngenta which has partnered with Safaricom's Digifarm to provide access to financial services for smallholder farmers. Partnerships with research and higher learning institutions are critical to support innovation. The revolving door and the relationship between business and industry needs to be strengthened significantly to design appropriate solutions, enrich interactions between the private sector and research and drive transformation in agriculture.

An ecosystem approach

Doing business in Africa is extremely complex and many times companies are starting from ground zero. As discussed previously, they have to build networks and develop an ecosystem just to get a functional market. Our experience is that multi-stakeholder platforms designed around an ecosystem approach will drive agricultural transformation. As demonstrated in the diagram below, an ecosystem approach, when applied to any value chain or sub-sector, would require an understanding of enablers, key actors, gate-keepers as well as norms and laws that determine its success with the customer or farmer at the centre.

The Opportunity: It is often said that one's network is one's net worth. This is certainly evident in the businesses we interviewed. One business we interviewed has more than doubled its revenue in the last two years to US\$2.5 million, thanks to new relationships with development partners. Upon further examination, we find that it has been adept at building relationships that provides an ecosystem of support. The network includes industry associations (knowledge, markets and networks), government relations (for regulatory approvals), donors and consulting firms (for financing and technical assistance), agents (for growing revenue and delivering product).



Credit: KPMG New Zealand

Empowering Women on the Farm but not in Corporates

2020



Priority Rank 28: Build more inclusive supply & distribution chains (8.20)

2020



Priority Rank 32: Empower women to take on leadership roles in organization (8.11)

Women are the backbone of agriculture in Africa. Two thirds of the agribusiness companies surveyed prioritise including more women in their supply and distribution chains and would actually like to develop more gender sensitive farmer extension programmes, including leadership programmes at the farmer level. Several companies have started implementing activities to address this gender bias as a first step to addressing this problem.

Although women are the backbone of agriculture and comprise the majority of smallholder farmers, comprising more than 80% of smallholder farmers, some crops are seen stereotypically as women's crops, such as horticultural, cashews, coffee and tea. Beekeeping in Tanzania, for example, is seen as a man's business as it involves long distances, often including overnight stays.

Deeply entrenched historical/cultural systems exist in some countries, for example Cote d'Ivoire, that prevent women from participating in the more 'managerial' aspects of agriculture; anecdotal evidence pointed to the idea that men feel that this empowerment in the form of training for women, access to skills etc. is disruptive of the traditional and family balance and oppose this type of women's empowerment. Companies

in Cote d'Ivoire that have tried to provide this type of training for the women in their value chain have taken the time to understand the men's perspectives first; and with time, been able to convince them that this women's training is for the benefit of the entire community.

In Mozambique, Lonrho has included women in its tractor operations, a previously men-only domain, and wants to replicate this in other countries in Africa. Selfina in Tanzania was developed specifically to provide leasing for women, an extremely important offering in this biased domain.

Women are often perceived as very high risk when it comes to securing funding from banks. This is because in most countries, they do not own land and therefore cannot provide land titles as the required collateral.

About 10 percent of the companies surveyed do not prioritise achieving 50 percent of female representation at the corporate level. We asked survey respondents to tell us if achieving at least 50% women representation in senior leadership and at Board level, and 51% said this was an important priority. The good news is that 65% recognise there is a gap and would like prioritise equipping women with the relevant skills to take on leadership and governance positions. This is not surprising given that the issue of increasing women representation in firms is a global issue. Indeed, when it comes to management women often have the junior positions, rarely represented in senior management. Very often in our discussions the question of having more women in senior leadership positions in the business took many business owners and senior executives by surprise.

The Opportunity: Companies need to have a deliberate strategy to ensure inclusion and equity of women across all levels of the agribusiness value chain is key to achieving success. This requires an understanding of, and willingness to address, the social and cultural biases that prevent women's full participation in specific aspects of the agriculture value chain.

Diversifying the leadership team is not a nice-to-have. It is imperative. Just like agribusinesses surveyed are committed to diversifying their supply and distribution chains, we urge them to make this a serious agenda item. The evidence is clear, diversity, including gender diversity, is great for business.

Youth and talent management

2020



Priority Rank 39: Promote career opportunities in a coordinated way to attract youth (8.04)

2020



Priority Rank 48: Increased focus by government & other actors on agricultural education at high school & tertiary level (7.83)

Creating opportunities for young people in agribusiness

By 2050, Africa's youth population (18yrs-35yrs) is expected to double to 420 million. Currently, one in every five young people is an African. The biggest challenge that young people face on the continent are unemployment and underemployment. The agricultural sector faces a special challenge. In Africa, the sector is dominated by aging farmers, a generation that should have retired. Agribusinesses that we spoke to discuss some of the challenges they are facing, the greatest of which is a lack of interest in farming by African youth. For businesses which rely on sourcing from smallholders, this is a big area of concern. Their supply chain may not be secure in a few years to come.



Africa is currently home to 20% of world youth



The predicted median age in Africa in 2020



60% of African youth are unemployed



75% of African youth are below the age of 35 years



by 2100, Africa's youth population could be double that of Europe

Where are the opportunities for African youth in agribusiness

To attract young talent into the agricultural sector, we recommend a value chain and an ecosystems approach to the challenge. A value chain approach would allow for entry of young people into the sector at any point in the value chain – from logistics, to retail to processing. The pool of opportunities expands even more when you adopt an ecosystem approach. One of the easiest and most attractive pathways for youth is in technology. We have seen many of Africa’s young people create technology-based solutions to address agricultural challenges. There is opportunity therefore to nurture youth entrepreneurs to develop much needed Agtech solutions for the sector, across the entire value chain and in enabling sectors such as financial services.

Agribusiness initiatives for youth

2Jijiri by KCB Foundation

Tujijiri, which means “let us employ ourselves,” in Swahili is a programme is a wealth and job creation programme that aims to turn the tide of youth unemployment in Kenya and is part of the Foundation’s ambitious goal of creating over 1.5 million jobs for young people over the next five years. As at the end of 2019, 2jijiri program had reached just over 34,000 youth (50% in agribusiness), providing access to technical skills and financial literacy.

Go Farming Project by Premier Foods Ghana

Delivered in partnership with USAID’s Advance Programme under the Feed the Future programme, Premier works to empower youth in agriculture. It has set a target of 10% of its suppliers must be youth.

Nurturing tomorrow’s talent

At the firm level, one of the greatest challenges encountered by companies we interviewed was having a talent pool of young people. There is a mismatch of skills between employers and youth who graduate from school. Nearly two-thirds (67%) of the companies interviewed indicated they need to prioritise promoting career opportunities in agribusiness for young people in a coordinated way to enable the industry to grow.

The Opportunity: Agriculture has the greatest potential to make a significant dent on poverty and youth unemployment. African youth represent a tremendous opportunity for agribusinesses. We believe that agribusinesses should consider this one of their most urgent priorities. For agribusinesses to scale, have impact and secure the continent and their future, they need to be proactive and support talent and skills development of young people. It may require an investment on their part, but we believe the dividends will pay off.



Seize the Moment-Key Opportunities

Now is the time to take action and lay a solid foundation by seizing opportunities that have been identified through the discussions with business. Just like you would build a house, the future we want must be created opportunity by opportunity. In the section below, we highlight some of the key opportunities that came up in the conversations.



There is opportunity in COVID-19. For every threat, there is always an opportunity. What is the opportunity for African agribusinesses in these times? We have seen there is a chance to optimise local value chains, thus helping to

mitigate the devastating effect on the economy and livelihoods. The growth of local and regional demand needs to be sustained with the advancement of the intra-African trade agenda. Not all businesses will be able to thrive in these times but it would be wonderful to help many survive this period.



Innovative finance: There is a clear need for massive finance for the agri-food sector. Investments need to be across the value chain, in many value chains and in enabling sectors such as infrastructure and technology to create a

thriving environment for agribusinesses. Meeting the financing gap for the agricultural sector in Africa will require partnerships between different actors in the ecosystem to meet the needs of African agribusinesses.



Food safety matters: Food safety is no longer the preserve of wealthy nations. Neither is sustainability or traceability. Every single person living in Africa deserves to eat

safe food. Priority must be given to implementation and enforcement of food safety standards. While compliance may be costly for business, overall, it will have positive net effects including healthy workers, ability to access new markets in the region and internationally and a stronger economy



Transform agriculture with irrigation: It remains a mystery why irrigation has not received the attention it deserves – both from business and the development world. Irrigation is to agriculture what mobile money is to

financial services. Africa's ambitious goals for the agricultural sector will remain a dream without investment in affordable and accessible irrigation.



Partnerships matter: Silos need to be broken down. Critical dialogue needs to happen. It is very clear from our conversations that an ecosystem approach to addressing Africa's agribusiness challenges is

necessary. We hope that as a result of this report, new partnerships will be created to move the Africa agribusiness agenda forward.



Diversity is good for business: There is a link between a firm's profitability and diversity. Diversity brings new ideas to the table and helps a business adapt faster to challenges. We encourage Africa's agribusinesses,

including SMEs, to pay attention to this issue as they look to scale operations.

Acknowledgment

This Survey would not have been possible without the inputs of the KPMG team that conducted the Survey and industry leaders who made time to share their views and opinions. We hope, through this Survey, that we have initiated a meaningful conversation between AGRA and the private sector that will continue in the years to come.

KPMG provides services to more than half of the world's largest agriculture and food companies. In East Africa, KPMG provides audit, tax and advisory services to agribusinesses, government and development institutions. We work shoulder to shoulder with our clients as advisors, thought leaders and fund managers to support the growth of agriculture and agribusiness in Africa.

This publication was made possible through support provided by the Partnership for Inclusive Agricultural Transformation in Africa, which includes the Bill & Melinda Gates Foundation, The Rockefeller Foundation, Foreign, Commonwealth and Development Office and the United States Agency for International Development, and is managed by the Alliance for a Green Revolution in Africa (AGRA). The opinions expressed herein are those of the author(s) and do not necessarily reflect the views of these partners. This publication can be downloaded and distributed freely.

KPMG

Anis Pringle

Wambui Chege

Hugh Scott

Micheline Nturu

Grace Njoroge

Sarah Kieti

Tabitha Njuguna

Colin Azavedo

David Waithira

Humphrey Odanga

Elijah Sawe

AGRA

Vanessa Adams

Jennifer Baarn

Valentine Miheso

Betty Otieno



Contacts

Valentine Miheso

Partnerships

AGRA

Tel: 254 786 220 002

E: vmiheso@agra.org

Anis Pringle

Partner, International

Development Advisory Services

KPMG East Africa

Tel: +254 709 576 106

E: apringle@kpmg.co.ke

Wambui Chege

Team Leader

Africa Agribusiness Outlook

Tel: +254 702 729 870

E: wchege@kpmg.co.ke

Disclaimer

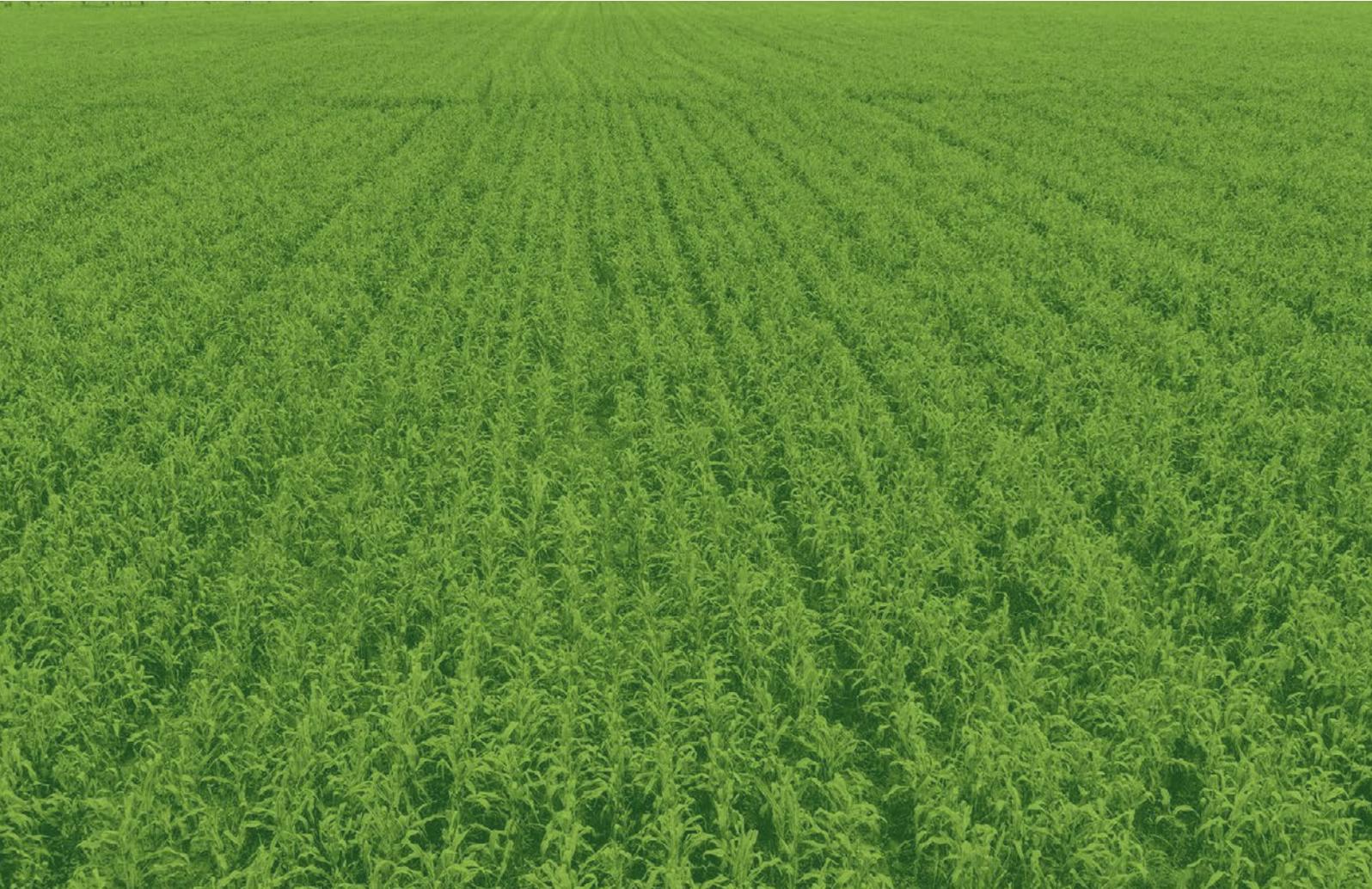
A report of this kind is dependent on the completeness, accuracy and reliability of data received from a variety of sources. Alliance for a Green Revolution in Africa (AGRA) and KPMG make no warranty or claim as to the accuracy of the information on which this report is based and cannot be held responsible for any inaccuracies so arising. Where possible, AGRA and KPMG have taken steps to ensure that the use of information is consistent and complete within the terms of this project.

This report is made possible by the generous support of the American people through the United States Agency for International Development (USAID). The contents are the responsibility of Alliance for a Green Revolution in Africa (AGRA) and do not necessarily reflect the views of USAID or the United States Government.

Copyright statement

© 2020. A publication by Alliance for a Green Revolution in Africa (AGRA) and KPMG Advisory Services Limited, a Kenyan Limited Liability Company and a member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity. All rights reserved.

The KPMG name and logo are registered trademarks or trademarks of KPMG International.



Alliance for a Green Revolution in Africa (AGRA)

West End Towers, 4th Floor
Muthangari Drive, off Waiyaki Way, Nairobi, Kenya
PO Box 66773, Westlands 00800, Nairobi, Kenya

WWW.AGRA.ORG