



**IMPACT  
REPORT**  
2014 - 2020  
APRIL 2021

**AFEX**



# Overview

## WITH GRATITUDE

Reflecting on the last 5 years, it has been an incredible journey for AFEX and the commodities sector in Africa as a whole. We have continued to build inclusive and efficient markets with the potential for high social impact that addresses the challenges faced by smallholder farmers and improves their livelihoods through better access to inputs, credit facilities, and markets.

Our key focus is to create, fund, and scale-up efficient, evidence-based innovations that lead to an enabling environment for key players in the commodities ecosystem. We are proud, and grateful, that as a business, AFEX is proving – through targeted actions – that our services have the potential to measurably improve the lives of millions of people in Nigeria and bridge the current gaps in our food systems.

With each passing day, we are more driven to continue the transformation of Nigeria's commodities exchange ecosystem into a scalable, efficient, and profitable system. The dedication from our over 150 team members, the commitment of our shareholders, and the trust of our investors, gives us the confidence we require to bring this vision to fruition. We are united by a common culture of excellence, empathy, and execution to impact change.

Along this journey, taking stock is important to keep our true north of inclusive markets always within sight. We express heartfelt gratitude to everyone that has joined us on the way: Xperts, Investors, Clients and Partners, who are together delivering a trust economy for commodities in Africa.



## CEO'S PERSPECTIVE

AFEX started with a long-term commitment to support Nigeria's food security while promoting a fair exchange of value among players in agricultural value chains. We have been working since 2014 to devise strategies and processes that support inclusive and efficient trade of agro-commodities. A key aspect of that work is unlocking capital for Nigeria's commodities market by deploying a robust market infrastructure, and technology to drive financial inclusion and alternative investment opportunities.

In fulfilling these goals, over the last 5 years, we have built a network of over 160,000 farmers and cumulatively facilitated over 200,000MT in trades, matching orders from producers and brokers with buyers on our trading platform at fair prices. Our laser-focus on early intervention and education through AFEX's technologies, Workbench® and ComX®, significantly helps to unlock the potential of key players in the agricultural value chain.

Consequently, the agreement of the 17 United Nations Sustainable Development Goals (SDGs) has laid out a universal agenda that aligns with our vision for a better and more sustainable future for all by 2030. Our founding goal at AFEX – to support Africa's food security – has seen our operations poised to strongly contribute to SDGs 1,2,5,8, and 12 – advocating for no poverty, zero hunger, gender equality, decent work and economic growth, and sustainable production and consumption.

Measuring our impact is now more important than ever. It is inherently about value creation and creating a more systemic and sustainable change. Helping farmers, processors, traders, brokers, investors, fulfil their potential, whether through boosting agricultural productivity, enabling farmers' access to credit and markets or through the creation of a fair and efficient market for trading commodities, is key to our corporate responsibility. Key to our success over the years has been our ability to leverage technology to drive value chain management activities such as storage provision, outreach programs, input financing, and an efficient platform for trade.



**Ayodeji Balogun**  
CEO, AFEX



**“We have recognized that zero poverty and zero hunger cannot be achieved without empowering women and creating decent work.”**

We have made significant progress in developing an active voice in the commodities market through engagement with the Government and other private sector players. We worked with the Agribusiness and Marketing Unit of the Federal Ministry of Agriculture and Rural Development (FMARD) to review the Warehouse Receipt Bill and re-establish the pulses value chain relationship with India. We were a member of the technical committee set up by the Securities and Exchanges Commission (SEC) to create a roadmap for the Commodities Trading Ecosystem. Still, we are only beginning.

We have recognized that zero poverty and zero hunger cannot be achieved without empowering women and creating decent work. We devised an impact assessment methodology that analyzes the complexity of the contexts in which we work. Within this impact report, you will be reading informative data and wider statistics of the services we provided that have accelerated the social value of our investments. It takes you on a journey through the communities, stakeholders, and activities where AFEX invests in agro-transformation.

Read this report to learn about the challenges and successes of smallholder farmers, our food heroes, who are enabling and ensuring the sustainability of Africa's food security. Then join our vision to Be the Reference Point for Commodities in Africa in a way that maximizes impact by prioritizing inclusion.





## AGRI-LOGIC REVIEWED

Dear reader,

This is not an external impact evaluation, however the process has been externally verified. As an independent advisor to AFEX, I supported the AFEX Strategy team in developing and structuring the impact framework, selecting indicators, and supervising analysis. The data collection, analysis, and writing of this report was done by AFEX.

I believe the process was conducted with much passion and a high level of integrity. Compliments to the AFEX Strategy team! It's been inspirational to work with a young, highly intelligent and highly motivated team.

In interpreting this report, I advise to consider the following:

- Operating in the complicated country that is Nigeria, AFEX has grown organically, and has had to adjust and expand strategy over time. While farmer verification and traceable trade were always part of the model, for some of the components in the current Theory of Change, historical data was not always collected. Data had to be sourced from different systems, and in several cases had to be cleaned and complemented with assumptions. Some components of the Theory of Change can't currently be measured, and indicators are being implemented for inclusion in future impact reports.
- Even though AFEX has been operating for five years, the majority of farmers was registered during scale up in 2019 and 2020. While we are able to report on output indicators, it is too early to distinguish impact on the level of the Sustainable Development Goals. These sections are included as a baseline, and the AFEX team will follow up with regular measurements against the indicators provided.

Enjoy reading this report, and all the best to AFEX and partners in continuously growing impact over time,

*Sanne Steemers*

AGRI LOGIC



**Sanne Steemers**

Independent Advisor, expert profitable impact

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# Impact Framework



## WHY WE MEASURE **IMPACT**

The main goal of a business should be to develop new and innovative products and goods that generate economic growth as well as deliver important benefits to society. Thus, a business creates value and becomes profitable because individuals in a society will pay for a product or organization that gives them value. Measuring this impact helps businesses to manage their impact.

## IMPACT **FRAMEWORK**

The AFEX Theory of Change is a model that connects AFEX's strategies and activities to target impact. Everything we do feeds into our bigger goal of helping Africa to feed itself. Our value chain activities in agribusiness have a positive impact on farmers, businesses, and the larger society. We consider our impact contributions along three major lines:

- 01 Rural Impact:** healthy, decent, and profitable livelihoods.
- 02 Processing Impact:** better quality and more efficient processing of food.
- 03 Macroeconomic Impact:** food security, self-sufficiency, and food safety through well-functioning markets contributing to a diversified GDP







The value chain activities that contribute to these impact outcomes are also determined in three clusters: Physical Trade, Financial Markets and Technology and Capacity Building and Inclusion.

**Physical Trade:** Physical Trade which includes such activities as buying and selling, trading, standards and certification, traceability, grading and storage is a driver of our impact outcomes. We aim to facilitate access to a ready and fair market while aggregating large volumes of commodities, and providing quality assurance and transparent processes in the trade of agricultural commodities. These lead to a balanced supply and demand as well as a fair distribution of value; safe and healthy foods and reduction in food waste and food security.

**Financial Markets and Technology:** The second driver of our impact is Financial Markets and Technology. Activities at this level include capacity building of the investment ecosystem; trade and supply chain finance; risk management, and hedging. The goal is to create transparent and fair markets with well-informed participants. Included at this level is our ambition to develop financial and securitized products as an alternative asset class. These will contribute to more efficient supply chains, the provision of direction for policy advocacy, and the facilitation of private and public financing for investment in agriculture.





**Capacity Building and Inclusion:** The verification of farmer profiles and credit scores; inclusion in formal banking; farmer registration and input distribution coalesce in a third driver of impact through capacity building and inclusion. We support increasing access on the producer side to financial services, better farm management and farmer entrepreneurship, improved agricultural practices and more beneficial social and environmental practices. These can, in the long term, contribute to higher household savings and resilience, higher yields, better crop selection, increased profitability, and safe, clean, and healthy communities.

## UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS

The United Nations Sustainable Development goals are a group of 17 interlinked goals, which serve as a blueprint to achieve a better and more sustainable future for all by 2030. They are global goals adopted by all the United Nations States in 2015 as a universal call to action to address the global challenges we face.

We have aligned our impact-oriented goal of helping Africa feed itself with these SDGs, with AFEX contributing directly to five of the Sustainable Development Goals: No Poverty (SDG1), Zero Hunger (SDG2), Gender Equality (SDG5), Decent Work and Economic Growth (SDG8), Sustainable Consumption and Production (SDG12).

**SDG 1****NO POVERTY****SDG 2****ZERO HUNGER****SDG 5****GENDER EQUALITY****SDG 8****DECENT WORK AND ECONOMIC GROWTH****SDG 12****RESPONSIBLE CONSUMPTION AND PRODUCTION**



# Five Years of Activities



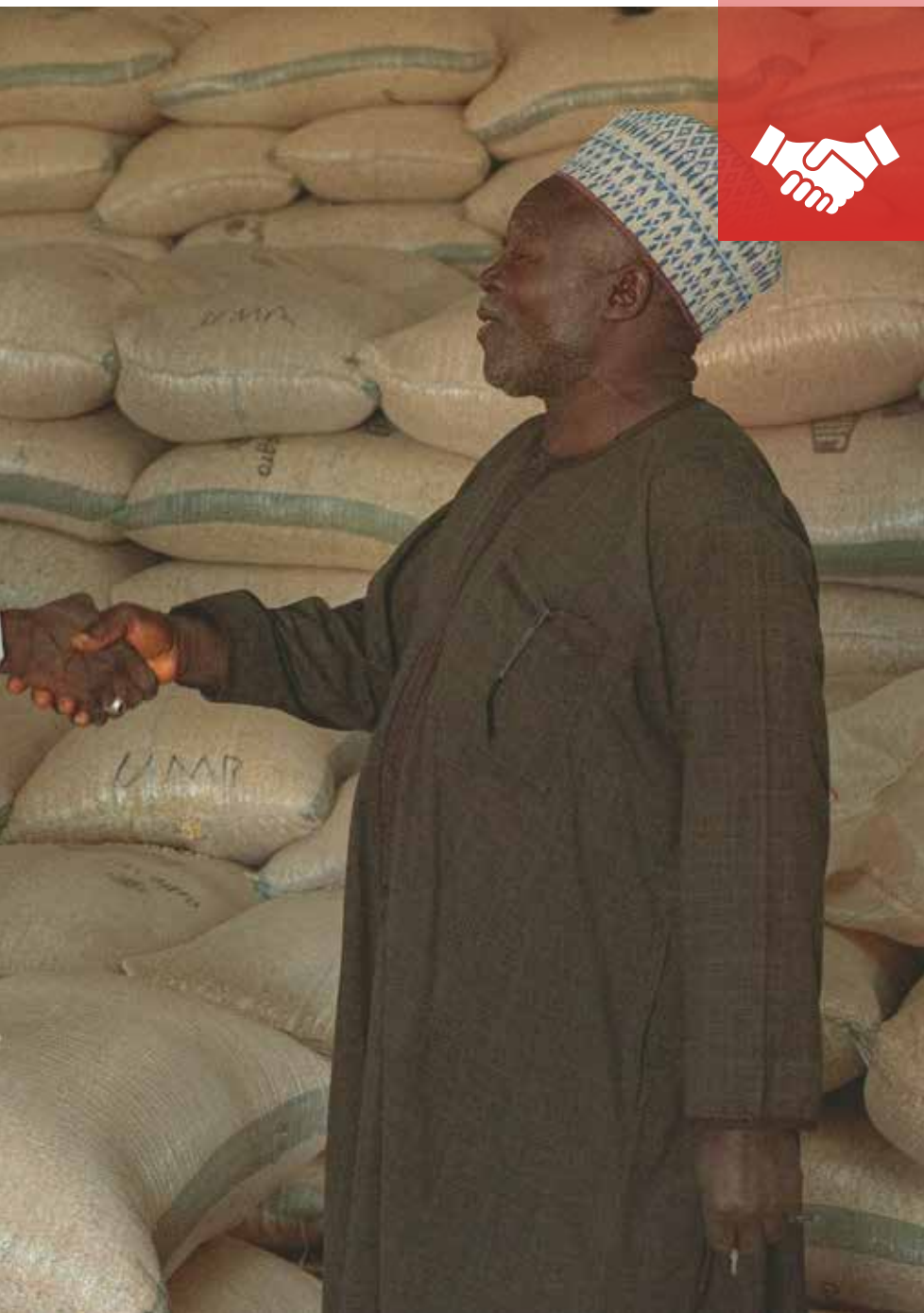
## MEASURING OUTPUT **ACHIEVEMENTS**

In 2020, AFEX marked five years since beginning work in Nigeria. Coincidentally, the Sustainable Development Goals (SDGs) were also adopted about five years ago. As we reflect on the initial five years of our journey in 2021, we also begin a deliberate journey of tracking and reporting on our impact outcomes. This report therefore serves not only as a reflective endeavour for how far we have come as a business, but also a compass for the next five years as we evolve as an organization. To do this we need to measure and document a framework for measuring our activities in rural communities, in our food systems and in our larger macroeconomic environment. We capture AFEX activities in enabling productivity, trade and access to finance through the use of innovative technology, alongside the role we have played in structuring Nigeria's commodities ecosystem.

This chapter is structured around the main activity clusters of the Theory of Change: physical trade, financial markets and technology and capacity building and inclusion.







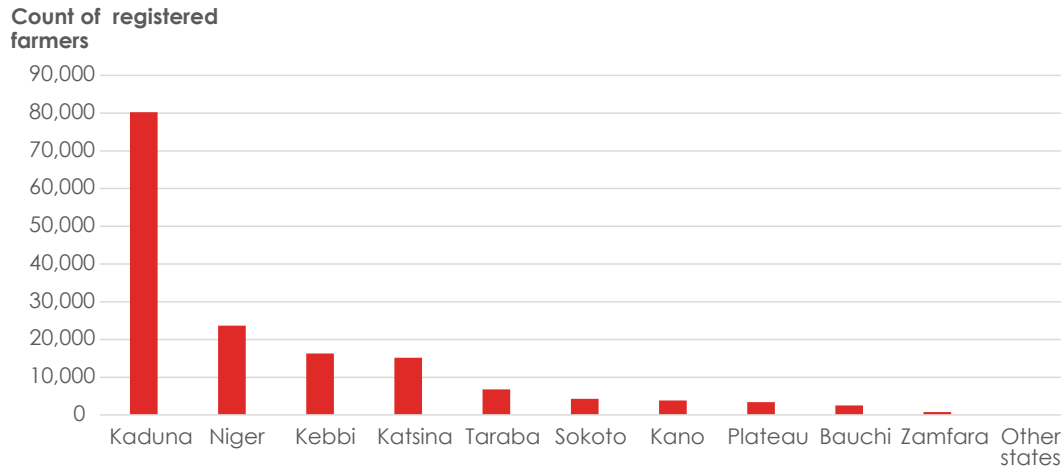
## PHYSICAL TRADE

AFEX entered the Nigerian market with a focus on including the producers in the benefit sharing formula of the commodities market. Working with smallholder farmers through registration, profiling and financial inclusion all the way to facilitating access to inputs and eventually plugging them into a market for trading their commodities was therefore a vital aspect of our initial work. To date, AFEX has established a reliable structure for physical trade that includes storage infrastructure, knowledgeable talent and a bespoke value chain management platform, WorkBench®, that facilitates the entire farm to factory process.

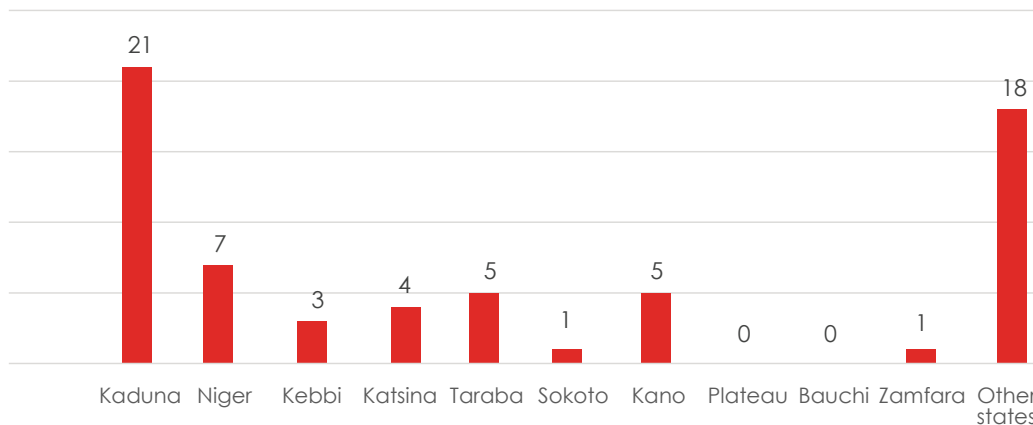
The development of an effective supply chain for agricultural commodities in Nigeria involved linking grain producing areas in Northern Nigeria to demand in the South. We built on existing logistics systems by revamping idle storage infrastructure in the largest grain-producing states in Northern Nigeria; making them available for all market players – producers, merchants, and processors.



## AFEX Farmer Distribution

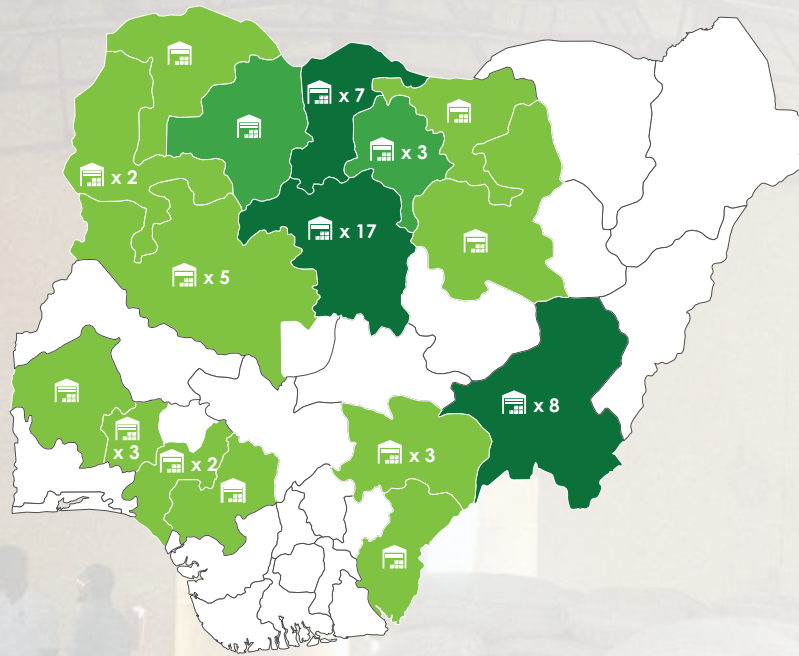


## Distribution of Storage Facilities



Our storage facilities are managed by trained professionals, and provide both quality and quantity guarantees across all commodities with necessary insurance covers for stored commodities. With this critical infrastructure available, producers and processors can store products at our locations whilst we manage the entire storage chain, including all intake procedures, product grading, and fumigation. Upon receipt of commodities at any of our locations, AFEX ensures the commodity is sampled, graded, and appropriately stored for ease of traceability and preservation of quality. Some of our quality certification tracks for commodities include aflatoxin tests, UTZ certification and more recently, closing on the Rainforest Alliance certification seal for cocoa.

Source: AFEX WorkBench®



Warehouse Capacity ('000MT)

■ <5   ■ 5-10   ■ >10

**61** Warehouses  
**15** States Covered  
**c.100,000MT** Capacity

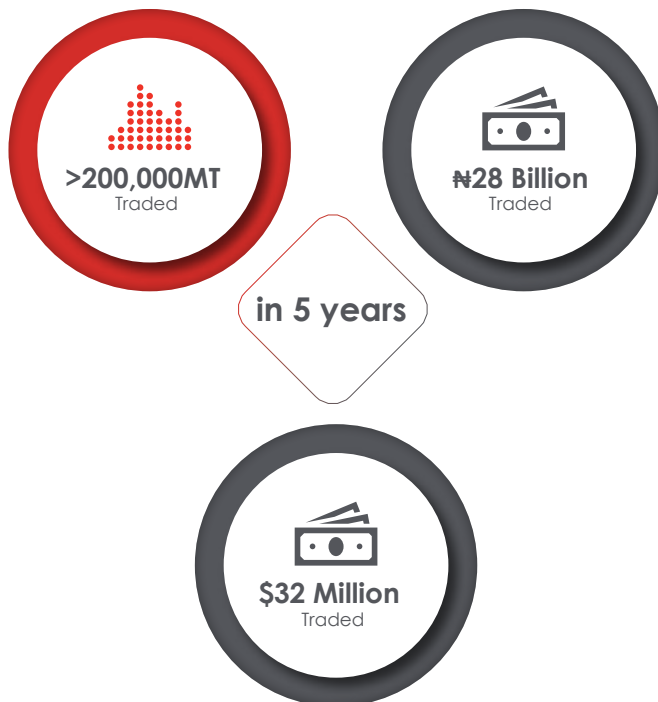
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#### FACT:

*Did you know that AFEX began its operations in Kaduna State? Our partnership with the Federal Ministry of Agricultural and Rural Development (FMARD) to develop a warehouse receipt system enabled our linkage to government owned storage facilities there thus beginning our journey in secure storage.*

## FACT:

*AFEX carries out quality control for every delivery to its warehouses, and differentiates prices based on quality grade.*

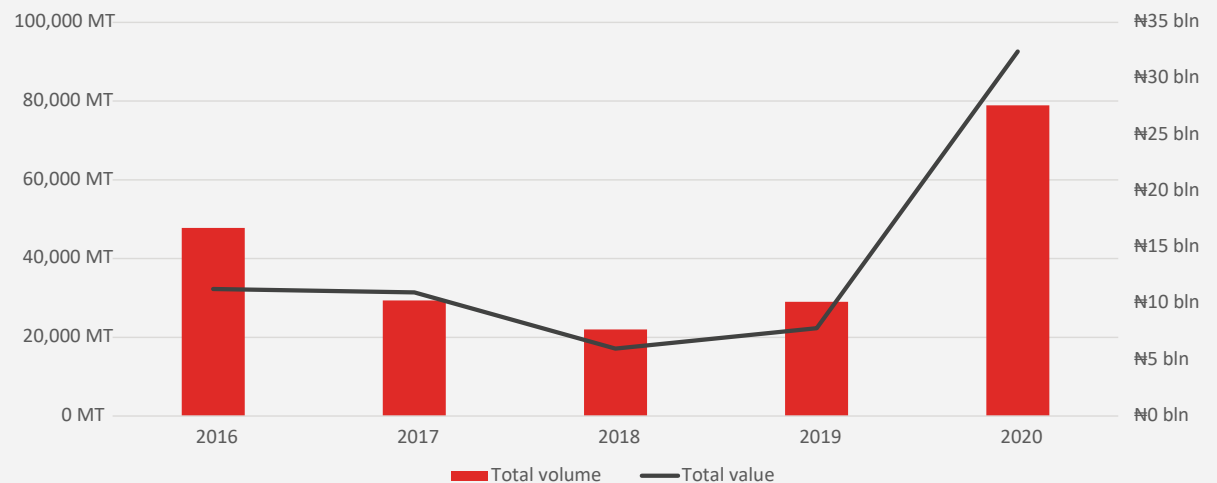


Source: AFEX WorkBench®

At AFEX, we also provide access to spot markets where farmers can follow price trends and sell their products on the AFEX trading platform. All AFEX warehouses have remote access to Workbench®, and a key value that farmers derive from being a part of the platform's ecosystem is the timely settlement of trades; farmers selling through Workbench® in the spot market get cash settlement for their transactions within 24hrs of trade. The spot market creates a non-preferential market for buyers and sellers, with the trading platform matching transactions based on price and then transaction time.

Over the past five years, we have cumulatively facilitated over 200,000MT in trades, matching orders from smallholder farmers and brokers with buyers on our trading platform at fair prices, continuously bringing value to farmers and ensuring quality in the ecosystem.

## Volume and value of commodities traded by AFEX



Source: AFEX ComX®





## FINANCIAL MARKETS AND TECHNOLOGY

Being uniquely positioned as a licensed commodities exchange, AFEX designs and structures instruments that give investors an alternative asset class while providing necessary finance for commodity value chain activities. AFEX's technology platforms, Workbench® and ComX®, are at the core of its securitization of physical commodities.

Workbench®, AFEX's value chain management platform is available across mobile, web, and desktop interfaces, and ensures the digitization and automation of critical processes relating to inventory management. ComX® by AFEX is an electronic platform where securitized commodity assets are traded and is available on web, iOS and Android. ComX® is designed to provide the market with a user-friendly and efficient shared infrastructure, allowing investors to access the commodities market while unlocking finance for production and other value chain processes. A variety of instruments have been listed on ComX® since its launch in January 2020 including Spot Contracts, the AFEX Input Note, Cocoa Export Note, Fair Trade Exchange Traded Commodity (FETC) and the Asset Backed Commercial Paper.

**FACT:**

*ComX® by AFEX recorded a turnover of over \$25 million (₦10 billion) in investments in its first year of launch.*



*We recently published a Crop Production survey for 2020-21 season.*

AFEX's technology platforms also support our data reporting system. As price discovery is a valuable pillar of the Exchange, which links to a requirement to reduce price and information asymmetry, AFEX derives data from transactions that occur on its platforms. The AFEX Price Survey is a secondary component of the data reporting system, which utilizes AFEX's bespoke outreach network to gather data on prices of commodities in major markets across the country. The data which is gathered is cleaned, and analysed by a partner data research firm – Kainosedge, and the data is distributed via a variety of channels, and used in our reports and other publications.

Our technology and data investments have enabled the creation and deployment of our Indices: The AFEX Commodities Index (ACI) and the AFEX Export Index (AEI). The ACI tracks the price performances of select commodities - Sorghum, Maize, Soybean and Paddy Rice while the AEI is designed to track the price performance of key export commodities - Cocoa and Ginger.

**FACT:**

*All reports are available on our website – [www.afexnigeria.com](http://www.afexnigeria.com), you can also subscribe to our mailing list and not miss another update or report.*





## CAPACITY BUILDING AND INCLUSION

At the forefront of AFEX's inclusion strategy is the Outreach Program. The focus of the outreach program is to first capture the data of all participants of the program, include them within the financial system where they are excluded, strengthen the governance structure of the cooperatives/groups, and educate the farmers on the bouquet of AFEX's services and their advantages. The Outreach Program also emphasizes knowledge dissemination on how farmers can maximize their earnings from harvested produce by reducing post-harvest losses, and ensuring that the products remain at top-grade and do not lose value from mold, infestations, etc. Another strong pillar of the program includes educating the farmers on the right time to sell their produce, and how to measure and sell based on weight, as against the normal market practice of buying based on volume.

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**FACT:**

*"Ba Wasa", an Hausa phrase meaning "No jokes" originated from the early days of engagement where farmers found it hard to believe the AFEX model.*





To date, we have registered over 150,000 smallholder farmers, many of whom have been included in formal banking and provided with access to inputs. The outreach training calendar is set up so that a farmer receives at least 19 trainings inclusive of field days per season. Courses range from agriculture as a business, to farm records, weed management, and pest and disease identification and management. AFEX Field Extension Officers provide year-round services to farmers and are the focal point for identification, engagement, information exchange, and content delivery. The outreach structure exists in all AFEX Warehouses.

### Farmer outreach by region



Source: AFEX Workbench, Management Records

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# Towards Long Term Impact



## UNDERSTANDING CURRENT LIVELIHOODS AND ECONOMIC **VALUE**

In order to achieve our vision for Africa to feed itself, we need to understand current livelihoods and macro-economic indicators. Considering that the majority of farmers in scope have only been trading with AFEX for just one or two seasons, it is too early to expect a significant impact on livelihoods.

This chapter is an attempt to capture current livelihoods and economic value creation in the Nigerian agribusiness sector. It serves as a baseline for measuring AFEX's impact going forward.

## METHODOLOGY AND **SAMPLING**

In addition to five years of data that AFEX has generated from its operations, we conducted a livelihoods survey of 2,435 farmers across northern Nigeria, which included both AFEX and non-AFEX farmers, to measure the current livelihoods and target impact of AFEX's activities. Surveys were conducted by phone in August and September 2020, based on a sample selected from the AFEX database and partner databases.

We have aligned impact indicators with selected official SDG indicators set by the United Nations alongside other common measurement instruments, with some additional metrics. We have carefully balanced accuracy with the feasibility of data collection.

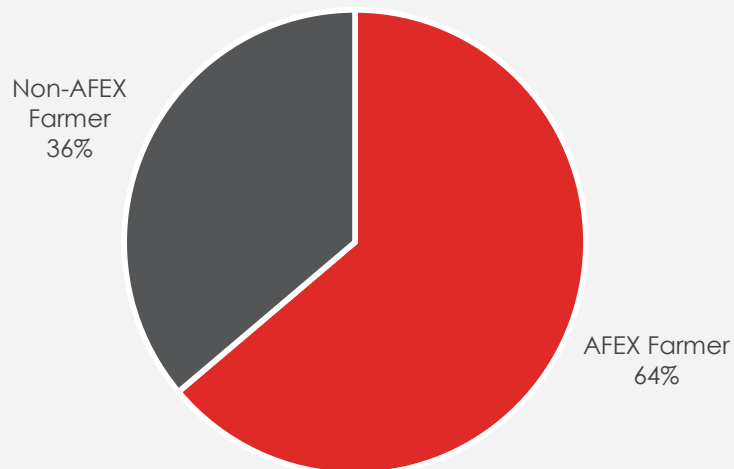
Research by the UN and related parties was used to complement the data collected directly by AFEX.



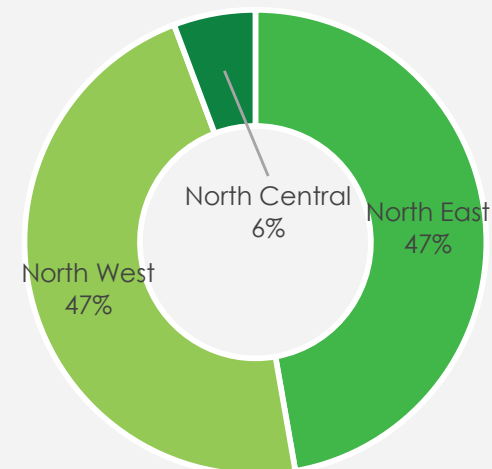


### Survey sample characteristics:

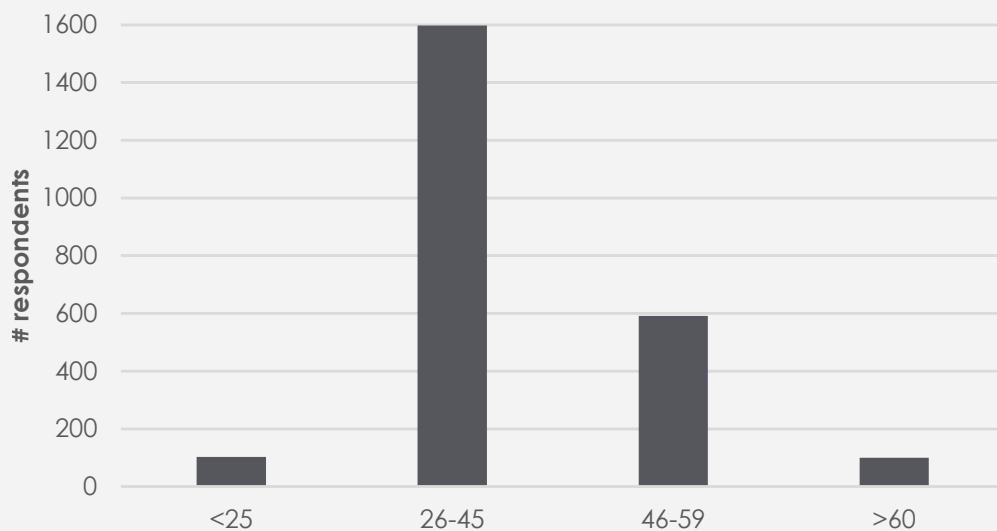
respondent category



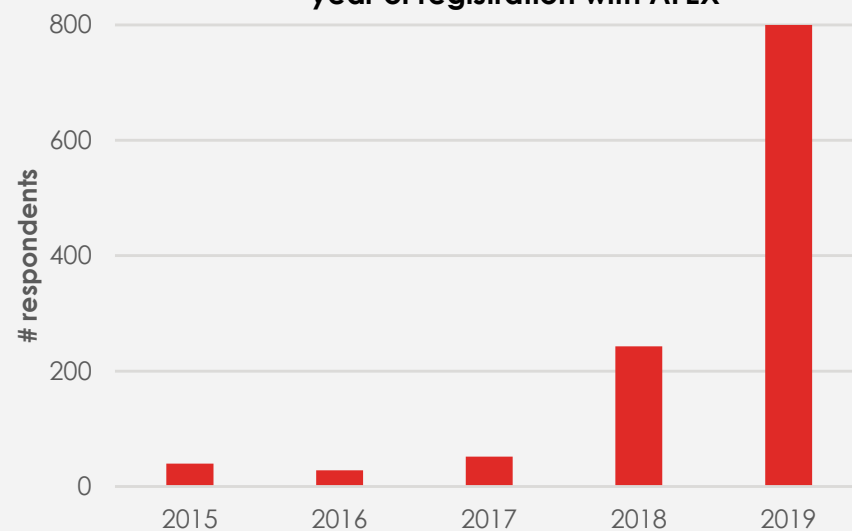
respondent region



respondent age range



year of registration with AFEX



Source: AFEX farmer survey 2020



## SDG 1: NO POVERTY

We share the UN's desire to end poverty in all its forms everywhere, and seek to measure our contribution towards reducing poverty for the smallholder farmers in the commodities ecosystem. We began our operations in Northern Nigeria due to a number of factors including the predominance of grain cultivation in the region, the humidity levels and other environmental conditions that make it easier to cultivate and store grains. The socio-economic characteristics of the region, however, also constituted a key consideration from an impact standpoint. Issues around income distribution and financial exclusion were strongly addressable by our model, which tackles the reality of rural farmers in Africa remaining the poorest and most underserved group on the continent.

Our earliest stories at AFEX are about reaching out to farmers on their farms and in their homesteads, spreading our solutions for increased yields and productivity. The scale of our programs have expanded with a warehouse infrastructure that is established in proximity to farmers. Farmers are grouped into cells and cells are tied to warehouses which are 20/30km from the clusters for ease of access. Farmers are therefore able to access storage and structured markets in a more efficient manner. These warehouses provide better transaction fees and a better pricing method – weight vs bag – for the farmer, translating to more money and fewer fees from taxes, charges and transport costs incurred in the open market.

The national poverty line for Nigeria is ₦137,430 per household member per year. Or roughly ₦1,000,000 per year for the average



household of 2 adults and 5/6 children. This is a calculation based on local purchasing power and cost price and considers nutrition and other essential needs including housing and health. It is a similar approach to calculating a living income benchmark, as is currently common in an international environment.

Comparing income targets and benchmarks				
Name	Source	Target value	Benchmark income for a typical family per annum (2 parents + 5.6 children)	Notes
<b>Nigeria minimum wage</b>	FGN (2020)	₦ 30,000 per month per worker	₦ 576,000	Official minimum wage, sufficient for an individual adult but not to support a family
<b>Nigeria national poverty line</b>	NBS (2019)	₦ 137,430 per individual per year	₦1,044,468	Official poverty line based on a basket of food and non-food in all states
<b>Living Wage Series Nigeria</b>	Wage Indicator (2019)	₦ 89,200 per family per month	₦1,070,400	Living Wage monitored by international non-profit
<b>International Extreme Poverty Line</b>	World Bank (2020)	\$ 1.25 per individual per day	~₦1,500,000 (depending on fx)	FX rate is volatile, considers income only, does not consider purchasing power

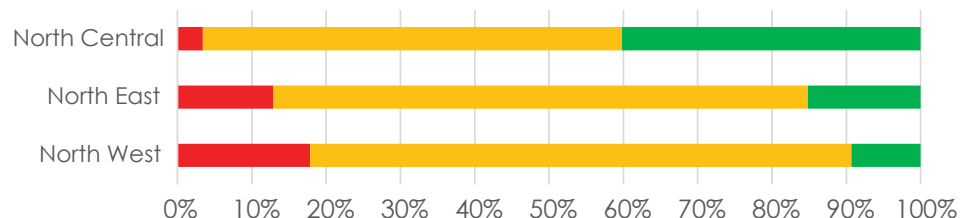
The Poverty Probability Index (PPI) is used as a proxy for calculating living income. Farmer annual incomes in absolute monetary terms are difficult to measure, because of their variations over time, the lack of insight and understanding that farmers' generally have on their profitability, and an inherent bias and lack of objectivity when farmers are asked about their incomes. PPI is a widely researched dataset allowing researchers to calculate poverty probability based on a set of 10 questions about household, home structure and facilities, and family assets and means of transportation.

Each respondent's PPI score is calculated on a range of 1-100, the higher the PPI score, the less likely the respondent lives in poverty.

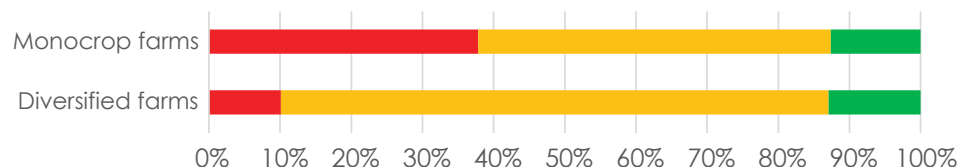


## Poverty likelihood

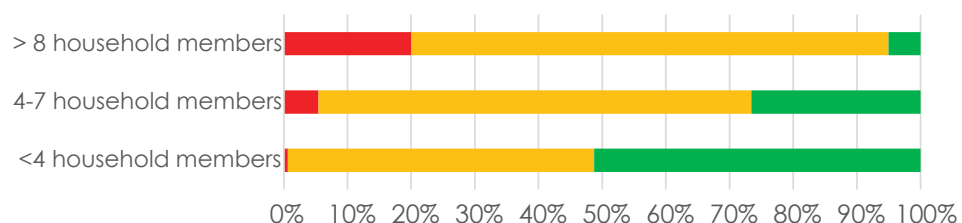
### per region



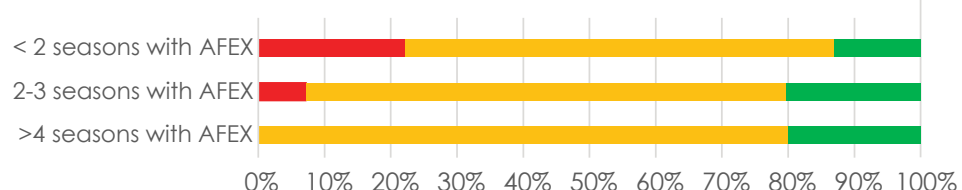
### per farming system



### per household size



### and length of relation with AFEX (indicative)



Source: AFEX farmer survey 2019, PPI

- Likely below national poverty line (PPI <30)
- Likely around national poverty line (PPI 30-55)
- Likely above national poverty line (PPI >55)

Farmers in the red category have a 70-100% likelihood of living below the national poverty line. These farmers are at immediate risk of food insecurity. Farmers in the yellow category have a 10-50% likelihood of living below the national poverty line. In good years, these farmers are generally able to meet their basic needs, but they are very sensitive to market volatility, adverse weather impacts and insecurity.

Farmers in the green category have a 95% likelihood of living above the national poverty line. These farmers should be in a position to feed themselves and their families, provide education to their children, and operate their farm in an economically sustainable manner.

We observe that farmers in the North West are more likely to live below or around the poverty line, while farmers in North Central most likely earn a living income.

While gender and crops do not change the poverty likelihood significantly, we observe that diversified farms and smaller households are more likely to live above the national poverty line. These are predicting



factors and concrete indicators for targeted outreach and support going forward.

While in the total sample, there are no significant differences in poverty level between AFEX and non-AFEX farmers, we do observe that AFEX offers a higher level of inclusion for farmers below the national poverty line and that those who have worked with AFEX for at least two full seasons or more have a lower likelihood to be living in extreme poverty.

This is a tentative indication that a long term relationship between AFEX and farmers does have an impact on poverty. We caution that this should be interpreted with care, while we are optimistic that AFEX activities can make a difference.

As the goal is to end poverty in all its forms everywhere, AFEX is renewing its commitment to ensuring the improvement of the livelihood of smallholder farmers to increase their income on a household level. AFEX's contribution will ensure a balanced supply and demand with a fair distribution of value and the facilitation of private & public investment in agri-food.

We are devoted to this goal and will continue to monitor the progress of farmers in our system.

**CASE STUDY: DALHATU ABDULAZEEZ**

“

*I enjoy what I do because I'm enabled to help farmers eliminate the constraints that prevent them from effectively growing and selling their crops. We are in a race to fight poverty, food hunger and ensure all-year production of commodities*

”





Dalhatu Abdulazeez's day begins at 8.00 am each morning. Before the sun has risen, he's already at work at the Zaria warehouse, tending to the bags of grains and the disbursement to farmers. He plans, supervises, and contributes to the planting and harvesting process. As part of his morning checks, he always keeps a close tab on the growth of the farmers' harvest, the input disbursement, and the market dynamics of the grains stored in the warehouse. But it's the ability to support livelihoods and generate income, he tells us, that's the most important factor.

Working at AFEX enables him to connect farmers to transformative projects that lift them and their households out of poverty. "Most times they come around to the warehouse and enquire about our services and how it can be beneficial to them. When they come around, we provide them with loan disbursement that can be applied on the farms and cultivated for higher yields."

Interested farmers are then profiled for their eligibility to receive loans. This involves some of the following processes: data capturing/ validation on Workbench, applicant credit history check, Input loan application. "A beneficiary of this program is Mogaji Aska who I brought in to register with the farmers Association. Before AFEX, he was practicing the local method of farming and that limited his abilities to harvest more grains. Today, he delivers trucks filled with grains to the warehouse for sale. Improvements like this don't just make us a food-secure nation alone but help even the farmers become rich. Most importantly, the ability to help farmers around me come out of poverty and become self-reliant gives me the hope and joy that life can be better when you are in the right environment like AFEX."



## SDG 2: ZERO HUNGER

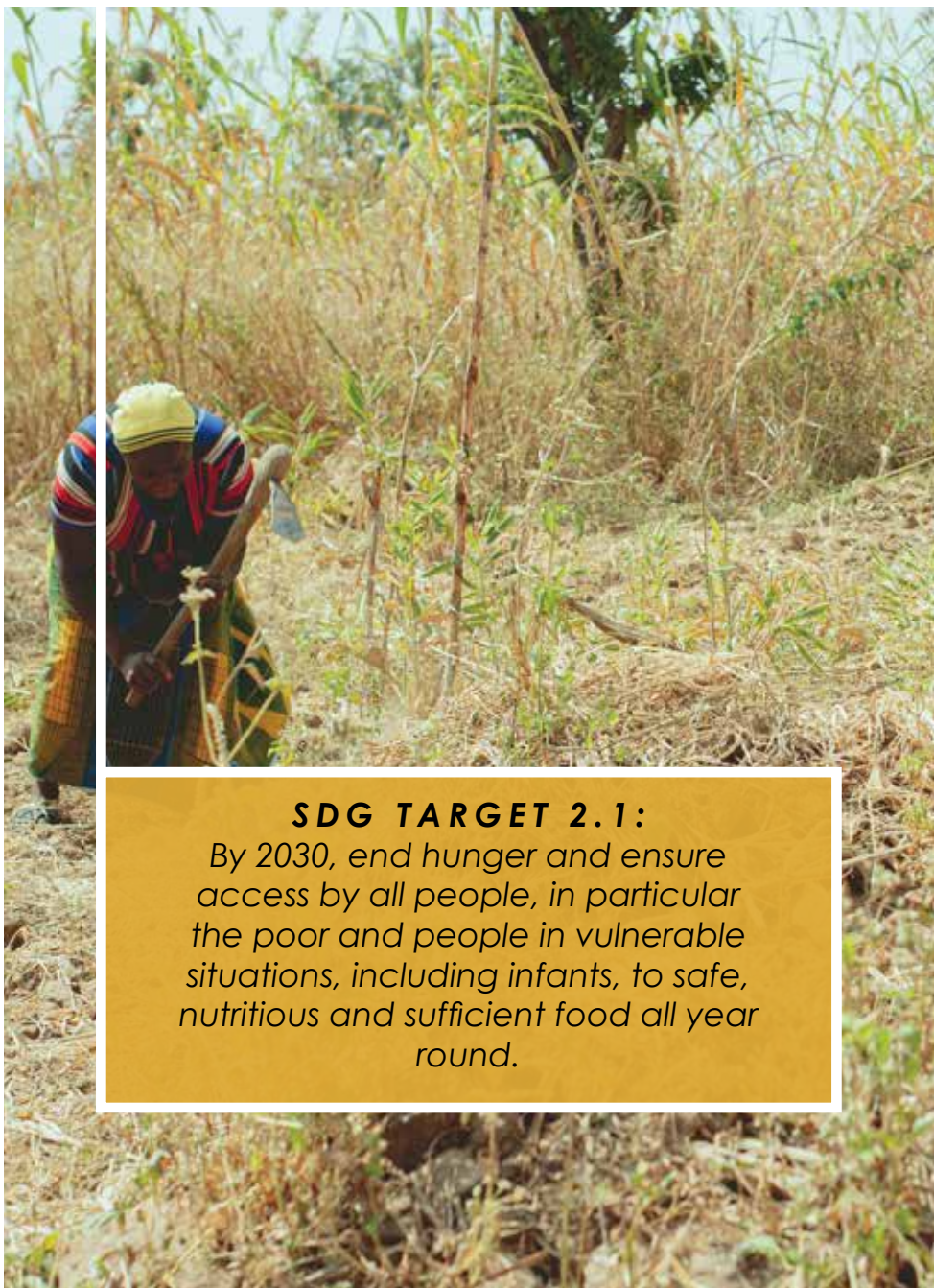
Eradicating hunger and achieving food security remains a challenge globally and the advent of the COVID-19 pandemic has not made things any easier. Smallholder farmers, although producers of food, continue to be the ones most at risk, as many live in poverty and food grown on their farms is often only available in certain seasons. Farmers are encumbered by a lack of access to inputs and credit that make a difference to their yields and productivity.

Through our outreach structure, we have deployed our Input Financing Program successfully over a number of years. It began as a partnership, facilitated by AFEX, with microfinance banks providing credit, and world-class input providers providing quality inputs and education on agronomy. The Input Financing Program has, however, now evolved into a securitized note that is listed on the Exchange. The listing of the note provides an avenue for investors to finance agricultural production securely. Since its inception, over \$4 million has been raised. Farmers who pass AFEX's eligibility criteria are given loans as inputs (seeds, Crop Protection Products, fertilizer), and also receive extension support through the period of planting to harvest and repayment and trade through AFEX's platform. The program results in better productivity and yields, increasing the contribution of individual producers to the country's food basket, and also delivering an improvement in livelihoods year on year that also cascades into more secure households and communities.

The Food Insecurity Experience Scorecard (FIES) is a statistical measurement scale designed to determine the severity of food insecurity at the household or individual level, which relies on people's direct yes/no responses to eight brief questions regarding







### **SDG TARGET 2.1:**

*By 2030, end hunger and ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round.*

their access to adequate food over a period of a year. The number of questions answered in the affirmative will determine which side of the scale one is in. The scale ranges from 0 (no food insecurity) via 1 (mild food insecurity) to 8 (severe food insecurity). For this report, and considering the sample size, we have only used the raw FIES score as an ordinal measure of food insecurity. The FIES is the official measurement instrument for **SDG indicator 2.1.2**.

Food insecurity is very common in Northern Nigeria, with almost 90% of farmers experiencing some level of food insecurity. Note that this data was collected in August and September 2020 and survey questions were focused on food insecurity in the most recent 12 months, considering this timeline it is likely that the COVID-19 pandemic was one of the causes of potentially more severe food insecurity, which combined with the timing of the survey just before the main harvest season may have somewhat inflated figures. Regardless of the potential impact of the timing of the survey, food insecurity is a large issue for farmers in the North.



# 88.7%

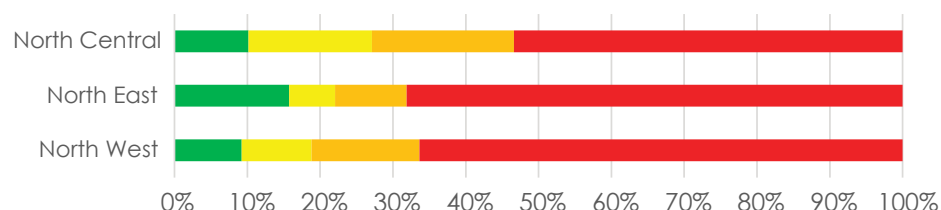
**of farmers in Northern Nigeria experienced some level of food insecurity in 2020.**

*Source: AFEX farmer survey 2019, FIES*

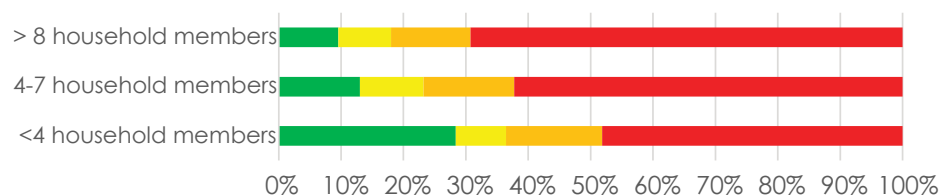


## Food insecurity in 2020

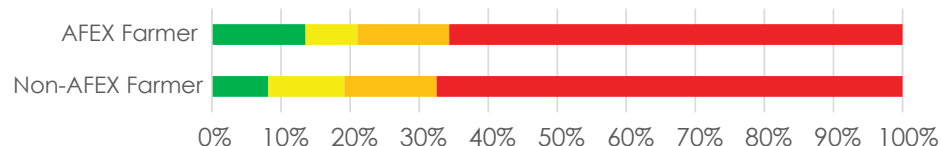
### per region



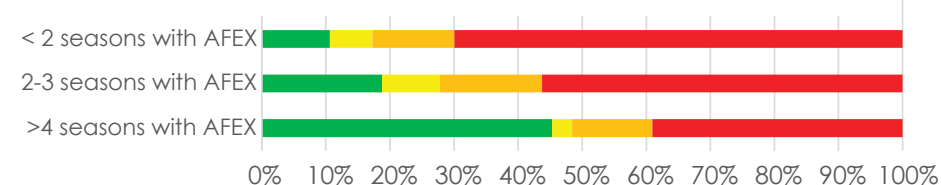
### per household size



### for AFEX and control group (indicative)



### and length of relation with AFEX (indicative)



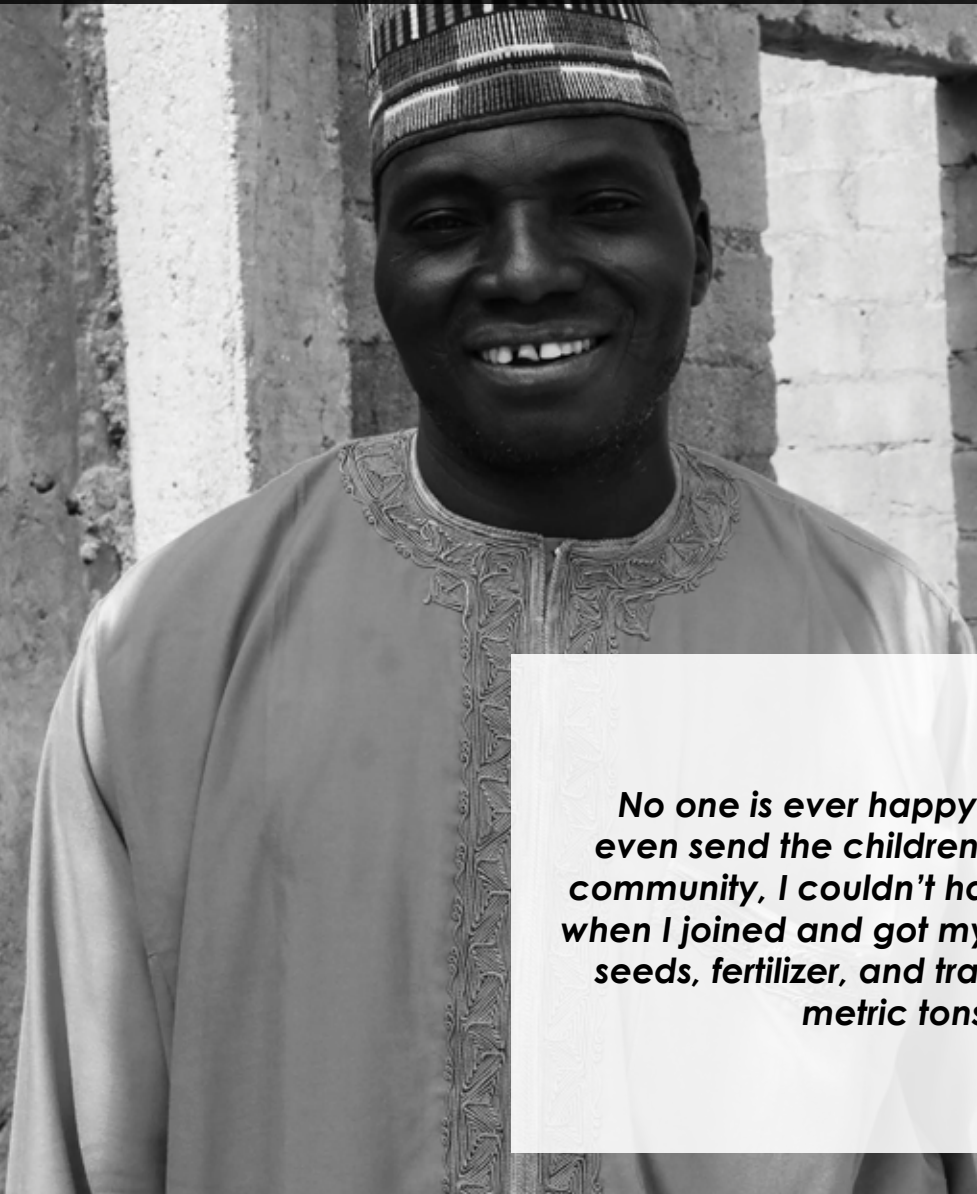
- No food insecurity
- Mild food insecurity
- Medium to high food insecurity
- Severe food insecurity

There are no significant patterns in food insecurity depending on the region. As with poverty likelihood, food insecurity is less severe for smaller households. Contrary to poverty likelihood, farm diversification does not appear to affect food insecurity.

Our analysis shows indications that AFEX farmers, specifically those who have had a longer relationship with AFEX, for two seasons or more, experience food insecurity less commonly. However, the overall prevalence of food insecurity is much too high.

AFEX will continue to ensure access to finance, quality inputs and structured markets as these provide smallholder farmers with the resources to improve their yields and subsequently ensure the continuous availability of commodities year-round.

Source: AFEX farmer survey 2020, FIES

**CASE STUDY: ALHAJI YUNSUA DAUDA**

“

***No one is ever happy when the family cannot eat a normal meal or even send the children to school. I remember before I joined the AFEX community, I couldn't harvest up to 50 bags of grains on my farm. In 2016 when I joined and got my hectare disbursement with the help of improved seeds, fertilizer, and training on how to plant better. I harvested over 7 metric tons of maize. It was a bumper harvest***

”



Alhaji Yunsua Dauda is a smallholder farmer in Northern Nigeria, Katsina. He is one of the 200,000 beneficiaries of the AFEX Outreach and Input disbursement programme aimed to tackle the root of hunger by increasing farmers' productivity, income-earning, and livelihoods.

The program begins with Farmers' outreach carried out alongside fundraising efforts, ahead of the planting season. They are trained on the best agronomic practices from weed management, pest and disease identification & management, to farm records and loan education. In addition to this, farmers receive inputs such as seeds, Crop Protection Products, fertilizer to increase the volume of commodities they produce.

A number of these practices allow smallholder farmers to adapt, become more resilient, and diversify crop varieties which unlocks capital in the value chain and ensures food circulation all year-round.

Thanks to the program, farmers like Yunsua have seen a huge increase in production and sales volume. He says "Four years ago, before I joined AFEX, I had 7 hectares of land that was wasting away. I didn't have access to fertilizers, seeds, manpower, or other resources to increase my harvest, so I leased out my farm. I had to rely on the profit from my shop to feed my family. And that itself, was little compared to anything at all. Today, I am the owner of two houses, multi shops, I can adequately feed my four wives and 14 children and afford quality education from them all. This I have achieved from selling Maize, Soybeans, and paddy rice from my farm, thanks to AFEX's intervention".





## SDG 5: GENDER EQUALITY

SDG 5 focuses on achieving gender equality and empowering all women and girls. AFEX has always been deliberate in the space of gender inclusion and equality. Ranging from its services specially crafted for women smallholder farmers to the engagement of females in its workforce and their representation in executive roles. While legally women are equally allowed to own and use agricultural land in Nigeria, culture, and practice in many regions in Nigeria is different. While women work on the land, they frequently are not the owners and do not have control over proceeds.

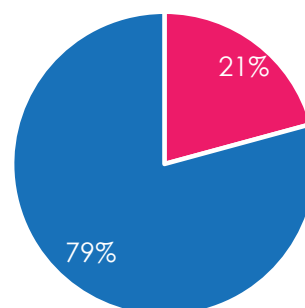
Economically empowering rural women by making agriculture more productive and lucrative is an important step in eradicating extreme poverty. Where value can be distributed fairly, allowing greater participation that leads to increasing economic benefits, women can improve, not only, their reality, but that of their households and communities. We have seen this picture come alive particularly in a five-star farmer cooperative – the Nasara women cooperative – that AFEX began engaging in 2016. Since working with AFEX over four farming seasons, the Nasara women cooperative has rapidly expanded member numbers and consequently, the amount of land available to them to farm and the yields from their production activities. These group benefits have flowed down to an individual level; allowing the women to impact

their immediate households and communities in a visible ripple effect that sees them contributing to improved food and nutrition practices, increased access to education for rural children, and better rural livelihoods and overall well-being.

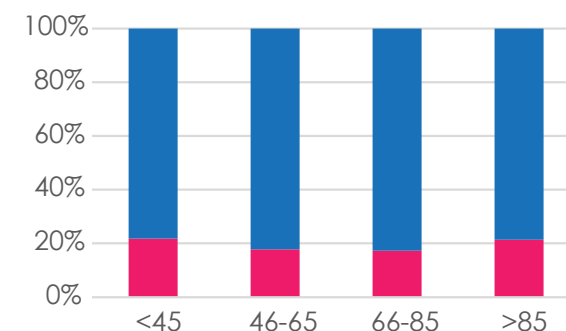
AFEX strives for inclusiveness and equal access regardless of gender. The representation of women in our registered farmers base is around 21%, without significant differences between age groups.

### AFEX registered farmers

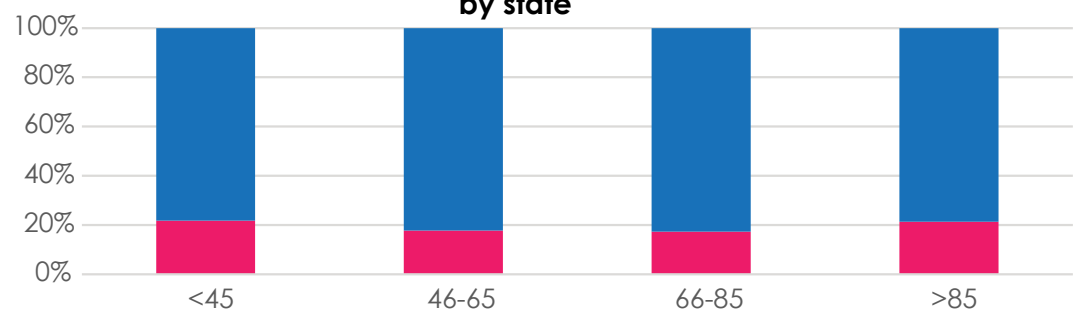
by sex



by age



by state



■ Female ■ Male

Source: AFEX Workbench

**29.7%**  
of women in the agricultural  
population had ownership  
or secure rights over  
agricultural land in 2019.

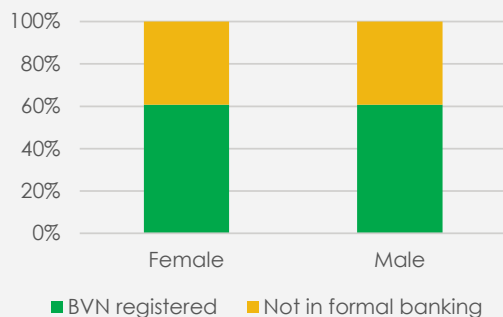
**35.1%**  
of owners or rights-  
bearers of agricultural  
land were women in  
2019.

Source: UN Statshub SDG Country Profile Nigeria





## Financial inclusion by gender



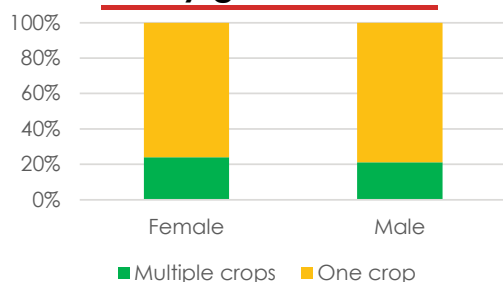
Source: AFEX Workbench

## Diversification by gender



Source: AFEX Workbench

## Household size by gender



Source: AFEX farmer survey 2019, FIES

**Male-headed households own an average of 1.39ha, while female-headed households own an average of 0.65ha**

Source: LSMS Integrated Surveys on Agriculture Nigeria

## Ownership of outright purchased farms in Nigeria by gender



Source: LSMS Integrated Surveys on Agriculture Nigeria

Within the AFEX network, women participation is higher in the North Central and South-South regions and lowest in the North West.

Financial inclusion, diversification and household size are factors that can mitigate poverty and hunger. Men and women in our sample show similar characteristics. Women-headed households are somewhat smaller in size than male-headed households, which can be explained by the common practice of polygamy.

Land ownership and land size are key factors determining farm profitability and living income. While AFEX does not currently have this data available for its farmer network, data from the Nigerian Bureau of Statistics indicates that over two-thirds of land ownership is with men, with only the South West region showing an equal distribution of land titles. Female farmers also have a smaller land ownership average compared to men.

AFEX continues to strive to reach as many women farmers as possible. AFEX will continue to welcome both men and women to its network and will continue to promote female role models to grow cultural acceptance of female involvement in farming.



## CASE STUDY: DIJE SANNI

“

*Like in other parts of the world, Women in agriculture face challenges of accessing quality inputs such as fertilizers and loans for their farms. We earn a little reward for our labor compared to our male counterparts. The culture and traditions of the land don't give us full access to education, land, financial services, and opportunities. And that's why we started the Nasara Women Association – to address the gender gap.*

”



In Nigeria, where women account for 75 percent of the farming population, Dija Sanni, a woman in her late thirties, has already overcome gender bias and prejudices associated with women in agriculture to become the leader of the Nasara Women Association of farmers. But the 6-year old association has still faced the challenge of accessing credit and loans for its members.

In response to the gender inequalities female farmers experience, AFEX has been active in the Nasara Women Association for 6 years – assisting female farmers to increase productivity through access to fertilizer stocks and loans from a bank or microfinance institution. This allows women like Dija, to afford inputs like fertilizer to improve their farming. They can deposit their crops and access credit to invest in their farms and generate more income.

“ Our number in the Association has increased from 100 women to over 1,200 to produce more bags of grains per hectare. AFEX's intervention has increased our knowledge on the best practices for farming, doubled our income, and brought more recognition to our business and name.

The overarching goal remains to reduce food hunger, improve food security and farmers' incomes while ensuring gender inclusion of female farmers with equal rights and opportunity.





## SDG 8: DECENT WORK AND ECONOMIC GROWTH

SDG 8 promotes sustained, inclusive, and sustainable economic growth, full and productive employment, and decent work for all. AFEX aims to grow the value created by agriculture in absolute terms, as well as per head of the population. Agriculture and food can and should be a significant contributor to GDP.

Current added value from agriculture is insufficient to provide a living income for the rural population.

**₦158,756 (\$488)**

**is the annual added value of agriculture, forestry and fisheries per head of the population in Nigeria.**

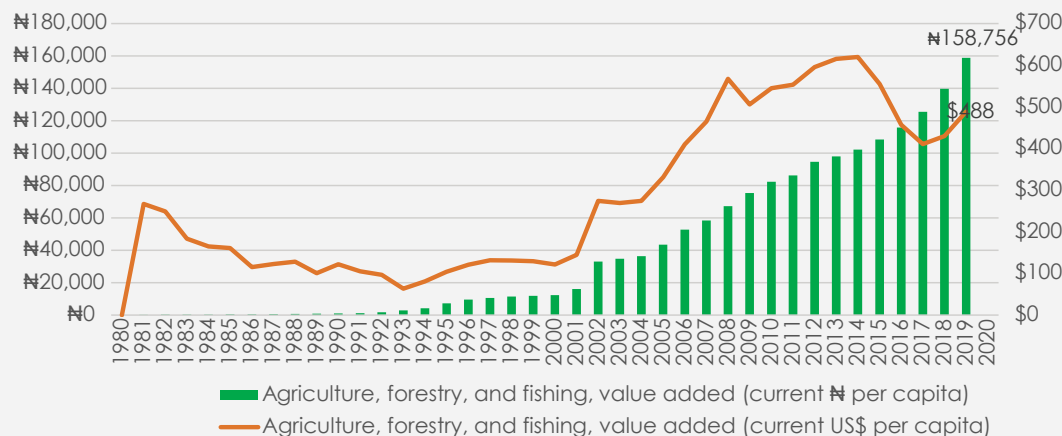
*Source: World Bank*



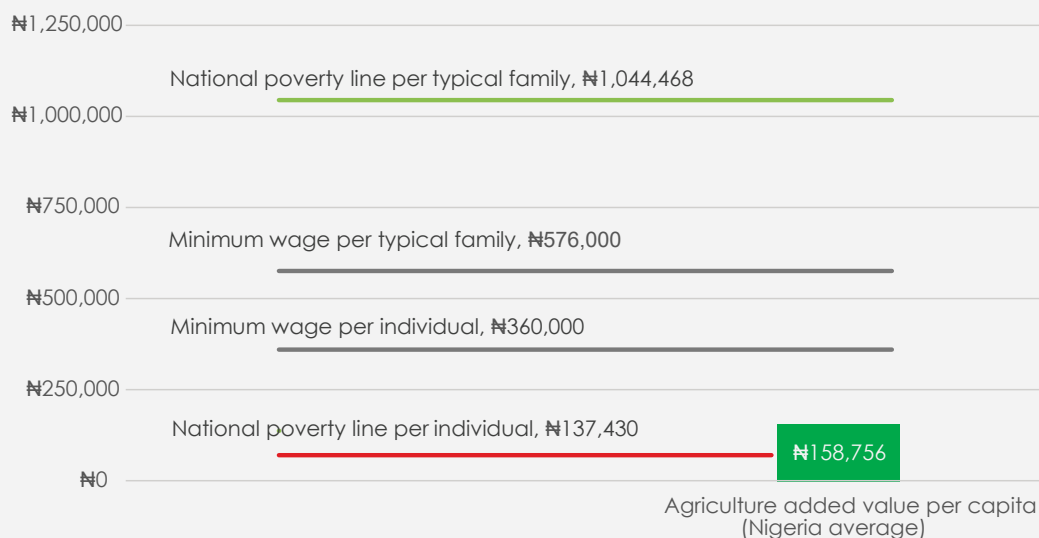




## Agriculture value addition per capita in Nigeria



## Value addition per capita per year



Source: World Bank, NBS, Agri-Logic

While the national added value of agriculture per capita has increased over time, the average income levels do not yet meet the benchmarks of minimum wage and the national poverty line for a household.

In addition to its direct economic contribution by facilitating transactions, AFEX contributes to SDG 8 by providing financial inclusion to smallholder farmers as well as creating products and processes that make it easy for the capital market and the public to be a part of the commodities ecosystem. While UN Statshub indicates that 39.7% of adults in Nigeria have access to a financial institution, a breakdown for the rural population is not available.

AFEX's Village Aggregator Model has provided productive employment and decent work along the value chain. By creating a link between farmers and AFEX in a location far from AFEX warehouses, these agents serve as local hubs for aggregation and disbursement. In the coming years, AFEX intends to create more decent work through its franchising model – where agripreneurs can replicate the AFEX model on a smaller scale while having access to its technology and platform.



## CASE STUDY: DIMEJI GREEN

“

*For the first time since I left my white-collar job to work on the farm, I've found joy in doing what I know how to do best – Impacting knowledge and livelihoods for farmers. The most important thing is everyone should enjoy his/her right to decent work. In the agricultural sector, farmers deserve proper and adequate remuneration. They must be treated properly*

”



Dimeji Green is AFEX Sustainability Manager monitoring farmers' growth and production in the South-western regions. Ever since his childhood, he has been growing and harvesting cocoa with his grandmother, so after an unsatisfying experience in an executive job, he quit to pursue a life on the farm in 2013. Increasing demand for agricultural commodities, and the need to impact farming knowledge to producers, led him to start a cocoa farm.

"Farming is a viable and fun business. Working with a company like AFEX that is passionate about improving farmers' livelihoods offers an example of how to develop sustainable communities for economic growth.

People often ask me why I would leave a job with the nice offerings to work in a bush. They do not understand that my best moment is working on the cocoa farm. From inception, it is the same cocoa production that was used to build our hospitals, offices, schools, and south-western Nigeria. And here at AFEX, we are doing something different with globally attractive cocoa.

Our farmers are certified under the Rain Forest Alliance, a global institution that shuns deforestation, fight climate change, upholds labor rights, and combats child labor. We empower them with the skills to understand and work with it. We have registered and trained over 150,000 farmers and they are doing well on their farms"

In Nigeria, the current added value from agriculture is insufficient to provide a living income for the rural population. AFEX aims to grow the value created by agriculture in absolute terms, as well as per head of the population.

Dimeji sums it up like this " The way I see it, if farmers' production on the farm pays them well, they can afford nutritious food for their family (SDG2, zero hunger), they can earn a good living (SDG1, no poverty), they can afford to send their children to get a good education (SDG4, quality education), and they can encourage responsible consumption and production (SDG 12) that feeds the nation."





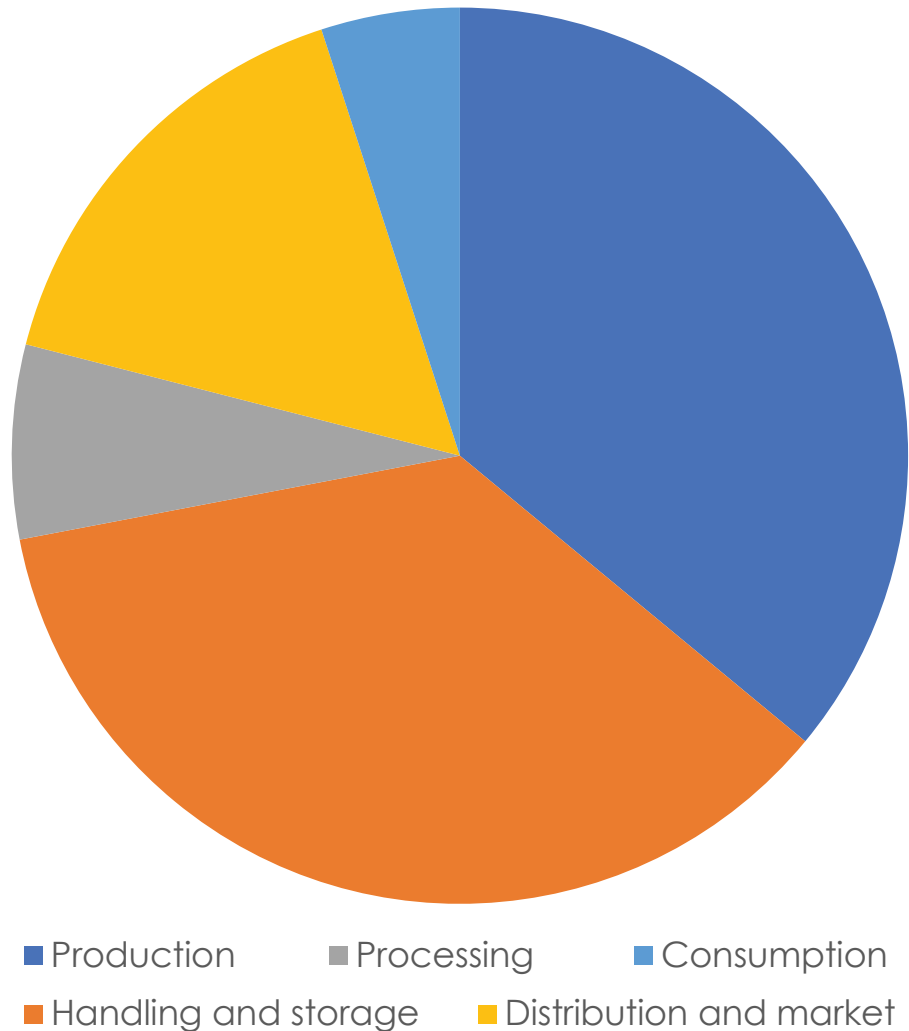
## SDG 12: RESPONSIBLE CONSUMPTION AND PRODUCTION

The global material footprint is increasing faster than population growth and economic output. An unacceptably high proportion of food is lost along the supply chain and waste is mounting. The SDG 12 focuses on ensuring sustainable consumption and production patterns. To ensure this, improvements in resource efficiency, consideration for local ecosystems and active engagement with relevant stakeholders will ensure a joint multilateral approach.

As an aggregator in agriculture, AFEX focuses on reducing food loss from post-harvest to distribution. AFEX already provides secure storage to prevent post-harvest loss as well as to reduce waste along the value chain. But to improve our contribution, we will put in deliberate measures in ensuring our practices are environmentally friendly and look into sustainable alternatives for chemicals currently being used by farmers.



## Food loss and waste in Sub-Saharan Africa



Source: Champions 12.3



**of total food losses Sub-Saharan Africa occur in production, handling and storage.**

Source: FAO

Currently, there is no reliable baseline for the food loss index in Nigeria. AFEX intends to set up a measurement system around its network of farmers and warehouses to track progress over time. Our focus will be on reducing losses in production, handling and storage.

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# Join the Movement







## ABOUT OUR **IMPACT**

While there is a lot to do, we are proud to have grown to a network of almost 160,000 farmers in just five years, and we are immensely proud to see that farmers who have received continued support for a longer period of time show more resilience, and lower levels of poverty and hunger. We are dedicated to scaling up our model, and positively impacting the livelihoods of millions, eventually helping Africa feed itself.

## VALUABLE LESSONS **LEARNED**

Five years of delivering value to the smallholder community, processors, consumers and breaking into an uncommon territory have brought several lessons for our business, from the importance of human connections to the benefits of a customer-centric business.

### **Trust is Everything**

When AFEX began, it was in a relatively unknown sector. The majority of the audience engaged had difficulty understanding the model and farmers had much greater difficulty believing in it. We had to work twice as hard to convince farmers to trust us with their commodities. We made it easy for them to see what the processes are at the warehouses. We were transparent about the process and preached the benefits of the engagement. We are proud of our farmer relationships which are still going strong.



## When in Rome

The Nigerian landscape is a unique one. Where certain practices are entertained in one location, they can be forbidden in another location. An example is when we began female farmer engagement. There was a general non-interest or outright lack of response. We decided to study the location and understand that our usual operations would not work as some practices and beliefs needed to be respected. So we reassessed and began engaging local female field officers to onboard them as they would not engage with officers of the opposite gender.

## Continuous Improvement

In the beginning, our farmer registration was a paper form which after being filled at the warehouse level, had to be collated, then dispatched to the head office at the country's capital. These documents then had to be inputted into excel. This was a rigorous process that consumed significant time and resources. A few years later, after various beta tests and trials, WorkBench was launched. All our value chain management activities are now managed by WorkBench and Workbench continues to receive upgrades to fit into our expanding scale of operations.

## Jack of all Trades, Master of All

It is always convenient and impressive when organizations can offer a service that caters to a variety of needs, but so far on our journey, we have come to realize all that is not enough. It is one thing to understand smallholder farmer challenges and try to solve them and it is a different ball game to develop solutions that are indigenous and innovative enough that it leverages on technology while having the adaptability to be used in any environment. Be it bringing agriculture to the capital market by creating securitized instruments that are tradable or creating an app that allows the public trade commodities with ease. A true master is an eternal student. Forever learning, adapting, and innovating.





## THE FUTURE

AFEX is looking forward to the next five years in anticipation. We are excited to monitor our progress and will be sharing updates through our various social media channels as well as our periodic publications. This journey with the SDGs will serve as a guide for AFEX's 10x growth. Our vision remains to Be the Reference Point for Commodities in Africa while retaining our core values of Excellence, Execution and Empathy.

We are still focused on helping Africa feed itself, delivering impact on two levels. On a rural level, we will continue to support and build healthy, decent and profitable farming livelihoods. While nationally, we intend to increase food security, food safety and help Nigeria achieve self-sufficiency through well-functioning markets, ultimately contributing to a diversified Gross Domestic Product (GDP). We will continue to find innovative ways to deliver value across the ecosystem and look forward to establishing new relationships.

This report will be a bi-annual publication over the next five years. We invite you to join us in this new chapter.

We thank and are grateful to all our partners we have worked with so far. We also want to commend the hard work of all our teams who have been working dedicatedly to bring our vision to life.





**Growing Markets | Connecting Trades**

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