

Impact Report 2019



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### Foreword

Foreword by Francis Obirikorang, and Michael K. Ocansey, Co-Founders of AgroCenta

In December 2018, AgroCenta with the support a grant support from GSMA Ecosystem Accelerator Fund, begun the development and technology commercialization of the AgroPay (Now Lendit) platform that targets rural smallholder farmers excluded from the financial divide to have access to a suite of financial services. AgroCenta initially targeted 3,000 smallholder farmers for the rollout of AgroPay with the following financial services including mobile payments through mobile money wallets, microlending/input financing which gives farmers input loans between \$100-\$500, crop insurance and finally pensions for the informal sector.

Technology platform development commenced in January 2019 to build the AgroPay platform for web and mobile (USSD and android mobile applications. By securing strategic partnerships with two Mobile Network Operators (MNOs) that is MTN Ghana and Vodafone Ghana, AgroCenta has successfully completed the Mobile money API integration directly with these MNOs that gives access to bulk payments and reconciliations. Additional partnership with Vodafone Ghana was secured in August 2019 to further drive the bridging of the digital divide in the rural areas by enabling free SIM card distribution among farmer cooperatives as part of the Vodafone Farmer Club Project, mobile money agency network activation and setup in rural communities, allowing farmers to perform financial related activities such as cash in, cash out of funds, funds transfer and bill payments at the community level. Farmers, through the Vodafone Farmers Club enjoy discounted calls and text messages

amongst farmer cooperatives they belong to and heavily subsidized mobile money transaction charges.

In July 2019, partnership with Pan African Savings and Loans- PASL (a subsidiary of Ecobank Limited) was secured to finance the microlending part of AgroPay. PASL facilitates loan disbursements of between \$100-\$500 as input financing for farmers to enable farmers access certified seeds, fertilizers and mechanized tractor services.

July 2019 also saw partnership with Metropolitan Pensions to underwrite the third tier pension scheme for rural smallholder farmers to bring farmers in the informal sector onto the pension scheme in Ghana. Farmers contribute about \$20 on an annual basis that entitles them to enjoy pension benefits once they attain the statutory age of sixty (60) years.

2019 cannot be without setbacks, lesson learned such as mobile money fraud from scammers that makes rural communities shun away from mobile money usage for fear of being duped to relatively low internet and mobile coverage in some rural communities making it difficult for farmers to enjoy both the trade and financial services AgroCenta has to offer. Results from these learnings will be included in the 2020 Impact Report.



# Acknowledgement

Special thanks to the GSMA Ecosystem Accelerator fund for the grant and technical support to build and commercialize the AgroPay platform.

Additional thanks to Pan African Savings & Loans, Petra Trust, Metropolitan Pensions, MTN Ghana, Vodafone Ghana & MicroEnsure for their partnership with AgroPay to provide financial services to smallholder farmers in the informal sector in Ghana.

Finally, to all smallholder farmers AgroCenta works with, we are proud of your achievements and support as we change the narratives of agriculture in Africa.

## **Executive summary**

AgroCenta is an agricultural technology company that delivers value for businesses and smallholder farmers through its innovative technological solutions in the areas of access to market (AgroTrade now CropChain) and access to financial suite of services (AgroPay now Lendit). AgroCenta started off with its digital trade platform in 2017, connecting rural smallholder farmers in the staple food value chain to a wider and more structured market to trade freely and fairly. By September 2019, AgroCenta, through its field agents have enrolled over 46,000 smallholder farmers in maize, soybean, sorghum, rice and millet value chains of which over 34,000 active farmers have sold commodities once it the AgroTrade platform. In 2019, AgroCenta added the second technological vertical, LendiT, which is to deliver financial related services such as savings, loans, insurance and pensions for smallholder farmers.

This impact report covers our achievements in 2019 in terms of farmers accessing both the trade and financial inclusion platforms and shows our impact plans for the future.

We aim at changing the very lives of smallholder farmers by using technology to solve problems they encounter in agriculture.

"Being the largest maize grit producers in Ghana, our clients expect timely and consistent supply of quality maize grits for their production. AgroCenta ensures we have access to consistent and timely deliveries of maize raw materials at affordable cost using their online trade platform - AgroTrade. All we need to do is to sign up and place orders" – Anthony Mensah, Operations Manager, Oseboba Limited

"I like AgroCenta because i use AgroTrade to get ready access to market for my farm produce through AgroTrade and also get loans for my farm through AgroPay. AgroCenta has increased my yield and income significantly" – Madam Charity Asigri, AgroCenta beneficiary - Talensi Community, Upper East Region.



# Our story so far



#### Accessing Market & Finance – Rural Farmer Perspective

Inefficient market for agricultural products in rural areas, limited knowledge of modern farming practices and lack of access to finance for agricultural assets are among the biggest challenges that farmers in Ghana are struggling with. These difficulties result in low yields and low income for farmers and little possibilities for growth. Additionally, the lack of access to financial services for smallholder farmers hampers the growth of agriculture at the community level. Farmers do not have access to finance to purchase certified seeds at the beginning of every farming season, hire the services of tractor operators to plough their lands or funds to purchase simple farm inputs such as pesticides and weedicides.

At AgroCenta, we believe that agriculture should be sustainable, fairly remunerated and an opportunity for present and future generations for growth and well-being.



By using technology to accelerate the growth of agriculture, AgroCenta with its suite of services reached out to the following population of smallholder farmers through the following services:

- CropChain Digital food distribution and supply chain platform that facilitates trade between smallholder farmers and businesses. From quality control at the field level, e-logistics, warehouse and inventory and trade facilitation, AgroCenta since 2017 has shipped over 15,000MT of commodities through its platform, onboarding 46,000 farmers with over 35,000 farmers being active, setting up of 5 major aggregation centres (warehouses) across the country, each with a minimum storage capacity of 2,000MT. Additional income of \$650,000 has been generated for smallholder farmers on the platform since 2017.
- Apploader AgroCenta's data collection app that runs on android devices. Field agents are trained to collect farmer registration information, initiate loan requests, collect market prices, geo-map farmlands, deliver e-extension advisory services. Apploader is the originator of all data that has to be processed either on CropChain or Lendit. AgroCenta currently works with 45 trained field agents in 6 regions across the country, delivering services to rural smallholder farmers.
- Lendit Access to financial services such as mobile payments, crop insurance, pensions and microlending for rural smallholder farmers. Farmers now can receive mobile payments right on their mobile phones for commodities sold on the platform, request for loans to purchase inputs and contribute to their retirement plans. By September 2019, AgroCenta has paid out over 2,000 smallholder farmers via mobile money for the 2019 season.



#### **Impact We Measure**

At AgroCenta we aim at addressing some of the world's most pressing issues. In particular, our work contributes to the following UN's Sustainable Development Goals:



**End poverty in all its forms everywhere (SDG 1)** through access to market to smallholder farmers

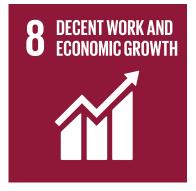
By matching smallholder farmers with buyers on our platform, AgroTrade, we aim to eliminate the inefficiencies in the value chain and give a fair remuneration to our farmers. In addition, we aim to provide farmers with higher and less volatile incomes so to enable them to provide for their families and improve their livelihoods.



End hunger, achieve food security and improved nutrition and promote sustainable agriculture (SDG 2) through access to modern farming techniques

Best farming practices and modern techniques are essential to increase the productivity of the crops. Our trainings are delivered by skilled professionals and the methodologies are continuously updated to reflect the state-of-art practices. At least 50% of women take part in the trainings.

Moreover, a call center service accessible 24/7 in the local language will support farmers with further information related to their crops, fertilizer application etc.



Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all (SDG 8) through access to finance

By purchasing agricultural inputs such as machines and fertilisers, farmers can upgrade their farms, get a higher and more stable income and contribute to the economic growth of the agricultural sector in Ghana.

In addition, AgroCenta aims to create a market for local specialised workforce that will assist farmers in increasing the value of their crops.

## **Impact Management**

Impact is at the core of what we do. And we believe that by measuring our impact we will be able to make better business decisions.

So far our impact measurement was focused on economic indicators and it was driven by the demand for the products of the off-takers. The image below shows our achievements for 2019.

# We Work With Farmers

In 15 communities spread out in 4 regions within Ghana using 30 fields agent Our metrics over the past couple of months have been amazing.



The metrics above shows the impressive growth AgroCenta has chalked since 2017. From an initial 3,000 registered smallholder farmers in 2017, the platform has expanded its service offering to about 46,000 smallholder farmers in 4 regions in Ghana, culminating in over 15,000 metric tonnes of maize, sorghum and soybean shipped to 4 major institutional buyers in the country. Income of over \$650,000 have been paid out to smallholder farmers since 2017.

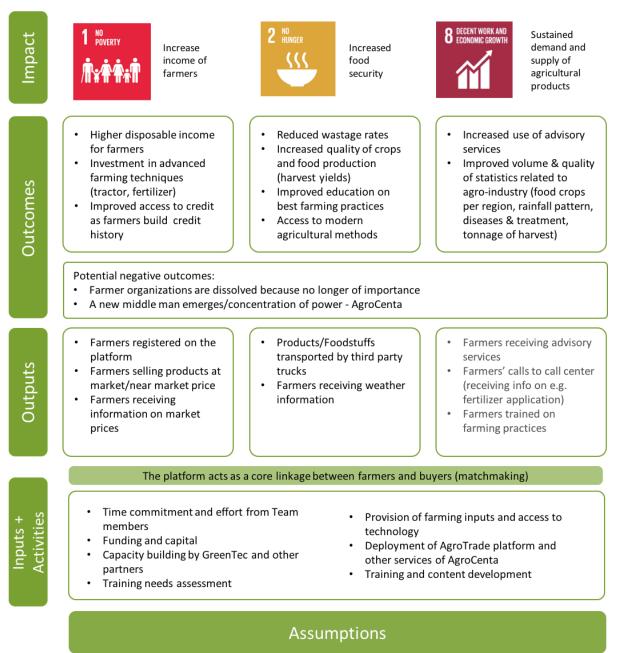
With the launch of the AgroPay platform in 2019, AgroCenta has moved from the traditional cash based payment system to now a digital payments via mobile money for smallholder farmers. With the commencement of the 2019 harvest season in August, AgroCenta currently has paid 1,550 farmers through MTN and Vodafone Cash. MTN is currently the most used payment channel with over 80% of the transactions being done through the MTN mobile money platform.

By receiving mobile payments, farmers now have the opportunity to have their credit scores computed through the AgroPay platform, making them eligible to apply for loans in the next farming season in 2020.



## **Theory of Change**





- Middlemen are exploiting farmers
- Farmers need trainings on new farming techniques
- There is no effective transport service
- No access to sustainable, organic fertilizers
- Farmers lack access to market information (crop prices)
- Farmers lack access to financing for purchasing farmer inputs



#### **Core metrics**

In order to measure our progress towards the SDGs 1, 2 and 8 (see more in the section Sustainable Development Goals) we have identified the following three metrics:

Metric 1: Increased income of farmers	Metric #2: Reduced wastage of food – calculated as tons of food waste avoided	Metric #3: % yield increase	
Baseline: \$1.5 Target: \$4 per day	Baseline: 125 MT 1Baseline: 1 metric tonne (MT)Target: 100,000 MTTarget: 2-2.5 metric tonnes		
2018 2019 2020   \$2.5 \$3.2 \$4.0	2018     2019     2020       20,000     50,000     100,000	2018     2019     2020       2MT     2.6MT     3.2MT	
Assumptions: Farmers sell all their production to AgroCenta at fair market prices and they don't have to worry about unsold produce	Assumptions: By ensuring constant demand for raw materials from offtakers, AgroCenta ensures food reaches those who need it in record time, minimizing food wastage	Assumptions: Provision of microloans and extension advisory services to farmers ensure that they are able to expand farms, follow good agricultural practices that increases yield	

Each of the three metrics has assigned a weight that depends on the importance of the contribution of the metric to the overall goal of AgroCenta.

i.

Increased income for farmers	weight 35%
Reduced wastage of food	weight 25%
% yield increase	weight 40%

By the end of the reporting year (starting in 2019) we will be able to combine the metrics into one score, expressed as a percentage that will give a clear indication on our performance. Here's how the results could look like and how to interpret them:

- score of **90%**  $\Box$  operations are **underperforming** (with respect to the targets set)
- score of **100%**  $\Box$  operations are **on track** (with respect to the targets set)

<sup>&</sup>lt;sup>1</sup> We assume 25% of post-harvest losses. It is estimated that post harvest losses range in the 25-40%, with some studies indicating as high 50-60% losses. ("Reducing Postharvest Losses during Storage of Grain Crops to Strengthen Food Security in Developing Countries", Deepak Kumar and Prasanta Kalita, Foods , Published: 15 January 2017; http://www.mdpi.com/2304-8158/6/1/8/htm#B8-foods-06-00008 )



- score of **110%**  $\Box$  operations are **outperforming** (with respect to the targets set)

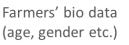
#### Methodology

AgroCenta field agents are the interface between smallholder farmers in the rural communities

The data that we are able to collect today include:







Income (before and after joining AgroCenta)



(land size, type of

commodity etc.)



Market price

Once the data are collected during the registration, the agents create farmers' personal profiles on the platform and save the information. These data serve as the baseline for our impact metrics. Then, once the goods are sold, the platform captures the selling price which allows to measure the increase in revenues of the farmers. Moreover, based on the amount of goods offered on the platform by the farmers, we can measure the increase in food production.

#### How mobile payments is driving rural financial inclusion for smallholder farmers

In the 2019 Cropping season, AgroCenta, with the support of GSMA Ecosystem Accelerator Fund, introduced mobile payments as part of service offerings for smallholder farmers. Mobile payments were introduced to reduce and replace the traditional cash payments that was fraught with many challenges such as theft, not having proper financial records on smallholder farmers thereby making them ineligible to access loans and financial services. AgroCenta has carried out extensive farmer training and education on mobile money usage with partners such as Vodafone Ghana and Pan African Savings and Loans to drive home the concept of mobile money adoption and usage in the rural areas. The trade activities commenced in August/September in the middle regions (Ashanti, Brong Ahafo and Eastern Regions) and so far over 2,000 smallholder farmers have received digital payments for goods sold on the AgroCenta platform. This is possible through the extensive education on mobile money usage, safety and convenience. With farmers receiving mobile payments, this has opened up opportunities for leveraging on technology to perform credit scoring for smallholder farmers which will make them eligible for loans and other financial services AgroCenta through its financial partners will be introducing for the 2020 cropping season.



#### Impact Roadmap

Our impact measurement is a work in progress and impact measurement is a journey.

Our aim is to be able to capture through time the material effects of our work. For this reason, we want to expand our measurement model in the future and communicate about the changes in our farmers' lives.

In the short term, we want to be able to effectively measure and report on the metrics we've identified and compare them with our targets. We want to learn from our successes and failures and continue improving the business model of AgroCenta.

In the medium term we will build our technology outreach capacity with a focus on financial inclusion. The goal of Lendit will be to not only allow for mobile wallet payments to farmers for the harvest, but will ultimately include a lending capability so that farmers can borrow small amount of money to purchase inputs before the harvest. We will then have additional impact metrics related to access to finance and improved output.

In the long term we aim at creating a complete database of market prices and help established a standard price for the agricultural products in Ghana. In this way, we can influence and indirectly reach every farmer and make sure that he can trade his goods at a fair price.





#### Yield Improvements

For the 2019 cropping season, AgroCenta deployed 45 agents in 4 regions to provide extension advisory services to smallholder farmers. AgroCenta agents who are trained agronomists ensured that farmers followed the right agricultural practices from planting to harvesting. Agents also organized community seminars/durbars alongside demonstration farms to show farmers what the benefits are for using improved seeds and quality inputs.

Comparatively, between 2018 and 2019, farmers who joined AgroCenta have recorded increase yield margins through the provision of expert agricultural advisory services and access to agricultural inputs. The table below highlights key metrics from 2018-2020

Year	2018	2019	2020
Yield (MT) per Acre	2	2.6	3.2





#### Smallholder Farmers Income Improvement

With the corresponding yield improvement for 2019 means additional income for smallholder farmers who trade on the AgroCenta platform. Additional income for smallholder farmers mean they can now afford to pay school fees of their wards, pay for social amenities, take care of family and reinvest a percentage of funds back into their farming activities. 2019 saw an increase in income of smallholder farmers as compared to the data from 2018\*. The metrics below represent the increase in income and target by 2020

Year	2018	2019	2020
Income (PPP/day)	\$2.5	\$3.2	\$4.0





## **2019 Projects**

A series of farmer related projects & activities were carried out January-September 2019 for farmers in the Northern, Upper East, Upper West and Eastern Regions. These projects were aimed up improving service delivery for AgroCenta and also equipping farmers with the necessary tools and information.

#### **Agents Training**

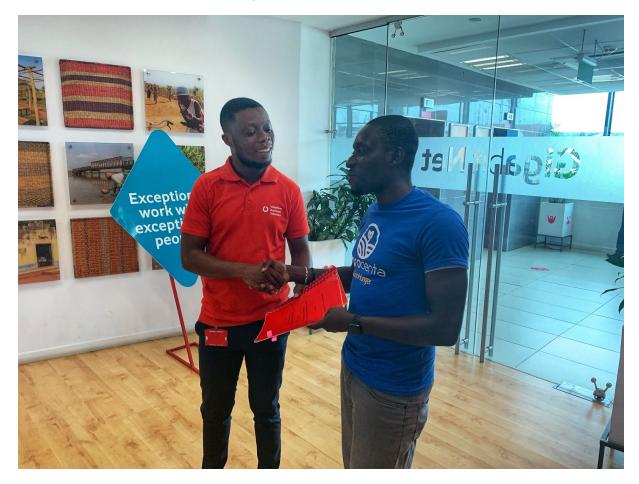
45 agents were trained in 2019 on Apploader 2.0 which is the data collection application for AgroCenta. The 5 day training taught agents on farmer registration, quality control standards, market price data collection, loan requests from farmers, signing up farmers for pensions program, crop monitoring/field visits and other services of benefits to smallholder farmers. In 2019, AgroCenta agents reached out and onboarded more than 18,000 smallholder farmers, signifying a 200% increase from the 2018 registered farmers. This was made possible by collaboration with other development partners such as IFC/World Bank Ghana and GIZ Ghana.





#### Vodafone Ghana - AgroCenta Farmers Club Partnership

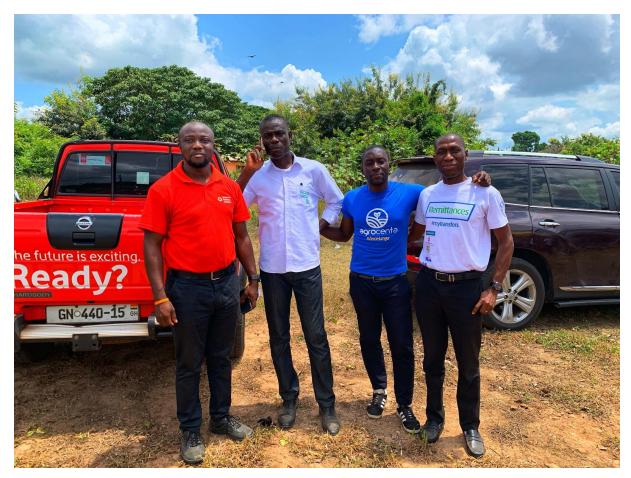
In August 2019, AgroCenta secured a strategic partnership with Vodafone Ghana to rollout digital services for smallholder farmers. This partnership will enable farmers get access to free SIM cards that allows them to make free farmer-to-farmer calls within their farmer cooperatives, discounted mobile money charges, access to weather information via SMS and IVR, automatic enrolment onto the Vodafone Cash platform and finally access discounted Huawei feature phones (\$10). Additionally, Vodafone Ghana will provide mobile money agent networks in hard to reach areas where farmers can access mobile money services.





#### **Farmer Engagements & Training**

In Quarters 2 and 3 2019, AgroCenta through its partners and agents trained over 4000 smallholder farmers in financial literacy, good agricultural practices for improved yields and new farming techniques/methods. Farmers were drawn from the Northern, Upper East and Eastern Regions of Ghana. Pan African Savings & Loans (subsidiary of Ecobank Ghana) trained farmers on financial literacy whilst Vodafone Ghana extended their training on mobile money and other services to rural smallholder farmers.





#### **AgroMart (Food Distribution Center)**

The first food distribution center was setup in July 2019 in an effort to promote effective food distribution across the country by retailing AgroCenta products through a network of distributors. AgroCenta aims to capture the retail/end consumer market with AgroMart by providing access to high quality and affordable commodities, cheaper than what the traditional markets offer. Additionally, it an effort to maximize profitability through fair trade for AgroCenta, its distributors and the general public.





#### **Partners & Investors**

Our efforts to create value for smallholder farmers and businesses cannot be realized without the efforts of our partners and investors who through diverse ways provide tangible and intangible support. We're grateful for the following partners and investors who have been of immense support in 2019





# **Recognition & Awards**

We are honoured that our work has been recognised in several competitions this year

These awards not only do they come with financial benefits but also come with expert advisory services AgroCenta will need to scale and grow to become the largest commodities trading and exchange platform in Africa







Winner (Social Good Category) TechCrunch Battlefield Africa, October 2017



Winner (Environment & Green Energy Category) World Summit Awards, November 2017



1st Place Seedstars Accra, September 2017



2nd Place Pitch Agrihack West Africa, September 2017



1st Place FINCLUDERS Startup Challenge Amman, May 2017



## Our team



Thank you so much for reading our report. We look forward to hearing from you as we continue to work hard towards our collaborative vision of farmer prosperity in 2019 and beyond!

#### Contact

Francis A. Obirikorang CEO/Co-founder AgroCenta LLC K45 Motorway Extension Drive Tel: +233240110096 Email: <u>francis@agrocenta.com</u> Skype: swapchief

This report was prepared by AgroCenta under the technical supervision of Roots of Impact.