



TELLING AN ADVANCE II PROJECT SUCCESS STORY











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Preface

The Feed the Future Ghana Agricultural Development and Value Chain Enhancement (ADVANCE II project) project's activity is a five-year project implemented by a consortium led by ACDI/VOCA. The project's goal is to scale up agricultural investments to improve the competitiveness of the maize, rice, and soybean value chains in Ghana. The project adopts a facilitative value chain approach, where smallholder farmers link to markets, finance, inputs, equipment, and information through larger commercial farmers and traders who play the role of outgrower businesses and have the capacity and incentive to invest in the smallholders' farming activities. These linkages build the capacity of smallholder farmers to improve the efficiency of their farm businesses with improved production and post-harvest handling practices. The project aimed to reach more than 113,000 smallholder farmers by end of 2018.

As of FY17, ADVANCE II project had reached 127,050 smallholder beneficiaries, of whom 66.595 (52.42 percent) are men and 60,455 (47.58 percent) are women, which is 14,050 (12.4 percent) above the life of project target of 113,000. The project has supported 1,034 private enterprises, producer organizations, trade and business associations, and community-based groups through training, facilitating access to loans, and business development services; and trained 116,694 individuals, of whom 57,213 (49.03 percent) were women, in agriculture and food security-related topics.

This document is a compilation of some of the project's success stories. They show evidence of USAID's ADVANCE project impact in the project's communities, especially its impact on livelihood through interventions such as: linkage to markets, the promotion of improved agricultural technologies and business management practices, including climate smart techniques, increasing access to finance through Village Savings and Loans Associations (VSLAs) and linkages to Financial Institutions (FIs). The project has also supported emerging outgrow businesses, encouraging youth patronage in agriculture, promoting proper recordkeeping, and more.

I. Inspiring Financial Hope and Increasing Access to Agricultural Services for Women In Rural Ghana

Beneficiaries adopt the Village Savings and Loans concept

Although there are banks in some rural communities, most smallholder farmers do not believe they have enough money to open accounts, or engage with them. Also, farmers do not keep adequate records of earnings and spending from past farming seasons so banks are hesitant to lend to them for fear that the farmers will not raise enough revenue to repay the loans.

To address this issue, USAID's ADVANCE project in 2015, adopted the Village Savings and Loans Association (VSLA) concept, with the aim to encourage smallholder farmers develop the culture of savings to purchase inputs for crop production and be



Smallholder farmers expressing their joy during input promotion where they used their VSLA savings to purchase certified seeds.

economically empowered. As of fiscal year (FY) 17, the project formed 826 VSLA groups with membership of approximately 20,000 beneficiaries (76 percent women), who saved \$539,118 (GHS 2,223,325) and 348 groups gave out loans amounting to \$90,587 (GHS 387,760). The groups have all received training on how to record their savings, maintain orderliness in the group during and after meetings, leadership roles, development of group constitutions and regulations, buying of shares and borrowing from the VSLAs.

Beneficiaries of the VSLA have experienced the benefits associated with the concept and shown appreciation to USAID's ADVANCE project for equipping them with "banks" in their communities. They affirm that they can now afford to buy inputs for agriculture production. "We are now able to manage our funds more effectively and end the farming season with a greater profit than before," Barikisu Batukpere in the Upper West Region narrates. She adds: "We can borrow money from our savings to pay for seeds and farming equipment, which results in the use of more effective farming technologies that increase productivity. The interest rate is usually five to ten percent per annum compared to a current average m of 30 percent per annum from the commercial banks."

A member of the Suglo Mbori Buni (name of group means to seek wealth with patience) VSLA Group in Kpanashe community in the Northern Region remarked: "For Suglo Mbori Buni group, the over 150 women saved GHS 13,007 (\$58,271) to invest in the recommended agricultural production practices we had seen through USAID's ADVANCE project field demonstrations. During the share-out (the period where funds contributed are disbursed) in 2016, USAID's ADVANCE project facilitated a community input promotion event whereby representatives from Yara and Heritage Seeds (Input Suppliers) promoted their products to the community members. The farmers purchased seeds produced by Savanna Agricultural Research Institute (SARI), instead of using saved seeds from the previous harvest. They also learned about the importance of double-plowing, which retains moisture in the soil.

According to Barikisu, through proceeds from her VSLA savings, she could invest in farm input and land for production. She doubled the size of her farm, from two acres in 2016 to four acres in 2017, and is expecting to expand to eight acres in the next farming season. "Using part of my savings of about GHC500 (\$112), I bought certified seeds (Pioneer), and patronized a tractor service. I could hire the service of a spray service provider at a cost of GHC15 (\$3.4) per acre. I expect a total of 80 bags of maize compared to the usual 30 that I produced." Bariku said.

Besides its contribution to increasing agriculture production, the money saved or loans secured from VSLA pay for educational bills of beneficiaries' children as well as other social needs. For Elizabeth Dassah, a woman beneficiary in the Fio community, her daughter is now in the nursing training college because she could borrow from the group. USAID's ADVANCE project will set up 200 new groups and continue to use the VSLA approach for smallholders to purchase production inputs to increase their yields and income.

2. Maximizing Safe Application of Pesticides and Creating Employment for Youth

USAID's ADVANCE Project Spraying Services Provision Has Contributed to Improved Livelihoods of Youth in Northern Ghana



"I made GHC 1,400 from spraying farmers' field and have saved it with GN Bank towards next year's farming activities,"

—Ali Yahaya, spray service provider from Bulenga, Upper West Region.

The health and safety of farmers—especially of the vulnerable in farming communities—were a concern for USAID's ADVANCE project. In northern Ghana, some smallholder farmers continue to use pesticides without protecting themselves. Notwithstanding the economic benefits of using these products, they could pose environmental and health risks to users and other natural resources. The effect of the pesticides on the environment can reduce biodiversity and aquatic life if not handled appropriately. Evidence of food poisoning and many skin diseases could be due to inappropriate use and handling of agricultural pesticides in Ghana.

The primary objective of the project's initiative to support the setting up of spraying service providers is to mitigate the harmful effects of pesticides on users and the environment. The project, in collaboration with the Plant

Protection and Regulatory Services Departments (PPRSD) of the Ministry of Food and Agriculture (MOFA), set up and trained 711 young men as spraying service providers across the Northern, Upper East and Upper West Regions of Ghana, as of FY17. The training covered the use of various products, the importance of using personal protection equipment, customer care, basic recordkeeping, and assembling and servicing of knapsack sprayers.

After gaining the knowledge and skills to provide professional and effective spraying services, the trained spraying service providers have so far provided services to 8,597 smallholder farmers for a total value of GHC169,555 (\$37,847), covering 19,990 acres.

Dauda Yakubu is a spraying service provider in the Northern Region and he remarks: "I generated GHC 2,544 (\$568) from the 318 acres I sprayed in 2016, with which I bought nine bags of fertilizer and applied on my four-acre maize farm. Through this, my yield increased from the usual 1.3 MT to 3.9 MT of maize. I give credit to USAID's ADVANCE project for exposing me to a business opportunity within my own neighborhood and helping me get enough food to feed my family."

During a visit to Kpanashe in the Northern Region in October 2017 by the USAID/Ghana Mission Director, Sharon Cromer, a 24-year-old spraying service provider, in an outburst of joy, explained how the spraying service concept has offered jobs, confidence and income to him and other youth in the

community. According to him, the seasonal jobs for the youth in the community have contributed to reducing rural urban migration in the community. Alhassan Yussif, an outgrower business owner, verified this assertion; he revealed that he supports 25 young ladies and 40 young men in farming, without such support, he made the projection that all of them would have migrated from the community to pursue greener pastures in the urban areas.

To make spraying services more accessible to smallholder farmers, USAID's ADVANCE project will train an additional 700 sprayers (majority being the youth) across the three northern regions of Ghana by the end of 2018. For sustainability, USAID's ADVANCE project is developing dedicated supply chains for these spraying service providers by linking them to private input firms, telecommunication networks, banks, and outgrower businesses to establish business relationships that will last beyond the project.

3. Celebrating the Successes of Female Farmers

Margaret Tabla Demonstrates Evidence of USAID's ADVANCE Project's Impact on Smallholder Farmers

Margaret Tabla, a 45-year-old widow and mother of six, is an outgrower farmer working with Outgrower Business (OB) Manager, Augustine Sandow Ambotima. Margaret cultivates five acres of maize and three acres of soybeans. She started working with the first phase of USAID's ADVANCE project in 2012.

Prior to joining USAID's ADVANCE project, she recorded very low yields—an average of 0.1 metric ton of soybean per acre and 0.3 metric ton of maize per acre. The low yields were due to the poor agricultural practices such as using saved seeds, planting haphazardly, inappropriately applying fertilizer and other agrochemicals, among others. Margaret simply did not have adequate knowledge of good agricultural practices.

Margaret, in one of the plowed fields she supervised for usage as a demonstration plot.

"Because of the yield I made in 2014 with the support of USAID's ADVANCE project, my late husband's family has allotted me five acres to add to the five acres I already have, and they are willing to add more land if only I am willing to accept it."

—Margaret Tabla, a smallholder farmer in Bussie, in

Ghana's Upper West Region

With USAID's ADVANCE project program support,

especially training on good agricultural practices (row planting, use of certified seed, appropriate fertilizer, and the application of agrochemicals); post-harvest handling; recordkeeping; numeracy; farming as a business; Sell More for More, and women's leadership programs. Today, Margaret sees farming as a business and her achievements include the following:

- In 2014, she increased her acreage from three to five acres of maize, and an increase in yield from 0.3 metric ton per acre to 1.04 metric ton per acre, earning her an income of GHC 5,200 (\$1,330).
- Because of her adoption of good agricultural and other practices, Ghana's Ministry of Food and Agriculture recognized and awarded her as the best female farmer in maize and soybean in her district. As her award, she received a bicycle, wellington boots, a certificate of merit, and a machete. Margaret no longer walks long distances from her community to others to educate farmers on the need to adopt good agricultural and other practices in their farming activities; she covers the distances with her bicycle.
- Margaret also serves as a resource person on radio programs that educate smallholder farmers on good agricultural and management practices.

Margaret's achievements have been recognized by OB owner, Augustine Sandow Ambotima, who is mentoring her to become an Associate Nucleus Farmer and ultimately, an OB. Augustine has entrusted Margaret with many responsibilities: she now supervises the formation and training of farmer groups, provides extension services to Ambotima's other outgrowers, supervises the activities of the OB's

tractor operators as well as monitors and supervises the operations of the Village Savings and Loans' scheme that includes 82 groups in 11 communities, with 2050 members (with 1,558 females). The Village Savings and Loans' concept allows smallholder farmers to save together and take small loans from the savings, thereby providing simple savings and loan facilities to make up for the limited access to formal financial services in rural communities.

"Margaret has worked so well and hard that now I assign her to represent me at meetings and perform a lot of my duties as a nucleus farmer for me," says Ambotima. Margaret's excellent work also gained recognition in the Bussie community. The opinion leaders and community chief have nominated her to run in the upcoming National District-Level Election as an Assemblywoman to represent them at the Daffiama-Issa-Bussie District Assembly, where she previously served as a unit committee member. They have confidence that she can champion their cause. She is also currently the spokesperson for the Queen Mother of Bussie.

"I owe all these achievements and successes to USAID's ADVANCE project. If not for USAID's ADVANCE project I would not have reached this far. Thank you very much USAID's ADVANCE project." — Margaret Tabla, beneficiary of USAID's ADVANCE project training.

4. Scaling Up Mobile Financial Services for Farmers

USAID's ADVANCE Project Subscribes Farmers to Mobile Money Virtual Wallet



"Mobile money has helped me have access to my accounts. I can easily record the value of inputs sold in the communities. With my five agents, I serve more than 3,500 smallholder farmers in Mion District."

-Mohammed M. Muntaka, input dealer, Northern Region

USAID's ADVANCE project has been supporting the maize, rice, and soybean value chains in Northern Ghana to achieve food security. The project encourages savings among its smallholder farmers while ensuring that easy payment options are accessible to them, especially in remote areas where there is no access to a bank.

In 2015, realizing that some of the farmers with whom the project works own mobile phones, the project introduced them to the mobile money concept. Prior to introducing them to the mobile money concept, farmers travelled long distances to transact business and carried cash with the attendant risks. Collaborating with telecom companies (MTN, TiGO), and Fidelity Bank, USAID's ADVANCE project organized the farmers to subscribe to the mobile money virtual wallet on their personal phones. The project explained the

service's benefits such as extending financial services (sending and receiving monies via mobile phones) to unbanked people. Since its introduction to project beneficiaries, the mobile money service has proven to be cost-effective, convenient, and time-saving. The charges for sending money is insignificant compared to travel time and the expenses involved in transacting business in a more traditional manner. With the mobile money concept, farmers and outgrowers send and receive money on their phones without the fear of theft.

Outgrower business owners (OBs) who work with the farmers started using the service after seeing its benefits first-hand. Within a year; 3,274 smallholder farmers and 65 outgrower business owners have begun using the service for various financial transactions. The OBs promptly pay for produce aggregated from their smallholders and inputs bought from input dealers through their mobile phones. Receiving their money on their mobile phone is saving the farmers from the temptation of spending it instantly, which they occasionally did when they had physical cash. Some farmers even use the service as "savings account."

Monitoring of transactions of four OBs who received training and set up as merchants in the Upper West Region, showed that e-transactions (cash in/cash out) carried out amounted GHS 2,269,403 (\$587,365) in FY16. The project will continue to scale up the mobile money technology to allow more value chain actors in northern Ghana to make payments spending less time and resources.

5. Community Input Promotion Offers Access to Farm Input and Increases Revenues

Tang Gomda Enterprise Increased Sales and Revenues through Community Input Promotions in Karaga District of the Northern Region

Input promotions are events organized by USAID's ADVANCE project to increase farmers' access to inputs by bringing input dealers to the communities when the farmers' Village Savings and Loans Associations are sharing out their savings.

The project worked with input dealer Tang Gomda Enterprise, operated by Fuseini Ziblim, to implement the community input promotions in Karaga Town, in Karaga District in 2017.

Until Fuseini Ziblim met USAID's ADVANCE project and engaged in the community input promotion activities, he operated his input shop



in Karaga market, where he competed with other input dealers. The project introduced Tang Gomda Enterprise to farmers in nine remote communities where the VSLAs organized savings' sharing events. Close to 400 smallholder farmers, mostly women, used part of their savings to purchase inputs (seeds, herbicides, and knapsack sprayers) worth over GHS 20,000 (\$4,464) during the period of the promotions. After participating in the input promotion event, Fuseini's daily sales, which averaged GHS 1,500 (\$335) in 2016, increased to an average of GHS 3,200 (\$714) in 2017. Through USAID's ADVANCE project facilitation, he now covers over 10 additional communities in the districts and provide over 1,000 farmers with inputs including fertilizer, seeds, agrochemicals, and insecticides to control Fall Armyworm.

Fuseini Ziblim excitingly narrates: "The community input promotion facilitated by USAID's ADVANCE project is very good. Within two days I made GHS 5,000 (\$1,116) of profit from the promotion and since then, the community agents made a follow up to my shop to buy more inputs. My sales have increased with the number of people visiting my shop. I am very happy and wish to thank ADVANCE for identifying me."

To further improve his relationship with farmers and increase sales, Tang Ngomda established 24 demonstrations sites on maize and donated 0.1 MT of NPK, K-Optimal and weedicides valued at GHS 1,500 (\$335) to train smallholder farmers in the Karaga District.

During fiscal year 2017, USAID's ADVANCE project organized 204 input promotion events, through which 130 input dealers sold inputs for a total value of GHS 568,041 (\$126,795).

6. Supporting Emerging Outgrower Businesses

An Outgrower Business Owner Capitalizes on USAID's ADVANCE Projects' Business Management Training to Enhance His Business Operations



"I am looking to help other farmers become OBs, just as Gundaa did for me"
—Subila Iddrisu

Starting as a lead farmer for Gundaa Produce Company where he supervised the plowing services for the outgrowers, Subila, in 2014, set up his outgrower business (OB), bought a tractor, and became an associate outgrower business (OB) providing services to over 100 outgrowers. He called his OB Yong Dakpemayili Company Ltd.

The start of Subila's business was shaky. In the first year, nearly 30 percent of his outgrowers defaulted in repayment. While he waited until the rains to find outgrowers, he also did not work to establish any relationship with them, and so most of them did not honor their commitments to repay. According to Subila, he learned one of his most valuable lessons that, to be successful, he had to plan and build trust with his outgrowers.

In 2015, USAID's ADVANCE project supported Subila to access a loan from Sinapi Aba Trust to purchase a new tractor and render plowing services to his farmers. The project adopted one of his farmer's land as maize demonstration farm. The project trained Subila and his field agents on good agricultural practices, and during planting, the project facilitated him to use certified seeds, plant in rows at the correct spacing, and apply appropriate fertilizers. The adoption of these improved farming technologies resulted in improved yields of 5.88MT/ha of maize in that year compared to a maximum of 3.1MT/ha on the same land size in previous years. This significant increase in yield enticed the other farmers to adopt the recommended farming practices. Many more smallholder farmers have linkages to Subila.

Currently, Yong Dakpemayili Company, Ltd., has over 611 outgrowers in eight communities, with nearly 46 percent being women. Subila now has a default rate of less than 10 percent on services provided. The company employs two field agents and two part-time machinery operators. In each community he has a lead farmer who coordinates activities on his behalf in that community. Yong Dakpemyili sells most of his produce to Gundaa Produce Company, a large aggregator, which in turn sells to large buyers such as World Food Program (WFP), Premium Foods Limited and has signed a purchase agreement Nestle Ghana recently. Hence, Subila sells his maize at very competitive prices. In 2016, Sulbila, sold 20 Mt of maize valued at GHS10,000 (\$2,511) to Gundaa Produce Company. In addition, Subila gets his maize cleaned and re-bagged at Gundaa's warehouse, whose construction was with the support of USAID's ADVANCE project and certified under the warehouse receipt program. Moving forward, Subila would like to grow his business to take on direct marketing to the large buyers.

As of FY17, a total of 434 OBs and lead actors had been trained on the USAID's ADVANCE project eight-module Outgrower Business Management (OBM) curriculum aimed at educating OBs on proper business management practices with the eighth module dedicated to female OBs and FBO leaders. USAID's ADVANCE project deliberately ran the OBM modules along the cropping calendar, so that OBs can have a thorough understanding of how they can plan and operate their businesses efficiently, profitably, and sustainably. Each module took two days and participants received certificates of competency following post-training monitoring and evaluation. In 2018, the project will train 300 OBs and lead actors, based on their specific needs, to improve their business management services.

7. Ensuring Optimal Data Capturing for Effective Decision Making

USAID's ADVANCE Project Adopts SmartCard Technology for Optimal Data Capturing

Ghana, lack of a unique national identification system coupled with low literacy levels make it difficult to use normal attendance rosters to accurately count large numbers of participants during training. Other challenges posed to continuous tracking include the practice where most participants are not consistent with their names when registering for a training. To overcome these challenges, USAID's funded Agricultural Development and Value Chain Enhancement (USAID's ADVANCE project) project designed an innovative and efficient system that accurately identifies and tracks interventions for each beneficiary. The project introduced SmartCards for each project beneficiary to capture and store data.



The women's group of Diare, in the Northern Region, showing off their new SmartCards printed by ADVANCE. Photo credit: USAID's ADVANCE project Tamale Office.

Each project beneficiary's picture and unique identification numbers are printed on the smartcard while essential and private information are stored in the card. The data contains the participant's age, gender, phone number, farm size, yield and sales history, number of dependents, number of trainings attended, and other information that is essential for monitoring and evaluation for decision making.

Using the SmartCard for three years now, the results have been positive. With over 100,000 SmartCards in circulation, USAID's ADVANCE project is also able to determine the training attendance rate of farmers and follow up on beneficiaries with poor attendance. As of December 2017, the project has effectively tracked over 114,488 beneficiaries who have attended trainings.

"The best, the easiest, and the smartest way of interacting with your project beneficiaries and knowing how they are performing in real time as you implement project strategies over the years," said Samuel Akoi-Wontumi, USAID's ADVANCE project M&E Coordinator to describe the SmartCard system.

With the SmartCards, capturing and analyzing data is faster and easier, thereby eliminating the risk of double counting. High quality data is also a benefit, with less effort and time in addition to easy identification of beneficiaries who are assigned unique ID numbers. The SmartCard system supports the project in making both strategic and day-to-day operational decisions.

"As a nucleus farmer, the SmartCard helps me in tracking the provision of services to my outgrowers. For instance, if I hire a tractor operator to go and plough for my outgrowers, the operator is easily able to identify

those he must plough for as they present their ID cards. This ensures that my outgrowers are served first before other farmers. My women outgrowers feel very proud when they put on the ID cards. Well done, ADVANCE for that innovation," said Ernest Asoi, leader of the Kukunasor Women's Group in the Chereponi District in the Northern Region.

Although the SmartCard development was primarily for project use, it has additional benefits. It provides a form of identification to those without any formal ID, as is often the case in rural Ghana. The cards also provide a sense of belonging for the project beneficiaries especially at the community level. "The SmartCard is very good. Anytime I attend a training, I put it on and it makes it easier to identify me. I don't have to mention my name; the card gives my personal details, farm size, yield, and other information. I feel so proud when I wear it. In fact, I even put it on when I am attending programs like outdooring, marriage ceremonies," said Fati Sulemana, a smallholder farmer in Nansoni in the Northern Region.

Based on these successes, the USAID's ADVANCE project won a global Digi Award for digital innovation in the use of SmartCards to capture data during the 2017 USAID's Global Innovation Week, organized by USAID, in conjunction with the Australian Aid Agency, the Hewlett and Gates Foundations, and the Center for Global Development at the Reagan Building in Washington DC. Dr. Niri Ramasinjatovo (who previously served as the USAID's ADVANCE project Deputy Chief of Party in charge of M&E, on behalf of the Ghana team and the USAID/Ghana Mission), received the award.

In 2018, the project will focus on ways of improving the SmartCard technology by

An ADVANCE officer handing over a SmartCard to a beneficiary after entering her data during a Good Agronomic Practices (GAPs) training for rice farmers at Janga in the Northern Region.

exploring the possibility of making the cards accessible on mobile phones (and not only on computers) using the card readers. This will further enhance the ease in updating the records.

8. Making Mechanized Farming Attractive to Female Farmers

A Female Outgrower Business Champions Mechanized Farming in the Brong Ahafo Region



"The agreement with Sinapi Aba Trust gave me confidence to invest in climate smart practices"
—Mary Azongo, outgrower business owner and USAID's ADVANCE project training beneficiary

USAID's ADVANCE project, in collaboration with AFGRI Ghana and John Deere, in 2016, started establishing model farms, in order to promote mechanized farming and improve the efficiency of farm businesses in production and post-harvest handling practices. The model farm approach promotes good agricultural practices (GAPs) and technologies to increase efficiency and productivity of outgrower businesses. It involves a holistic set of practices such as good land preparation, using good seeds, appropriate plant population density, appropriate plant nutrition, and use of mechanical planters, fertilizer applicators, boom sprayers and harvesters for efficiency and increased scale. Such large scale farming are usually practiced by men, in Ghana. However, some women have taken bold steps towards this practice. One of these women is Mary Azongo.

Mary Azongo is an outgrower business (OB) owner who currently works with 333 outgrowers, and has made steady gains by farming and marketing maize. From a modest beginning of farming 10 acres and supplying two to five neighbors with fertilizer.

After seeing Mary's significant efforts to improve her livelihood and that of others through her farming business,

another OB owner took her to a USAID's ADVANCE project maize demonstration site where she had an introduction to a new way of farming. Later that year, she attended the USAID's ADVANCE project pre-harvest agribusiness forum, where she made contacts with Dizengoff, John Deere and Sinapi Aba Trust. Mary leveraged these opportunities provided by USAID's ADVANCE project to expand her outgrower business and invest in outgrowers in her community. As a head teacher, and now a successful entrepreneur, she serves as a community leader and a mentor to many outgrowers, especially female outgrowers.

Mary's two great strengths are: I) the good reputation she built with financial institutions and end markets through her commitment to deliver on her contract and repay her loans in a timely manner and 2) her great innovative capacity and readiness to try innovative technology that could improve her farm business.

In 2016, the project linked Mary to Agricare, an agrofeed processing company in Kumasi, and she entered into a pre-financing contract for 30 farmers. Through the contract, she sold 150 MT of maize to

Agricare. To meet the quality standards, she provided her farmers with mechanized shelling services. One of the key benefits Mary saw in the scheme is that Agricare committed to a set price. She also adopted good agricultural and maintenance practices on her 25-acre farm, which encouraged Agricare to increase its contract to cover 230 acres for her and her outgrowers.

With increasing demand, she readily adopted another practice recommended by USAID's ADVANCE project—ripping as a sustainable land preparation technology. In 2017, in collaboration with John Deere/AFGRI—an equipment dealer—Mary's farm served to demonstrate large scale model farming with ripping as a minimum tillage land preparation method and the use of planters with fertilizer applicators. She gives her perspective about the benefits of the ripper: "previously, we first ploughed and then planted the seeds, then after a week or two, we added the fertilizer manually. But now, we can rip even 10-acre plots of land, plant the seeds, and add fertilizers, all on the same day. This [makes] farming much easier and cheaper, too".

In 2017, the establishment of 13 maize model farms took place with an average yield of 4.66MT/ha. When Mary looks to the future, she hopes to increase her support to her farmers and the number of farmers who could benefit from what she has learned from USAID's ADVANCE project. The project will continue to support Mary and other female beneficiaries to scale up the adoption of large scale farming.

9. Importance of Project Collaboration with Outgrower Businesses

Faustina Amoah and Her Husband Revamp Their Milling Business



Faustina Amoah (right) standing in front of her tractor that she received from matching grant from USAID's ADVANCE project.

The OGs received a loan of GHS and paid back. She also saw the need to enough to purchase improved inputs. ADVANCE project also linked Faustina Life, a local organization that assisted Village Savings and Loans Associations USAID's ADVANCE project linked her

Faustina Amoah and her husband, Afena Yorke, started their outgrower business (OB) together in 2013 with 150 maize farmers. At a point in their farming business, they faced challenges with marketing their produce. They explored maize processing as a business opportunity. This led them to commence a milling business, producing maize grits, maize flour, dough, and tom-brown mix¹. As the business progressed, they did not have reliable supply of maize for milling, which adversely affected their business. To address this challenge, Faustina and her husband adopted a strategy to focus on their outgrower business and expand the outgrower base to guarantee supply. It was at this stage that Faustina contacted the USAID's ADVANCE project in 2014, and collaborated with the project to demonstrate latest technologies to their outgrower farmers.

USAID's ADVANCE project helped link Faustina's outgrowers (OGs) with Sinapi Aba Trust to access financing.

"We [OBs] help each other with market and weather information"
—Faustina Amoah, outgrower business owner and USAID's ADVANCE project training beneficiary.

20,000 (\$5,534), help farmers save USAID's

with Access to her OGs to form (VSLAs). In 2016, with Grameen

Foundation to train its farmers on good agronomic practices using the Smartex extension application. Simultaneously, the project encouraged her to use mobile payments with some of her outgrowers through MTN mobile money and showed her how to access information such as weather and market prices.

In 2016, Faustina's outgrowers increased their yield from 0.8 metric ton to 1.8 metric ton per acre because they adopted better farming practices. As of December 2016, Faustina's outgrower network had grown from 150 to 350 farmers. Her OBs can sell over 200 MT of maize to her, of which she uses 140 MT for milling and 60 MT for her poultry farm. Faustina's milling activity, now revamped led to her business thriving once more.

¹Toasted cornmeal porridge popularly known in Ghana as "Tombrown."

10. Encouraging Youth Patronage in Agriculture

Prince Danso, 27, Role Model for Ghanaian Youth to take up Farming as a **Profession**

Despite numerous strategies adopted by the Ghanaian government and other agricultural stakeholders to attract the youth into agriculture, most young people in Ghana shy away from farming with the perception that farming belongs to the elderly. Therefore, when USAID's ADVANCE project discovered 27-year-old Prince Owusu Danso's engagement in commercial farming, the project took a special interest to support him.

Prince Owusu Danso is the youngest outgrower business (OB) owner out of 373 OBs working with the project as of FY17. After completing his technical education in 2007, Prince started his own farm at Ejura in the Ashanti Region. He cultivated one-acre maize farm with seeds and fertilizer bought on credit. From that one acre, he harvested 0.8 MT. Happy with that yield, Prince increased his acreage to two the following year.

After eight years of hard work, Prince now has a 45-acre maize farm and works with 254 smallholder farmers (who cultivate about 1,167

acres of land) across six communities in the Ejura Sekyeredumase District whom he provides fertilizer and weedicides on credit. Though Prince was making improvements in his farming business, he

acknowledges that since receiving USAID's ADVANCE project support in 2015, he has been able to take his

Prince Danso at a USAID's ADVANCE

project-supported agricultural event.

The project trained him and his smallholder farmers on best agronomic practices including row planting, use of certified seeds, and proper application of fertilizer as well as other agrochemicals. The project also provided him with a Samsung Galaxy Tab and a Pico projector which he uses to profile his farmers, teach them good agronomic practices, and keep records. He counts on the project for more knowledge and innovations. The project also assisted him in preparing a business plan and linked him to Esoko Limited and Ignitia Ghana Ltd to receive weekly

text messages on agronomic tips, market prices of commodities and weather information to better schedule his planting and harvesting. In 2015, the project connected him to two buyers, Spice Farms, and Akate Farms, both poultry farms. He supplied 10 MT of maize valued at GHC135,000 (\$ 30,134) to Spice Farms. In 2016, Prince supplied 6.5 MT of maize to four end-markets in Ejura and Bibiani at a total value of GHC 80,000 (\$17,857.1)

business to a higher level.

"I recently completed a 16-bedroom house at Ejura and am taking care of the education of four siblings. I have become a role model for the young men in Ejura who approach me to learn from my experience. I advise the youth that farming is good and rewarding, especially if one applies the best agricultural practices, he will get good yields. Farming is not only for old people, young people like you can also go into it." —Prince Owusu Danso, outgrower business owner and USAID's ADVANCE project training beneficiary



Prince (indicated with arrow) and several his youth outgrowers in a group photo with the Chief of Party for the USAID's ADVANCE project (in red shirt) and the USAID Private Sector Development team lead (third from right after the chief of party) during a field visit in July 2017.

In FY17, USAID's ADVANCE project identified Prince as a youth icon in agriculture with potential of influencing the 41.1 percent youthful population within his district to take up agriculture as businesses. Prince's district also selected him to distribute the government's subsidized fertilizer for the 2017 cropping season; after which, he successfully distributed 8,000 bags of fertilizer to both his and other farmers. Recently, Prince established three input shops and engaged three youth to manage each shop. He also established a mobile input service delivery system and purchased two motor bikes for usage by the youth he is working with.

Due to the training provided by USAID's ADVANCE project, Prince's smallholder farmers realize high yields, which enable them to repay him for the services he provides to them. Lucy Fabea, one of Prince's smallholder farmers in Ejura narrates: "Adoption of good agronomic practices from USAID's ADVANCE project greatly improved my yields. Like any other smallholder farmer in this community, previous yields used to be between 600 and 800 kgs of maize per acre but with the use of improved seeds and adoption of the good agronomic practices, I had 1500 kgs per acre in the 2017 farming season and I was very happy about it."

Prince is working to establish one-stop farm service center where his farmers would access tractor services, inputs, and extension education at all times. He is also promoting the rearing of small ruminants by his young farmers to serve as another source of income for them. With the project's support, plans are also underway to buy air time on "Today's" radio station to educate and encourage more youth to take on agriculture.

11. The Mystery of Slate and Chalk

USAID's ADVANCEe Project Numeracy Training Beneficiaries Share their Experience on Breaking Reading and Writing Barriers



Salifu Zalia, a smallholder farmer in West Mamprusi District of the Northern Region proudly displays her chalkboard after writing down her phone number.

"I am able to read the weight of my baby for weighing."

—Rebecca, a beneficiary of the numeracy training in Sombo community in on the weighing scale whenever I take her to the hospital the Upper West Region.

One of USAID's ADVANCE project main objectives is to increase farmers' productivity and one strategy to achieve this goal is to train smallholder farmers to acquire numeracy skills. In 2015, the project began training smallholder farmers to acquire numeracy skills. As of December 2017, the project trained 31,727 farmers (18,156 or 57.23 percent women) on Numeracy skills across USAID's ADVANCE project four zones of operation. It may be difficult to imagine, but most of these trainees had never learned to write all their lives.

The numeracy trainings do not only educate individuals on how to count numbers and calculate their income, they also contribute to recordkeeping and improve the quality of decision making for farming, which in turn increased productivity and profitability. For example: as smallholder farmers can identify

expiry dates of inputs and the chemical composition of fertilizer, they are able to make informed decisions about what input to buy.

Learning to hold a pen in their hand and move it to form a number was very challenging at the beginning, but the trainees remained committed. Salifu Zalia, a smallholder farmer in the West Mamprusi District of the Northern Region, shared: "It was so hard at first, I was sweating as I tried to write the numbers, but now it feels so easy." After all the demanding work and dedication to learning a new skill, the farmers are proud and grateful to USAID's ADVANCE project for supporting and facilitating the classes for them. They attest to practical results of the training and their contribution to the enhancement of their agribusiness. Majority of them can now identify and write numbers, from one to thousand. They can also identify the various denominations of the Ghanaian currency, the Cedi.

Issa Colubu, a male beneficiary of the training in Loagri community in the Northern Region, said that during previous farming seasons, he did not know the total cost of the seeds, fertilizers, pesticides, and more, as he had no way of keeping track of them. In the 2017 season, however, he could record how much he spent to determine if he made a profit or loss at the end of the season.

Amina Yakobo, a female beneficiary of the numeracy training in the Northern Region explained how useful her new numeracy skills have been to her, especially in respect of knowing the expiration dates on bottles of agrochemicals. She narrates that, in 2016, she purchased pesticides at a local shop and after using them on her crops, all the crops died. She purchased expired pesticides, but was not aware



Issa Colobu displays his tablet, on which he wrote the ages of a volunteer and himself.

of it until after she took the numeracy training course in the latter part of the year. Hence, in early 2017, she purchased non-expired pesticides, which helped her crops to flourish with good yields at the end of the season.

In Sombo community in the Upper West Region, another beneficiary, Rebecca Naa, excitedly remarked: "I am even able to read the weight of my baby on the weighing scale whenever I take her to the hospital for weighing." Another beneficiary in the same community, Yaama, alluded that she now knows that "Mr." refers to a man. This same

beneficiary, after receiving training on how to identify the different denominations of the Ghana cedi, could determine that a GHC 50 note given to her by a vendor did not have the security features and hence, raised an alarm. Later, they verified that the currency was indeed counterfeit.

Seeing the enormous results of the numeracy training, USAID's ADVANCE project will continue to follow up to measure the impact of the training and how numeracy skills is supporting beneficiaries to increase agricultural productivity. The project will also train over 11,000 smallholder farmers in 2018.

12. Adopting Innovative Ways to Improve Agricultural Trade and Marketing

Cereal Foods Processor Increases Sales from Product Rebranding

Yedent Agro formulates and produces healthy and affordable cereal foods from maize and soybean fortified with vitamins and minerals for the Ghanaian and West African market. Since its inception in April 2002, the company relied on purchase orders from the World Food Program and the Ministry of Health of Ghana to drive sales. In 2014, it decided to enter the consumer market with "MaisoyForte", а maize-soy





blend breakfast cereal fortified with nutrients such as vitamins and iron. In the Ghanaian market, this type of cereal food is called "Tombrown."

Despite its comparatively low price and nutritional superiority over substitute products, sales for MaisoyForte was sluggish. About half of the products distributed to supermarkets and retail shops in the Ashanti and Brong-Ahafo Regions were returned unsold. Retailers were decreasing shelf space for the product to make way for products with higher demand.

In mid-2015, Yedent Agro sought the help of USAID's ADVANCE projectto address the low sales of MaisoyForte. The project hired a consultant to assess the product's market and competitive position, and subsequently developed a marketing strategy and action plan to increase sales.

The assessment established that the market perceived the product as different from "tombrown"—the product name and packaging did not reflect its content; and the package design was opaque, making it difficult to see its contents.

The consultant recommended a rebranding including renaming the product to reflect its content, and switching to transparent packaging.

In December 2016, the firm completed rebranding the product and purchased a branded distribution van. The deployment of billboards and radio adverts to improve brand awareness complemented these rebranding efforts.

After ten months of product rebranding and relaunch, Yedent has multiplied sales of the product tenfold from an average of GHS3,800 (\$848) monthly to GHS37,667 (\$8,408). The product has regained shelf space.



The number of retail outlets carrying the products increased from nine in the Ashanti, Brong Ahafo and Greater Accra, to 70 across all 10 regions of the country. Current monthly production volumes have increased by 800 percent from 0.48 MT to 4.71 MT.

Yedent's farmers have seen increased demand for maize and soybean. In 2017, USAID's ADVANCE project facilitated an outgrower scheme between Yedent and Suleman Abdul Karim, a USAID's ADVANCE

project outgrower business in the West Mamprusi District in the Northern Region. The project will continue to enhance the outgrower schemes to enable famers access good quality inputs, and a guaranteed market for their produce.

13. Promoting Sustainable Land Preparation Technologies for Increased Yields

USAID's ADVANCE Project Adopts Planting Basin as an Alternate Method of Land Preparation for Smallholder Farmers in Northern Ghana



A smallholder farmer in the Upper West Region and his team marking out lines for laying out and digging for a hand dug precision

USAID's ADVANCE project adopted planting basins as an alternative for smallholder farmers who are unable to obtain timely land preparation services such as ploughing and ripping. The branding for this process is called, "manual ripping." This is particularly useful for women smallholder farmers who produce on relatively small acreages, and often finds it difficult to access timely tractor services. The advantages of basins are enormous. Basins enhance water retention from the first rains of the wet season and enable precise application of both organic and inorganic fertilizer (where available) as the fertilizer's

application is directly into the pit and not broadcasted. Basins help concentrate the fertilizer (manure or chemical) where the crop is planted. Also, maize under basins develop extensive rooting system that makes them effective in tapping water and minerals required by the plants for growth and development. Incidents of lodging in maize is reduced due to the enhanced rooting system that properly anchors the plants to the soil.

USAID's ADVANCE project established 13 basin demonstration sites in the Upper West Region in 2017, to demonstrate the benefits of planting basins as an adaptation strategy for dry soils and low rainfall areas. The plants under basin demos had extensive root development, thus making them efficient tappers of water and minerals relevant for plant growth and development, and resulting in healthier looking plants. During short periods of drought, the plants in basins thrived while the ones on the plowed field showed serious stress signs. The widespread root development of plants in basins made them more resistant to lodging than conventionally prepared plots.

Mr. Nasir-deen Mohammed who is lead farmer for Hafiz Seidu-Deen, an outgrower business owner in the Upper West Region, noted that this year (2017) when there was a dry spell lasting three weeks, the maize plants on the basins were the only ones looking fresh in his community. All other crops started wilting.

"What is remarkable is the uniformity of growth of the maize crop on the planting basins. Next year, I plan to prepare my five-acre maize farm using planting basins." —Nasir-deen Mohammed, lead farmer, Banungoma, UWR

The participating farmers also reported that most plants in the basin had new shoots which sprout up into new plants with some almost the same size and height as the original plant. These encouraging results are attributable to the suitable conditions including moisture conservation, localized nature of fertilizers in the basin and loose soil created by the basins.

The planting basin technology is the best mitigation measure for smallholder farmers in Northern Ghana where dry spells are increasingly becoming common. Besides it conserves the soil better by reducing soil susceptibility to erosion. USAID's ADVANCE project will continue to promote this conservation agricultural technique in the coming crop season. In 2018, eight OBs are earmarked to establish 4-acre each as



This farm belongs to a smallholder farmer, Polee-na Mahame, in Joleriyiri community in the West Africa, West District. There are two sets of maize plants shown in this photo. The one on the left is on a conventional plot; the other on the right is a demo prepared with basins. The farmer, Polee-na, is touching the plant on the basin to show its height. Acknowledging the benefits of the basin, he has avowed: "If God doesn't take my life, I can assure everyone that I will adopt the basin technology on my 25-acre land next year. The basin shows good results and is easy to practice."

demonstration farms (32 acres in all), in locations not reached by mechanized land preparation services.

14. Strengthening Marketing Linkages for Increased Commodity Sales

USAID's ADVANCE Project-Facilitated Market Linkages Led to Expansion of Commodity Sales by Outgrower Businesses in the Northern Region of Ghana



Imoro Tijani by the side of his stored grain in Gushegu in the Northern Region.

As a result of these linkages, the OBs and FBOs have supplied and sold a total of 3,159.74 MT of maize, paddy rice and soybeans valued at GHS 3,329,314.40 within six months in 2017 commodity sales period compared to GHS 1,100,000.00 in 2016 during the same period.

One of the main objectives of the USAID's ADVANCE project is to increase market access and trade for maize, rice, and soybean farmers in the project's zones of operation. The project's approach to achieving this objective is through a multi-facilitated market linkage approach including trade missions involving buyer and seller business exchange visits, pre-harvest agribusiness events, market or trade fairs and events, transport linkages, and capacity development of the value chain actors to participate actively in the value chain.

In pursuit of this objective, USAID's ADVANCE project, has, as of FY17, assisted 150 outgrower businesses (OBs) and 12 farmer based organizations (FBOs), have linkages to over 12,306 smallholder farmers, to expand trade and market opportunities with formal end market buyers as well as strengthening existing trade relationships.

The majority of these end market buyers are in the southern part of Ghana especially Ashanti and Brong Ahafo Regions who need soy, maize, and paddy rice for processing. The end market buyers include Vester Oil Mills Limited, Royal Danemac limited (soymeal processors based in Kumasi), GhanaNuts, Yedent Agro Industries and EGABs Ghana Limited (soymeal and food processors based in Sunyani), Agricare Company, and Premium Foods Limited and Agrisolve company (maize buyers and food processors based in Kumasi and Tema). AVNASH Industries Ghana Limited, Nyebu Biyoona, and Tiyumba Women rice processing centers based in Northern Region and Wurawura Rice Company in Volta Region are the major rice buyers.

Because of these linkages, 141 OBs and 12 FBOs sold a total of 6,133 MT of maize, paddy rice and soybeans valued at GHS 6,765,956 (\$1,510,258) in 2017 compared to GHS 3,329,314.40 (\$835,881) during the same period in 2016.

Imoro Tijani, from the Gusheigu District of the Northern Region, is one of the outgrower businesses who has benefitted from project interventions on market access. Imoro joined USAID's ADVANCE project in 2015 with 64 outgrowers, but because of USAID's ADVANCE project market linkage approaches, he expanded his outgrower base to 250, in 2017, who are cultivating soya and rice. For example, take Imoro's linkage to Royal Danemac, one of the major soya processors in Kumasi, in 2015.

He sold 54 MT of soy to Royal Danemac for processing. In 2017, Royal Danemac prefinanced Imoro's aggregation activities and he supplied 119.20 MT of Soya valued at GHS 140,935 (\$31,458)

15. Transforming Farmer-Based Organizations into Farmer Based Enterprises

USAID's ADVANCE Project Supports Tiehi-Sung FBO to Enhance Service Delivery and Productivity



Tiehi-Sung cooperative members in front of their office

USAID's ADVANCE project supports Farmer-based Organizations (FBOs) to transform into Farmer Based Enterprises (FBE) that can provide valuable agribusiness services to their members. An FBE Is a business minded organization that provides services (ploughing, bulk input purchase, bulk sales etc.) and is economically beneficial to its members.

One of the FBOs is Tiehi-Sung. In 2013, 10 farmers in West Africa in the Upper West Region of Ghana came together to establish Tiehi-Sung Farmer-based Organization (FBO). Their goal was to contribute money and ideas as means for peer

assistance. They believed that as a group they were better off than individuals to purchase inputs, sell grains and obtain financing.

In December 2014, Tiehi-Sung linked to USAID's ADVANCE project and participated in a USAID's ADVANCE project event where cooperative members learned the importance of adopting good agricultural practices (GAPs), including the use of appropriate agroinputs, particularly high yielding maize seed varieties like Pannar and Pan 53. The project also facilitated a linkage between Tiehi-Sung and 18th April, a local input dealer. This linkage enabled Tiehi-Sung to purchase 50 kg of certified Pannar seed and about 250 kg of improved certified aromatic Jasmine 85 rice seeds from April 18.

In November 2015, the project facilitated Tiehi-Sung for registration as a cooperative with the Department of Cooperatives, with over 59 members including 37 men and 22 women. Also in 2015, USAID's ADVANCE project facilitated them to seek additional financing from Sinapi Aba Trust, in addition to the GHS 7,000 (\$1,562.5) they raised internally. The cooperative received GHS 14,000 (\$3,125) from Sinapi Aba to buy fertilizers and improved seeds. Furthermore, USAID's ADVANCE project linked Tiehi-Sung with Yahaya Idris, an outgrower business (OB). He purchased 23 MT of maize valued GHS 25,000 (\$5,580) from Tiehi-Sung through a sale agreement. Tiehi-Sung's linkage with Yahaya Idris also promoted access to plowing and threshing services. Accessing such services can be challenging because of high demand, therefore, Tiehi-Sung is planning to purchase its own equipment in the near future.

With the USAID's ADVANCE project GAP training, the adoption of new farming methods, and the linkages with access to farm inputs; the Tiehi-Sung farmers observed their maize yields increase from 0.5 MT per acre to 2.375 MT per acre, and from 0.6 MT per acre to 2.725 MT per acre for rice within one farming season. The cooperative members are very excited with USAID's ADVANCE project support and are optimistic about continuing to have enhanced service delivery.

16. Enhancing Job Opportunities For The Youth Through VSLA

An Unemployed Graduate Gains Employment with a Commercial Bank because of Dedicated VSLA Service



Abdulai Abukari taking records of VSLA transaction by one of his groups at Sampayili.

The Village Savings and Loans Association (VSLA) approach implemented by USAID's ADVANCE project ensures that smallholders who do not have access to formal banking services are able to save and borrow to purchase agricultural inputs and increase productivity. As at December 2017, the project had formed 926 VSLAs with an approximate membership of 20,000 beneficiaries. The groups received training in saving and recording their savings, conducting meetings (in an orderly fashion and proper recording of minutes), leadership roles, developing group statutes and regulations, and finally, on savings and borrowing from the VSLAs.

Community volunteers received training on the VSLA concept and they in turn trained members of VSLAs in recordkeeping and other activities that take place to ensure that the groups are sustainable after the exit of the project. Therefore, Abdulai Abukari, an unemployed bachelor's of arts graduate from the University for Development Studies, received training as a VSLA volunteer to support four VSLAs with about 100 beneficiaries. One of the roles of Abdulai was to link his VSLAs to banks for financial services. Although this initiative was challenging, he successfully linked two groups (Kpanmanga and Bobgunyeyaa Groups from Sambu community) to the National Investment Bank in February 2017. The two groups opened bank accounts with a total savings of GHS15,000 or \$3,345.68 (GHS8,000 or \$1,784.36 for Kpanmanga, and GHS7,000 or \$1,561.32 for Bobgunyeyaa). Based on the returns, the two other VSLAs opened accounts with the same bank, with Abdulai Abukari playing a vital role in the process. The instrumental role Adbulai played by liaising with both the bank and the groups to mobilize funds for savings earned him the admiration of the bank officials, who went ahead to employ him in June 2017.

"I am grateful for the training I received from USAID's ADVANCE project. The skill set I received through their trainings and activities landed me a job, three years after graduating from the university. I am also glad the VSLA groups have seen the need to enroll with the formal banking sector to access credit and other facilities."—Abdulai Abukari, USAID's ADVANCE project training beneficiary

Currently, Abdulai Abukari works for the National Investment Bank at the Yendi branch. His livelihood has improved and he now contributes financially to his family. He intends to save some of his salary to pursue higher education. He has mobilized 44 clients in the Sambu area of the Mion District in the Northern Region for the bank. He has also shared his experiences on VSLA linkages to financial institutions with eight groups in Kpanashe in Gushegu. USAID's project ADVANCE seeks to use the

VSLA approach for smallholders to purchase production inputs to increase yields and income. In FY18, the project will set up 200 new groups and provide the needed guidance to make the group members economically empowered.

17. Expanding Access to New Markets

An Outgrower Business Optimistic of Selling Farm Produce on the International Market



(VSLAs) by USAID's ADVANCE to mobilize additional resources to activities.

Mahama participated in his first trade southern part of Ghana in 2015

When Mahama Tia dropped out of school because he lacked funding, he decided to become a farmer just like his father. He had grown up working on the farm but wanted to do things differently. In 2008, he purchased a used tractor and started plowing on credit for about 50 of his neighbors. In 2014, he linked to USAID's ADVANCE project, and thereby expanded his business. Currently, Mahama supports 339 outgrowers, including 133 women.

One of his first goals after starting his business was to expand the number of outgrowers he could serve. To reach this goal, he identified nine lead farmers who organized the neighbors into producer groups. Mahama offered five bags of fertilizer and plowed four acres for each of the nine lead farmers. Each producer group member had the responsibility to repay in-kind in produce. In 2015, the groups formalized into Village Savings

and Loans Associations project, to enable them fund the farming

"I can now sell any MT of maize. I don't have to worry about the market" —Mahama Tia, USAID's ADVANCE project beneficiary

mission to the organized by USAID's

ADVANCE project where he contacted Premium Foods Limited. He received 300 bags of fertilizer and 0.9 MT of improved maize seeds on credit and he repaid fully with 64.30 MT of maize valued at GHC43,440 (\$10,906.) This was his first real experience with such a contract scheme and was transformative to both his business and his outgrowers, as he could sell in bulk to large processor 500 kilometers away. Hitherto, his stay in Janga community made him isolated and sold only in the local market.

In 2016, USAID's ADVANCE project facilitated a contract between Mahama and Agricare, an agrofeed processing firm in Kumasi, to receive four bags of fertilizer and a bag of Dupont Pioneer maize seed per acre in return for 0.8 MT of maize per acre valued at GHC972.23 (\$221.92) as repayment. Agreeing to the proposal, Mahama registered 60 acres through this scheme with his outgrowers. During that season, although the rains were unfavorable some farms realized up to 1.7 MT per acre. All his farmers repaid on time and Mahama was able to fulfill the terms of his contract. He also aggregated on behalf of Agricare and to date has delivered additional 130 MT of maize.

As of FY17, USAID's ADVANCE project had facilitated 742 contracts between nine buyers and 150 outgrower businesses estimated to cover 72,088 MT of maize, rice and soybean valued at \$8,781,545. The project also supported 1,034 private enterprises, producer organizations, trade and business associations and community-based organizations (CBOs) through training, facilitating access to loans, and business development services. The OBs are also applying the knowledge and experienced gained from the project to enter into contracts with buyers on their own.

18. Improving Outgrower Business Services is Beneficial to Many Smallholders

USAID's ADVANCE Project Facilitates an OB to Expand His Business and More Than Doubles the Number of His Outgrowers within Five Years



Enoch Akisiba sitting in a tractor which he received from USAID's ADVANCE project in 2016.

"The key to success is to deliver quality services that your farmers need."

 Enoch Akisiba, outgrower business owner and USAID's ADVANCE project beneficiary Enoch Akisiba started his outgrower business (OB) in 2012 with 14 outgrowers. Through the USAID's ADVANCE project facilitation, he increased his outgrowers from 265 to 637, with more than 75 percent being women from 2014 to 2017. Enoch believes that the reason for such an exponential growth in the number of outgrowers, is due to the quality services he provides to his outgrowers.

Enoch believes that customer service is one of the most important criteria to making a business successful. Enoch organizes quarterly meetings with his outgrowers where he updates them on emerging trends and farming practices. Together with his outgrowers, he sponsors the establishment of demonstration farms to showcase good agricultural practices. While he funds the cost of the demonstration (seeds, fertilizers, and chemical input) the outgrowers offer the land and labor.

Through USAID's ADVANCE project, Enoch learned how to manage his growing business, including how to keep records. He also participated in trainings on good agricultural practices, post-harvest handling, quality and standards, farming as a business, numeracy and the outgrower business management (OBM). Through USAID's ADVANCE projectsupport, Enoch became a seed grower, when his outgrowers complained about not being able to find certified rice seeds. Through the project's facilitation, he received foundation seed for rice from Savanna Agriculture Research Institute (SARI) to produce certified seeds for the outgrowers under the supervision of the Ministry of Food and Agriculture (MOFA). He now provides seeds on credit to his outgrowers, with Agra and Jasmin 85 being the varieties in high demand.

Enoch also aggregates from his outgrowers to offer them a better market. Through a linkage by USAID's ADVANCE project, he has a contract with AVNASH, a large rice processor, but he notes that the standards can be challenging to achieve. Rice is graded based on purity and sometimes the process in agreeing on grades is complicated. In 2016, Enoch delivered 16 MT of rice on contract to AVNASH. Enoch anticipates continuing his relationship with AVNASH but is also exploring other markets.

In 2017, Enoch established a mechanized model farm of four hectares which yielded 5MT/ha. One trend he has noticed is that some of his long term outgrowers are no longer seeking support. Instead they are coming to him to buy his seeds with cash. This is a good development because his business is making a difference in people's lives in a sustainable way. Enoch is grateful to USAID's ADVANCE project for

helping him to improve the quality of his services and expanding his outgrower base. In 2018, Enoch will serve as a mentor on model farm establishment for other farmers in his district. The project will provide him with the needed training and logistics until his business is sustainable.

19. Linking Private Sector Actors to Scale Up Production

Private Sector Firms Support Farmers' Technology Adoption



An Agricultural Extension Agent of the Ministry of Food and Agriculture educating farmers on good agricultural practices at Gbulung, Northern Region.

Agric Services, Simple Prince Company Ltd., Enterprise, and N2 Africa/SARI; contributed fertilizer, herbicides, and inoculants to demonstrations. By availing these inputs, the sector firms promoted their products to increased sales and received feedback for product design and distribution. Making inputs to farmers led to the sale of 310.7

Year after year, Northern Ghana farmers continue to reuse their seeds, even with decreasing yields. Improved varieties of seeds have become available, with the potential of a four-fold increase in yields. However, access to these certified or improved seeds, fertilizer and pesticides remains a constraint for farmers.

To improve the supply of certified seeds—especially in Northern Ghana—USAID's ADVANCE project partnered with 21 private firms and Ghana's Ministry of Food and Agriculture and trained 66,362 farmers in good agricultural practices (33,245 males and 33,117 females) using 1,344 demonstration sites as of FY17. The private sector firms; including Wienco, Dizengoff WA, Chemico, Yara Ghana Ltd., Heritage Seeds, Lexborg Ltd., Meridian

"This year, the field activities have been very good promotion for sales especially in the Upper East Region. Sales are likely to be more than doubled due to farmers' exposure through the demonstrations, input promotions, farmers' sales days and radio sales promotions."—Roland Quaye, Wienco, USAID's ADVANCE project private firm partner

Antika seeds, establish the private the farmers, improved available the MT of

seeds, 95,624 bags of fertilizer and 125,869 liters of other agrochemicals valued at GHS 11,087,102.85 (\$2,578,396).

To ensure that their outgrowers learn and adopt appropriate technologies and/or management practices, 373 Outgrower Businesses (OBs) partnered with the private sector to set up the demonstrations. The farmers provided land, land preparation services and contributed herbicides and weedicides to establish the demonstration plots. Through this private sector support, yields obtained on the demonstration sites for maize, rice and soybean were 5.39 MT/ha, 5.36 MT/ha and 2.76 MT/ha respectively far above the national average yield of 1.82 MT/ha, 2.64 MT/ha and 1.64/ha respectively according to MOFA.

With the knowledge acquired at the demo sites during the training and field days, the farmers can increase their yields and subsequently their incomes when they apply what they have learned. The collaboration has also created awareness and demand for seed, fertilizer, herbicides, and inoculants among smallholder farmers.

20. Impact of USAID's ADVANCE Project on a Lead Farmer

The story of how a lead farmer built his house and bought a motorbike



Abdul-Kadiru Imoro, standing in his own house, built through increased crop yields.

Kharma Farms is an outgrower business operated by Muhib Hussein and supported by USAID's ADVANCE project. Through the project's lead farmer system, well-established outgrower businesses select lead farmers who represent them in their communities.

In 2014, Kharma Farms identified Abdul-Kadiru Imoro as a potential lead farmer in Sampayili and provided him with ploughing services for a four-acre land, on which he cultivated soybeans and rice. He harvested 5.13 MT/ha of rice and 2.5 MT/ha of soy at the end of the season,

compared to previous yields of I.75 MT/ha and 0.5 MT/ha for rice and soybean, respectively. After fully repaying the cost of the services to Kharma Farms, Abdul-Kadiru bought a motorbike from the proceeds.

Following Abdul-Kadiru's success, Kharma Farms confirmed him as a lead farmer. Abdul-Kadiru has since received several trainings from USAID's ADVANCE project, including trainings on good agriculture practices, pesticide spraying and grain quality standards; which have helped him improve his farming techniques. In 2015, Kharma Farms increased Abdul-Kadiru's acreage from four to eight. He cultivated three acres of maize, three of rice and two of soy. He adopted USAID's ADVANCE project technologies; and his yields for that year increased to 5.2 MT/ha for rice, 4.5 MT/ha for maize, and 2.6 MT/ha for soy. He generated enough sales' proceeds to build a house.

"I built my house and roofed it with aluminum roofing sheets and still had enough food for my family. I am a proud man and I am proud to be a beneficiary of the USAID's ADVANCE project interventions. May Allah bless ADVANCE and their sponsors so that they can continue to guide us further to reach greater heights," —Abdul-

Kadiru Imoro, lead farmer and USAID's ADVANCE project beneficiary.

For the Sampayili community, where most houses are built with mud and roofed with thatch because of low income, it is a great achievement to have a house built and roofed with aluminum roofing sheets.

"In 2017, Kharma ploughed four acres of maize for me, gave me yellow maize seed with fertilizer, I planted in rows and buried the fertilizer, today it is about 70 days old, and when I look at the farm, I [am] satisfied;



therefore, I cannot hide my story," Abdul-Kadiru Imoro says.

Moving forward, Abdul-Kadiru Omoro plans to transfer his acquired best farming practices to other smallholder farmers in his community to strengthen their capacity and increase their farms' yields.

21. Facilitating Effective Market Linkages and Quality Management System in Grain Supply Chain

Traceability Codes Improve Quality of Produce Farmers Deliver to Feed Processors

For Agricare, a Kumasi based feed miller, producing 6000metric tons of feed per annum, tracking the source of poor quality maize delivered to its factory to a specific farmer remained a huge challenge. In 2016, the company supported 14 nucleus farmers and 334 smallholders with seed and fertilizer. In exchange, farmers paid back 712.50 metric tons of maize which translated into 14,250 bags of maize of 50Kg weight each.

Nucleus farmers will typically aggregate the maize from their smallholders in various communities in Northern Ghana, add theirs, and deliver it to Agricare in Kumasi in truckloads of 500 to 600 bags per consignment. Due to the absence of adequate storage facilities, nucleus farmers most often weigh, package and leave the produce in the custody of smallholder farmers, and later hire trucks to load and deliver it to the buyer.



Bags of maize with traceability codes in a smallholder farmer's community ready for collection

Some of the consignments delivered to Agricare included underweight bags (50Kg), inferior quality grain, or grain with too much foreign material. Nucleus farmers found it difficult to identify and isolate these bags from hundreds of bags before delivery to the buyer. Where a defective bag was identified, the next challenge was tracing it to the source of supply.

The Intervention

To reduce the incidence of poor quality maize supply on the Agricare outgrower scheme, USAID's ADVANCE project and five nucleus farmers in the Upper West region in November 2016 piloted the use of traceability codes written on each bag of maize supplied to Agricare. Each code has the name of the nucleus farmer, name of the smallholder farmer, community, and the bag number. Smallholder farmers have their codes written on their bags in their presence before their produce is carted away by

the nucleus farmer, or his or her representative. The selected nucleus farmers generated and wrote traceability codes on all the bags of maize they supplied to Agricare.

The Outcome

At the end of the 2016 farming season, all smallholders on the scheme supplied maize that met



Maize with traceability marks in Agricare warehouse

the quality parameters of Agricare. The company did not report any underweight bags, or grains mixed with foreign materials.

Emmanuel Yobor, a nucleus farmer in the Upper West region, joyfully describes the traceability coding as his "new packaging security man". On its effectiveness, he says "with the codes, all smallholder farmers know that bad maize supplied by them can be traced to them so they package the produce to meet high standards. Produce left in their care was not tampered with because they had their unique marks on them".

Emmanuel directs a vehicle from Agricare to a smallholder farmer in Dasimah in the Sissala West District of the Upper West Region of Ghana to load and deliver maize to Agricare unaccompanied. He

is confident of the quality, and knows that he can trace any defective bag to its source. Previously, Emmanuel or his field officer would have to accompany the vehicle to the community, randomly sample bags from the consignment to inspect its contents and weigh them to ensure that Agricare's quality requirements were met before loading them into the truck.

Another nucleus farmer, Yahaya Seidu in Buoti, also of the Upper West region, has allowed smallholder farmers to fill sacks of maize in their homes, and bring them to a specified location for weighing. Previously, Yahaya would send a representative to the



A truck discharging maize with traceability codes at Agricare

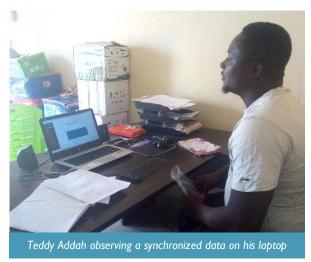
smallholder's farmer community to supervise the packaging process.

For Agricare, the traceability coding has saved the company the time and costs of labelling each bag of maize before storage. It can investigate any quality defects in any batch of feed produced to the source of maize. William Ahiadormey, Managing Director of Agricare, has, on some trade missions to farmer communities, asked to meet some smallholder farmers, based on their traceability codes, to commend them for their high-quality supplies.

In 2017, the traceability coding was adopted by 18 additional nucleus farmers and their smallholders from the Upper West Region (they are implementing the scheme on a full scale out of a total of 79 outgrower businesses.) who are suppliers to Agricare and other large processors. In 2018, Agricare intends to make traceability coding of local maize mandatory for its local suppliers. Consequently, USAID's ADVANCE project is providing the requisite support to all beneficiaries of the Agricare scheme to enable them meet this requirement.

22. Sustaining Improved Agriculture Services through ICT

An Outgrower Business' Initiative Gives Signs of Sustainability of Technology Adoption for Improved Outgrower Management Services



West District and Kassena Nankana Municipality.

The use of technology and digital equipment for business activities, including agriculture production, is on the upsurge. However, technology adoption for information management is a challenge for many farmers in northern Ghana. Teddy Addah, outgrower business (OB) and owner of Kolada Farms and Trading Company Ltd, in Navrongo in the Upper East Region with over 90 outgrowers sought to overcome this challenge. Among other things, he wanted to intensify extension delivery services such as distribution of inputs and delivering of good agronomic practices for his outgrowers who were spread across communities in the Kassena Nankana

Being aware of his intent, the project facilitated a business linkage between Teddy and Farmerline, an ICT-based company, during the 2017 USAID's ADVANCE project pre-harvest event. In December 2017, Teddy signed up on Farmerline's Mergdata, an application which enables bulk voice and SMS messaging, mobile surveys and data collection to improve operations. It also improves real-time information access, dissemination, data collection, and analytics for these businesses.

Through this technology, Teddy by himself captures and manages the profiles and accounts of his field staff and production records of his outgrowers. The application has a functionality to map exact farm locations. After using it for five months, Teddy successfully profiled and took GPS coordinates of his farmers to precisely determine where they live. Once his field staff collects the data, they automatically synchronize it on Teddy's laptop. The application has relieved Teddy of the long and tiring manual data collection and increased his efficiency in information dissemination, data management, and monitoring of his field staff work. "The Mergedata has improved my filing system; data collected on the field automatically synchronizes with my laptop in the office. I monitor the work of my field staff remotely. I have spent only GHC450 (\$100) on data capturing and analysis on my farmers but would have previously spent over GHC2,000 (\$444) for same activity." Teddy shares.

The project is particularly excited that Teddy confidently adopted this technology, which shows a sign of sustainability by the OB's commitment to invest in it beyond project's support. "I am very certain to continue this activity even when USAID's ADVANCE project exits. I thank them so much for linking me to Farmerline and providing me with all the trainings. But again I say that, I can, and will continue with the application with or without the project", Teddy added. He will begin to send bulk texts messages to his farmers using the same application. USAID's ADVANCE project will support him in developing and

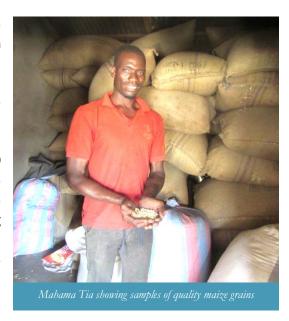
localizing the content for his farmers.

USAID's ADVANCE project has reached over 54,140 beneficiaries with ICT services including radio broadcast and agricultural tips, weather and market price information through Voice Messaging (VM) and Short Messaging Service (SMS), and will continue to facilitate the training of OBs and field agents on various technological tools for improved outgrower management services.

23. Quality Grain Standards, a Tool for Profitability

Adoption of Quality Grain Standards by Smallholders Increases an OB's Profit Margin

Mahama Tia, an outgrower business (OB) owner in the Northern Region, joined USAID's ADVANCE project in 2014 and supports 339 outgrowers, including 133 women. In 2015, the project linked him to Premium Foods Limited, a food processing company based in the Ashanti Region of Ghana, with whom he signed an outgrower contract to purchase 300 bags of fertilizer and 0.9 MT of improved maize seed at GHC 34,500.00 (\$7,701) on credit that he will repay after harvesting. He fully repaid his debt by supplying 64.30 MT of maize (valued at GHC 64,728.00 or \$13,741.15 including repayment for the inputs and extra sales) sourced from his smallholder farmers to the company. Based on this success, Mahama signed, in 2016, another contract with Agricare, a processor in Kumasi.



Mahama, however, faced a challenge in delivering quality grains because the practice of cleaning maize (which involves winnowing, weighing, bagging, sewing and packing) after shelling was new to the smallholder farmers who benefited from the OB's services. Because of poor quality, he spent GHS 3,200 (\$714) to hire labor for more than 30 days to clean 64.30 MT of the maize consignment to Premium Foods. The extra cost of production drained his profit and delayed supply to the company.

USAID's ADVANCE project worked with Ghana Grains Council and Ghana Standards Authority to develop grain quality standards on maize, rice and soya, and trained 60 staff from the Department of Agriculture and lead farmers who work with OBs on meeting those standards and handling post-harvest. Mahama leveraged the opportunity to train two of his lead farmers who in turn trained over 300 of his smallholder farmers from the latter part of 2016 through 2017.

As a result of the post-harvest and quality standard trainings, the smallholder farmers better appreciated the need to clean their maize after shelling and adopted the practice. "In late 2017 and early 2018, the farmers themselves packaged their maize produce into Agricare's and Premium Foods' 50Kg bags after cleaning, which saved me the cost of transporting the maize to my place for cleaning and re-bagging", Mahama shares. Within the same period, Mahama supplied more than 482.5 MT of maize to Premium Foods Limited and Agricare which were cleaned by his smallholder farmers. This resulted in savings of more than GHS 24,075 (US\$ 5,374) which would have hitherto been spent on cleaning. An elated Mahama Tia remarked "I noticed a massive improvement in the quality of maize I now aggregate from my outgrowers after the training.

My outgrowers now clean their maize after threshing before bagging for me which was not done in the past sourced and supplied 113mt of maize from my farmers to Premium Foods and Agricare in 2017 alone without spending a cedi on cleaning. The food processors were very satisfied with the quality and requested me to bring more in 2018."

Beyond increasing his profits by meeting quality grain standards and selling to the food processors, Mahama is now considered a leading figure in quality standards by Agricare who relies on him occasionally to inspect the supplies' quality of other OBs with whom Agricare has similar contracts. Mahama's adopted quality standard practice has promoted good relationship with his buyers, increased his profitability and improved access to markets.

24. How VSLAs are Contributing to Reduction in Rural-Urban Migration

An Ex-"Kayayei" Shares How She Stopped Head Porting Business and Relocated Permanently to Her Hometown Because of VSLA

In Ghana, it is quite common for women in rural areas, especially in the north, to migrate to cities in the south to engage in head porting ²(popularly called "Kayayei" in the local parlance) to enable them to raise money to cater for their families.

Latifa Hamidu, a 39-year-old enterprising woman who lives in Boamasa, a farming community in the West Mamprusi District of the Northern Region, farms to generate income. Prior to fully engaging in farming, Latifa was forced by circumstances to engage in the head porting business in Accra in the Greater Accra Region from 2014-2016. "It was not a pleasant experience being a "Kayayei" at all. While it served as income generating venture for patrons, it exposed "Kayayeis" to a number of social vices such as sexual harassment and theft", Latifa narrated. She made an



average of GHC12.00 (USD 2.8) as income in a day when the market demand is high. On a typical bad day however, she made no money at all.

In early 2017, Latifa returned home to visit her family and met an old female friend who introduced her to USAID's ADVANCE project Village Savings and Loans Associations (VSLA)³, after hearing how Latifa suffered in the south. Latifa's contributions ranged from GHC12.00 (USD2.8) to GHC40 (USD 9) per week. After the share-out, she used some of her money to purchase 100 kilograms of fertilizer to farm maize on a 1.2 acres family land. After adopting good agronomic practices promoted by USAID's ADVANCE project, Latifa harvested 2.5 MT/Ha. She sold 0.5 MT and realized GHS 500 (USD 111), which she invested in small trading to generate additional income.

Latifa attributes her "new" life to the impact of USAID's ADVANCE projects' VSLA. She shares: "USAID's ADVANCE projets' VSLA saved me from Kayayei. I can vow that I will never go back to 'Kayayei' because I have a 'saviour', VSLA. VSLA challenges me (and other women) to contribute towards the purchase of agriculture inputs. Through that, I am into farming, with other income generating sources. What even gives me

² Head porting is a menial business where operatives make a living by carrying loads on their head, for example, in market areas and lorry stations for distances for which payment is determined by the owner of the goods

³ With a culture of savings, Village Savings and Loans Association (VSLA) members save amounts of money periodically to purchase input for agriculture production and be economically empowered.

joy and happiness is that, there is now increased unity among we the women in the community as we meet weekly to save and discuss issues confronting women, our children and the community at large."

She now stays in the community to take care of her children instead of travelling to the south to embark on Kayayei. "My children are fed well and are now concentrating on their education", she added. She hopes to become a VSLA ambassador to encourage all head porters who migrated to the south to return to their hometowns and make a more dignified living. USAID's ADVANCE project has set up 826 VSLA groups with a total savings of \$656,730 as of December 2017, which has contributed to improving agriculture productivity and enhancing livelihood.

25. Breaking Traditional Barriers for Women to Access Productive Land

USAID's ADVANCE Project has Contributed to the Allocation of 5,000 Acres of Agriculture Land to Over 3,000 Women



Some of the women representatives endorsing their portions of the MoUs at the signing ceremony at Walewale in the Northern Region.

Securing access to land, agricultural inputs and extension services is a prerequisite for promoting gender equity among farmers. However, women's access to such services in the three northern regions of Ghana is hampered by patriarchal practices and norms that deny women's property rights.

Since 2014, USAID's ADVANCE project has adopted three strategies to improve women's access to farm land: I) Use of existing outgrower business (OB) network in communities to help influence traditional custodians to avail land to female farmers. OBs take on the initiative of

raising awareness on the economic opportunities of women farmers to produce and achieve high yields. 2) Collaboration with other Feed the Future projects such as Ghana Commercial Agricultural Project (GCAP) that award grants to OBs for land development. Through USAID's ADVANCE project collaboration with GCAP, over 40% of such land development grants were awarded to women producers. 3) Work with advocacy groups such as the Coalition for the Development of Western Corridor of Northern Region (NORTHCODE) to convince traditional leaders and land owners in northern Ghana to allocate acres of land to women.

USAID's ADVANCE project organized community sensitization and lobbied with men-landlords, chiefs, and husbands in other districts in the three northern regions between March and May 2016. As a result, a number of OBs also successfully negotiated with traditional authorities and husbands of female outgrowers to release lands to women. Nicholas Lambini, an OB in Chereponi District in the Northern Region, negotiated with traditional authorities to secure 500 acres of fertile land for 500 women to cultivate during the 2017 production season by demonstrating how investment in women yield greater returns. Opportunity International, through an outgrower scheme with OB Yakubu Hussein in the Gushegu District in the Northern Region, helped 23 women smallholder farmers to acquire one acre of land each to cultivate soybean. Abdul Rahaman Mohammed, an OB in Kongo in the Garu-Tempane District in the Upper East Region, convinced local chiefs and opinion leaders to release land for 100 women to cultivate rice for the 2015 cropping season. Through the same type of project's intervention, Amidu Kala, an OB in Fatchu in the Upper West Region, released five acres of farm lands to five women; and Margaret Tablah, a woman farmer at Bussie in the Upper West Region, was granted 10 acres of her deceased husband's land by his family.

The Chief of Bussie in the Daffiama-Bussie-Issa District in the Upper West Region pledged: "We are

ready to hand over some of our fertile lands to our women, and support them with inputs to farm. I now appreciate that if women have access to fertile lands for production, there will be a sustainable food supply and the nutritional benefits of our foods in our homes will be enhanced to reduce malnutrition among our children".

USAID's ADVANCE project in June 2017 awarded a grant of GHC126,800 (\$28,304) and technical support to the Coalition for the Development of Western Corridor of Northern Region (NORTHCODE), a local NGO that operates in the Northern Region of Ghana, to advocate and influence traditional leaders and land owners in 16 communities in the Mion, West Gonja, West Mamprusi and Sawla/Tuna/Kalba Districts to allocate lands to women to farm rice, maize and soybeans. NORTHCODE carried out a research on the issue of women's limited access to and ownership of farm land in the four districts. The research showed that women lack access to fertile land closer to homestead, and are rather given land that is far away; which affects their productivity. These research findings were shared during a regional stakeholders' advocacy workshop in August 2017 in Tamale (Northern Region) where some stakeholders pledged their support to address the issues.

Between October and November 2017, NORTHCODE in collaboration with the Departments of Food and Agriculture in the four districts, successfully facilitated the signing of memorandums of understanding (MoUs) between the women beneficiaries and the traditional leaders of the 16 communities, who agreed and set aside parcels of land banks (parcels of land for future sale or development, including farming) for cultivation in the next farming season by the beneficiary women. It is expected that success of this initiative will further give tenure rights of 1,600 acres of farm lands to 1,000 women over a 10-year freehold lease period starting from 2018 farming season until 2028.

Adopting all these strategies have led to over 3,000 women accessing about 5,000 acres of lands across the three northern regions that they would not have accessed otherwise. USAID's ADVANCE project will strengthen its advocacy interventions for more land to be released to women.

26. Adopting Improved Agricultural Practices Enhances Livelihood

A Family Sends Its Children to University Because of the Adoption of Improved Production Technologies



Ceasar Akinkang is the owner of Adanseba Farms, which operates in three communities (Naadema, Baasa and Bachiesa) in the Builsa South District of the Upper East Region. He is an outgrower business owner who supports 185 smallholder farmers and provides various services to them, including land preparation and input support. Before becoming USAID's ADVANCE project beneficiary, Ceasar cultivated small acreages of land barely using any improved technologies, which resulted in low yields. In 2014, he cultivated 4 hectares of maize and 1.6 hectares of rice and produced 4.5 metric tons (MT) and 3.1mt respectively.

USAID's ADVANCE project trained 116,694 individuals on good agronomic practices (GAPs), post-harvest handling (PHH), produce quality standards, farming as a business (FaaB), Outgrower Business Management (OBM), among other modules, by December 2017. Ceasar joined USAID's ADVANCE project in 2015 and has since received various trainings including good agronomic practices and OB management services. With the knowledge acquired on the use of certified seeds and recommended fertilizer application, he saw improvement in his rice production from 4.5mt on 1.6 hectares (2.8mt/ha) in 2014 to 40mt on 8.4 hectares (4.8mt/ha) in 2016. In 2017, he expanded his farm to 20 hectares and increased production to 138mt (6.9mt/ha) by using improved technologies. He sold 30mt of rice to AVNASH (foodstuffs producer mainly in the rice lines of businesses), 42mt to Shinkafa Buni Rice Farmers Association, and 8.4mt to parboilers, all valued at GHC 94,620 (\$21,121). He also ploughed a total of 239 hectares for his 185 outgrowers and provided seeds and fertilizer to 49 of them.

With revenue from the season's activities, Ceasar purchased a secondhand John Deere tractor with a trailer for GHC 25,000 (\$5,580), a secondhand plough for GHC 3,500 (\$781), and a rotovator for GHS 4,000 (\$893). Ceasar recounts how joining USAID's ADVANCE project has improved his production and enabled his siblings to graduate from university. "Because of USAID's ADVANCE project, I had high yields, made a lot of money, and spent over GHC19,400 (\$4,330) from my own coffers to take care of two younger siblings in the College of Education in Bimbilla in the Northern Region with one of them currently pursuing a Bachelor's Degree at the University for Developmental Studies in Tamale. I am also comfortably taking care of my two children in primary and junior high school levels. Since 2016, I have paid their school fees in advance before school resumes. I have also set up a shop for my wife from which she makes additional

income to support the family. I credit USAID's ADVANCE project for these positive developments in my life".

In 2018, Caesar will continue to support his outgrowers by preparing their land and providing seeds and fertilizer. He also anticipates securing the services of a trained field agent to assist him in monitoring his fields and training farmers. The project will set up a four-hectare maize model farm for him and support him to cultivate additional eight hectares of maize and 40 hectares of rice.

27. Commercializing and Making Spray Service Provision Sustainable for Climate Smart Agriculture

Spill over results of spray service lead SSPs to form networks on their own initiative

USAID's ADVANCE project introduced the spraying service provision program in 2016. The project works with OBs to equip selected farmers with personal protective equipment (PPE) to provide safe pesticide application services to other farmers. These service providers are called spraying service

providers (SSPs). The SSPs train other smallholder farmers in their communities on safe use and handling of pesticides and spray farmers' fields with pesticides at an agreed fee.

As of December 2017, the project had trained and equipped 711 SSPs (all males) with PPE across the zone of influence. Out of this number, 564 sprayed 12,433 hectares of land for over 12,518 smallholder farmers; and realized GHC 263,014 (US\$54,795). In addition to educating and providing services to the farmers, SSPs are contributing towards the reduction of farmers' exposure to health



Kwame Akponjabil, an SSP, taking other SSPs through active ingredient identification and recording during an SSP training at Naadema in the Builsa South District

hazards from improper application, handling and storage of pesticides. "Being an SSP is not only about spraying people's farms but educating the farmers on safer use and handling of pesticides. Dressing in my PPE is enough education to the farmers in Prima as they mostly learn through visualization. I thank USAID's ADVANCE project for helping me to impact my community positively through this SSP program," Adam Wahab, a service provider in the Upper East Region said.

The benefits and interest in SSP participating in the program have spilled over beyond the project's involvement. Without project's support, SSPs trained 32 smallholder farmers in the Upper East Region in April-May. Further, the newly trained SSPs acquired their own PPE and sprayed a total of 26.2 hectares as of June 2018.

The SSPs' results have led them to form networks to make the intervention sustainable beyond USAID's ADVANCE project. In June 2018, with the project's support, SSPs in the Upper East Region formed networks in Builsa North, Builsa South and Mamprugu Moaduri Districts to oversee their activities. The Department of Food and Agriculture in the region has recognized the networks as functioning groups in the district. The networks will be supported to formally register with the Plant Protection and Regulatory Services Directorate (PPRSD) of the Ministry of Food and Agriculture (MoFA) and Environmental Protection Agency (EPA). The networks will plan and manage all SSPs' activities in their respective areas. They will engage various district offices of Department of Agriculture and other regulatory bodies in their activities for SSP business certification and trainings and reach more

communities.

The success of these three networks has become a model for replication in other regions. USAID's ADVANCE project will guide all SSPs to form networks in their districts to make their activities sustainable.

28. Empowering Women for Agricultural Production and Livelihood

"Providing land to women can help increase families' livelihoods", a male farmer and husband states

By collaborating with NGOs such as the Coalition for the Development of Western Corridor of Northern Region (NORTHCODE) and other projects, USAID's ADVANCE project is facilitating access to land by women for farming activities. As of March 2018, the project helped secure tenure rights for 1,600 acres of farm lands to 1,000 women over a 10-year lease period. The success of a female farmer, Asibobo Alhassan, in Kongo in Garu-Tempane District in the Upper East Region has urged her husband and community leaders to release more farming land to women in the upcoming 2018 production season.

Asibobo's husband, Alhassan Yakubu, cultivated 3.2 hectares of maize and harvested 0.45 MT on



A smallholder farmer in Garu-Tempane District in the Upper East Region engaged in winnowing activity

average in 2015 and 2016, earning an average of GHC 400 (US\$ 89) each year. In the 2017 production season, Asibobo requested 1.6 hectares of land from her husband to complement his efforts. Through USAID's ADVANCE project plea, Alhassan reluctantly released the land to his wife. She used 1.2 hectares for maize farming and the remaining for groundnut production. USAID's ADVANCE project linked her to an outgrower business (OB), Abdul Rahman Mohammed, who trained her on good agronomic practices, including row planting, fertilizer application, and pest management. After adopting these practices, she harvested 3.2 MT of maize and sold 2.5 MT, which generated income of GHC 2,500 (US\$558).

Asibobo's husband stated: "I was not so sure my wife could farm so I was reluctant to give her the land. Adopting USAID's ADVANCE project GAPs, she proved me and other men wrong. I now know that providing land to women can help increase families' income."

Because of Asibobo's success, the men in the community have expressed their willingness to release land to their wives to farm during the upcoming production season. Other women, upon witnessing the respect she gained from her husband and other men in the community, consult her on good agronomic practices. The couple intends to cultivate seven hectares in 2018. USAID's ADVANCE project OB will continue to provide them with the necessary training and help them access inputs. The project will strengthen its advocacy interventions for more land to be released to women.

29. Increasing the Productivity of Smallholder Farmers through Outgrower Schemes

Buyer outgrower schemes improve yields and profits of smallholder maize farmers in Janga

Abdulai Sayibu is a smallholder farmer based in Janga in the West Mamprusi District of the Northern Region. He has been cultivating maize for 15 years, as well as groundnuts and cowpea. Like many smallholder farmers in Northern Region, he faced challenges with accessing improved seeds, he neither applied fertilizer nor adopted most improved farming practices. "I started farming maize since I was 15 years old and I am now in my midthirties. For all these years, I never purchased certified seeds nor adopted adequate fertilizer application and row planting. My harvest was usually between 0.5mt to 0.8mt on two acres," Abdulai Sayibu recounted.



Abdulai Sayibu became a USAID's ADVANCE project outgrower beneficiary in 2015 and worked with Mahama Yakubu Tiah, an OB in Janga. He has since benefitted from training in good agronomic practices and quality standards. In 2017, he received input credit through the project's facilitated Agricare outgrower scheme⁴; specifically, eight bags of fertilizer and 30Y87 pioneer maize seeds to cultivate a two-acre land. With skills acquired through project's trainings and the application of the certified seeds and fertilizer, Abdulai harvested 6.8MT of maize from the two acres. Compared to his initial average production volume, the 6.8MT represents over 1,000 percent increase in his production volume because of USAID's ADVANCE project support.

With the 6.8MT of maize harvested, he paid 1.6MT to Agricare for the inputs and sold the surplus for GHS 2,300 (US\$479). He used some of the profit to purchase a motorbike to facilitate visits to his buyers and other farmers. In preparation for the 2018 farming season, Abdulai acquired additional land and expanded his farm to four acres with support from USAID's ADVANCE project outgrower scheme.

"I thank the OB and the USAID's ADVANCE project for the support. I got high yields and profit from maize farming because I had access to improved seeds and fertilizer, timely ploughing and threshing service from my OB. With the new motor, I intend to acquire a new land away from the community where the fertility is high to expand my farm and increase my yield next season," — Abdulai Sayibu

The project has linked 5,009 smallholder farmers to the outgrower schemes and will continue to

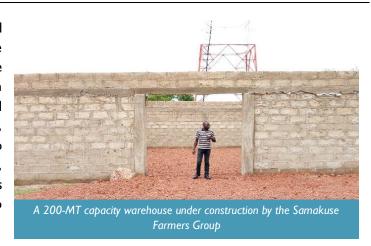
⁴ Linkage to Agicare allows him to access high quality inputs and guarantees markets to sell his maize produce.

support outgrowers through OBs to increase production and gross margins.

30. Positioning Farmer Based Enterprises as Key Agents of Change in Agricultural Value Chain

USAID's ADVANCE project strengthens the capacity of a farmer group for improved service delivery

Adam Aminu and Adam Abdullah, lead farmers in the Buipe District of the Northern Region, formed the Samakuse Farmers Group in 2010 to enable them participate in outgrower schemes and access production inputs such as seed, fertilizer, herbicides and insecticides to improve their productivity. For four years, the group struggled with business registration, record keeping, and access to agricultural inputs and end markets.



The group became a farmer-based organization (FBO) under USAID's ADVANCE project in August 2014 and has since received project support. Through USAID's ADVANCE project facilitation, the group leaders developed a constitution to guide their operations and registered the group with the Department of Cooperatives in Buipe District. The project trained group members in leadership and agricultural production activities such as: management of group dynamics, records keeping, numeracy, farming as a business (FaaB), Sell More Fore More (SMFM) and good agronomic practices (GAPs). To expand their marketing outlets, the project introduced group members to mechanized practices such as shelling, spraying service provision for business, large buyers, and financial institutions such and Abosokotre Rural Bank.

These interventions have enabled the group to graduate from an FBO to a farmer-based enterprise (FBE). Members operate with formal administrative structures, engage with the open market, and conduct collective purchases and sales of inputs and produce. They purchased two tractors, two shellers, two trailers, warehouse (under construction), tricycles, motorbikes, power tiller, knapsack sprayers, tarpaulins, weighing scales and manual planters. By adopting improved agricultural technologies, yields of individual FBE members improved from an average of 0.15 MT to 1.0 MT of maize per acre, with corresponding profits rising from GHC150 to GHC700 (US\$31 to US\$149) for the 2017 farming season. Their bank account balance is GHC 32,000 (US\$6,667) as of May 2018.

Samakuse Farmers Group has become exemplary to other organizations. They trained 11 FBO executives in four districts in FBO management. They oversee 13 smaller community groups with membership of 45 each, who serve as their outgrowers. The group not only advances loans to its members for production, aggregation and trade but also allows the members to leverage the group's assets as collateral to access loans from Abosokotre Rural Bank in Buipe. The rural bank has acknowledged the farmer group as their major partner in the district.

Out of the project's 148 FBOs, 52 have graduated to become FBEs as at March 2018. The project is working with the remaining FBOs to enhance their progression to FBE status to make them profitable in the agricultural value chain.

31. Building Outgrower Businesses' Capacity in Bookkeeping for Improved Management Services

Accurate bookkeeping leads to increased margins for Mic Mac Enterprise, a USAID's ADVANCE project-supported outgrower business

Michael Asutani is the owner of Mic Mac Enterprise, an outgrower business (OB) with over 625 smallholder farmers across eight communities in the Yendi Municipality in the Northern Region. Before becoming a beneficiary of the USAID's ADVANCE project in 2015, Michael was a nucleus farmer with 30 farmers from three communities and had farmed for over 10 years. While he would keep basic records on his ploughing services to his outgrowers, the records did not include data on sales, income and expenditure, or equipment maintenance (fuel, servicing and operator cost) records. This made it difficult for Michael to ascertain the true financial state of his business; he could not make sound business decisions and suffered losses.

Since becoming a project beneficiary, Michael has received project-facilitated training covering accurate record management, business and financial management, contracting and outgrower management, business operations analysis. With project support, Michael received two interns who supported him with bookkeeping during peak production season, from the University for Development Studies in 2017 and 2018. As a result, he acquired bookkeeping skills in income and expenditure, ploughing services, recovery, shelling, sales, and fuel management.

Mic Mac Enterprise owner, Michael Asutani (Photo credit: Joseph Kansaki,

Now, Michael keeps up-to-date records on all

ploughing services, including cash and in-kind payment, equipment fuel and maintenance cost, service provision to outgrowers in seed and fertilizer, marketing and sales. He also tracks repayment from outgrowers supported. In 2017, through knowledge in bookkeeping, Michael successfully determined the amount of fuel used for ploughing per acre, and this enhanced transparency and accountability between his machine operators and the farmers. He spent GHC 13,444 (USD 2,801) on ploughing services for 619 outgrowers and GHC 5,324 (USD 1,109) on tractor maintenance. If not for his newly acquired knowledge as a result of the project's training intervention, Michael could not have determined these figures exactly.

The bookkeeping also helped in repayment recovery. For the 2017 production season, he had 99% recovery for in-kind repayment. His increased knowledge in outgrower business management led to increased efficiency, timely equipment servicing, and tractor maintenance. Michael's production volume

also increased to two metric tons per acre, which is more than a 25% increase over his previous average prior to being a project beneficiary.

"Previously, I kept my records anyhow. I could not analyze the figures to make any meaningful decision to improve my business. Because of USAID's ADVANCE trainings, I can now set target for the business operation in terms of loan repayment, service provision, and revenue generation. I am also able to project profits for a particular season." — Michael Asutani, owner of Mic Mac Enterprise

Because of these successes, he has progressively increased the number of outgrowers he supports from 30 in 2015 to 625 in 2018. Michael is one of 373 OBs the project has trained to help them improve their businesses and offer quality services to their outgrowers.

32. Enhancing Tractor Operators' Capacity for Improved Service Delivery

A trained tractor operator shares how the USAID's ADVANCE project helped him break a major barrier

Many smallholder farmers in northern Ghana face the challenge of having limited access to quality-mechanized equipment. This is primarily due to lack of financial means to acquire equipment but also partly due to lack of qualified and trained equipment operators. Not having the appropriate equipment and know-how to prepare land can potentially reduce yields by 30 percent.

To address this challenge, the USAID's ADVANCE project has worked with equipment dealers, especially AFGRI, an agricultural services company that formerly represented John Deere in Ghana, to train 56 people, including tractor operators and outgrower business owners (OB) across the



Abdula Alidu, a USAID's ADVANCE project trained tractor operator with Mic Mac Enterprise, an outgrower business in the Yendi Municipality of the Northern Region (Photo credit : Joseph Kansaki, agricultural production officer)

three northern regions of Ghana on basic tractor operation and maintenance, since 2016.

Abdula Alidu, who is 40 years old and works with Michael Asutani, an OB in the Yendi Municipality of the Northern Region, benefited from the tractor maintenance training. Abdula previously worked as a hired tractor operator, providing land preparation and threshing services to farmers in the municipality. Throughout his entire 17-year career, he had never received any formal training in operating and maintaining a tractor and ripper until he took part in the USAID's ADVANCE project's facilitated trainings in 2016 and 2017. Prior to being trained, he had frequent tractor breakdowns, which resulted in incurring servicing costs and reducing his gross margins. After ploughing 50 acres of land, Abdula would spend GHS 3,000 (USD 625) on either maintenance or repairs.

Since being trained, Abdula has acquired skills in operating a tractor more efficiently, routinely checking of all fittings, reading and interpreting dashboard, scheduling servicing, ripping and ploughing, which has significantly reduced breakdowns. As a result, he received a John Deere tractor as grant from Michael Asitani and hasn't had any breakdown for a year. Abdula now provides quality ploughing services to smallholder farmers, which has won him the admiration of farmers, OBs, and other tractor operators in the Yendi Municipality.

"Now, due to the knowledge gained on tractor operation, there is reduced cost of maintenance. I invest the money I would have spent on repairs on other beneficial things. I am motivated to continue with the practice because my [fellow] operators are always curious to how I kept the tractor in that good condition. I now literally sleep with the tractor for good monitoring," Abdula said.

In early 2018, Abdula trained nine other tractor operators who had not received prior project's training. This will enable them to also improve their performance. He monitors and provides technical backstopping to the trained operators, as they encounter challenges. His vision is to continue to be an example to others. "The training has been beneficial," Abdula said. "I want to impart the knowledge to more operators on my own in the coming years." Many smallholder farmers in northern Ghana face the challenge of having limited access to quality-mechanized equipment. This is primarily due to lack of financial means to acquire equipment but also partly due to lack of qualified and trained equipment operators. Not having the appropriate equipment and know-how to prepare land can potentially reduce yields by 30 percent.

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33. Improving Outgrower Business Management through Digital Financial Services

USAID's ADVANCE project connects smallholder farmers to input suppliers and buyers through mobile money services

Most of the USAID's project beneficiaries live in remote communities in the three northern regions and Brong Ahafo Region with limited or no financial services. They therefore face challenges, including inadequate access to financial services and difficulty obtaining agrochemical and other agricultural inputs. To mitigate this situation, the project collaborated with financial institutions and telecommunications companies to provide digital financial services (DFS) through mobile money. This technology promotes cashless transactions among value chain actors to promote efficiency and reduce risk associated with cash payments.



Since 2014, the project has linked 4,756 actors to mobile money and trained 1,482 project beneficiaries, including 692 women, to become mobile money subscribers. Smallholder farmers appreciate the benefits of this digital financing system and patronize its use on their own initiative.

Adopting this DFS method has contributed to smallholder farmers' access to finance, improved payments, facilitated access to credit, reduced the risk of cash transactions, and facilitated the payment or recovery process. In August 2018, the project organized community input promotions for over 8,750 smallholder farmers across 16 districts in the Northern Region. Using mobile money and without the project's facilitation, 222 farmers from the Zagum, Fio Naya, Boamasah, Kinkandina communities in the West Mamprusi District followed up after the promotions. They purchased 13.2 metric tons of NPK fertilizer from Mumuni Enterprise, an input shop owned by Alhaji Mumuni Braimah, at a value of GHS17,952.00 (USD 3,740). Early purchase and application of fertilizer contributes to improved yields. "We do not have to travel long distances to give money to anyone. We can sit in the comfort of our homes and transact business. Because we have gotten fertilizer early, I am sure we will increase our production volume this farming season," a smallholder farmer said. The input dealer appreciated the payment system and remarked, "In 2017, USAID' ADVANCE project set me up as a mobile money merchant to facilitate transaction with clients. I am grateful to the project for that initiative. It is easier to transact business with farmers through mobile money than physical payment."

The mobile money service has also improved credit recovery for outgrower businesses. Matthew Mbanti Dagbanja, a nucleus farmer in the Yendi Municipality in the Northern Region, said that USAID/Ghana ADVANCE II's introduction of the electronic money payment system caused an appreciable number of smallholder farmers repaying their credits through mobile money. Matthew extended his services from 90 outgrowers in 2012 to 219 outgrowers in 2018. "Before the introduction of

mobile money service, my farmers either risked carrying cash or traveling long distances to purchase agrochemicals," Matthew said. "With mobile money, farmers now send money to me before I transport their goods to them in their respective communities. This makes the work easier."

Most input dealers have set up agents in the communities. These agents are mostly lead farmers, who provide services to smallholders receiving payment through mobile money. Additionally, mobile money has become a savings platform for most smallholder farmers, as they find it as a secure way of keeping money.

The project is scaling up the number of beneficiaries of DFS to 10,000 smallholder farmers by the end of 2018. The project will continue to work with the telecommunication industries to provide technical support to smallholder farmers through mobile money services to enhance their productivity.

34. Strengthening Market Linkages for Increased Commodity Sales

USAID's ADVANCE project intervention enables Vestor Oil Mills Limited to expand domestic distribution channel and increase soymeal sales

One objective of the USAID's ADVANCE project is to increase market access and trade for maize, rice, and soybean farmers in the project's zone of influence. One way the project achieves this is through strengthening the capacity of processors, including Vester Oil Mills Ltd., a Kumasi-based soybean processor, to allow them to participate actively and increase gains within the soybean value chain. In Ghana, mechanically processed soymeal suffers from stiff competition from the predominantly imported, solvent-processed soymeal because of the general perception among poultry farmers and the product's main users that the quality of Ghanaian meal is inferior.



Vester Oil Mills Limited, a USAID/Ghana ADVANCE Ilsupported business, operates a 45 metric tons-per-day mechanical expeller.

Vester Oil Mills had regular Ghanaian poultry farmer customers but in 2014, heavy shortages in the soybean supply left the customers with no option than to purchase imported products. When the supply improved in 2015, the company found it difficult to reclaim the customers it had lost. Consequently, it turned its attention to the Nigerian market, where the demand for mechanically processed soymeal by the poultry industry was stronger. Vester Oil Mills successfully exported 1,105 metric tons (MT) of soymeal to Nigeria from March through December 2015. In July 2016, the Nigerian naira, began to depreciate. Because of the naira's deep depreciation, Vester Oil Mills had to increase its products' sale prices by 179% and as a result, saw the Nigerian demand decline significantly. Vester Oil Mills had no choice than exiting the Nigerian market in October 2016.

USAID's ADVANCE project and Vester Oil Mills started to work together in October 2016, when the project introduced Vester Oil Mills' products to the Poultry Farmers Association in Dormaa Ahenkro in the Brong Ahafo Region — the biggest poultry enclave in Ghana. The association's members, who are all poultry farmers of mostly layer birds, were initially skeptical about the efficacy of the company's mechanically processed product. The project encouraged members of the association to volunteer some of their birds for a trial using Vester Oil Mills' soymeal. Six farmers volunteered 200 birds for the trial. Two weeks after the trial, all six farmers recorded a 66 to 87 percent increase in laying among their 200 birds. During the same period, the flock from which the 200 birds originated increased their laying by 73 percent. The trial's positive results led to a higher demand from farmers for Vester Oil Mills' soymeal.

In addition, the project also identified and assisted Vester Oil Mills to secure a premise in Dormaa Ahenkro's main market to store and sell. The owner of the premise, Nea Nyame Aye Farms, a USAID's

ADVANCE project-supported poultry business, offered the space to Vester Oil Mills at no cost to allow the company to save money and promote its soymeal to poultry farmers in the region. In less than a week after the trial's results, farmers purchased 75MT of soymeal compelling Vester Oil Mills to dispatch another I40MT from its factory at Aputuogya Abuoentem in the Bosomtwe District of the Ashanti Region to restock the Dormaa Ahenkro sales outlet.

Between November 2016 and December 2017, Vester Oil Mills recorded soymeal sales of 5,760MT in Dormaa Ahenkro. In January 2018, the company acquired two acres of land in Dormaa Ahenkro to begin construction of a permanent sales distribution depot. From January through December 2018, Vester Oil Mills sold 4,867 MT of soybean in the Dormaa Ahenkro market. Dormaa Ahenkro is on the Ghana-Cote d'Ivoire border, where the company's soymeal has caught the attention of some Ivorian poultry farmers who became regular customers. Fuani Farms, for instance, one of the biggest poultry farms in Cote d'Ivoire, purchases an average of 85MT of Vester Oil Mills' soymeal per week through KA Unity farms in Dormaa Ahenkro.

35. Changing Farmers' Lives through Capacity Building

An outgrower business (OB) owner increased his farming business assets and livelihood as a result of adopting USAID's ADVANCE project's good agronomic and agribusiness practices

The USAID's Agricultural Development and Value Chain Enhancement project (USAID's **ADVANCE** project) works with outgrower businesses (OB) and 131,411 smallholder farmers to improve their yields and gross margins in the maize, rice and soy value chains. From inception to date, the project has trained 123,845 beneficiaries (male: 62,896, female: 60,949) on good agronomic practices (GAP), post-harvest handling, and produce quality standards, and other agribusiness areas. The project's training programs have improved farmers' knowledge, productivity, and income. Field surveys conducted in 2018 by the project to estimate smallholder farmers' profitability during the



Mr. Yakubu Salia with his child standing in front of one of his tractors in Challu. Photo Credit: Cephas Lifeson.

2018 crop season indicate that gross margins per hectare amounted to \$774.76 for maize (provisional figure).

Salia Yakubu is a 42-year-old OB in Challu Community in the Sissala East District in the Upper West Region. According to him, many households in his community now consider farming as profitable businesses because of USAID's ADVANCE project training on good agronomic and farm management practices. Prior to becoming a project beneficiary in 2015, Salia provided services to 45 outgrowers (OGs) with one tractor and sheller. Even though he transacted business with his OGs, he did not keep any business records. He and his OGs also planted haphazardly and had low yields. "We were not conscious about how we planted our maize. We didn't even know that planting techniques influence plants' growth", Salia said.

Since he became a project beneficiary, the project has trained him on GAP such as row planting, effective methods of applying fertilizer, use of certified seeds such as pannar hybrid variety of maize, importance of conducting germination tests, post-harvest handling (PHH), and fall armyworm (FAW) control measures. He was also trained on OB management practices such as record keeping, crop budgeting, profit calculation and contract negotiation. Salia adopted these practices for the 2017 crop season. Instead of using his local maize seed variety (Obaatampa), he planted a certified variety (Pan 12). As a result, his yields and income increased from an average of 1.57MT/ha and GHS6,560 (US\$1,367) in 2016 to 4MT/ha and GHS48,342.83 (US\$9,795.91) in 2018, higher than the national average of 1.99MT/ha (MOFA report, 2017). His OGs' who were planting local varieties and obtained 0.5MT are

now obtaining 2.5MT/ha with the certified Pan 12 seeds. The high yield motivated him to increase his farm size from 6.1ha in 2017 to 15.4ha in 2018. The increase in income enabled him to acquire additional tractor at GHC 45,000 (US\$ 9,375) and two shellers at GHC 8,000 (US\$1,667) each for his farming business. The number of OGs with whom he works also increased from 45 to over 150 farmers as of the 2018 production season.

He appreciated the USAID's ADVANCE project for its interventions. "My farming business has received huge transformations since I became a beneficiary of the USAID's ADVANCE project in 2015. Notably, the trainings have enhanced my understanding about GAPs and OB management practices, and this has helped me increase my assets and income. Prior to joining the project, I served 45 OGs with only one sheller and a tractor. Before the end of 2017, my margins increased and I purchased an additional tractor and two shellers. I am better able to provide for my family. I even paid off my children's fees at one instance. Thanks to USAID's ADVANCE project". Salia encouraged farmers to adopt USAID's ADVANCE project's improved agricultural practices and technologies.

36. Evolving from an FBO to a Food Manufacturing Business

The story of how Wallindi Women's Association leveraged USAID's ADVANCE project trainings to build a cottage industry

Wallindi Tinguri Women's Association in the West Mamprusi District in the Northern Region comprises 78 members (77 female and one male) and is amongst 43 farmer-based organizations (FBOs) in the Northern Region that were supported by the USAID's ADVANCE project to become farmer-based enterprises (FBEs).

In March 2018, the group was registered as an enterprise and it now belongs to the Cottage Industries Association of Northern Region. The FBO was trained



Members of the Tinguri women's association in the motor tricycle they received from KOICA as result of USAID's ADVANCE facilitation

on record keeping such as meeting minutes' writing, attendance and dues registers, production records, collective purchases, sales, balance sheets, and profit and loss determinations, among other areas aimed to enhance its management capacity. The group also attended several advocacy and policy workshops that improved their lobbying skills and helped them reach out to other organizations for support. In addition, the group benefited from trainings on numeracy, farming as a business (FaaB), good agronomic practices (GAP), credit management, and post-harvest handling (PHH). They also participated in preseason and pre-harvest agribusiness events where they built business partnerships through market linkages.

In an effort to boost the FBO's income and improve nutrition, the project trained the women on different ways of preparing meals with soybean such as khebabs, beverages, and porridge. Using the knowledge gained from these trainings, the group established a small cottage factory which currently employs one person, where they produce and sell instant cereals and porridge products; i.e. cerelac, tombrown and winimix. In February, 2018 the group received a grant of GHC2,000 (US\$412) from Korea International Cooperation Agency (KOICA) to enhance their brand and packaging. In October 2018, the USAID's ADVANCE project, in collaboration with KOICA and project's partner ACDEP, organized a contest to support effective and dynamic women groups and the Wallindi Association won a tricycle. The tricycle has helped reduce the challenges and costs of transporting the group's produce to the district capital's market for sale.

During the project's 2018 pre-harvest event in Tamale in October, the Tinguri Women's Association displayed and sold their soymeal products for a total value of GHS 900, which is 41% higher than their average monthly sales (GHS 640).

Through project facilitation, the group now keeps up-to-date records of their meetings and business transactions. Moving forward, the association plans to expand their sales outlets to reach a larger market and increase its sales volume.

37. From Challenges to Success: How USAID's ADVANCE Project Contributes to Youth Employment

The Story of Abdul Wahab in the Upper West Region

As of September 2018, the USAID's ADVANCE project interventions had benefitted 131,394 farmers of which 21,577 (16.4%) were youth⁵ involved in activities such as crop production, safe spraying service provision (SSP), and village savings and loans associations (VSLA). The project trained 179 youth in SSPs out of which 167 sprayed 3,873.57 hectares of land for 3,886 farmers and generated revenues of US\$78,500. In 2018, over 5,219 young VSLA members had saved GHC 268, 083.37 (US\$ 54,322.86). These results complement government's efforts to



22-year-old Abdul Wahab (OG) in front of his 4-acre maize field at Bugubelle in the Sissala East district of the Upper West Region. Picture credit: Martin Agubere, USAID's ADVANCE project, Upper

reduce the rate of youth employment. With their savings, some of these young VSLA members have engaged in commercial farming, some have invested in input dealership business, and others in various businesses that have helped improve their livelihood.

Abdul Wahab, a 22-year old maize farmer at Bugubelle Community in the Sissala West District in Upper West District received project's support. Wahab completed Tumu Senior High School in the Upper West Region in 2016. He wished to further his education at John Bosco Training College in Navrongo in the Upper East Region, but his parents could not afford his tuition fees. A disappointed Wahab decided to travel to Accra for menial jobs to survive and raise enough money to go back to school. In 2017, while preparing to travel to the city, Wahab met a USAID's ADVANCE project-supported outgrower business (OB) owner, Tahiru Yahaya Imoro, during a project training for farmers in the Bugubelle Community. "I explained my situation to Tahiru and he promised to help me. He explained to me how the USAID's ADVANCE project supports farmers to increase their agricultural production and income. I became assured that through farming I could earn a decent income, so I abandoned the idea of going to the city. I became one of Tahiru's OGs who received support from USAID's ADVANCE project", Wahab noted.

Through project facilitation, the Ministry of Food and Agriculture's (MoFA) agriculture extension agents trained Wahab on good agronomic and post-harvest practices. He learnt row planting, fertilizer application, fall armyworm control, timely harvesting, and good storage to minimize postharvest losses.

⁵ Beneficiaries 18 to 29 years

He also received production inputs and (hybrid seeds, fertilizers agrochemicals), and crop insurance from Agricare for his maize field for the 2018 production season at a value GHS805.63 (US \$161.41).

In December 2017, he harvested 4.2 MT of maize from 0.8 hectares and repaid with 1.6MT crops to Agricare. He sold his remaining 2.6MT of maize at a value of GHS2,340 (US\$ 474.16). In 2018, he increased his acreage from 0.8ha to 1.2ha and harvested 5.7MT. He repaid Agricare with 2.4MT of crops to cover the cost of input he received and the remaining 3.3MT was sold at GHS3,300 (US\$ 667). With project support, he opened a bank account with Ghana Commercial Bank in December 2017, where he deposited his proceeds for the next crop season. He also started to save to pursue his education.

With his gained knowledge and success, Wahab expanded to four acres and plans to purchase inputs without depending on the Agricare outgrower scheme for the next crop season.

"I am now a happy person, and I can brag about that, thanks to USAID's ADVANCE project. At least, I can take care of myself and support my family. What makes me very happy besides the money is that I have successfully convinced three of my friends to practice farming rather than going to the city to pursue menial jobs. They heeded the advice, and are now cultivating an acre of maize each. I help them in the management of their farms. I want to go back to school by 2020. I want to save enough through my farming activities for my school fees. I know it is very possible", Wahab noted.

38. Linkage to Formal Markets Increase Farmers' Sales and Income

The story of how Kasule Enterprise increased his sale outlets through USAID's ADVANCE project facilitated market linkage strategies

One of USAID's ADVANCE project's objectives is to increase market access and trade for maize and soybean farmers in the project's zone of influence. The project achieves this objective through a multifacilitated market linkage approach which includes trade missions with buyers and produce sellers, preharvest agribusiness and exhibition events, as well as capacity building of the value chain actors to increase access to markets.

Yakubu Kasule, an aggregator and owner of Kasule Enterprise, a sole proprietorship business in Tamale is a project beneficiary of the capacity development initiatives aimed at enhancing trade. His enterprise aggregates and supplies maize and soybeans to buyers in southern Ghana. The business has the capacity to sell 1,000 metric tons (MT) annually in the open market. Until Yakubu became a participant of USAID's ADVANCE project in 2016, his end market buyers were only limited to women aggregators and poultry farmers in Accra. The project directly



linked him to buyer firms, including Premium Foods Limited, Vestor Oils, and Agrisolve Limited to sell his produce formally. In 2017, Yakubu was also linked to a producer group, Samankuse Farmers Association in the Northern Region's Central Gonja District, where he was able to purchase 250MT of maize.

Since Yakubu benefited from the project's support, he has been able to strike a deal with Premium Foods Limited during the seventh pre-harvest agribusiness and exhibition event to supply of 50MT of maize weekly, at GHS1,120 (US\$ 250) per ton as compared to the open market price of GHS1,000 (US\$223). In addition, he was also able to ysupply 400MT of maize and 50MT of soybeans worth GHS 591,750 (US\$ 131,728) to two companies at the end of 2018 production season.

"The market linkage has increased the number of metric tons I supply by about 45 percent. The price offered by the formal markets is higher compared to my usual buyers, so I made more profit. Even for the upcoming 2018/19 purchasing season I have started engaging two companies and we will continue to do business together" Yakubu stated.

39. Leveraging Outgrower Schemes to Enhance Women's Access to Agricultural Production Input

USAID's ADVANCE project-supported **OBs** provide women farmers with agricultural production inputs to improve their productivity

In 2014, USAID's ADVANCE project introduced buyer outgrower schemes, enabling farmers to easily access production inputs such as seed, fertilizer, herbicides, and insecticides on credit to improve their productivity and repay with produce. Since then, the project facilitated 12 buyer outgrower schemes in the Upper West Region that have supported 37 outgrower businesses (OBs), with a total investment of GHS10,583,232.58 (US\$2,355,9130) covering production on 6,096.8 hectares. The support package includes hybrid seeds, fertilizers, herbicides, and ploughing services. Agricare Company, Limited has one of the largest schemes currently operating in the Upper West Region. During the 2017 and 2018 planting seasons, Agricare supported 24 OBs with agricultural inputs worth GHS 1,801,901.08 for 1,560.8 hectares of land.

According to the OBs, many women farmers are credit worthy, yet they face challenges accessing inputs from outgrower schemes because of costs. To address this issue, five OBs, including Yahaya Seidu, John Dimah, Fulera Adamu, Emmanuel Yobo, and Yahaya Tahiro Moro, linked 252 women farmers in Bouti, Vamboi, Kusali, Bullu, and Bugbelle in the Upper West Region's Sissala West and East Districts with Agricare's outgrower scheme for the 2018 production season to cultivate 527 acres (210.4 ha) of maize. The 252 women applied the inputs and good



Sahartu Sumani on her donkey to heading to market to sell some of her 2MT maize after paying off the cost of input to her OB John Dimah

agronomic practices they learned from demonstration sites on their farms. This adoption led to increased yields, from an average of 1.25MT/ha in previous seasons to 4MT/ha at the end of the 2018 production season. In addition, they successfully repaid OBs with 2 MT of maize to cover the cost of inputs they received, and will sell 2 MT of remaining maize. On average, each woman earned GHS2,000 (US\$408.16) per hectare, supported with the outgrower scheme's input package.

Saharatu Sumani, a 52-year-old widow from Bullu in Upper West Region's Sissala District and a project beneficiary, said, "I harvested 3 MT from my one acre (0.4ha) farm in the 2018 planting season as compared to between 0.5 and 1 MT in previous years. I paid 0.8 MT to my OB to cover my cost of inputs and I still have 2.2 MT of maize and likely to make a profit of GHS2,200 (US\$445). I will use this money to pay my children's

school fees, care of their health needs and also buy inputs for my farm during the next farming season. I am very happy and will appeal to my fellow women to join outgrower schemes for better access to inputs and increased yields."

40. Positive Impact of Advance FAW Training on Maize Yield – The Case Of Awintoma Farms

Awintoma Farms in the Upper East Region survives FAW infestation and obtains high production volumes amidst severe floods

In mid-2016, fall armyworm (FAW) was formally identified in Ghana. Maize farmers across the country suffered huge farm losses due to farmers' inadequate knowledge on how to control the pest.

The project sensitized 30 journalists across three northern regions to share accurate information with the general public on the best pest management practices for FAW

To mitigate FAW, USAID's ADVANCE project collaborated with the Ministry of Food and Agriculture (MoFA) and the National Fall Armyworm Taskforce to implement various interventions. The project trained and reached 424 OBs, 131,394 smallholder farmers, and over 70 agricultural professionals on FAW management. The project produced 45,336 print materials, including posters and leaflets, and aired radio jingles in



Awintoma Akande (right) engaging an APO on how he controlled FAW menace on his farm

English and II local languages on 31 radio stations in the three northern regions and Brong-Ahafo regions. These outreach efforts disseminated accurate pest management information to the general population.

In addition, the USAID's ADVANCE project also set up dedicated call centers (MTN, Airtel-Tigo and Vodafone) to educate farmers and the general public on the worm and its mitigating measures, and further set up 57 pheromone traps to monitor the presence of egg-laying moths. Also, four pesticide observation fields were established by the project to observe the efficacy of FAW pesticides in order to determine which one works best.

In April 2018, USAID's ADVANCE project conducted a three-day workshop on FAW management for agricultural extension agents and outgrower businesses. The training taught participants to set up pheromone traps, scout the field, and use a backpack sprayer.

Awintoma Akande, an OB at Tilly in the Bawku West district, Upper East region, chose to participate in the workshop due to the heavy losses he suffered on his farm during the previous season. In 2017, Awintoma invested GHS30,000 (US\$6,678) on production inputs, including seed, fertilizer, and weeding, to cultivate a 24- hectare maize farm. Unfortunately, he only harvested 40 MT at the end of the season. After attending the FAW management training, he felt empowered to manage the pest by setting traps,

monitoring, and managing sanitation on his farm. He increased his acreage to 40 hectares and invested GHS 85,000 (US\$ 18,889) in production input for the 2018 cropping season, ultimately producing 108 MT on his 60- acre farm.

Awintoma hopes to use his sales revenue to pay off his loan from the bank. He also intends to increase his farm size to 46 hectares during the 2019-cropping season to expand his profits and improve his business's sustainability.

41. Celebrating the Success of a Female Farmer

Fati Zakari, a smallholder farmer Smallholder who became an Outgrower Bussiness



Fati Zakari, once a smallholder farmer of outgrower business (OB) owner, Fusseini Abubakar, in April, 2019 successfully progressed to become an OB in Nyong Yapalsi in the Karaga District of the Northern Region.

Fati, who worked with her OB for two years, adopted all the good farming practices she was taught by USAID's ADVANCE project and received production inputs (hybrid seeds, fertilizer, and agrochemicals) from Agricare through project facilitation. "Due to all the trainings I benefitted from ADVANCE and my OB, I

started row planting, using certified seed, applying appropriate fertilizer with good record keeping and can now produce and sell more for re-investment into my farm and family's upkeep', she said.

In 2014, Madam Fati cultivated 20 acres of maize (10 acres of yellow maize and 10 acres of white maize), 10 acres of rice and soybean. She was able to increase her yield in maize from 2.0MT/ha in 2016 to 3.72MT/ha in 2018. In June 2019, Madam Fati increased her acreage by 20 acres for maize and 10 acres each for soybean and rice.

From January to May 2019, she provided 30 smallholder farmers with hybrid seeds and ploughed 30 acres of maize, 10acres of soybean and 35 acres of rice for 45 smallholder farmers. "I was happy when I saw my farmers increased their production to 3MT/ha in 2018 from IMT/ha previous years. I am hopeful that their yields would keep increasing due to the support I continue to give them", she indicated.

Madam Fati, who now supports 90 smallholder farmers out of which 60 are women, is also the leader of project facilitated village savings and loans association (VSLA). She organizes meetings with her outgrowers where she trains them on farming practices such as land preparation, row planting, post-harvest handling; supplies them with seeds and chemicals for pest control; and provides them with ploughing services.

In addition, she serves as a resource person on radio programs that educate smallholder farmers on good agricultural and management practices and conducts monitoring visits to their farms.

Through the project, she was linked to Opportunity International Savings and loans and negotiated a loan to buy a tractor to render ploughing services to her outgrowers. "As soon I am able access the loan to get the tractor, I would work hard to increase the acreage of soya so that I can also buy a planter in order to attain higher yields", Madam Fati noted.

42. Mechanization for Outgrower Business Increases Yield

How Fabuk Farms acquired equipment to increase crop yield.

USAID's ADVANCE project has worked with 424 OBs and 131,493 smallholder farmers to improve their yields and gross margins in the maize, rice and soybean value chains. From 2010 to date, the project trained 124,572 beneficiaries (male: 63,344, female: 61,228) on good agronomic practices (GAPs), post-harvest handling, and produce quality standards, and other agribusiness areas which improved farmers' knowledge, productivity, and income.

Fusseini Abubakar from Niebilgbin is the vice chairman of the Karaga OB Network and owner of Fabuk Farms in the Karaga District of the Northern Region. He now considers farming as a profitable business because his income has significantly increased by adopting the good agronomic and farming practices, he learned from the USAID's ADVANCE project's trainings.

The annual increase in his income enabled him to acquire two tractors, two corn shellers, two conventional ploughs, one ripper, one manual planter and one harrow for his farming business in 2016.



Fusseini Abubakar showcasing one of his rippers

As a result of acquiring these equipment his productivity improved and he has been able to take care of his 12 children. Prior to becoming a project participant in 2010, Fusseini provided services to 57 smallholder farmers (outgrowers) with only one tractor.

He narrated that supporting himself and his smallholder farmers with ploughing services was very difficult. "There were no chemicals to spray and kill weeds before planting and also, we have to manually prepare and plant seeds. When ADVANCE came, they taught me new farming techniques by showing me how to plant in rows

and supported me to get one variety of pannar seed", he admitted.

Fusseini who cultivates maize, rice, soybean, groundnut and cowpea mentioned that since he became a project participant, the project has trained him on row planting, effective fertilizer application methods, use of certified seeds such as pannar hybrid variety of maize, post-harvest handling (PHH) and OB management practices such as record keeping, crop budgeting, profit calculation and contract negotiation.

He adopted these practices and used one of his farmlands as a visible model farm to show off good practices in his community.

"After I sowed and it sprouted, the staff of ADVANCE came to monitor and brought smallholder farmers to see my model farm. I then decided to plant on a larger land close by the road for it to be visible for all eyes to see when passing", Fussini recalled.

As a result of adopting new technologies and management practices, Fusseini's yield on his maize farm almost doubled, increasing from an average of 2.0MT/ha in 2011 to 3.7MT/ha in 2012. During the 2018 production season, his production increased to 6.2MT/ha. The number of outgrowers with whom he works with also increased from 58 in 2011 to 750 (of which 328 are women) in 2018. trained his outgrowers and monitored their farms to make them productive. His trainings and regular monitoring of his outgrowers also helped increase their yields from 1.7MT/ha in 2011 to 4.5MT/ha on average in 2018.



Fusseini Abubakar (right) and his secretary (left) showing two of his trailers

"I am working with my secretary who is a youth who handles all my records and mobile money for all payment to mobilize the young children of all my aged OGs so that I can train them to take over their parents farms as a business", Fusseini noted.

43. Encouraging Youth Participation in Agribusiness

Sulley Adams urges youth to take up farming as business



Sulley Adams, 28 years old, is an outgrower businessman from Lagbensi in the East Mamprusi District of the Northern Region who defied the notion that farming is for the elderly and illiterate and took over his father's farm to manage as a business. Sulley took over the management of his father's 130-acre soybean farm in 2015 after completing senior high school and decided to cultivate maize for himself in addition to managing his father's farm. He then became a USAID's ADVANCE project's participant with 40 smallholder farmers. The project trained him and his smallholder farmers on row planting, post-harvest handling, record

keeping, appropriate application of fertilizer and agrochemicals. By 2019, Sulley had progressively cultivated an 85-acre maize farm.

Sulley now works with 345 smallholder farmers (40% women) who cultivate about 1,380 acres of land across ten communities in the East Mamprusi district. He provides his outgrowers with services and agro –inputs, including ploughing services, fertilizer, and improved hybrid seeds.

"I assess the farmers, profile them, then I do my own investigations and visit their farms unannounced to see the realities on the ground because I want them to succeed so that I can also succeed", he noted.

He also received a Samsung Galaxy tablet from USAID's ADVANCE project which he uses to profile his farmers and to teach them good agronomic techniques. He subscribes to Esoko and Ignitia Ghana to receive weekly text messages on agronomic tips, commodity prices and weather information, which he shares with his outgrowers to better schedule their farming activities.

Thanks to the training provided by USAID's ADVANCE project, Sulley's outgrowers realize higher yields, which enable them to repay him for the services he provides to them.

"Before joining the project, our previous yield for maize was 2.0MT/ha and 0.7MT/ha for soybean. Most of my farmers, especially the men could not repay their credit; but now with the improved seeds and good agronomic practices, they are able to produce 4.5MT/ha of maize and 1.75MT/ha for soybean" he narrated.

Sulley's farming business growth also enabled him to invest in the rearing of livestock and has a mango plantation. He pays for his younger siblings' education and currently mentors six young men who assist him in supporting his 345 outgrowers.

44. PROJECT-SUPPORTED SPRAYING SERVICE PROVISION IMPROVES YOUTH LIVELIHOOD

FTF ADVANCE II Creates Jobs by Training Young People on Safe Spraying Who are now Training and Giving Opportunities to Others

One of the interventions implemented by USAID-funded Feed the Future Ghana Agricultural Development and Value Chain Enhancement Project (FTF ADVANCE II) is setting up spraying service providers (SSPs) to mitigate the harmful effects of pesticides on users and the environment. The project, in collaboration with the Plant Protection and Regulatory Services Directorate (PPRSD) of the Ministry of Food and Agriculture (MOFA), set up and trained young men as SSPs on the use of various products, the importance of using personal protection equipment, customer care, basic recordkeeping, and assembling and servicing knapsack.

David Awia Kabade, is a youth and security guard at GN Bank who, after gaining the knowledge and skills to provide professional and effective spraying services in 2016, has been able to train and

David Awia Kabade, SSP in Langbinsi in the East

Mamprusi District

create jobs for six more youth in Langbinsi in the East Mamprusi District. According to David, he was able to save some money out of the income he generated from providing spraying services to farmers and purchased three knapsacks and personal protective equipment (PPE) to enable him to train some youth.

He narrated that he aims to transfer all the skills he acquired from the project to his trainees to create a source of livelihood for the youth. He also noted that, although the spraying business is hazardous and tedious, he has been able

to provide spraying services to 78 smallholder farmers for a total value of GHS1,500 covering 150 acres in 2019.

He explained how the spraying service benefitted him and his family. "Without the spraying job, myself and most my trainees would have traveled elsewhere in search for work. "I see my job as a business and that is why I have to market myself well by not just providing services to the farmers who I see as my clients, but also to educate them on safer use and handling of pesticides. At the end, they are satisfied and get good yields" David noted.

Currently, David owns three knapsacks and PPE sets which he rents out at a fee. He plans to acquire additional knapsacks and PPEs and also train more youth next year.

Yakubu Ibrahim, 23-year-old who was trained by David shared that becoming an SSP since 2018 has been his source of income. "I am able to spray 10 acres a day during peak season with the support of knapsack from David. He rents it out to me at a fee of GHS 2 a day which is convenient. He always ensures I adhere to proper disposal after spraying", he said.

45. VSLAS TAKE UP COOPERATIVE FARMING AS A SUSTAINABILITY MEASURE

Two VSLAs Engage in Cooperative Farming to Build their Resilience

Two village savings and loans associations in Kulunkpegu, a farming community in the Yendi Municipal of the Northern Region have engaged in cooperative farming as part of their efforts to sustain the running of their savings and also support their member's farms with seeds during planting season.

The groups known as "Gub kati mali" which means 'together we can' and "Somsim vela" meaning 'support is good' are made up of 25 members each (20 females, 5 males) who farm between two to eight acres of maize and soyabean.

According to members of both groups formed in 2015, the benefits that they received from USAID-funded Feed the Future Ghana Agricultural Development and Value Chain Enhancement Project (FTF ADVANCE II) propelled them to save money for their share outs and also use their social fund to start an acre of maize cooperative farm together in 2018.

The proceeds from the group's cooperative farms that will be harvested this year will be partly shared among members of both groups and partly used to re-invest for the next planting season.



Some members of the two VSLAs in Kulunkpegu in the Gushegu District, Northern Region

Majeed Sana, leader of "Gub kati mali" group, recounted the instances that led to their encounter with FTF ADVANCE II. She disclosed how they were processing sheabutter on a small scale and

wanted to progress in their farming activities until they decided to engage the district agriculture extension officer for training who in turn led them to FTF ADVANCE II.

"Before we were introduced to ADVANCE, we did not know how to row plant, space out our crops, apply fertilizer, control pest and weed, level our land before planting and even appropriate time for harvesting. But the project built our capacity, taught us all the best farming practices and gave us susu boxes to enable us to save and share out when farming season is about to start. Also, during share out, ADVANCE came in with input dealers to give us the opportunity to buy improved seeds, fertilizers and chemicals", Sana noted.

Salamatu Iddrisu, also a member of "Somsim vela" group added that, "We never thought as peasant farmers that we are capable of saving money until ADVANCE showed us the way. We are now enjoying the benefits because one can request for loan to support the family in times of educational or health emergencies. Also, for farming season, we are able to request for loans to invest into our farms and access inputs and ploughing services."

They disclosed that, in 2018, they were able to raise an amount of GHS 4,000 each during a cycle to invest in agro-input purchase in the production season.

The groups mentioned access to tractor services and to markets as being their greatest challenge. In order to address their inability to access tractor service appropriately, the group expressed their desire to register and set up as MTN Mobile Money merchant so that they could obtain transactions commissions that will add to their savings to acquire a used tractor for themselves.

Abdullai Wasiu, secretary of 'Gub kati mali' group said, "If we are able to sign up for a MoMo account and run one as a bussiness, we will be able to generate additional savings to be able to acquire a tractor for our group someday."



Abdul Wasiu of 'Gub kati mali' group at the cooperative maize farm

