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The U.S. Government's Global Hunger & Food Security Initiative



AGRICULTURAL DEVELOPMENT AND VALUE CHAIN ENHANCEMENT PROJECT (ADVANCE)

FY19 Q1 REPORT: OCTOBER– DECEMBER 2018



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USAID'S ADVANCE PROJECT FY19 Q1 REPORT

OCTOBER–DECEMBER 2018

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ACRONYM LIST

ACDEP	Association of Church-Based Development Projects
ADVANCE	Agricultural Development and Value Chain Enhancement
AEA	Agriculture Extension Agent
BDS	Business Development Services
CSA	Climate-Smart Agriculture
CREMA	Community Resource Management Areas
EPA	Environmental Protection Agency
FaaB	Farming as a Business
FBE	Farmer-Based Enterprise
FBO	Farmer-Based Organization
FTF	Feed the Future
FTFMS	Feed the Future Monitoring System
FY	Fiscal Year
GAIP	Ghana Agricultural Insurance Pool
GAP	Good Agronomic Practice
GIS	Geographic Information System
GNFS	Ghana National Fire Service
GPS	Global Positioning System
ICT	Information and Communication Technology
IDRW	International Day of Rural Women
IP	Implementing Partner
MoFA	Ministry of Food and Agriculture
(M)SME	(Medium,) Small, and Micro Enterprise
MT	Metric Ton
NGO	Nongovernmental Organization
OB	Outgrower Business
PERSUAP	Pesticide Evaluation Report and Safe Use Action Plan
PHH	Post-Harvest Handling
PPE	Personal Protective Equipment
PPRSD	Plant Protection and Regulatory Services Directorate
SMTN	Southern Maize Traders Network
SSP	Spray Services Providers
UDS	University of Development Studies
UN	United Nations
USAID	United States Agency for International Development
VSLA	Village Savings and Loan Association
WFP	World Food Programme
WIAD	Women in Agriculture Department
ZOI	Zone of Influence

EXECUTIVE SUMMARY

The USAID'S ADVANCE project continued to strengthen the maize and soy value chains during the reporting quarter, focusing on activities that will ensure the sustainability of businesses and innovations established under the project. These activities include augmenting various capacities of actors such as building and maintaining business relations, strengthening the capacity of the leadership of groups and apex associations and networks, business management, and advocacy. The project initiated five learning studies to evaluate the sustainability of the outgrower business model, grants, expansion of input dealerships to the community level, fall armyworm (FAW) management strategies, village savings and loan associations (VSLAs), and buyer-sponsored outgrower schemes.

During the quarter, the USAID's ADVANCE project completed 2018 field demonstrations with field days, post-harvest handling (PHH) training, and review meetings. The review meetings identified 15 key private sector entities, including 13 retail and two wholesale input companies that supported field demonstrations with inputs and site visits and expressed their intention to continue after the project. A total of 5,955 smallholder farmer beneficiaries (3,805 females) attended the field days. The attendees also benefitted from PHH training on the quality of produce required to participate in buyer-sponsored outgrower schemes.

In addition to field demonstrations, the project continued to provide knowledge and information to smallholder farmers through radio programming. During the quarter, the project continued a campaign to reduce the occurrence of bushfires with radio messages and community durbars (traditional ceremonies). Eight community and regional radio stations donated airtime for the campaign, in addition to time sponsored by the project. The project also monitored activities of radio listener clubs. Reports from 32 clubs show high level of attendance at listenership sessions.

The project identified general office and outgrower management capacity as key areas for continued strengthening during the quarter. Therefore, the project provided support to 120 outgrower businesses (OBs) field agents based on reported constraints they faced from the buyer-sponsored outgrower scheme. Through discussions with the field agents at review meetings, the project identified the general lack of transport facilities or mechanisms to reach farmers in far-off locations as a key constraint, suggesting low investment in transport facilities for field management. In spite of this, outgrower businesses (OBs) continued to invest in other areas of their businesses, including in capital items (warehouse, shellers, and tractors), totaling \$57,000 to set up offices and strengthen management practices (business registration and recordkeeping), and business relationships (contracting and paying back substantial credit facilities).

To benchmark capacity improvements, the project implemented a regular OB assessment and categorization, which identify areas that require further improvements. Most of the OBs scored a 3-star or higher rating (of a six-level rating (Novice to 5-star) in almost all assessment areas. These include office and field setup (76 percent of OBs had 3-Star or higher), business and succession planning (67 percent of OBs), inclusion of women and youth (97 percent of OBs), and provision of services (68 percent of OBs). Areas of concern include market linkages and value chain digitization, as the assessment showed that only a few OBs deploy digital equipment and processes, including the use of digital money in their operations.

The project reached out directly to 6,019 smallholder farmers and individuals (63 percent women). These results brought the total number of beneficiaries reached so far to **131,349** smallholders, representing 103.8 percent of the life-of-project target of 127,000. More than 5,800 households benefitted from the project in this quarter. In all, 5,955 individuals (3,805 women) received trainings on good agronomic practices (GAPs),

PHH, and quality standards. In line with our gender strategy, the project targeted VSLA members with separate trainings designed to improve their entrepreneurship and leadership skills and knowledge of their rights through capacity building activities. With these achievements, the project reached 124,551 individuals (49 percent women), representing 104 percent of its life-of-project target of 120,000 trained beneficiaries. Additionally, the project trained 163 medium, small and micro enterprises (MSMEs).

The 2018 provisional average gross margins per hectare totaled \$774.76 for maize and \$528.93 for soy. Male maize farmers achieved higher margins (not significant) than their female counterparts primarily due to higher yields. Female soy farmers however, had a slightly higher gross margin than their male counterparts due to higher yields. Male soy farmers had a higher selling price (about 1.5 percent), making up for the low yield achieved in the 2018 season.

INTRODUCTION

This report presents the main accomplishments of the USAID's ADVANCE project implemented by ACDI/VOCA and its sub-awardees, ACDEP, PAB, and TechnoServe, during the first quarter of FY19 (October to December 2018). The project was originally scheduled to end on September 30, 2018. However, a no-cost extension extended the project until April 30, 2019.

The ADVANCE project's goal is to increase the competitiveness of the maize, rice, and soy value chains in Ghana. The report summarizes the project's achievements against this goal and its indicators, and presents the main results and activities undertaken during the quarter, organized by the project's intermediate results as follows:

- Increased agricultural productivity in targeted commodities
- Increased market access and trade of targeted commodities
- Strengthened capacity for advocacy and activity implementation

The report starts by summarizing the project's collaboration with other organizations, projects, and the Ministry of Food and Agriculture (MoFA), followed by a summary of key results. It also covers the project's cross-cutting activities, including gender, environment, grants, and monitoring, evaluation, and learning activities.

COLLABORATION

1.0. Collaboration with the Ministry of Food and Agriculture

USAID's ADVANCE project continues to work closely with the Ministry of Food and Agriculture (MoFA) at the national and regional level, and the ministry's agricultural extension agents (AEAs) in the districts. During the reporting period, the project also collaborated with MoFA to train farmers in post-harvest handling (PHH), quality grain standards, and fall armyworm (FAW) monitoring and control. In addition, several AEAs participated actively in anti-bushfire campaigns organized by the project.

2.0. Collaboration with Other Partners

Ghana Agricultural Insurance Pool (GAIP)

USAID'S ADVANCE project continues to collaborate with the Ghana Agricultural Insurance Pool (GAIP) to provide farmers with insurance products to cover risks including drought, flood, and bushfires. During the period under review, the project supported GAIP to sell insurance products to smallholder farmers in the Northern Region. GAIP sold 68 policies during the season, valued at \$7,283 (GHS 35,000.00).

Ghana National Fire Service (GNFS)

During the quarter under review, the project collaborated with the Ghana National Fire Service (GNFS) to organize anti-bushfire campaigns in project operational areas in Northern Ghana. The theme of the campaign and sensitization programs was "***Stop Bushfires, Protect the Soil.***" Attendees included smallholder farmers, chiefs, elders, community leaders, district assemblies' representatives, school children, media, and other community members.

Radio Stations

The project continued to collaborate with 31 radio stations to broadcast agricultural-related information, including good agronomic practices. The project mobilized thirteen stations to lead the anti-bushfire campaign from September to December 2018. The radio campaign aimed to educate listeners, particularly farmers, about the harmful effects of bush burning on the environment and on farming activities. Eight (8) radio stations sponsored part of the campaign, donating 1800 minutes of airtime (on the average 2 minutes jingle played 2-3 times a day for 8 weeks).

German Corporation for International Cooperation (GIZ) Green Innovation Center (GIC)

The Southern Maize Traders Network (SMTN) won a grant from German Agency for International Cooperation's (GIZ) Green Innovation Center (GIC), consisting of 200 analogue scales and 10 moisture meters worth \$47,240 (GHS 227,000). The project had assisted the SMTN in preparing the grant application. The items were jointly delivered by staff of GIC and the project during the quarter.

University of Development Studies (UDS)

During the reporting period, the project collaborated with the University of Development Studies (UDS) to assess and evaluate the eighth pre-harvest event, involving 2,449 farmers (656 women), exhibitors, processors, and input dealers. (*See Section D.2.4 Pre-harvest Event*). The project will share the results with USAID in January 2019.

Yara Ghana, Ltd.

During the period under review, the project collaborated with Yara Ghana, Ltd., to support OBs to sustainably incorporate extension and advisory services in the OB model. Yara also facilitated training events organized by the project.

KEY RESULTS

I. Direct Beneficiaries

During the quarter, the project reached out directly to 6,019 smallholder farmers and individuals, of whom 3,806 (63.3 percent) are women. All the beneficiaries participated in the project in the previous year. These results brought the total number of beneficiaries reached so far to **131,349** smallholders, or 103.8 percent of the life-of-project target of 127,000. The project benefitted 5,823 households, including 5,722 (73 percent) households considered vulnerable.¹

The project provided 5,955 individuals (3,805 women) with trainings on good agronomic practices (GAPs) and PHH. In line with ADVANCE's gender strategy, the project specifically targeted women with capacity building activities to improve their entrepreneurship and leadership skills and knowledge of their rights. With these achievements, the project reached 124,551 individuals (49 percent women compared to 47 percent LOP target), representing 104 percent of its life-of-project target of 120,000 beneficiaries. Additionally, the project trained 163 medium, small, and micro enterprises (MSMEs).

2. Gross Margins and Incremental Sales—2018 Crop Season²

As per USAID's definition, gross margin is the difference between the total value of smallholder production of an agricultural commodity and the cost of producing that commodity, divided by the total number of hectares under cultivation. The key data points required to calculate the gross margin are area planted (ha), yield obtained per hectare (tons/ha), total recurrent cash input costs (GHS), and average sale price per ton (GHS).

The project conducted a survey with a random sample of 1,654 from all maize and soy smallholder project beneficiaries in FY18, as prescribed in the USAID Feed the Future Indicator Handbook. The figures presented in the sections below on gross margins and technology application were extrapolated from the survey results of 1,654 smallholder farmers and are based on FY18 data because the survey collected data for the 2018 crop season.

Table I. Number of smallholder direct beneficiaries by crop planted and gender³ in 2018

Gender	Maize	Soy	Total
Female	29,789	10,466	40,255
Male	33,394	5,329	38,723
Total	63,182	15,796	78,978

HECTARES PLANTED

In 2018 crop season, 78,978 project smallholder farmers cultivated **60,463.12** hectares, of which women planted 42 percent. Farmers planted 86 percent of land with maize and 14 percent with soy (Table 2).

¹ Households that are exposed to flooding, bushfires, drought, communal conflict, or are single headed and located in rural communities.

² The gross margin figures are provisional. The project will conduct a phone survey on the sales to measure actual sales for the season.

³ Some farmers planted more than one crop at a time. In such cases, the farmer is counted under each planted crop

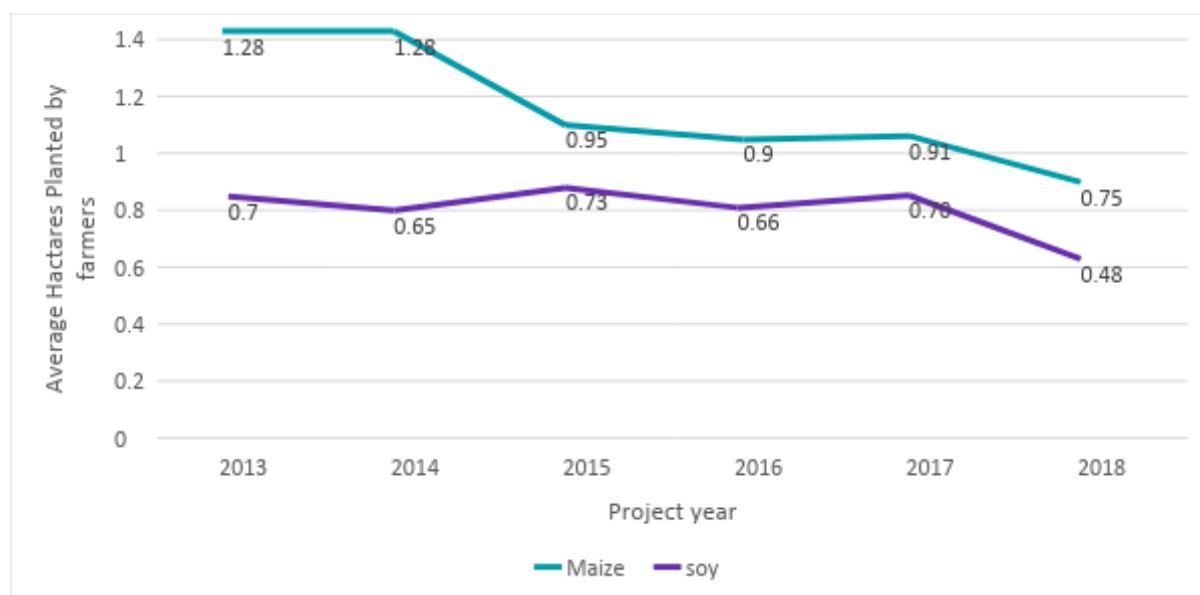
Table 2. Hectares planted in 2018 by crop and by gender

Gender	Maize	Soy	Total
Female	20,147.08	5,208.23	25,355.30
Male	31,956.68	3,151.14	35,107.82
Total	52,103.76	8,359.36	60,463.12

On average, individual farmers planted 0.75 ha of maize, 0.48 ha of soy in 2018. Female maize farmers planted smaller areas compared to their male counterpart (23 percent less) while female soy farmers planted larger areas than male soy farmers (25 percent more) (Figure 1).

Overall, the average hectares planted by maize farmers continued to decrease each year since 2015, while soy farmers maintained their average farm sizes between 2015 and 2017 but reduced their size by 31 percent in 2018. Generally, the project advises producers not to hasten expansion but to apply their limited resources efficiently, which may explain some of the slow rate of expansion.

Figure 1. Average hectares planted by farmers



PRODUCTION

Total production of all crop farmers in 2018 was estimated at 208,510.45 metric tons (MT) (Table 3) as compared with 283,599.19 MT in 2017, 231,688 MT in 2016, and 182,376 MT in 2015. In 2018, the beneficiaries produced 191,568.38 MT of maize and 16,942.07 MT of soy. Female soy farmers produced about 26 percent more than their male counterparts. Inversely male maize farmers produced about 26 percent more than female maize farmers.

Table 3. Total volume of production by smallholder farmers in 2018 per crop and gender in MT

Gender	Maize	Soy	Total
Female	70,568.76	10,651.78	81,220.54
Male	120,999.62	6,290.29	127,289.91
Total	191,568.38	16,942.07	208,510.45

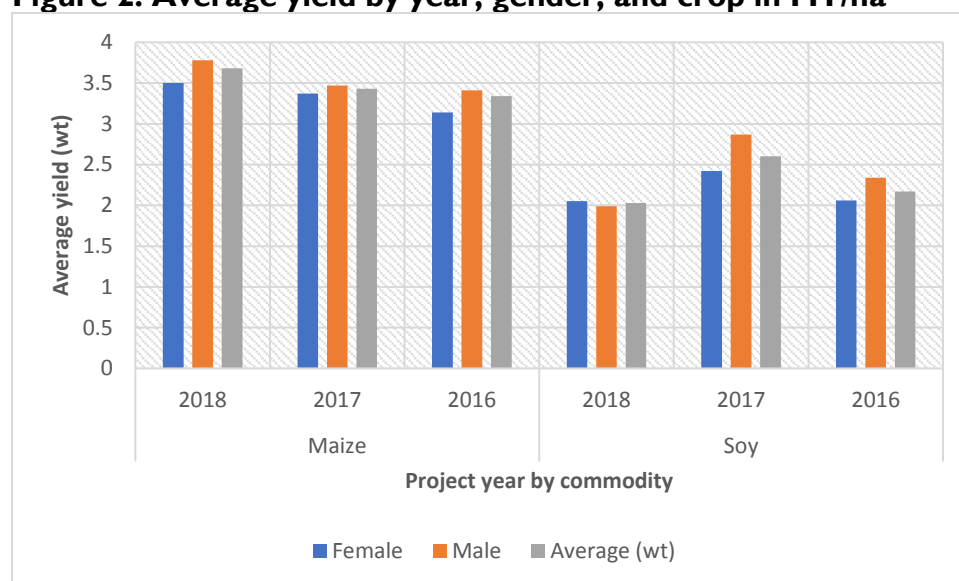
On average, a maize farmer produced 2.76 MT and a soy farmer produced 0.96 MT (Table 4). On average, male farmers produced 2.68 MT while female farmers produced 2.06 MT. On average, male maize farmers produced 0.61MT more than their female counterpart while the female soy farmer produced 0.20 MT more than their male soy farmer counterpart. Female maize farmer plots tend to be smaller, while the reverse is true for soy. In addition, female soy farmers had higher yields (Table 5).

Table 4. Average production per farmer in MT in 2018

Gender	Maize	Soy	Average(wt)
Female	2.41	1.05	2.06
Male	3.02	0.85	2.68
Average (wt)	2.76	0.96	2.40

Average maize and soy yields in the 2018 production season were 3.69 MT/ha, and 2.03 MT/ha respectively. The marginal increase (7.2 percent) in average yield for maize in 2018 over 2017 may be partly attributed to the success of project interventions against FAW in 2018. Figure 2 shows that both male and female maize farmers obtained higher yields in the 2018 production season compared to the 2017 season. The reverse occurred in soy, where average yield dipped significantly (22 percent) between 2017 and 2018 as a result of low investment in inputs and limited support from OBs and buyers.

Figure 2. Average yield by year, gender, and crop in MT/ha

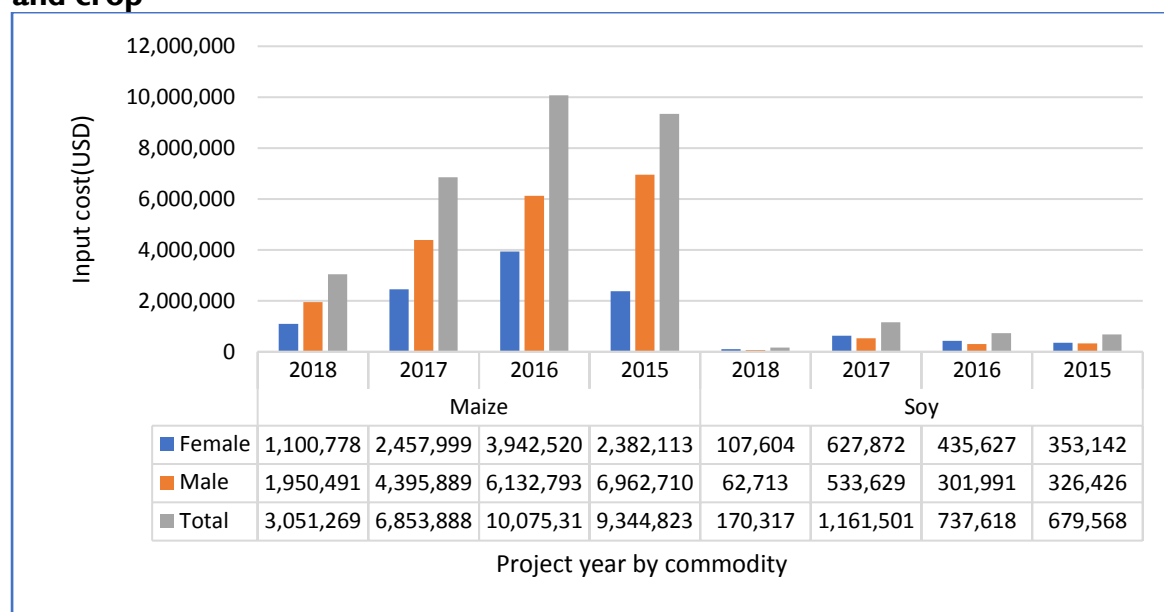


TOTAL RECURRENT CASH INPUT COSTS

As per USAID’s 2017 FTF Indicator Handbook, the total recurrent input costs used to calculate the gross margin values include those paid in cash and not given in kind. Gross margin calculation ignores family labor and similar in-kind contributions, as well as all non-significant costs (less than 5 percent of the total costs). The cash costs include land rent, costs of seeds, fertilizers, other agrochemicals, labor, and equipment rental.

In the 2018 farming season, maize and soy smallholder farmers incurred total input costs of \$3,221,585.88, 95 percent for maize and 5 percent for soy. Of this total, women invested 38 percent, or \$1,208,382 (figure 3).

Figure 3. Beneficiary smallholder farmers' inputs costs (USD) in 2018 by gender and crop



Interestingly, smallholder farmers overall cost reduced by 23 percent in 2018, when compared with results in 2015 and 2016 (Figure 3).

The amount invested by maize farmers in inputs per hectare continued to decrease at an average rate of 35 percent from 2015 to 2018. However, soy farmers increased their spending in inputs by 11 percent from 2015 to 2016, reduced their investment by 12 percent from 2016 to 2017, and further reduced investment by 76 percent from 2017 to 2018 (Table 5). This could be partly attributed to the annual reduction in the average size of plots cultivated by smallholder farmers of both commodities, as well as Government of Ghana input subsidies to promote planting for food and job policy. Although the subsidy program is not new, it has received great support in the last two years with wider coverage in 2018 following implementation of the government's planting for food and jobs program. However, yields in maize either increased or stayed the same because of increased production efficiency.

Table 5. Average input costs per hectare by crop and gender (2015 to 2018)

Gender	Maize				Soy			
	2018	2017	2016	2015	2018	2017	2016	2015
Female	\$54.64	\$110.56	\$158.21	\$218.94	\$20.66	\$ 75.51	\$93.17	\$82.80
Male	\$61.04	\$111.46	\$175.67	\$231.42	\$19.90	\$ 95.76	\$97.29	\$87.83
Average (wt)	\$58.56	\$111.96	\$168.40	\$228.10	\$20.37	\$ 83.63	\$94.81	\$85.15

SALES

The total quantity of produce sold in 2018 was **181,547.61 MT**, 87 percent of which smallholder farmers produced during the 2018 cropping season. Over 92 percent (**166,552.40 MT**) of all sales was for maize and 8 percent (**14,995.21 MT**) was for soy (Table 6).

Table 6. Quantity sold by smallholders in 2018 by crop and gender (MT)

Gender	Maize	Soy	Total
Female	60,899.32	9,330.59	70,229.91
Male	105,653.08	5,664.63	111,317.71
Total	166,552.40	14,995.21	181,547.61

Total sales (Table 7) for both commodities were **\$41,813,439.69**, with 90.2 percent (**\$37,749,231**) from maize and 9.7 percent (**\$4,064,208**) from soy. Female farmers contributed 39 percent (**\$16,374,912**) to total overall sales.

Table 7. Amount of sales in 2018 by crop and gender

Gender	Maize	Soy	Total
Female	\$13,859,745.23	\$2,515,167.47	\$16,374,912.70
Male	\$23,889,486.28	\$1,549,040.71	\$25,438,526.99
Total	\$37,749,231.51	\$4,064,208.18	\$41,813,439.69

In 2018, the average beneficiary sold produce worth \$481 (Table 11). Maize farmers sold the highest amount at \$544, while soybean farmers sold \$231, which is consistent with the volume of sales for those commodities (Table 10). Male farmers achieved higher average sales than their female counterparts. Inversely, female soy farmers made higher average sales than their male counterparts, corroborating the higher volumes sold by male maize farmers and female soy farmers in Table 8.

Table 8. Average baseline and 2018 sales per farmer by crop and gender

Year	Gender	Maize	Soy	Average (wt)
Baseline	Female	\$340	\$246	333.31
	Male	\$360	\$540	502.97
2018	Female	\$473.01	\$247.65	\$415.01
	Male	\$596.52	\$208.82	\$535.93
	Average (wt)	\$544.34	\$231.26	\$481.04

Table 9. Incremental sales⁴ by gender and commodity in 2018

Gender	Maize	Soy	Total
Female	\$6,332,917.53	(\$244,669.99)	\$6,088,247.54
Male	\$15,415,075.50	\$48,277.38	\$15,463,352.88
Total	\$21,747,993.03	(\$196,392.61)	\$21,551,600.42

Overall, project beneficiaries increased the volume of produce they've sold since the project's inception (Table 9). Both male and female maize farmers earned over 1.5 times as much as a result of the project's interventions as at baseline, resulting in incremental sales of \$21,747,993. However, soy farmers were better

⁴ The value of incremental sales indicates the value (in USD) of the total amount of targeted agricultural products sold by smallholder direct beneficiaries relative to a base year and is calculated as the total value of sales of a crop during the reporting year minus the total value of sales in the base year. The Feed the Future Monitoring System (FTFMS) requires computation of the baseline sales and baseline number of beneficiaries to establish average sales per beneficiary at baseline. The average sales per beneficiary are multiplied by the number of beneficiaries in each reporting year to create an adjusted baseline sales value.

off at baseline in terms of sales, resulting in a negative incremental sale of \$196,392.61. As indicated, the results are provisional. They will be validated through phone sales survey in February 2019.

GROSS MARGINS

The provisional 2018 average gross margins per hectare were \$774.76 for maize and \$528.93 for soy (Figure 4). The provisional 2018 average gross margins per hectare were \$774.76 for maize and \$528.93 for soy (Figure 4). Male maize farmers achieved significantly higher margins than their female counterparts, primarily due to higher yields.

Figure 4. Gross margins per hectare by crop and gender for 2018

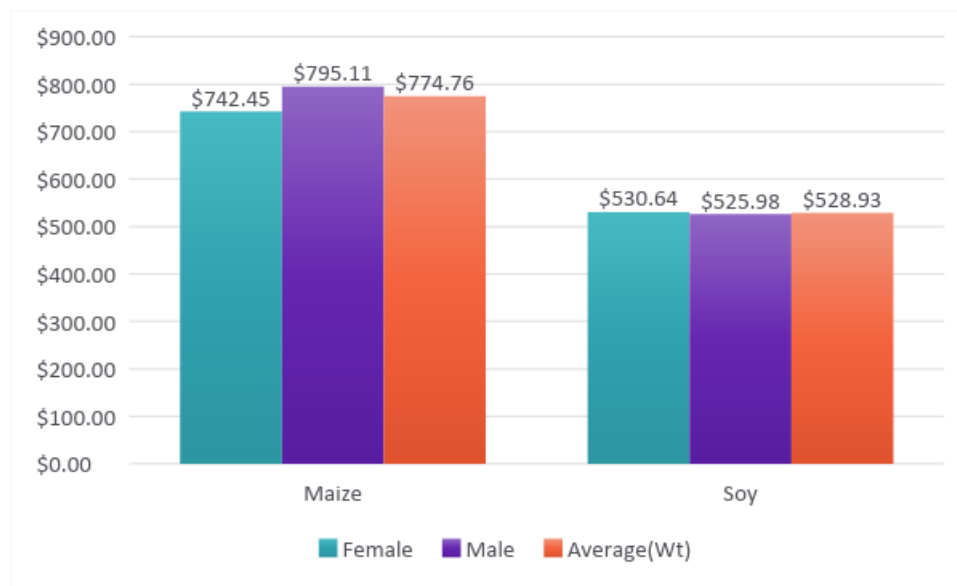
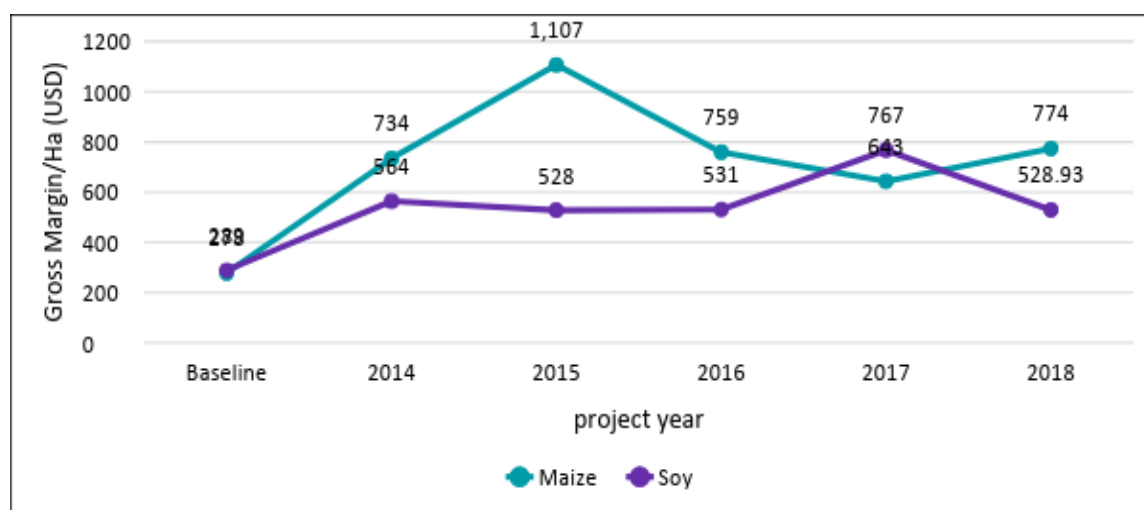


Figure 5 presents gross margin results for maize and soy from the baseline (2013) to the 2018 production season. The 2018 crop season ended with higher maize gross margins than the 2017 and 2016 production seasons because the average yield for maize increased by an average of 9 percent, from 3.34MT/ha in 2016 to 3.68MT/ha in 2018. However, the significant decrease in yields and selling price of soy from 2.6 MT/ha to 2.03 MT/ha and \$344/MT to \$271 (19%) respectively resulted in an overall low gross margin of \$529/ha, which is about 31 percent lower than the 2017 gross margin.

Nevertheless, the project fell short of its gross margin targets for maize and soy. However, if the farmers were not as efficient, gross margins would have been much lower than those they achieved. On average, yields for maize increased by 7.2 percent in 2018 from 2017. Despite lower investment, farmers ended up achieving higher margins per hectare.

Figure 5. Gross margins per hectare from baseline to 2018



APPLICATION OF TECHNOLOGIES AND MANAGEMENT PRACTICES

Table 10 shows the level of application of improved technologies and management practices, based on the 2018 gross margin survey. Almost all project beneficiaries applied one or more improved technology and management practices. The project promoted technologies and management practices such as crop genetics, soil-related technologies, pest management, and cultural practices during the 2018 production season. However, producer application rates varied across technologies and gender. In 2018, pest management was the most applied technology. This included integrated pest management and use of appropriate pesticides. This is not surprising, as farmers invested additional resources in insecticides to control fall armyworm. A total, of 75,545 farmers out of **78,978** beneficiaries in FY18 cultivated 59,372.76 ha under improved land-based technologies. This achievement translates into 169% above the annual target of 35,000

Table 10. Application of technologies by male and female farmers

Technology Type	Application Rate Women (%)	Application Rate Men (%)	# of Women Applying	# of Men Applying	Area Applied to (Ha) by Women	Area Applied to (Ha) by Men
Crop genetics	34	43	12,899	16,101	9,632	16,895
Soil related	56	61	21,280	23,171	15,156	22,953
Cultural practices	70	78	26,885	29,542	18,056	26,537
Pest management	75	77	29,003	29,096	18,836	26,189
One or more land-based	98	98	37,540	37,071	33,435	25,938
One or more technologies	99	99	37,967	37,578		

Women farmers most often applied pest management and cultural practices technologies, and applied crop genetics less often. Men most commonly applied soil-related practices and pest management technologies.

PROGRESS WITH TECHNICAL DELIVERY

This section is organized broadly under the three main project sub-purposes, where the major activities and outputs are presented.

1.0. Sub-purpose I: Increased agricultural productivity in targeted commodities

During the quarter, the project focused on:

- Increased adoption of improved productivity-enhancing technologies, services, and practices
- Continuing the use of ICT to disseminate GAPs and improve adoption of technologies
- Reinforcing the provision of business development services
- Strengthening sustainable systems and incentives for investment
- Continuing climate-smart agriculture initiatives
- Controlling FAW

1.1. INCREASED ADOPTION OF IMPROVED PRODUCTIVITY-ENHANCING TECHNOLOGIES, SERVICES, AND PRACTICES

The project aims to increase adoption of productivity-enhancing technologies, services, and practices by women and men farmers through the OB model, in which local business entrepreneurs provide services and technical support to smallholders on a commercial basis and through which they secure produce for sale to buyers. As a result, the project continues to increase the management and technical capacity of OBs through various trainings and initiatives that strengthen the OB model. During the reporting quarter, the project focused on strengthening elements of the model to ensure sustainable service delivery after the end of the project. These included:

- Relationships between OBs and input suppliers, researchers, and equipment dealers to ensure inputs are made available for field demonstrations by suppliers
- Capacity of OBs and their field agents to establish and conduct field demonstrations
- Capacity of OBs and their field agents to manage outgrowers (input delivery, supervision, technical assistance, recordkeeping and management, recovery of credit provided, and feedback provision)
- Capacity for office and business management, especially office recordkeeping and business planning

The project conducted joint implementation of activities (field days and PHH trainings) and held end-of-season review meetings with OBs and their agents to discuss performance and possible improvements to shortcomings.

Actor-Led Technology Demonstration, GAPs, and PHH Trainings

During the first quarter of FY19, the project trained 5,955 farmers (3,805 women) on GAPs and PHH to increase productivity and reduce post-harvest losses of maize and soybean. The training topics included:

- Protecting unharvested fields from bush/wild fires
- Adhering to maturity indices and harvesting methods
- Threshing and drying using tarpaulins and temporal storage mechanisms
- Quality grain standards
- Grain treatment against pests, handling, and transportation

- Use of appropriate storage sacks and cleaning of facilities prior to storage

Field agents of OBs facilitated trainings, along with USAID’s ADVANCE staff, MoFA AEAAs, and staff of private sector firms including Yara Ghana, Ltd., Macofertil (Louis Dreyfus Company), Heritage Seed Company, Limited, and Adama West Africa. The private companies participate to get feedback from farmers and also provide answers to questions regarding their products which they provide freely to support the establishment of the demonstration fields. The named input suppliers are among the private sector partners identified to support OBs to sustainably incorporate extension and advisory services in the OB model. The relationships established under the actor-led demonstration activity appear strong and functional and the benefits are mutual—farmers get to know, use, and see the impact of new practices and products, while companies get the opportunity to promote sales to previously-mobilized groups. In all 184 training sessions were conducted across the three regions during the quarter.



Figure 1: Mr. Samuel Oteng Jirapa Municipal Director of MoFA (in all green attire) answering questions from farmers during the farmer field day at Chapuri in the Jirapa of the Upper West Region.



Figure 2: Solomon Akanpisi, a field agent, engaging farmers after a field day on a climate-smart agriculture at a hybrid maize site at Namonsa in the Builsa North District.

It afforded me the opportunity to meet farmers to interact with in a very orderly manner. I am keeping the data for future interactions with them. Very good for me”
 Jerry Soyel – Adama West

“I keenly followed what was taught in GAPs last year and bought certified seeds from an input dealer in Savelugu and had 2.1MT from 2 acres of maize and sold 1.5MT to Umar Latif, an ADVANCE OB operating in the community.”
 Mr. Fuseini Alhassan - Nyologu

1.2. ICT OUTREACH AND PRODUCTION TECHNOLOGY DISSEMINATION

The project continued to collaborate with 31 radio stations to broadcast information on GAPs and other production information to smallholder farmers during the reporting period. The project engaged ten stations in the anti-bushfire radio campaign across the three project operational regions. The radio campaign aimed to educate listeners, particularly farmers, about the harmful effects of bush burning on the environment and on farming activities. The campaign broadcast messages using radio jingles and live presenter mentions in English and seven local Ghanaian languages (Dagbani, Gonja, Likpakpa, Kussal, Buli, Dagaree, and Sessali).

Radio Listenership Clubs

Established in 2015, radio listenership clubs continue to serve as a platform for helping change the behavior of farmers towards practices that improve their livelihoods. During the quarter, 32 clubs with a membership of 690 individuals who listen to agriculture and other programs on radio stations such as Zaa, Savannah, North Star, Labari, and Gaarkii were monitored in Gushegu, Saboba, Chereponi and Karaga. During monitoring visits, farmers in these communities indicate improvement in their yields as a result of applying practices learned from radio programs.

“Anytime I harvest my farms, I employ the services of a tractor to plough back the maize stalks into the soil. I have seen great changes in yields since I started practicing No Burn on my farm. My farm is always wet and green throughout the season and my yields have doubled”. Mr. Yamali Shaibu, a farmer in Golinga in the Tolon District in the Northern Region is one of the farmers who have avoided using burning as a land clearing tool on his farms for the past three years as a result of learning about the effects of bushfires through radio programming.

1.3. BUSINESS DEVELOPMENT SERVICES

The OB field management program aims to improve the organizations’ management capabilities to reach out effectively to outgrowers with various services. The program forms part of the ADVANCE project’s strategies to help sustain OBs. Considering this, the project organized two review meetings for 26 field agents, who are employed by OBs, to assess their activities and provide backstopping to issues arising from their supervision of outgrowers.

During the quarter, the field agents regularly conducted trainings for outgrowers, with topics including GAPs, PHH, and quality grain standards. Both the OBs and field agents agree that agent activities are fundamental to the sustainability of OBs. However, some field agents continue to face challenges with regard to transportation to some of the remote outgrower locations. This results in their inability to effectively reach all communities.

According to Sumaila, a field agent in Upper West Region, almost all his outgrowers bought improved seeds after seeing a video on improved yields. He indicated that to reduce travel and still reach farmers in communities located far from his residence, he trains lead farmers residing in those areas, who then cascade training to outgrowers. On the other hand, field agent Sufyan in the Upper West Region indicated that he can easily access communities to train farmers using a motorbike granted to his OB by the project.

“I have the passion to impact knowledge to the smallholder farmers within the operational area, but due to the means of transport, accessibility to the communities is a challenge.” Emmanuel Assibid, stated.

1.4. STRENGTHEN SUSTAINABLE SYSTEMS AND INCENTIVES FOR INVESTMENT

The project continued to support and provide incentives to OBs to provide services to OGs and act as a catalyst for further investment into their businesses. The project expects OBs to invest capital as well as recurrent expenditure to promote growth. During the reporting quarter, project staff supported OBs to acquire credit from institutions and monitored other investment activities. Monitoring showed that OBs made substantial investments during the season, including a 300 MT warehouse, motorized tricycle, multipurpose crop thresher, and a 300 liter-capacity boom sprayer. These investments, including the credit facilities obtained, exceeded \$57,000.

Benchmarking OBs for targeting support and incentive for performance

The OB model has become important for the development of food crop value chains in Ghana. This is because the project’s OB model supports the waning public extension system, while responding to the

opportunity for output markets to drive productivity through delivery of technical, financial, and sometimes social services. One way of promoting the model’s sustainability is to ensure that OBs understand and conduct business according to industry standards. Therefore, the project benchmarks their practices against standard practices with the goal of identifying those with expertise and a willingness to share along with those requiring support. The benchmarking exercise also categorizes the OBs into classes that serve as an incentive for improvement.

The project reviewed the assessment criteria and scoring, introducing a six-level scale (from “novice” to “five-star” levels), along with other criteria such as community, women, and youth engagement. The project assessed 229 OBs in the three northern regions. Table 11 shows a summary of the criteria. Each sub-area had six standards, which were scored from 1 to 6 accordingly. These scores were added with the weights assigned to each sub-area, totaling the maximum score. The results (Table 12) show that 69 percent of OBs are in or above the 3-star category.

Table 11. Business practice areas and weights assigned for use in scoring

Item No	Assessment area	Number of sub-areas assessed	Weight/maximum score
1	Market linkage and use of standards	5	25
2	Office and field setup	4	15
3	Business and succession planning	3	15
4	Employment of women and youth	2	5
5	Provision of services	5	25
6	Use of ICT	2	10
7	Network membership	1	2.5
8	Community engagement	1	2.5
	Total	23	100

Table 12. Number and percent of OBs in overall category rating for current and preceding assessment

Category Rating	Number of OBs		Percent of OBs	
	December 2018 (current)	January 2018	December 2018 (current)	January 2018
Novice	0	N/A	0	N/A
1 STAR	12	104	5.2	27.9
2 STAR	59	119	25.8	31.9
3 STAR	87	89	38.0	23.9
4 STAR	61	61	26.6	16.4
5 STAR	10	N/A	4.4	N/A
Grand Total	229	373	100.00%	100%

Each assessment area is given a star rating according to the sum of scores of the sub-area as a percentage of the maximum score (Table 12). The results show that “market linkage and use of standards” is the only major area with a substantial number of “novices” and without any OB scoring a 5-star rating. Again, most

OBs are still not up to standards with use of weights and measures as well as product labelling, an assessment area included for the first time.

Typical characteristics of star ratings according to scoring criteria

Novice	Unregistered business owner-operated startup with very few outgrowers and offering mainly ploughing services. No field or office staff.
One Star	Unregistered but with business name (mainly owner's initials). No pre-production orders but up to 10 percent pre-financing by known buyers. Relies on temporary unremunerated relatives to complete tasks. Keeps only two of required records. Makes up to GHS5,000 capital investment annually. Provides up to two services covering up to 20 percent of registered outgrowers. Up to 1 percent of staff are women and 1 percent are youth; outgrowers are up to 10 percent women, 10 percent youth. Only annual plans without financials. Not considered succession. One ICT device used in business. Not involved in community development in last 10 years.
Two Star	Unregistered but with business name (mainly owner's initials) with some documentation (receipts, letterhead, etc.). Up to 10 percent pre-production orders with up to 20 percent of costs pre-financed by buyers. Relies on ad-hoc remunerated/paid staff. Keeps up to four of 12 required records. Makes up to GHS10,000 capital investment annually. Provides at least two services covering up to 20 percent of registered outgrowers. Up to 10 percent of staff women and 10 percent youth; outgrowers are up to 20 percent women, 20 percent youth. Only annual plans partially budgeted. Not considered succession. Two ICT devices used in business. Funded one community development initiative in the last 10 years.
Three Star	Registered business with documentation. Up to 40 percent pre-production orders with 40 percent of costs pre-financed by buyers. Relies on temporary unremunerated relatives to complete tasks. Keeps up to six of 12 required records. Makes up to GHS15,000 capital investment annually. Provides at least three services covering up to 40 percent of registered outgrowers. Up to 20 percent of staff are women and 20 percent are youth; outgrowers are up to 40 percent women and 40 percent youth. Only annual plans with full budgeting. Has made decision on succession but undisclosed. Up to 2 ICT devices used in business. Owner registered as digital money merchant. Funded two community development initiatives in the last 10 years.
Four Star	Registered business with documentation. Up to 60 percent preproduction orders with 60 percent of costs pre-financed by buyers. Relies on one regular remunerated staff for office management and one field agent. Keeps up to eight of 12 required records. Makes up to GHS20,000 capital investment annually. Provides at least three services covering up to 60 percent of registered outgrowers. Up to 30 percent of staff are women and 30 percent are youth; outgrowers are up to 60 percent women and 60 percent youth. Unbudgeted long-term plan and budgeted annual plans available. Succession decided and disclosed, with multiple candidates not working with the business. Up to three ICT devices used in business. Owner registered as digital money merchant. Funded three community development initiatives in the last 10 years.

Five Star	Registered business with documentation, including internet presence. Up to 80 percent reproduction orders with 80 percent of costs pre-financed by buyers. Relies on more than one regular remunerated staff for office management and more than one field agent. Keeps more than eight of 12 required records. Makes more than GHS20,000 capital investment annually. Provides more than three services covering more than 60 percent of registered outgrowers. Up to 40 percent of staff are women and 40 percent are youth; outgrowers are more than 60 percent women and 60 percent youth. Budgeted long-term plan and budgeted annual plans available. Succession decided and disclosed, with at least one candidate working with the business. More than three ICT devices/channels used in business. Owner registered as digital money merchant and transacts business with 10 percent of outgrowers using digital money. Funded more than three community development initiatives in the last 10 years.
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Table 13. Number of OBs in each star rating according to the assessment area and overall rating

Star rating	Overall rating	Market linkage and use of standards	Office and field setup	Business and succession planning	Employment of women and youth	Provision of services	Use of ICT and digital finance
Novice	0	25	0	2	1	11	10
1-Star	12	41	4	19	1	22	65
2-Star	59	78	59	54	6	41	96
3-Star	87	57	68	82	27	39	48
4-Star	61	28	64	48	64	40	7
5-Star	10	0	34	24	130	76	3
Total	229	229	229	229	229	229	229

The assessment on the use of ICT included registration as merchants for digital money (giving higher scores). Fifty-two OBs have registered as mobile money merchants. The results include a large number of OBs that exhibit high level recordkeeping. In terms of service provision, 31 OBs offer all five services in the assessment (ploughing, input credit, shelling, marketing/aggregation, and technical advice). Eighty-one percent (185) of the OBs offered technical advice to outgrowers. The 71 OBs with 4-and 5-star ratings are spread across the three regions, indicating the availability of mentors in each region to continue support of the coaching program.

Generally, the results indicate the OBs continue to make and sustain progress, despite the varied backgrounds of business owners with respect to education, resource endowment, and point of entry into the project. Together with other learning studies, the results will support the preparation and dissemination of guiding materials to OBs.

Promotion of inclusive electronic payment systems

During the reporting quarter, project beneficiaries demonstrated continued use of electronic transactions within the value chain. Merchant activities by 19 OBs and one input dealer show transactions amounting to \$29,735.08 (GHS 142,886). To make digital financial services accessible to more farmers, three OBs—Alhaji Abanga Seidu, John Akumbole, and Amos Bangmarigu—and a lead farmer—Adiagbey Joseph of Wiaga—became mobile money merchants in order to incorporate electronic transactions into their

outgrower business operations in Binduri and Bawku West Districts and West Mamprusi Municipality during the reporting period.

Alhaji Abanga Seidu indicated he had plans to open outlets in all his operational communities, in addition to Atuba and Tansia where he currently maintains mobile money outlets. Additionally, 604 farmers (393 women and 211 men) registered with these OBs learned about the benefits of mobile money and how to incorporate this technology into their farming business. Subsequently, 287 (184 women and 103 men) registered as MTN mobile money platform subscribers.

“With the registration of mobile money, I will be able to save money by avoiding unnecessary spending and is assured of the safety of his money”, a smallholder farmer in Moglaa Iddrisu Abdallah, expresses his joy.

1.5. CLIMATE-SMART AGRICULTURE

The project promotes climate-smart agriculture to increase awareness and adoption of climate-smart practices among farmers, increasing the resilience of cropping systems and mitigating the impact of climate change to improve productivity and income.

Campaign against bushfires

Perennial bush burning continues to be a critical problem in northern Ghana. Bush burning negatively impacts the environment, soil, and crop production. To help create awareness of the harmful effects of bush burning, the project reached out to beneficiaries and the public with bushfire education through banners, posters, radio messages, and community durbars.

To ensure the sustainability of anti-bushfire education, the project approached eight partner radio stations during the quarter, who agreed to run the radio campaign as part of their corporate social responsibility initiatives. Additionally, the project collaborated with the GNFS, MoFA, Forestry Commission, and Environmental Protection Agency to hold anti-bushfire community outreach campaigns using durbars in three communities—Satande, Jempensi, and Yemo in the Bawku West District of the Upper East Region, Daffiama-Bussie-Issa District of the Upper West Region, and Karaga District of the Northern Region. The theme for this year’s campaign was “Stop Bushfires, Protect the Soils.” Various speakers from participating organizations advised farmers on the harmful effects of bushfires on the environment and farming lands, and urged farmers to stop burning bush. The durbars focused on fire safety and prevention and discussed actions such as the creation of fire belts around farms (especially late-harvested fields and installations). The GNFS spoke about fire safety and control, and demonstrated how to extinguish domestic and bush fires using various methods, including fire beaters and wet gunny bags.



Figure 4: Upper East Regional coordinator delivering message to participants at the 2018 anti-bushfire durbar in Santande, Bawku West District.

The theme for this year’s campaign was “Stop Bushfires, Protect the Soils.” Various speakers from participating organizations advised farmers on the harmful effects of bushfires on the environment and farming lands, and urged farmers to stop burning bush. The durbars focused on fire safety and prevention and discussed actions such as the creation of fire belts around farms (especially late-harvested fields and installations). The GNFS spoke about fire safety and control, and demonstrated how to extinguish domestic and bush fires using various methods, including fire beaters and wet gunny bags.

Mitigating production risk by working with crop insurance

Eight field agents sold a total of 68 GAIP products to maize, rice, and soybean farmers across the districts of Chereponi, Kumbungu, Yendi, West Mamprusi, Karaga, Mion, Saboba, and Nanumba North during the 2018 production season. Currently, GAIP has remitted half of its payments, \$7,284 (GHS35,000), to 7 out

of 22 farmers. These farmers experienced drought and FAW infestations during the 2017/18 farming season.

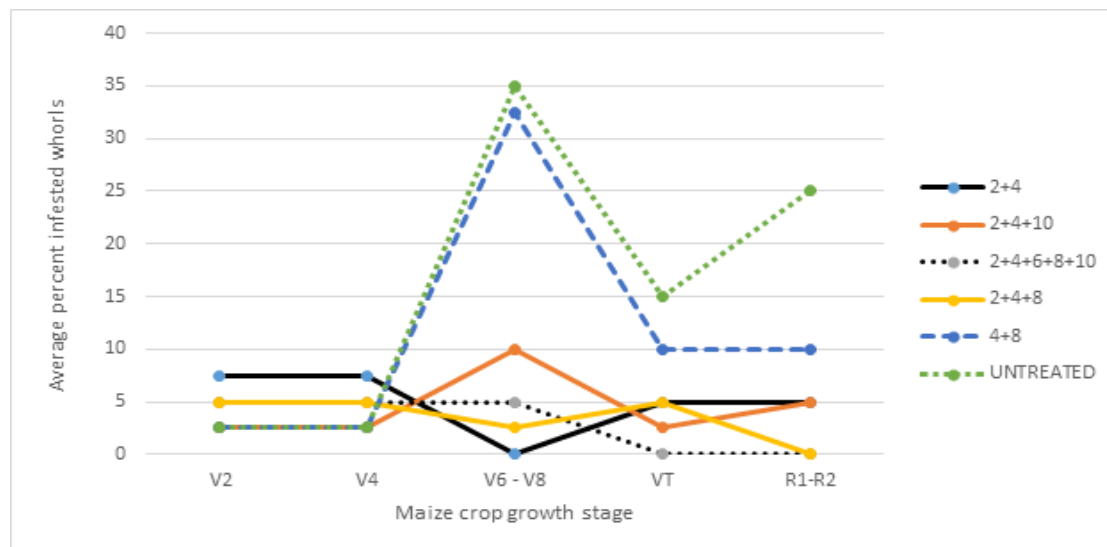
1.6. FALL ARMYWORM CONTROL

As part of the activities of the National FAW Taskforce, the project monitored the FAW situation and the status of intervention programs on a monthly basis. The project completed one such activity during this reporting quarter. The project found that farmers who received free, government-sponsored FAW pesticide had no or less cob damages.

In May 2018, the project set up an FAW observation plot at Abudwom, Kintampo, in the Brong Ahafo Region, Ghana. The project designed the quasi-experimental plot, which included two control plots neither deliberately infested nor protected, to observe the efficacy of a recommended active ingredient, *emamectin benzoate*, with regard to the number of applications and timing. The design was a randomized complete bloc with four replications. As much as possible the field operations and other conditions, except the treatments, were kept similar on all plots. The project collected data on pheromone traps, standard field scouting, rainfall, levels of vegetative growth infestation, and cob damage.

Figure 6 below shows that the V6-V8 stage of crop growth⁵ was critical for the expression of whorl infestation in this observation plot. It also indicates that spraying at the V2 stage was critical to prevent increased infestation. This is because all treatments that included a V2 stage spraying did not have significantly increased infestation.

Figure 6. Average percent infested whorls at various stages of maize growth as affected by chemical spray regime.



⁵ **Maize Growth Stages:** This is a growth stage identification system that divides plant development into vegetative (V) and reproductive (R) stages. The (V) stages are designated numerically as V1, V2, V3, etc. through V(n) where (n) represents the number of leaves with visible collars. The first and last (V) stages are designated as VE (emergence) and VT (tasseling). There are six reproductive stages that are simply designated numerically. R1-(Silking - silks visible outside the husks) - R2(Blister - kernels are white and resemble a blister in shape), R3 (Milk - kernels are yellow on the outside with a milky inner fluid), R4 (Dough - milky inner fluid thickens to a pasty consistency), R5 (Dent - nearly all kernels are denting) R6 (Physiological maturity - the black abscission layer has formed)

Fig 7. Percent infected cobs by stages of maize growth

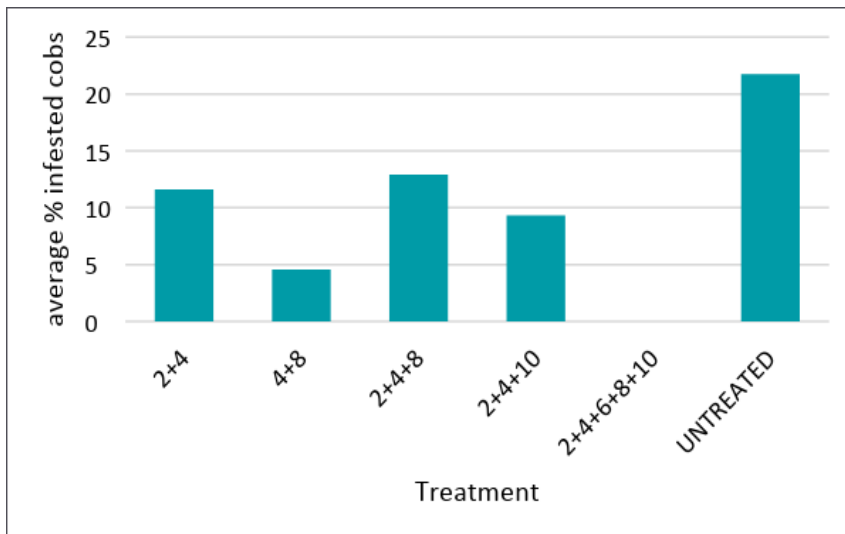
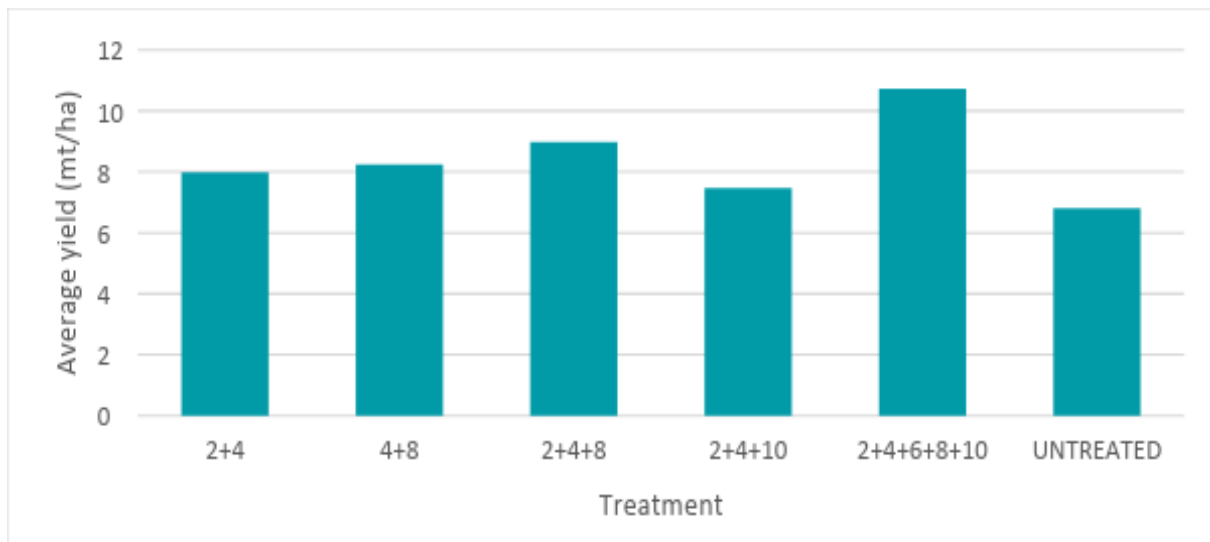


Figure 7 shows that there was a higher level of infestation in the control untreated plot than all the other treatments. The plot that received a treatment consisting of five sprays at two weeks intervals (2+4+6+8+10) resulted in no cob infestation at harvest. The result is for comparative purposes and is not recommended for adoption due to the cost of spraying five times.

Although the analysis of the grain yield⁶ did not show statistical significance, the plots where the active ingredient was applied produced yields that were 10 percent (2+4+10) to 57 percent (2+4+6+8+10) greater than the untreated control (Figure 8). In summary, the results of the observation plot suggest that it is critical to spray at the V2 stage of growth, and 2-3 sprays (at V4 and at V8 after V2) may be important to avoid significant yield loss.

Figure 8. Grain yield at harvest of maize with various spray regimes



⁶ Grain yield figures are higher than normal, as grain yields were measured at significantly higher moisture levels due to room drying to avoid contaminations and interference.

2.0. Sub-purpose 2: Increased Market Access and Trade of Targeted Commodities

During this reporting period, the project continued with the following strategies under sub-purpose 2:

- Strengthening market linkages between OBs and buyers
- Reinforcing lead firms' competitiveness
- Supporting trade associations
- Strengthening community-based marketing
- Key market developments

2.1. MARKET LINKAGE DEVELOPMENT

Two-way trade missions

The project facilitates trade missions to build business relationships. Two types of missions are organized by the project: project-facilitated (for new entrants, facilitated and sponsored by the project), and actor-led (for businesses who already experienced at least one mission). The actor-led missions are normally initiated and sponsored by buyers or OBs themselves. Actor-led trade missions are indicative of the sustainability of business relationships between buyers and OBs.

During the reporting quarter, the project facilitated three trade missions for four buyers to visit 64 OBs in the north, and facilitated OBs' visit to buyers and processors to understand their requirements (Table 14).

Table 14. Trade missions for buyers

Buyer Name	Location of Buyer	No. of Participating OBs	Regional Coverage of OBs	Commodity
Agrisolve	Tamale	52	Northern	Maize & Soy
Royal Danemac	Kumasi	7	Northern	Soy
Premium Foods	Kumasi	52	Northern	Maize & Soy
Essar Agro WA	Tema	5	Northern	Maize & Soy
Grand Total		64⁷		

The summary of outcomes are:

1. Agrisolve completed 2017/2018 trade reconciliation with Wumbei Enterprise; a Gushegu-based aggregator who previously supplied maize and soy to the firm. A purchase and supply agreement for 2018/2019 season was also concluded between the parties to supply an initial amount of 40 MT of white maize worth \$9,157 (GHS44,000).
2. Premium Foods Ltd concluded a purchase contract with Kasule and Yelmagli Enterprises of Tamale and Yendi, respectively, to supply 80 MT of maize each.
3. Royal Danemac met with the Saboba zonal OB's network and secured a biweekly supply agreement with OB Abdul Rashid Alhassan from Wapuli to supply 20 MT of soy with a start price of \$250 (GHS1,200) per MT at farm gate. The company also agreed to provide advance payment of \$4,994 (GHS24,000) to the OB to support aggregation.

⁷ Agrisolve and Premium Foods Ltd met the same set of 52 OBs

Contract Facilitation

The project facilitates and/or accounts for contracts that are concluded between parties in the value chains. During the reporting quarter, the project recorded six contracts covering 209 MT of maize between five buyers and two OBs.

Table 15. Contracts facilitated

Type of Contract	Number of Contracts	Contract Volume (MT)	Contract Value (USD)	Contract Value (GHS)
Closed sale without formal contract	2	60	16,232	78,000
Purchase and supply agreements	4	149	30,029	*144,300
Grand Total	6	209	46,261	*222,300

* The value shown above does not reflect the full value of the contracts, as the contract values of some of the purchase and supply agreements are yet to be determined.

These contracts resulted from business relationships that began at annual pre-harvest events and were executed by the parties with minimal facilitation by the project. Beyond the ADVANCE facilitated contracts, OBs and buyers in existing relationships executed contracts independently, using the skills and experience gained from previous market linkage facilitation and trainings provided by the project.

Marketing and Market Linkages Training for Outgrower Businesses

During the quarter, the project provided refresher training on marketing and commodity price trends to 52 OBs and two executives of FBOs, using content from the market intelligence report prepared by the project. The refresher training aimed to improve OBs' understanding of market dynamics in order to better participate in the 2018/2019 maize and soybeans purchasing season.

Staff of Premium Foods, Agrisolve, and Opportunity International Savings and Loans participated in the training and shared the perspective of buyers and financial institutions.

Both buyers and farmers discussed factors that affect prices on the open market as well as in negotiated contracts. The discussion focused on poor quality of produce as a key constraining factor in executing negotiated contracts, affecting both farmers and buyers. Farmers obtain lower-than-agreed prices when they supply poor quality produce, while buyers suffer disrupted production schedules and additional production costs if poor quality produce results in processing equipment breakdowns. They also discussed measures that the project introduced to promoted good quality grains.

2.2. LEAD FIRM COMPETITIVENESS

Support for Buyer Outgrower Development

During the reporting quarter, the project supported a number of buyers and monitored their outgrower schemes. Table 16 shows the type of support the project provided.

Table 16. Support for buyer outgrower schemes for 2018 farming season

Buyer Name	Crop	Type of Support	No. of Participating OBs	Status at mid-December 2018
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Agricare (North Ghana)	Maize	Seed, fertilizer, and crop insurance	63	Farmers are harvesting and shelling produce. Recovery is set for January 2019
Akate Farms	Maize	Seed, fertilizer, weedicides	1	Recovery is underway
Agri-Invest	Maize	Seed and fertilizer	3	Farmers are harvesting and shelling produce. Recovery is set for January 2019
Duna Farms	Maize	Fertilizer and ploughing service	1	Farmers have begun harvesting. Recovery is set for January 2019
Cropcare Ghana	Maize	Seed, fertilizer, agrochemicals	23	Farmers have begun bagging produce in readiness for delivery to Cropcare Ghana, Ltd. Recovery is set for January 2019
Total			91	

BDS Support to Buyers

The project provided business development services to five buyer firms during the quarter.

Table 17. BDS to grain buyers and market lead firms

Name of Firm	Home Region of Firm	Type of Technical Assistance
Vester Oil Mills	Ashanti	Met with three separate financial institutions—GEXIM, UMB, and UBA—to discuss working capital and capital expenditure financing needs
Cropcare Ghana and E-GABS GH	Ashanti and Brong Ahafo	Met with IFS Financial Services to discuss working capital financing to aggregate maize and soy during the 2018 harvest season
E-GABS GH	Brong Ahafo	Met with potential investors to discuss equity financing for expansion
Regis Commodities	Ashanti	Met with Cropcare Ghana to discuss collaboration to aggregate maize during the 2018 harvest. Began the development of a supply chain into the food/feed and poultry markets.

2.3. TRADE ASSOCIATION SUPPORT

Southern Maize Traders Network (SMTN) – Promotion of Structured Trade

The project facilitated the delivery of 200 analogue scales and 10 moisture meters worth \$47,240 (GHS 227,000) from the German Corporation for International Cooperation (GIZ) Green Innovation Center (GIC) to the Southern Maize Traders Network (SMTN) in November 2018 to support the promotion of

structured trade. USAID’s ADVANCE project assisted the traders to prepare and present the grant application to GIZ-funded GIC program in June 2018 and followed up on their behalf. The indicative distribution list agreed by the SMTN is as follow:

Table 18. SMTN distribution list

Market	Number of scales	Number of moisture meter
Techiman	50	1
Wenchi	25	2
Ejura	24	1
Odumase	22	1
Odumase	12	1
Badu	18	1
Kintampo	10	1
Nkoranza	8	1
Atebubu	18	1
Kwame Danso	5	-
Abofour	8	-
Total	200	10

2.4. STRENGTHENING BUSINESS AND MARKETING LINKAGES

The Agribusiness Exhibitions and Conference event, “*Transforming Agribusiness in Northern Ghana, The Future Starts Now,*” took place from October 3–5, 2018 at the Aliu Mahama Sports Stadium in Tamale. As part of the general post-project sustainability plan, Agrihouse Foundation, a private event organization, led the planning and organization of this year’s event, with technical and financial support from the World Food Program’s ENVAC⁸ private sector sponsors.⁹

For the first time, the event took place over three days, with a wider range of activities. A total of 2,449 participants (1,793 men and 656 women) registered for the three-day event, compared to 911 in October 2017. The 349 event exhibitors showcased varied products, from equipment to food products, knowledge platforms, and other value chain products. Daily attendance is captured in table 19 below :

Table 19. Annual pre-harvest attendance

Day	Women	Men	Total
Wednesday	312	977	1,289
Thursday	297	795	1,092
Friday	198	543	741
Total ¹⁰	807	2,315	3,122

Participants included farmers, buyers, processors, transporters, input dealers, farm machinery dealers, financial institutions, development agencies and projects, and government officials.

¹⁰ The unique count of participants over the 3 days was 2,449

The event provided a platform for farmers to establish business relationships and discuss contracts for the 2018 maize, rice, and soybean harvests. It also included seminars and briefing sessions on agribusiness and policy issues, as well as a field trip to a model mechanized maize farm promoted by an OB affiliated with the ADVANCE project.



Ambassadors and ministers of state at the opening ceremony



Exhibition grounds



OBs from ADVANCE south at the pre-harvest event



Exhibitor explaining drone applications in agriculture

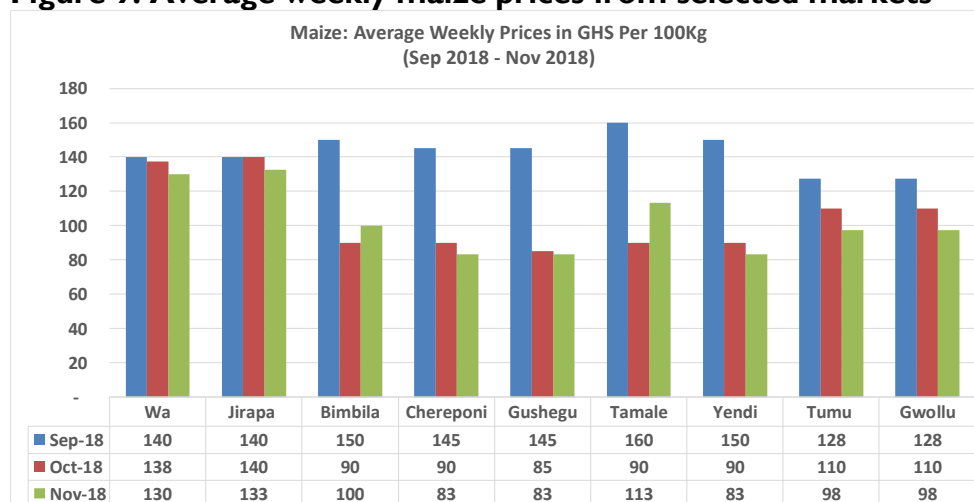
2.5. KEY MARKET DEVELOPMENTS

This section summarizes developments from key markets monitored by the project in the Northern and Upper West Regions. Overall, commodity prices declined between September and November 2018.

Maize

Maize prices declined by an average of 28 percent between September 2018 and November 2018 in the nine markets monitored in the Northern and Upper West Regions.

Figure 9. Average weekly maize prices from selected markets



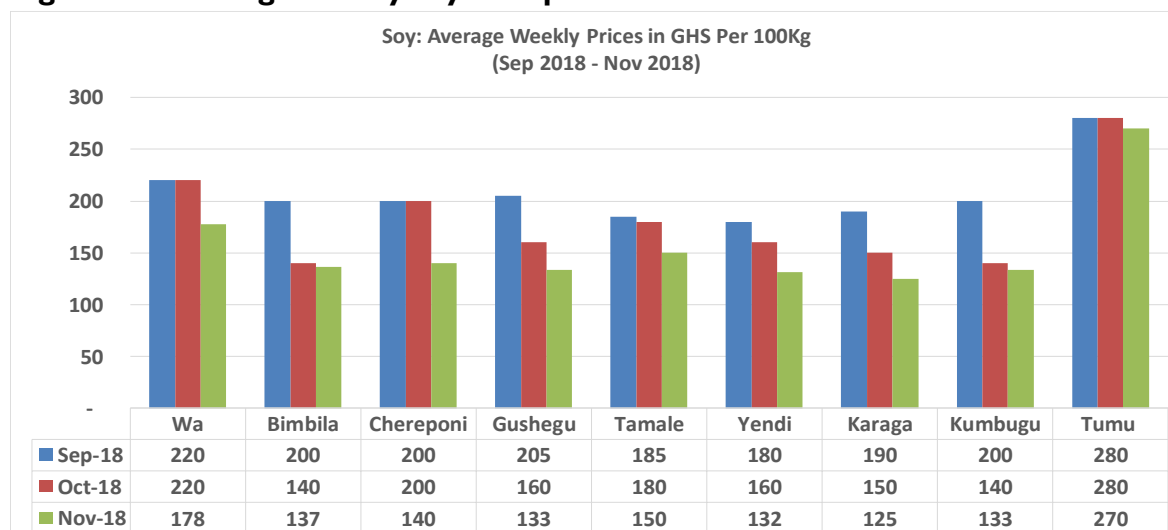
Source: ADVANCE market monitoring

The overall fall in price is due in part to the early harvest in 2018, bringing maize into the market and pushing down prices. On a market-by-market basis, however, prices fluctuated differently. Market actors expect an overall increase in maize supply due to good rainfall in the 2018 crop season. The effects of the FAW was minimal this season, with localized infestation. Farmers have learned to control the pest.

Soybean

Soybean prices declined by an average of 25 percent across the nine markets monitored from September to November 2018 in the Northern and Upper West Regions. However, the decrease in prices is marginal in the Upper West Region because of historically low production volumes.

Figure 10. Average weekly soybean prices from selected markets



Source: ADVANCE market monitoring

3.0. Sub-purpose 3: Strengthened Capacity for Advocacy and Activity Implementation

Under sub-purpose three, the project focused on

- (i) Development of advocacy groups
- (ii) Capacity development for apex organizations
- (iii) Capacity development for VSLA groups

3.1. ADVOCACY CAPACITY BUILDING

The project supported five local non-governmental organizations (NGOs) to develop advocacy strategies to address agribusiness policy constraints. Apart from providing advocacy strategies, the project also awarded the grants to improve the NGO recipients' organizational and operational capacities. The project requested that NGOs conduct a self-assessment of their work performance and capacity and hired an external consultant for an objective assessment. Table 23 shows various areas identified for improvement.

Table 20. Extracts from self-reported improvements in capacity of grantees on advocacy action

	Organization	Title of Advocacy Action	Self-reported improvements in organizational capacity and other areas
1	Community Development Alliance (CDA)	Improving the enabling environment for agribusiness growth	<ul style="list-style-type: none"> • Research and evidence gathering for advocacy purposes; • social mobilization and facilitation of local advocacy campaigns media engagement and advocacy on government fertilizer subsidy; • Report writing and monitoring of advocacy actions
2	Sung Foundation Ghana (SUFOD)	Monitoring and facilitation of share-out among VSLA groups in the Northern Region	Not applicable. This grant didn't require capacity assessment.
3	Urban Agricultural Network (URBANET)	Leveraging stakeholder support for enhanced smallholder farmer access to agriculture extension services	<ul style="list-style-type: none"> • Enhanced stakeholder mobilization for policy dialogue; building relationships with stakeholders, especially the district departments of agriculture in the project districts; • knowledge and skill in developing and implementing a community scorecard system.
4	Youth Harvest Foundation Ghana (YHFG)	Safe disposal of agrochemicals containers advocacy project	<ul style="list-style-type: none"> • Improved subject matter knowledge (safe handling of pesticides); monitoring and evaluation skills; • public speaking, negotiation, and dialogue skills
5	Coalition for Development of Western Corridor of	Enhancing Women's Output of Maize, Rice, and Soy Value Chains through	<ul style="list-style-type: none"> • Enhanced dialogue and negotiation skills with traditional authorities and land owners; improved institutional-level

Northern Region (NORTHCODE)	fostering their access to improved seeds and productive land in the Northern Region of Ghana	<p>engagements and approaches for partnership and collaboration; significantly improved skills in community-based meeting session facilitation; enhanced</p> <ul style="list-style-type: none"> • Staff confidence level and workshop facilitation/delivery.
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Actions to Reduce Bushfires in CREMA Societies

The project concluded all the activities under the four-community resource management area (CREMA) advocacy actions in FY18 Q4. However, the project continued to monitor to ensure gazettement of the bye-laws passed by the district assemblies covering two CREMA areas, Chakali Sumaalu (Wa East) and Kunlog (Sawla/Tuna/Kalba) CREMAs and enforcement of the gazetted bye-laws of the Moagduri Wuntamluuri Kouwamsaasi (Mamprugu Moagduri) and Builsa Yenning (Builsa South District) CREMAs. The outcome of the visits indicated that the two bye-laws have finally been gazetted. The community leaders also indicated that they were alert to the provisions of the bye-laws and that there were no indications of breach as at the time.

Support to Local NGOs to Undertake Advocacy Actions

The project approved proposals from three local NGOs—URBANET, Youth Harvest Foundation Ghana (YHFG) and Community Development Alliance (CDA)—for grant support to undertake advocacy. The advocacy actions will focus on *accessing subsidized fertilizer, supporting AEAs, and appropriately handling and disposing of agrochemical containers.*

3.2. CAPACITY DEVELOPMENT FOR APEX ORGANIZATIONS

The project supported the development of apex organizations for two actor groups—OBs and farmer-based organizations (FBOs). There are currently 14 OB zonal networks and 11 FBO networks.

OB Zonal Networks

The 14 OB zonal networks are in the three northern regions. The OB zonal networks in Upper East region proceeded to form regional networks. The Upper East Regional Network now have vision and mission statements, and action plans for sustainable activities that unite members for mutual benefits. The project is in the process of finalizing the regional network for Northern and Upper West regions. During the reporting quarter, the networks’ main activities consisted of building structures and skills to develop sustainable relationships with other stakeholders, including local, traditional, and official governance institutions. Some of the network activities that took place during this reporting quarter include:



Members of the interim executives of the Upper East Regional Outgrower Business Network

- The Karaga zonal OB network held a series of meetings with the Karaga District Assembly, the Departments of Agriculture, and Karaga’s traditional leadership. At these meetings, participants discussed the objectives and activities of the zonal network. Key personnel such as the district coordinating director, the chief of Karaga, the district crops officer, and MoFA AEA attended the meetings and urged the OB network to work together for sustainable growth. A key result of the

meeting was the Karaga Traditional Council's allocation of an office space to the OB networks. In addition, the Department of Agriculture also pledged to provide an office space for the OB Network within the directorate's premises.

- The Tamale zonal network located in Gbullung, Kumbungu District, engaged with the World Food Program (WFP) to finalize the terms and conditions for the FBO network to supply grains to WFP as the main aggregator for that catchment area. They also resolved to do collective sales to generate revenue through deductions from the sale of grains for the purchase of fertilizer and inputs for the 2019 production season.
- Five zonal networks received support in the form of extension, financial, and organizational advisory services. The project facilitated review meetings across the zonal networks to ascertain the challenges, sustainability plans, and sales strategy after the 2018 cropping calendar. As part of deliberations, the OB networks, particularly the Navrongo and Mamprugu Moagduri networks, collaborated with AVNASH (a rice processing company) for bulk purchase of paddy, which is expected to benefit 23 OBs.
- The leadership of the Upper West Regional OB Network opened email accounts and social media presence on Twitter and Instagram, with support from project staff. Members can now advertise their produce and prospect for investors and partners on these platforms.

Improved Capacity of Farmer-Based Organizations

This activity aimed to support selected FBOs to develop operational structures and capacity to sustain their operations in the long term. During the reporting quarter, the project carried out tailored interventions to address specific needs of some FBOs.

Business Plan Development

The project facilitated the development of eight business plans for Libga, Gingani, Voggu Botingli, Golinga, Katabanawa, Tinguri, Boamasa, and Kukua FBOs. The preparation of the business plans is part of the project's exit plan, seeking to keep FBOs functioning as they seek to exploit other support services to make their groups functional business entities that continue to provide services to their members. FBOs have completed consultations and finalized their business plans as group documents/blueprints to guide their implementation.

Delivery of Training and Extension Services

During the reporting period, the project supported 21 FBOs to organize field days (at harvest) and training on maize and soy post-harvest processing and handling. A total of **1,002 (female – 394, males – 608)** farmers attended the field days.

Farmers enumerated issues related to harvesting, shelling, and post-harvest losses, and shared advice to reduce postharvest losses: *“Preventing bushfires and allowing maize to dry properly before harvesting and shelling, employ the use of tarpaulins during shelling to collect spills out grains, bag instantly, store produce on pallets in a well-ventilated warehouse.”* These were some of the measures pledged to be implemented by the farmers to reduce post-harvest losses.

Mr. Nuhu Mejida, a SHF from Katabanawa was very excited being a beneficiary of the ADVANCE project. He shares his experience and narrated:

“I planted one acre in rows and advise my farm neighbor to do same, but he refused and said it was time wasting. When our farms were infected with FAW, I quickly controlled my farm, but my friend struggled and spent a lot on chemicals. I harvested 21 bags from one acre and my friend harvested 8 bags, even though we both used the same seed, fertilizer, and chemicals.”

Coaching and Mentorship of FBOs

After assessing FBOs and identifying the challenges and weakness of these groups, the project designed a tailor-made mentorship and coaching program to guide them. As a result, the project coached nine FBOs on basic recordkeeping topics, including attendance registers, dues registers, cash books, bank books, production and sales records, store ledgers. The project also provided training on leadership and management topics, including leadership trainings, constitutional reviews, meeting scheduling, goal setting, finance and credit management, fundraising, and linking FBOs to input credits and bank loans.

“I will become an advocate for ADVANCE on what they teach based on my personal experience. When we were taught on the demonstration farm on buying new seed, planting in lines and applying the right quantities of fertilizer, I followed same on a 2-acre farm and I can swear that what I have seen on the farm, the harvest can feed my family a full year and I will still have more than enough to sell. I am advising everybody to follow the teachings of ADVANCE, limit your number of acres to few acres and apply the required knowledge and inputs and you will never regret.” - Benjamin Nsamba, a farmer in Kpachani in the Yendi District

Monitoring Activities of Asset Management Committees on Motor Tricycles

To ensure timely transportation of produce from farms to aggregation centers, the project, in the latter part of FY2018, provided six motor tricycles through grants to six FBOs located in Katabanawa, Tiyumtaba – Voggu Botingli, Suglo Mboringboni – Kamonayili, Salaga, Kabeso, and Kpachani. The project assisted these groups to form asset management committees to manage the properties. During the three months since setting up their committees, five of the groups kept detailed records on income and expenditures, coupled with good maintenance records for all the tricycles.

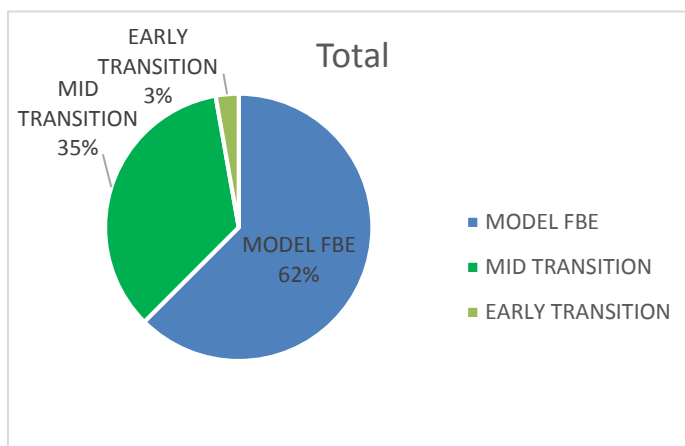
More than 200 smallholder farmers who are members of the six FBOs can now quickly transport produce from their farms to their homes after harvesting and threshing. Apart from eliminating the drudgery of carrying farm produce, especially by women, this initiative will reduce the burning and destruction of harvested produce by wild bushfires at the onset of the dry season by providing immediate availability of transport after harvest and processing.

3.3. ASSESSMENT OF GENERAL CAPACITY AND STATUS OF FBES

During the quarter, the project assessed 72 farmer-based enterprises (FBEs) in the three northern regions. The final assessment scores, based on a set criteria and weights, results in classification of the FBEs into capacity levels: formative, early transition, mid transition and model FBE. More importantly, the scores for each criteria help identify the strengths and weaknesses of each FBE, enabling the project to provide tailored support. The FBEs are evaluated in six main areas:

1. Organization setup and functioning (25.5 points)
2. General service provision to members (30 points)
3. Collective marketing and purchasing activities (21.5)
4. Provision of financial services (7.5)
5. Recordkeeping (10 points)
6. Ownership of equipment and machinery (6 points)

The results show that most FBEs (63 percent) were at the model FBE stage, and only two were at the early transition stage. There were no FBEs at the formative stage. The FBEs gained key strength in general recordkeeping, organizational setup and functioning, and collective marketing and purchasing activities.



Ownership of equipment and facilities is a challenge for many FBEs. The data shows there is appreciable ownership of tarpaulins (72 percent ownership), motor tricycles (51 percent) and weighing scales (42 percent), but very low ownership of tractors (21 percent) and warehouses (25 percent).

Table 21. FBE assessment criteria

Assessment criteria group	Target maximum score	Mean score achieved	Mean score as % of target maximum score
General service provision	30	17.9	59.2
General recordkeeping	10	9.3	93.1
Collective marketing and purchasing activities	21	16.9	80.4
Financial service provision	7.5	4.4	58.8
Ownership of equipment and facilities	6.0	2.2	36.6
Organizational setup and functioning	25.5	21.7	85.1
Total	100	72.4	

Four out of the 10 items under general services, namely transport, post-harvest shelling, pesticide input credit, produce storage, and seed input credit are still not common among the FBEs (See Table 22). Most FBEs (86 percent) provide extension services due to the project's training activities. Table 22 indicates that most FBEs are finding success with regard to organizational setup, general recordkeeping, collective marketing, and purchasing activities, and to some extent general services.

Table 22. Percentage of FBEs offering specific services to members

Item no.	Service	Weight assigned	Percent of FBEs offering service
1	Ploughing	10	79%
2	Fertilizer input credit	5	67%
3	Seed input credit	5	42%
4	Post-harvest shelling	3	28%
5	Pesticide input credit	2	22%
6	Extension advisory	1	86%
7	Produce storage	1	42%
8	Transport	1	31%

Item no.	Service	Weight assigned	Percent of FBEs offering service
9	Produce drying and cleaning	1	78%
10	Safe spraying	1	79%

Table 23. Number of FBEs with scores within stated ranges in six assessment areas

Score range	General services (#FBEs)	General recordkeeping (#FBEs)	Collective marketing and purchasing activities (#FBEs)	Financial services (#FBEs)	Ownership of equipment and facilities (#FBEs)	Organizational setup and functioning (#FBEs)
25 and below	14	0	11	3	27	0.
25.5 to 50	10	0	2	19	28	3
50.5 to 75	19	9	3	42	16	5
75.5 to 100	29	62	56	8	1	64.
Total number of FBEs	72	72	72	72	72	72.0

PROGRAM SUPPORT

1.0. Gender Program

During the reporting quarter, the project continued mainstreaming gender and promoting women's empowerment in all activities. Specific interventions included:

- Building women's business, leadership, and entrepreneurship skills
- Increasing women's access to ICT, financial services, and improved technologies
- Promoting nutrition-sensitive agriculture
- Celebrating and honoring rural women

1.1. BUILDING WOMEN'S BUSINESS, LEADERSHIP, AND ENTREPRENEURSHIP SKILLS

The project promotes women's leadership roles by advocating for the creation of women's leadership positions, training in leadership skills (especially to lead VSLAs), and recognition and award for performance and leadership. The project has discussed the possibility of creating additional leadership positions with the regional and zonal OB and FBE networks, such as a women organizer, apart from the treasurer position that is normally reserved for women. The OB and FBE networks generally agree, and the project expects the creation of two to three positions per network. During the reporting quarter, the project trained 131 female VSLA leaders from 54 VSLA groups in 15 communities on how to lead VSLA activities, especially share-out modalities. As part of technical skills training, 3,805 women smallholder farmers benefited from maize and soy post-harvest handling trainings during the quarter.

The project supported the leadership of the Binaba Women Farmers Association FBE to provide mentorship to the leaders of AGAOKODEP, an FBE AT Binaba. The project identified the Binaba Women Farmers Association for their strengths in financial mobilization, input acquisition, and equipment maintenance. Led by Victoria Asaaro, women from the FBE mentored AGAOKODEP on planning, documentation, and organization of membership, and the identification and networking with institutions for input credit facilities. Some of the critical experiences shared by members of the Binaba Women Farmers Association included:

1. Toende Rural Bank at Zebilla is considering providing lower interest rates for the group because they consistently make 100 percent payments on input credit facilities provided.
2. In regards to asset management and utilization, the Binaba Women Farmers Association established a committee to oversee the use and maintenance of their five donkey ploughs and motorized tricycle. The committee maintains records on incomes and expenditures kept and reported to members.
3. To generate income, the Binaba Women Farmers Association engages in commodity trading. The association invested funds earned from the motorized tricycle (GHS900) in rice paddy for later sale.

Leaders of AGAOKODEP felt inspired by the engagement and decided to adopt the strategies of Binaba Women Farmers Association in their group.

1.2. SUPPORT WOMEN IN VSLA GROUPS TO INVEST IN THEIR LIVELIHOOD

The project facilitated the development of 1,097 VSLA groups in the zone of influence (ZOI). The VSLAs have approximately 70 percent female membership, and results so far indicate improved savings. The purpose of this activity is to support improved economic use of savings to increase VSLA groups' overall annual income and resilience against shocks after the end of the project. ADVANCE collaborated with the

Women in Agriculture Department (WIAD) of the MoFA to train over 15,000 women on domestic and commercial utilization of soy to improve the nutritional status, food security, and income smallholder farmer households. These trainings continued during the period under review.

The project conducted training workshops for 371 women interested in commercial soy utilization. The women participants learned to prepare and package various soy products, including soybean cerelac, soy milk, soy kebab, soy flour (popularly known as “soya tom brown”), and other products for local substitutes such as soy dawadawa.

Apart from soy products, the training covered other popular commercial products such as shea butter, groundnut butter, and the weaving of highly prized local cotton fabric.

The project gathered evidence on the impact of training sessions during monitoring visits. A group of previously trained women from Tinguri in the West Mamprusi District of the Northern Region established a business entity producing soy cerelac for the market with assistance from KOICA, the Korean Development Agency, to enhance their branding and packaging. During this year’s Pre-harvest event in Tamale, the Tinguri Women’s Group funded their participated and exhibited their products (see picture above).



Asana Wuni, the group leader of Tinguri Women’s Group showcasing some of group’s products during the 2018 Preharvest event held in Tamale in the Northern Region. Photo credit: Alhassan A. Rashid

Under a mentorship scheme, Madam Esther Akabzaa, an OB and owner of Abuogpoka Enterprise, has promoted income generating activities to 250 female outgrowers who are members of VSLA groups in seven communities of the Bongo District of the Upper East Region. These groups are involved in shea butter production, groundnut paste, kente weaving, dawadawa making, basket weaving, and produce a local malt drink.

1.3. INTERNATIONAL DAY OF RURAL WOMEN

On October 15, USAID’s ADVANCE project commemorated the United Nations (UN) International Day of Rural Women (IDRW). Held at Tuna, in the Sawla-Tuna-Kalba District, Northern Region, the event recognized the role of women in enhancing agricultural production and rural development. During the event, the project awarded plaques and prizes to five women OBs across the three northern regions and the Brong Ahafo Region for their corporate social responsibility and contributions to improving livelihood, food security, and agricultural practices in their communities. The awardees included:

1. Elizabeth Peter from the Northern Region
2. Hajia Maria Kobzie from the Upper West Region
3. Akua Yeboah from the Brong Ahafo Region
4. Faustina Amoah from Brong Ahafo Region
5. Margaret Akos Awenyok from the Upper East Region

The theme for this year’s commemoration was “Enhancing access to production resources and time saving assets for agribusiness growth: the empowerment of rural women.” The event brought together 176 actors (132 women and 44 men), including the project’s beneficiary female OB owners, outgrowers, aggregators, and processors. Other participants included representatives from local nonprofit organizations, district departments of agriculture, traditional leaders, development partners, input and equipment dealers, and financial institutions.



*Participants at the IDRW event, organized by USAID’s ADVANCE at Tuna in the Sawla-Tuna-Kalba District in the Northern Region.
Photo credit: Abdulai A. Rahaman*

USAID’s ADVANCE Chief of Party, in a speech, acknowledged women’s contributions to national development and urged all stakeholders to continue advocating for women’s access to agricultural production resources to improve their yields and livelihoods. He enumerated some of the key opportunities provided to women under the project, indicating that, as of September 2018, the project had supported 63,278 women (48 percent) out of **131,349** project beneficiaries. Margaret Tabla, a USAID ADVANCE FBE leader and past awardee, also spoke on behalf of women beneficiaries, and commended the project for building female farmers’ capacity on good agricultural practices, explaining,

“We were trained not to burn [the stalks] after harvesting but rather leave [them] in the field for termites and other microbes to feed on; this has greatly helped in nutrient retention.”

2.0. Environment

USAID’s ADVANCE project continues to mainstream environmental and social safeguards with the aim of ensuring compliance with Title 22 of the Code of Federal Regulation, section 216, and the relevant environmental regulations of Ghana. During the first quarter of FY19, implementation covered the following two broad areas: general environmental compliance, and promoting climate-smart interventions and practices among farmers.

Pesticide use monitoring

Pesticide use monitoring of farmers under USAID’s ADVANCE is a requirement of the project’s Pesticide Evaluation Report and Safer Use Action Plan (PERSUAP). Monitoring was conducted annually to measure the progress of implementation of the safer use actions. The safer use monitoring plan aimed to (1) promote safer use of agrochemicals through awareness, (2) prevent environmental pollution resulting from improper pesticide applications and disposal, and (3) ensure compliance with Title 22 of the Code of Federal Regulations, section 216.

The project monitored the pesticide use of every farmer who hosted demonstration plots during the 2018 farming season. The project monitored all 281 demonstration farms hosted by 266 farmers in 271

communities, comparing data with the previous years' results for trend analysis. The main activity during the reporting quarter included data collation, cleaning, and analysis.

Over the course of the project, findings of pesticide use monitoring have demonstrated continuous improvement in the implementation of the safer use actions as required by the ADVANCE PERSUAP. This has ultimately contributed significantly towards achieving the overall environmental sustainability objectives of the project. The following is a summary of achievements on the safer use actions implementation observed through pesticide use monitoring:

Reducing reliance on pesticides

The last (2018) pesticide use monitoring revealed 92 percent of active ingredients used on the farmers' fields were similar to those used on the demonstration plots and were PERSUAP-compliant. This compliance is the result of training farmers on the safe use of chemicals and the integrated pest management (IPM) approach, emphasizing minimum and judicious reliance on chemical control and the use of least toxic chemicals.

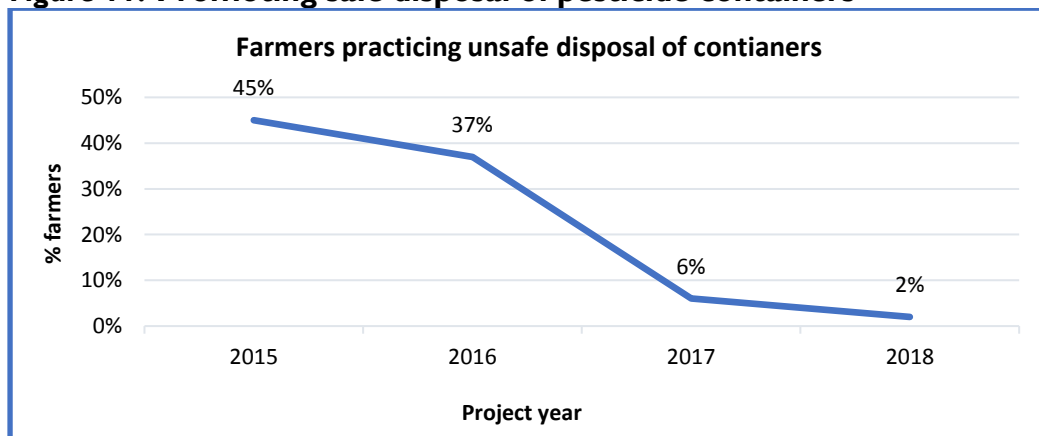
Promoting the use of personal protective equipment (PPE)

The acquisition of hand gloves, overalls, hats, and goggles among farmers had recorded a steady increase since the beginning of the project from 2015 to 2018. In the first year (2015) of the project, 23.7 percent of farmers hosted demos without a single PPE, and no farmer in the Upper West Region had a respirator. However, in 2018, 94 percent of farmers own and use safety boots with farmers in the Upper West Region recording 100 percent usage. At the end of 2018, the least owned and used PPE are goggles for eye protection, with 59 percent of farmers using goggles, and the lowest numbers (48 percent) recorded in the Upper West Region.

Discouraging re-use of pesticide containers

In 2018 and 2017, the project did not record any re-use of empty chemical containers for water/food storage by farmers, compared to three percent recorded reusing these containers in 2015.

Figure 11: Promoting safe disposal of pesticide containers



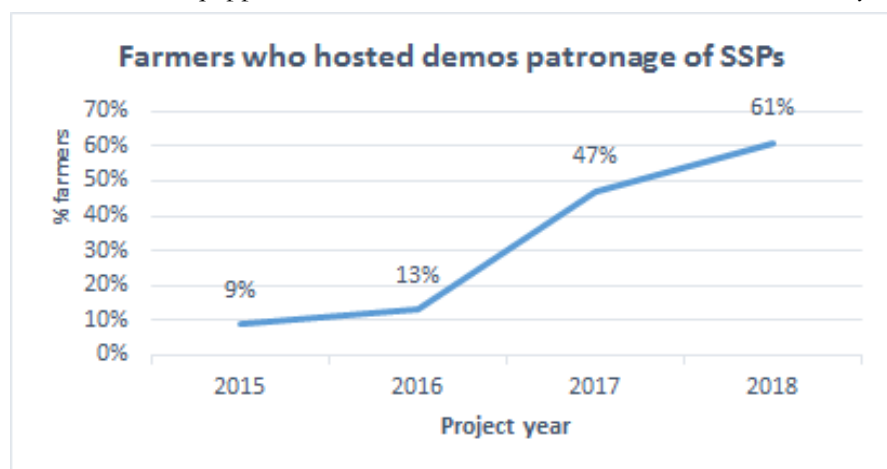
The unsafe practice of throwing away pesticide containers had improved under the project over the years. In the monitoring exercise this quarter, only 2 percent of farmers threw away used containers, compared with 6 percent, 37 percent, and 45 percent recorded in 2017, 2016, and 2015, respectively. The project achieved this significant progress mainly through GAPs trainings, the work of spray service providers (SSPs), and radio jingles.

Discouraging women and children from pesticide application

One of the safer use actions recommended in the ADVANCE PERSUAP is to discourage women and children from taking part in pesticide application. Women are at a greater risk of pesticide exposure since they often carry babies and food. Expectant mothers may also develop pregnancy complications with exposure to pesticides. The project recorded a continuous decline in the number of communities in which women take part in pesticide application. The trend has been 15, 7, and 3 communities in 2016, 2017, and 2018, respectively. Discouraging children from taking part in pesticide application also on the rise. In 2018, the project recorded three communities where children take part in pesticide application, compared to two in 2017 and 16 in 2016.

Promoting safe use of pesticides through trained locally-based service providers SSPs

In 2018, 61 percent of farmers (who hosted demos) patronized the services of SSPs, compared to 47 percent, 13 percent, and 9 percent in 2017, 2016, and 2015, respectively. This increase is due to the significant rise in the number of trained and equipped SSPs, who continue to offer services commercially to the public. At the end of 2018, 903 SSPs had received training and equipment, progressing from 39, 180, and 711 in 2015, 2016, and 2017, respectively. This improvement has significantly contributed to the elimination of untrained persons, including women and children, applying pesticides.



Climate-Smart Agriculture

As part of efforts to address declining soil fertility and erratic rainfall patterns in the project area, USAID’s ADVANCE project promoted ripping and planting basins as minimum tillage technologies during demonstrations and at model farms. The results are illustrated under sub-purpose 1 of this report.

3.0. Grants Program

The project implements an innovation and investment incentive grant program to buy down the risk for OBs and other value chain actors, promoting investments in innovative technologies, particularly related to mechanization and improving quality of produce. While no grants were made in FY19, the project had preexisting commitments that were completed during the first half of FY19.

During FY19 Q1, OBs received 59 multipurpose threshers through the project’s grant program to enhance processing in the maize and soybean value chains.

4.0. Monitoring and Evaluation and Learning

4.1. MONITORING AND EVALUATION

During the reporting period, the project continued its routine data collection on various trainings and support to beneficiaries. Also, the project focused on completing the second phase of the 2018 annual gross

margin survey, where data was collected on smallholder yield, technology application, household dietary diversity, and farmers' storage systems. The project undertook monthly data verification at the regional level.

Phase II Gross Margin Data Collection

The project completed the second phase of the FY18 gross margin annual survey in November 2018. Data on costs of inputs, technology application practices, production and yields, smallholder farmers' household storage systems, and initial sales were collected from 1,654 smallholders in the maize and soy value chains. Provisional gross margin figures are presented in the key results section of this report. Final results will be determined after sales surveys in February 2019.

Data Quality Assessment and Data Verification

ADVANCE performed monthly data verification exercises to authenticate the data submitted by the technical team during the period. Challenges of timely data collection and reporting were highlighted and discussed with all staff involved in the data collection, analysis, and filing process.

4.2. LEARNING ACTIVITIES

In October 2018, the project commissioned five studies to assess and learn from the impact and sustainability of specific project strategies and interventions, including the sustainability of the OB model, buyer sponsored outgrower schemes, grants, VSLA, access to inputs, and management of FAW. Four consultants and 12 supervisors are undertaking the assignment, with support from project staff in Ghana and the home office. The consultants adopted a mixed method (qualitative and quantitative), employed primary and secondary research, and administered structured and semi-structured questionnaires with selected smallholder farmers and OBs. The consultants have submitted final reports for review.

A summary of the studies' preliminary findings are as follows:

- 1. *OB Sustainability:*** This study enables the project to understand the extent to which systemic and sustainable changes have occurred in the OB model since 2014. Preliminary findings from the study on 265 OBs (out of 424 OBs in total) showed OBs have developed stronger business relationships with several value chain actors, positively impacting their agribusiness enterprises. The OBs also increased the number of outgrower business networks by about 3.5 percent from 2017 to 2018. The majority (70 percent) of OBs perceived the strength of their relationship with various value chain actors as high, while another 71 percent perceive the impact of their relationships on their agribusiness enterprises as high.
- 2. *Village Savings and Loans Association (VSLA):*** The study on VSLA assessed the impact of VSLAs and other financial sources on smallholder investments in agriculture in general, and on crop production and application of new and/or improved practices to improve yields and incomes. Preliminary findings showed that VSLAs contributed to improved savings culture among VSLA members, and increased and improved access to credit and agricultural inputs. Smallholder farmers can easily access agricultural inputs through the community input promotions organized during VSLA share-out. Early access to and use of production inputs resulting in improved yields, ability to hire more labor, increased incomes, investments in alternative income generating activities, increased contributions by women to their households, and investments in children's education. The study also showed that VSLA membership increased female participants' agency compared to women who do not belong to the savings groups.
- 3. *Business case for buyer sponsored outgrower schemes:*** This study assessed the level of success, or otherwise, of the various outgrower schemes facilitated by USAID's ADVANCE project since 2014 from the perspective of the private sector parties, i.e., the buyers and the OBs. The outgrower schemes facilitated

the OBs' linkage to prospective buyers, access to credit from financial institutions and grants, and market and weather forecast information, which helped farmers plan their farming activities. Among buyers, 100 percent reported a positive impact of the outgrower scheme on their business. The schemes led to increases in profit levels, quality of commodities sourced from OBs, assurance of consistent supply of commodities from OBs, and increased knowledge of good agronomic practices and business management. Both OBs and buyers affirmed that the provision of technical assistance in trade and marketing by USAID's ADVANCE project allowed them to increase their business profitability. Most OBs are confident in maintaining their current relationships with buyers in the absence of USAID's ADVANCE project support.

4. *Access to inputs and management of fall armyworm (FAW)*: The study assessed the level of expansion of input dealer businesses for sustainability and management of FAW. The project's introduction of community agro-input agents (CIAs) increased smallholder farmers' access to all types of inputs in terms of timeliness, affordability, and choice availability. The CIAs provide the added value of training to smallholder farmers on how to use purchased agro-inputs. Preliminary findings showed that the project established sustained agricultural input networks to make inputs accessible to smallholders (through community promotions, financing via OB, FBO, VSLA share-out, etc.), open market access, and also assessed the impact of the project's strategy in managing FAW.

For FAW management, the findings showed that the project's earlier interventions such as training of 200 agriculture extension professionals, poster production, use of radio, establishment of call centers, and setting up of pheromone traps helped create awareness among farmers. As a result, the majority of farmers (93.9 percent) are aware of the pest, can identify it, and adopt preventive measures to mitigate its effects. The results also showed that 89.2 percent of the beneficiaries who received training shared FAW management knowledge with others.

5. *Grants*. This study assessed the extent to which the grants provided incentives in promoting competitiveness along the project's commodity value chains. The study found that because of the project's grant scheme, OBs' businesses have expanded their outgrowers and the sizes of their farms. OBs can expand their services to their outgrowers and other community members. Use of grant equipment contributed to over 100 percent increases in yields from 2014 to 2018. The study found that the provision of motor bikes enabled extension agents working directly with the OBs to reach 91 percent of the outgrowers and visit up to 77.5 percent of them on a weekly basis. The use of the dryer, tarpaulin, sheller/thresher, and reaper led to high quality, attractive, and clean grains. This produce attracts buyers and resulted in contracts in the structured market such as Agrisolve, Vester Oils, and Agricare.

The USAID'S ADVANCE project team is reviewing the reports to provide feedback for their finalization.

4.3. GEOGRAPHIC INFORMATION SYSTEM (GIS) AND MAPPING

The project continues to employ geographic information system (GIS) technology to know the location of its beneficiaries and analyze data collected from project activities.

The GIS and ICT specialists organized a one-day program for end-buyers in Kumasi on the use and importance of digital tools. The topics discussed were:

1. GIS tools and how they work
2. Using GIS tools for supply chain management

4.4 PUBLIC RELATIONS AND COMMUNICATIONS

The project continued to ensure the visibility of activities, progress, impact, and lessons learned.

1. *Biweekly Updates*

During the quarter, the project delivered six biweekly updates to USAID. The bullets outlined the project's successes and results in areas of PHH practices by OB field agents, the gross margin survey in the three northern regions, and the increase in farmers' productivity and incomes through outgrower schemes. They also highlighted how USAID's ADVANCE project enhanced OBs' capacity in contract negotiations, aggregation and marketing, accessing loans from financial institutions to invest in their businesses, and the formation of zonal OB networks to strengthen their business relationships and undertake joint activities that will ensure their sustainability.

2. *Quarterly Newsletter*

The project published and distributed the October to December 2018 edition of the quarterly newsletter to over 1,000 stakeholders, including partners, clients, and actors involved in the project, in both electronic and printed formats. The newsletter showcased how USAID's ADVANCE project accelerated the transformation of agribusiness in northern Ghana through business networking and linkages at the pre-harvest agribusiness event, initiatives to mitigate the perennial bushfires in northern Ghana, and learning studies in five thematic areas. It also included a success story on how project intervention enabled Vester Oil Mills Limited to expand their domestic distribution channel and increase soymeal sales in Ghana.

Annex I: Indicator Table

USAID'S ADVANCE PROJECT INDICATOR TARGETS AND ACHIEVEMENTS — FY19 Q1

Indicator Source	Indicator Type	Indicator/Disaggregation	FY19 Targets	FY19 Q1	% FY19 Achievement	Comments
				Actuals		
CI	OP1	Number of direct project beneficiaries	40,000	6,019	15%	Training and other activities are ongoing. This will increase the number of beneficiaries in the second quarter.
		Male	23,500	2213		
		Female	16,500	3806		
FTF	OP3	Number of individuals who have received USG supported short-term agricultural sector productivity or food security trainings	30,000	5955	20%	Post-harvest handling and quality standards trainings are ongoing in quarter 2. This will increase on the total number of beneficiaries for the no-cost extension (NCE) period
		Male	17,500	3805		
		Female	12,500	2150		
FTF	OP4	Value of agricultural and rural loans	200,000	302,081	150%	A processor and an OB obtained a loan to invest in their business
		Male		302,081		
		Female				
FTF	OP5	Value of new private sector investment in agricultural sector or value chain (USD)	NA	57,000		Outgrower Businesses and other value chain actors invested warehouse, motorized tricycle, multi-purpose crop thresher and boom sprayer to improve production.
FTF	OP6	Number of MSME including farmers receiving USG assistance to access loans	50	2	4%	This is actor driven. High interest rates is forcing value chain actors especially smallholder farmers to who were targeted to depend on VSLA for investment in production.

Indicator Source	Indicator Type	Indicator/Disaggregation	FY19 Targets	FY19 Q1	% FY19 Achievement	Comments
				Actuals		
FTF	OC1	Gross margins per hectare for selected crops US Dollar under marketing arrangements fostered by the activity (USD/ha)				These are provisional figures. The figures will be validated during the phone sales survey in the second quarter.
		Maize		774.76		
		Male	820	795.11	96.96	
		Female	850	742.52	87.36	
		Rice	NA	NA		
		Male	NA	NA		
		Female	NA	NA		
		Soy		528.93		
		Male	730	526.98	72.19	
Female	610	531	87.049			
FTF	OC2	Number of hectares under improved technologies or management practices as a result of USG assistance	35,000	59,372.76	169.64	The overachievement was due to most farmers applying at least one of the management practices promoted by the project.
FTF	OC3	Number of farmers and others who have applied new technologies or management practices as a result of USG assistance	35,000	75545	215%	The overachievement was due to most farmers applying at least one of the management practices promoted by the project. The result is captured as part of gross margin survey for 2018 crop season
		Male	22,500	37,578	167.01	
		Female	12,500	37,967	303.74	
FTF	OC4	Number of private enterprises (for profit), producers' organizations, water users' associations, women's groups, trade and business associations, and community-based organizations (CBOs) that applied new technologies or management practices as a result of USG assistance	150			This will be measured in the second quarter pending availability of funds

Indicator Source	Indicator Type	Indicator/Disaggregation	FY19 Targets	FY19 Q1	% FY19 Achievement	Comments
				Actuals		
FTF	OC5	Value of incremental sales (collected at farm-level) attributed to FTF implementation	\$10,500,000	\$21,551,600	205.25	These are provisional figures. The figures will be validated during the phone sales survey in the second quarter.
		Maize	\$9,500,000	\$21,747,993		
		Soy	\$1,000,000	\$196,392.61		
		Rice	NA	NA		
FTF	OC6	Number of firms (excluding farms) or Civil Society Organizations (CSOs) engaged in agricultural and food security-related manufacturing and services now operating more profitably (at or above cost) because of USG assistance	NA	NA		This will be measured in the second quarter pending availability of funds
CI	OC8	Number of organizations/enterprises identified as high potential for future awards	8	13	167	No new award was made to any grantee but the project continued to work with existing grantees.
CI	OP8	Number of organizations/enterprises receiving capacity building support against key milestones	10	25	250%	The project supported the development of apex organizations for two actor groups, OBs and FBOs. There are currently 14 OB Zonal networks and 11 FBO networks.
F	OP9	Number of awards made directly to local organizations by USAID	5	5	100%	
FTF	OP10	Number of Households benefiting directly from USG Assistance	NA	5823		
FTF	OP13	Number of members of producer organizations and community based organizations receiving USG assistance	250	1002		The overachievement was due to more farmers receiving capacity building on savings through the

Indicator Source	Indicator Type	Indicator/Disaggregation	FY19 Targets	FY19 Q1	% FY19 Achievement	Comments
				Actuals		
						VSLA schemes and quality standards
FTF	OP14	Number of MSMEs including farmers, receiving Business Development Services as result of USG assistance	NA	163		Farmers OBs received capacity building on quality standards and savings through the VSLA schemes.
CI	OC9	Value chain actors accessing finance	50	2		This is actor driven. There was instability in the financial sector during the first quarter. Financial institutions were unwilling to lend money. Coupled with high interest rates, value chain actors especially smallholder farmers were forced to depend on VSLA for investment in production.

USAID'S ADVANCE PROJECT'S INDICATOR TARGETS AND ACHIEVEMENTS AS AT DECEMBER 2019

Indicator Source	Indicator Type	Indicator/Disaggregation	LOP Actuals	LOP Target	% LOP Achievement so far	Comments
CI	OP1	Number of direct project beneficiaries	131,349	127,000	103%	
		Male	68,116	67,000	102%	
		Female	63,278	60,000	105%	
FTF	OP2	Number of private enterprises (for profit), producer organizations, water users associations, women's groups, trade and business associations, and community-based	1,228	1,100	112%	The overachievement is due to the project targeting more producer enterprises and training them on product quality standards.

Indicator Source	Indicator Type	Indicator/ Disaggregation	LOP Actuals	LOP Target	% LOP Achievement so far	Comments
		organizations (CBOs) receiving USG assistance				
FTF	OP3	Number of individuals who have received USG supported short-term agricultural sector productivity or food security trainings	123,845	120,000	103%	More smallholder farmers received trainings in GAPs, FAW preventive measures, product quality standards during the production season.
		Male	62,896	63,600	99%	
		Female	60,949	56,400	108%	
FTF	OP4	Value of agricultural and rural loans	4,863,150	4,300,000	113%	
FTF	OP5	Value of new private sector investment in agricultural sector or value chains (USD)	3,731,280	4,000,000	93%	Outgrower Businesses and other value chain actors invested in machinery such as tractors, rippers, motorbikes, tricycle. However, end-buyers and processors did not invest in new plants and machinery to support their operations as expected.
FTF	OP6	Number of MSME including farmers receiving USG assistance to access loans	52,775	56,500	93%	The Village Savings and Loans Association and sensitization activities were successful but there were limited resources of the OBs and buyers and limited access to loans from financial institutions to OBs. This affected the OBs roles as upfront financiers to invest in outgrower farmers' production resulting in the under achieving of this indicator.
FTF	OC1	Gross margins per hectare for selected crops US Dollar under marketing arrangements fostered by the activity (USD/ha)				The gross margin figures are provisional. We expect improvement in the values after the phone sales survey in February.
		Maize	774.76	835	77%	
		Male	795.11	900	71%	
		Female	742.52	880	80%	
		Rice	886	814	110%	

Indicator Source	Indicator Type	Indicator/ Disaggregation	LOP Actuals	LOP Target	% LOP Achievement so far	Comments
		Male	752	867	87%	
		Female	1,038	760	137%	
		Soy	528.93	700	75.0%	
		Male	526.98	800	66.0%	
		Female	531	600	88%	
FTF	OC2	Number of hectares under improved technologies or management practices as a result of USG assistance	90785.76	312,200	63%	The project's strategy is to encourage farmers to intensify production. It enables farmers to invest their limited resources on the appropriate land size and apply good agronomic practices and improved technologies leading to increased yields
FTF	OC3	Number of farmers and others who have applied new technologies or management practices as a result of USG assistance	93,784	101,700	92%	
		Male	47,520	55,935	85%	
		Female	46,264	45,765	101%	
FTF	OC4	Number of private enterprises (for profit), producers organizations, water users associations, women's groups, trade and business associations, and community-based organizations (CBOs) that applied new technologies or management practices as a result of USG assistance	852	800	107%	The overachievement was due to all firms applying at least one of the management practices promoted by the project.
FTF	OC5	Value of incremental sales (collected at farm-level) attributed to FTF implementation	\$80,128,358.41	\$67,880,000	118%	The overall values will be updated after the phone sales survey in February.
		Maize	\$79,304,366.10	53,840,000	147%	
		Rice	(\$2,238,556.27)	9,730,000	-23%	
		Soy	\$3,062,548.58	4,310,000	71%	
FTF	OC6	Number of firms (excluding farms) or Civil Society Organizations (CSOs) engaged in agricultural and food security-related	379	225	168%	Many more firms than anticipated needed support and were supported by the project to improve productivity. Thus more firms have been surveyed

Indicator Source	Indicator Type	Indicator/ Disaggregation	LOP Actuals	LOP Target	% LOP Achievement so far	Comments
		manufacturing and services now operating more profitably (at or above cost) because of USG assistance				and found more profitable than the previous year.
CI	OC8	Number of organizations/ enterprises identified as high potential for future awards	13	8	163%	The project continued to work with existing grantees.
CI	OP8	Number of organizations/ enterprises receiving capacity building support against key milestones	46	50	92%	Trade Associations, OB and FBO networks, 3 municipal assemblies, 2 governmental organizations and 14 local NGOs were trained on market performance, weights and negotiations, contracts and measures.
F	OP9	Number of awards made directly to local organizations by USAID	5	5	100%	
FTF	OP10	Number of Households benefiting directly from USG Assistance	121,455	79,100	154%	More households than expected benefitted from the project.
FTF	OP13	Number of members of producer organizations and community-based organizations receiving USG assistance	19,445	9,000	216.0%	The overachievement was due to the project targeting more FBO members and providing them with capacity building on FaaB and product quality standards.
FTF	OP14	Number of MSMEs including farmers, receiving Business Development Services as result of USG assistance	109,292	45,200	242%	The overachievement was due to more farmers receiving capacity building on savings through the VSLA schemes and quality standards.
CI	OC9	Value chain actors accessing finance	590	300	196%	The overachievement is due to value chain actors' readiness to leverage the grants incentive and invest in their businesses.

Annex 2: Success Stories

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 Agricultural Development and Value Chain Enhancement project (USAID's ADVANCE project) works with 424 OBs 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 (62,896 men and 60,949 women) on good agronomic practices (GAP), post-harvest handling, produce quality standards, and other agribusiness areas. The project's training programs improve farmers' knowledge, productivity, and income. Field surveys conducted in 2018 to estimate smallholder farmers' profitability during the 2018 crop season indicate that gross margins per hectare amounted to \$774.76 for maize.

Salia Yakubu is a 42-year-old outgrower business owner in Challu Community in the Sissala East District, 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 with one tractor and sheller. Even though he transacted business with his outgrowers, he did not keep any business records. He and his outgrowers 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.



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

Since he became a project beneficiary, Salia received training on GAP such as row planting, effective methods fertilizer application, use of certified seeds such as the pannar hybrid variety of maize, the importance of conducting germination tests, post-harvest handling (PHH), and fall armyworm (FAW) control measures. He also received training on OB management practices such as recordkeeping, 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 outgrowers, who previously planted 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 purchase an additional tractor at GHC 45,000 (US\$9,375) and two shellers at GHC 8,000 (US\$1,667) to expand his farming business. He

also works with an additional 45 outgrowers, to a total of over 150 farmers as of the 2018 production season.

He appreciates 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 encourages other farmers to adopt USAID's ADVANCE project's improved agricultural practices and technologies.



EVOLVING FROM AN FBO TO A FOOD MANUFACTURING BUSINESS

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

Wallindi Tinguri Women's Association in the West Mamprusi District, Northern Region, includes 78 members (77 female and one male) and is one of 43 farmer-based organizations (FBOs) in the Northern Region that received support from the USAID's ADVANCE project to become farmer-based enterprises (FBEs).

In March 2018, the group registered as an enterprise, and it now belongs to the Cottage Industries Association of Northern Region. The FBO received training from the ADVANCE project on recordkeeping, such as keeping meeting minutes, attendance and dues registers, production records, collective purchases, sales, balance sheets, and profit and loss determinations, among other topics related to management capacity. The group also attended several advocacy and policy workshops that improved their lobbying skills and helped them to 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 participated in pre-season and pre-harvest agribusiness events, where they built business partnerships through market linkages.



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

In an effort to boost the FBO's income and improve nutrition, the project trained the women members to prepare meals using soybeans, such as kebabs, beverages, and porridge. Using the knowledge gained from these trainings, the group established a small cottage factory that currently employs one person, where they produce and sell instant cereals and porridge products, including cerelac, tombrown, and winimix. In February 2018, the group received a grant of GHS2,000 (US\$412) from the Korea International Cooperation Agency (KOICA) to enhance their brand and packaging. In October 2018, the USAID's ADVANCE project, in collaboration with KOICA and the project's partner ACDEP, organized a contest to support effective and dynamic women's groups, through which the Wallindi Association won a motor tricycle. The tricycle helped reduce the challenges and costs of transporting the group's produce to sell at the district capital's market.

During the project's October 2018 pre-harvest event in Tamale, the Tinguri Women's Association displayed and sold their soymeal products for a total value of GHS900, which is 41 percent higher than their average monthly sales (GHS640).

As a result of trainings from the USAID's ADVANCE project, 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 sales volume.



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, including 21,577 (16.4 percent) youth¹¹ 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 SSP. Of these individuals, 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 the Ghanaian government's efforts to reduce the rate of youth



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 West Region

unemployment. With their savings, some of these young VSLA members engaged in commercial farming, invested in input dealership businesses, or invested in various businesses to improve their livelihoods.

Abdul Wahab, a 22-year old maize farmer from the Bugubelle community in the Sissala West District, Upper West Region, received support from the ADVANCE project. Wahab completed Tumu Senior High School in the Upper West Region in 2016. He wished to continue 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 planned to travel to Accra and take menial jobs to survive while trying to 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 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.

¹¹ Beneficiaries 18 to 29 years

Through project facilitation, Wahab received training on good agronomic and post-harvest practices by the Ministry of Food and Agriculture’s (MoFA) agriculture extension agents. He learned about row planting, fertilizer application, fall armyworm control, timely harvesting, and good storage to minimize postharvest losses. He also received production inputs—hybrid seeds, fertilizers, and agrochemicals— and crop insurance from Agricare for his maize field for the 2018 production season, worth GHS805.63 (US\$161.41).

In December 2017, he harvested 4.2 MT of maize from 0.8 hectares (ha) and repaid Agricare with 1.6 MT of his crops. He sold his remaining 2.6 MT of maize at a value of GHS2,340 (US\$474.16). In 2018, he increased his acreage from 0.8 ha to 1.2 ha and harvested 5.7 MT. He repaid Agricare with 2.4 MT of crops to cover the cost of input he received, and sold the remaining 3.3 MT at GHS3,300.00 (US\$668.69). 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 newfound knowledge and success, Wahab expanded to four acres and plans to purchase inputs without depending on the Agricare outgrower scheme during 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”, said Wahab.



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