AGRICULTURAL DEVELOPMENT AND VALUE CHAIN ENHANCEMENT PROJECT (ADVANCE)

FY19 SECOND QUARTERLY REPORT: JANUARY – MARCH 2019

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USAID'S ADVANCE PROJECT FY19 Q2 REPORT

JANUARY – MARCH 2019
COOPERATIVE AGREEMENT NO. AID-641-A-14-00001
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DISCLAIMER

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Contents

ACRONYM LIST

ADVANCE	Agricultural Development and Value Chain Enhancement
AEA	Agriculture Extension Agent
EPA	Environmental Protection Agency
FaaB	Farming as a Business
FBO	Farmer-Based Organization
TFTF	Feed the Future
FTFMS	Feed the Future Monitoring System
FY	Fiscal Year
GAIP	Ghana Agricultural Insurance Pool
GAP	Good Agronomic Practice
ICT	Information and Communication Technology
MoFA	Ministry of Food and Agriculture
(M)SME	(Medium,) Small, and Micro Enterprise
MT	Metric Ton
NGO	Nongovernmental Organization
OB	Outgrower Business
PHH	Post-Harvest Handling
SSP	Spray Services Providers
USAID	United States Agency for International Development
VSLA	Village Savings and Loan Association

Executive Summary

During the reporting period, the ADVANCE project continued to scale down activities as indicated in the no-cost extension workplan. The project temporarily closed the Wa and Bolgatanga offices at the end of January and the Tamale office at the end of February. However, the project carried out activities to continue strengthening the maize and soy value chains. The activities focused on reinforcing the building and maintaining of business relations, leadership and functioning of groups, apex associations and networks, business management, and advocacy, as strategic pillars to support sustainability beyond project completion.

As part of the monitoring, evaluation, and learning (MEL) cycle, the project commissioned five learning studies to evaluate and document the sustainability of the OB model, and to assess the impact of grants made to value chain actors, input dealerships' business expansion and strategies in rural communities, and Fall Armyworm (FAW) management. The learning studies also examined the benefits from add-on components to the village savings and loan associations (VSLAs), and the growth of buyer-sponsored outgrower schemes. ADVANCE will share the final reports with USAID and other key stakeholders and will engage these parties in May 2019, to reflect on key lessons learned.

Through engagement with market actors, the project directly reached 6,019 smallholder farmers and individuals during this reporting quarter. All these beneficiaries participated in the project during the previous year. These results bring the total number of beneficiaries reached by the project to **131,493** smallholders, which is **104 percent of the life-of-project (LOP) target** of 127,000. A total of **73 percent** of the 5,823 households reached this quarter are considered vulnerable[1], and **nearly two-thirds of the direct beneficiaries reached are women** (63 percent, or 3,806).

The project trained 5,955 individuals (incl. 3,805 women) on good agronomic practices (GAPs) and Post-Harvest Handling (PHH). In line with the project's gender strategy which acknowledges the critical links between women's empowerment and agricultural performance/benefits, staff and training partners, including OBs and selected women leaders specifically targeted women with capacity building activities to improve their entrepreneurship, leadership skills and knowledge of their rights. With these achievements, the project trained 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.

The 2018 average gross margins per hectare were $781.43 for maize and $535.43 for soy compared with targets of $835 and $700 respectively. Male maize farmers achieved significantly (18 percent) higher margins than their female counterparts, primarily due to higher yields. Similarly, female soy farmers obtained (12 percent) higher gross margins than their male counterparts for the same reason.

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

INTRODUCTION

This report presents the main accomplishments of the ADVANCE project implemented by ACDI/VOCA during the second quarter of fiscal year 2019 (FY19). The project was originally scheduled to end on September 30, 2018. However, a no-cost extension modification changed the closing date to April 30, 2019. The ADVANCE project's goal is to increase the competitiveness of the maize, rice, and soy value chains in Ghana. The project focused on the maize and soy value chains during the no-cost extension period. The report summarizes the project's achievements against this goal and its indicators, and presents the main results and activities undertaken during the quarter. It is organized along 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 the Ministry of Food and Agriculture (MoFA), followed by a summary of key results. The report also covers the project's cross-cutting activities, including gender, environment, 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 collaborated with MoFA to build business relationships between Spraying Service Providers (SSPs) and key value chain partners, including input dealers, OBs, OB networks and staff of the department of agriculture of the district/municipal assemblies.

2.0. Collaboration with MTN

During the period under review, the project collaborated with MTN to sensitize members of village savings and loans associations (VSLA) and outgrower businesses (OBs) on the use of MTN mobile money services. Over 1,600 VSLA members (75% women) were sensitized and 502 of them subscribed to the mobile money service to facilitate transactions with their OBs and as a safer method for keeping and carrying money.

KEY RESULTS

1.0 Direct Beneficiaries

During the quarter, the project reached out directly to 6,019 smallholder farmers and individuals, of whom 3,806 (63 percent) are women. All the beneficiaries participated in the project in the previous year. With these results, the total number of beneficiaries reached is 131,493 smallholders, or 104 percent of the life-of-project target of 127,000. During the reporting period, the project reached 5,823 households, including 5,722 (73 percent) households considered vulnerable.[2]

The project trained 5,955 individuals (3,805 women) with trainings on good agronomic practices (GAPs) and harvest and post-harvest processing techniques (PHH). In line with USAID's ADVANCE project's gender strategy, the project specifically targeted women with capacity building gaps to improve their entrepreneurship and leadership skills and knowledge of their rights. With this achievement, the project reached 124,551 individuals (49 percent women), representing 104 percent of its life-of-project target of 120,000 beneficiaries.

2.0 Gross Margins and Incremental Sales—2018 Crop Season

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 (US$), and average sale price per ton (US$).

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 sample and are based on FY18 data for the 2018 crop season.

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

Table 1. Number of smallholder direct beneficiaries by crop planted and gender[3] in 2018

Gender	Maize	Soy	Total
Female	28,916	9,072	37988
Male	32,608	4,943	37,551
Total	**61,524**	**15,015**	**75,539**

HECTARES PLANTED

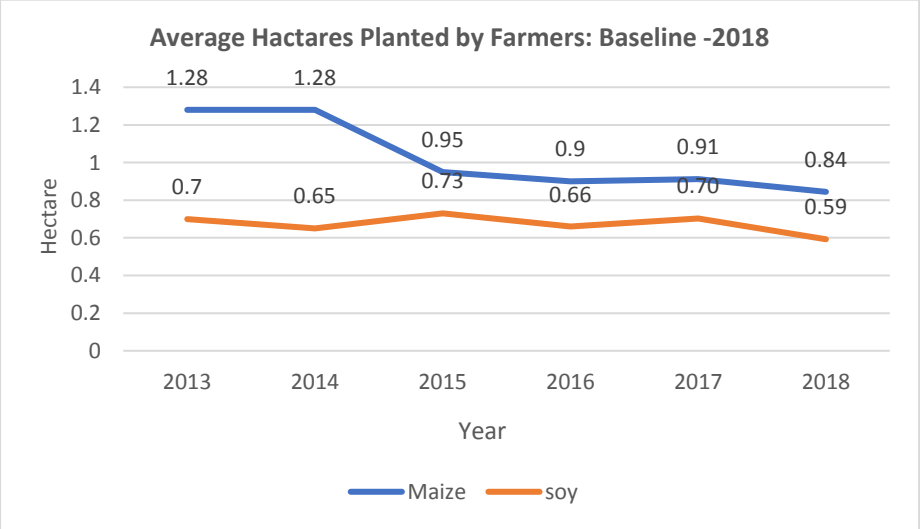
In 2018 crop season, 75,539 project smallholder farmers cultivated 60,225.16 hectares, of which women planted 42 percent. Farmers planted 86 percent of land with maize and 14 percent with soy (Table 2).

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

Gender	Maize	Soy	Total
Female	20,075.23	5,171.18	25,246.41
Male	31,876.90	3,131.85	35,008.75
Total	51,952.13	8,303.03	60,225.16

On average, individual farmers planted 0.84 ha of maize, 0.59 ha of soy in 2018 (Figure 1) 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)
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 mainly due to limited support received from OBs and the government subsidy program. Generally, the project advises producers not to hasten expansion but to apply their limited resources efficiently, which partially explains some of the slow rate of expansion.

Figure 1. Average hectares planted by farmers



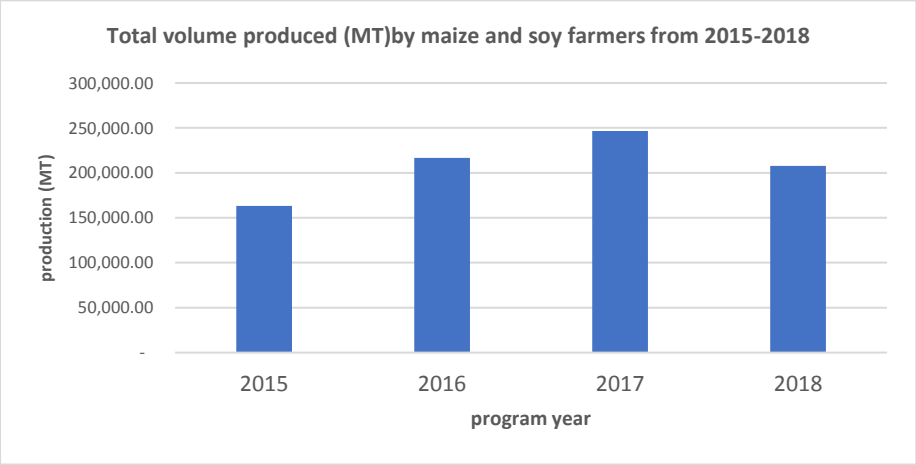
PRODUCTION

Total production of maize and soybean in 2018 was estimated at 207,862.85 metric tons (MT) (Table 3) as compared with 246,659.40 MT in 2017, 216,762.26 MT in 2016, and 162,315 MT in 2015 as the number of beneficiaries we extrapolated data to change every year. In 2018, the beneficiaries produced 191,568.38 MT

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

of maize and 16,942.07 MT of soy. Male maize and male soy farmers produced about 52 and eight percent more than female maize and female soy farmers respectively. This appears to be related to land area cultivated as male maize and male soy farmers planted an average of 42 percent and 11 percent higher than their female counterparts respectively.

Table 3. Total volume of production by smallholder from 2015-2018



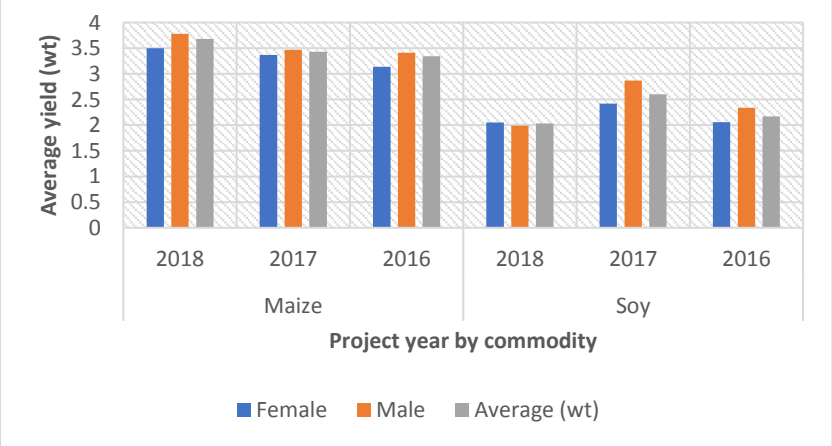
On average, a maize farmer produced 3.11 MT and a soy farmer produced 1,20 MT (Table 4). On average, male maize farmers produced 1.27MT more than their female counterpart. Female maize and female soy farmer plots tend to be smaller, Table 4

Table 4. Average production per farmer in MT in 2018

Gender	Maize	Soy	Average(wt)
Female	2.43	1.17	2.13
Male	3.70	1.26	3.38
Average (wt)	3.11	1.20	2.75

Average maize and soy yield 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 because of low investment in inputs and limited support from OBs, buyers and the government subsidy program.

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 $2,646,896.42, 95 percent for maize and 5 percent for soy. Of this total, women invested 40 percent, or $1,047,000.85 (Table 5).

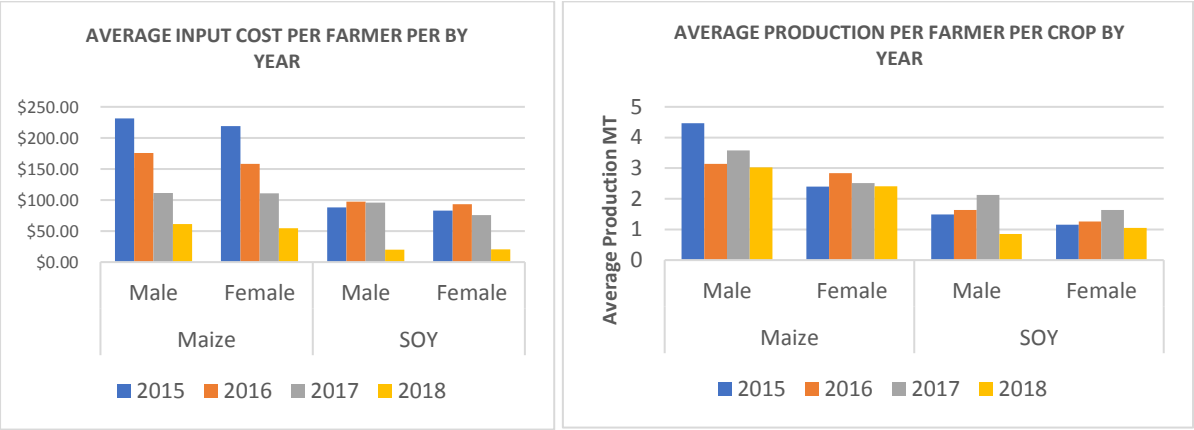
Table 5. Beneficiary smallholder farmers' inputs costs (USD) in 2018 by gender and crop

Gender	Maize	Soya	Total
Female	954,433.56	92,567.29	1,047,000.85
Male	1,692,462.86	54,145.46	1,746,608.32
Total	2,646,896.42	146,712.75	2,793,609.17

Smallholder farmers overall cost reduced by 23 percent in 2018, when compared with results in 2015 and 2016 (Table 5).

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 201662016, reduced their investment by 12 percent from 2016 to 2017, and further reduced investment by 76 percent from 2017 to 2018 (Table 5 and fig. 3). This could be partly attributed to the annual reduction in the average size of plots cultivated by smallholder farmers of both commodities, marginal improvement in adoption of improved and management practices as well as Government of Ghana input subsidies to promote planting for food and jobs policy which provided huge support for maize smallholder farmers. Although the subsidy program is not new, it has received great support in the last two years with wider coverage in 2018 because of the government's planting for food and jobs program.

Figure 3. Average production and average input costs per hectare by crop and gender (2015 to 2018)



SALES

The total quantity of produce sold in 2018 was 181,547.61 MT, 87 percent of what smallholder farmers produced during the 2018 cropping season. Over 92 percent (166,552.40 MT) of all sales was for maize and eight percent (14,995.21 MT) was for soy indicating that farmers sold most their production (Table 6).

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

Gender	Maize		Soya		Total	
	Vol sold (MT)	**Av. Price ($)**	**Vol sold (MT)**	**Av. Price ($)**	**Vol sold (MT)**	**Av. Price ($)**
Female	60,701.31	248.66	9,260.90	316.05	69,962.21	257.58
Male	105,431.70	267.00	5,624.12	296.12	111,055.82	268.47
Total	166,133.01	260.30	14,885.02	308.52	181,018.03	264.26

Total sales (Table 7) for both commodities were $48,276,995.02, with 90 percent ($43,243,676) from maize and 10 percent ($4,592,365) from soy. Female farmers contributed 37 percent (18,025,085.22) to total overall sales.

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

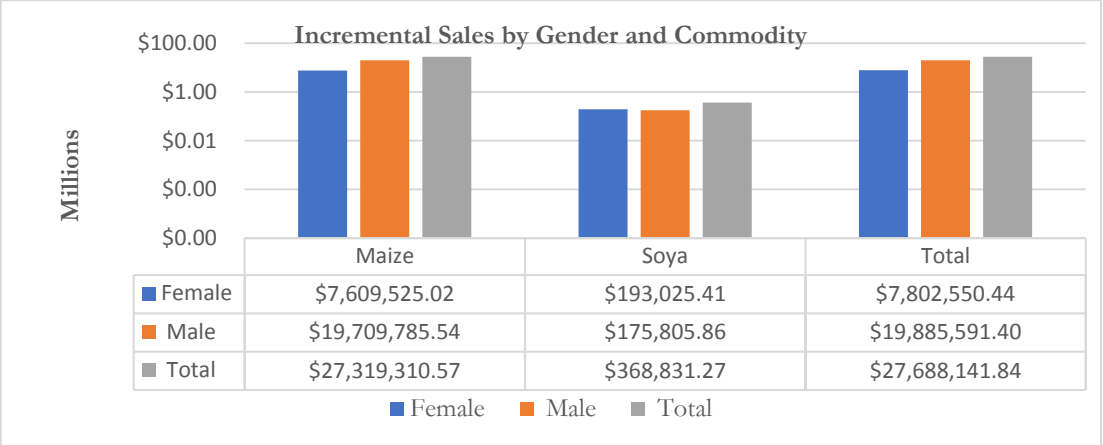
Gender	Maize		Soy		Total
	Amount of sales	Unit price	Amount of sales	Unit price	Amount of sales
Female	$15,093,904.31	$ 248.66	$2,926,946.08	$ 316.05	$18,025,085.22
Male	$28,149,771.70	$ 267.00	$1,665,418.94	$ 296.12	$29,948,904.64
Total	$43,243,676.01	$ 260.30	$4,592,365.02	$ 308.52	$48,276,995.02

In 2018, the average beneficiary sold produce worth $639 (Table 8). Maize farmers sold the highest amount at $709, while soybean farmers sold $325, which is consistent with the volume of sales for those commodities (Table 6). Male maize farmers achieved higher average sales than their female counterparts. Inversely, female soy farmers made higher average sales than their male counterparts, because of the higher volumes sold by male maize farmers and female soy farmers (see 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	$522	$323	$474.49
	Male	$863	$334	$797.55
	Average (wt)	$709	$325	$639.10

Figure 4. Incremental sales[4] by gender and commodity in 2018



Overall, project beneficiaries increased the volume of produce they sold since the project's inception (Fig 4). Both male and female maize farmers earned over 1.5 times as much because of the project's interventions as at baseline, resulting in incremental sales of $27,688,141.843. Similarly, soy farmers earned additional $368,831.27 compared with the baseline sales.

GROSS MARGINS

The 2018 average gross margins per hectare were $781.43 for maize and $535.43 for soy. Male maize farmers achieved significantly (18 percent) higher margins than their female counterparts, primarily due to higher yields. Similarly, female soy farmers obtained higher (12 percent) gross margins than their male counterparts for the same reason. (Figure 5)

***Figure 5.* Gross margins per hectare by crop and gender for 2018**

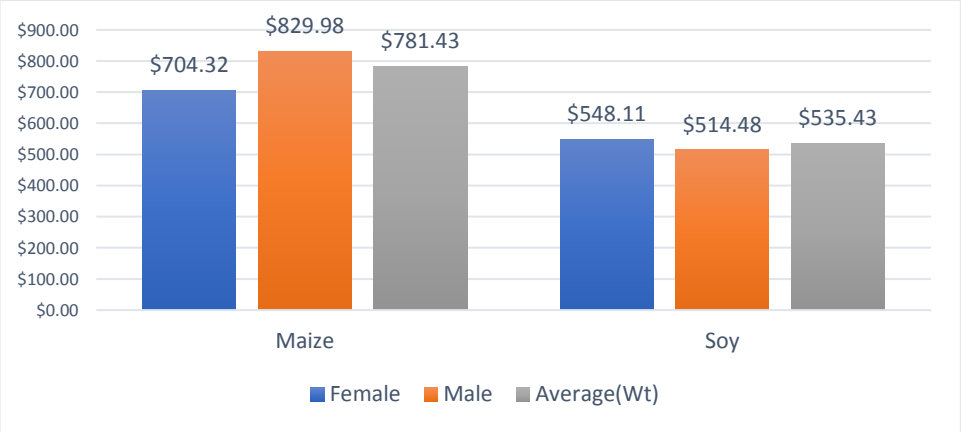
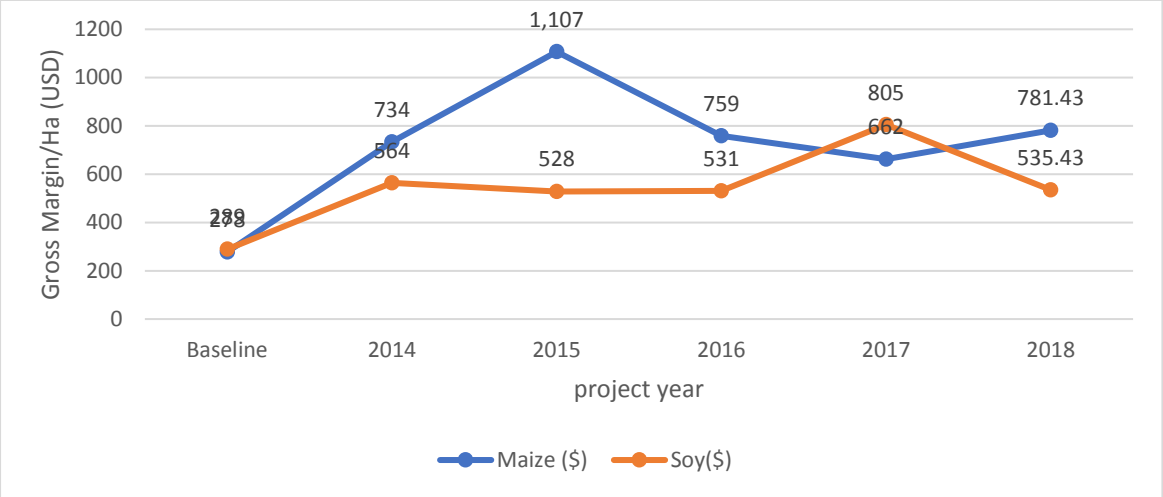


Figure 6 presents gross margin results for maize and soy from the baseline (2013) to the 2018 production season. The 2018 crop season ended with higher maize gross margins than the 2017 and 2016 production seasons because the average yield for maize increased by an average of 9 percent, from 3.34MT/ha 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 $535 per ha, which is about 34 percent lower than the 2017 gross margin.

[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.*

Overall project fell short of the gross margin targets for both maize and soy. However, the 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.

***Figure 6.* Gross margins per hectare from *b*aseline to 2018**



APPLICATION OF TECHNOLOGIES AND MANAGEMENT PRACTICES

Table 9 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 for crop genetics, soil-related technologies, pest management, and cultural practices during the 2018 production season. However, farmers' 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. A total of 75,545 farmers out of 78,978 beneficiaries in FY18 cultivated 59,372.76 hectares under improved land-based technologies.

Table 9. 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, and applied crop genetics less often. Men most commonly applied cultural practices, pest management technologies and soil-related practices.

PROGRESS WITH TECHNICAL DELIVERY

1.0 Sub-purpose 1: Increased agricultural productivity in targeted commodities

During the quarter, the project focused on:

- Reinforcing the provision of business development services
- Training on harvest and post-harvest processing techniques
- Training for input dealers in business management
- ICT outreach and digital finance outreach
- Strengthening sustainable systems and incentives for investment

1.1. BUSINESS DEVELOPMENT SERVICESSERVICES

Outgrower Business Annual Review Meetings

The project facilitated meetings between OBs, their staff (tractor operators, field staff) and outgrowers to review their activities during the previous season and plan for the 2019 farming season. The review meetings also afforded the project the opportunity to provide technical and managerial advisory support. In all 74 OBs, 84 lead farmers, 39 tractor operators and 728 smallholders, participated in the meetings. The review focused on key aspects of the OBs' operations including:

"We needed the drought and striga tolerant, early maturing maize variety Wang-Dataa and we are grateful to have obtained it through the community input sales" Farmers at Labaliga in the Tamale Metropolitan Assembly of the Northern Region.

Inputs and timely delivery

Service delivery, especially field preparatory (ploughing) services

- Field advisory services,
- Post-harvest processing (threshing)
- Credit recovery
- Produce marketing

Inputs and timely delivery: There were no major complains on the quality, quantity or timeliness of delivery of fertilizers and herbicides by the OBs. The farmers present indicated that they experienced improvement in availability of inputs, especially with the community input promotion conducted by input dealers in collaboration with the VSLA groups.

Field preparation/Ploughing services: Outgrowers expressed satisfaction with land preparation services. However, it was evident from the deliberations that demand continues to outstrip supply of services. According to the OBs, this sometimes led to delays in land preparation for some OGs. Field advisory services: Apart from OBs field staff, field training and advisory services done through demonstrations and "under-tree training" by staff of USAID's ADVANCE, and department of Agriculture of the various district/municipal assemblies.

Credit recovery: There were no major complaints from the OBs regarding credit recovery for the season. C Crop insurance, in relation to credit recovery, was discussed, and the respective field agent for GAIP took the opportunity to explain the scheme and clarify issues raised by OGs.

The outcome of the meetings indicates that generally, the crop 2018 season went well for most OBs and outgrowers.

1.2 TRAINING ON HARVEST AND POST-HARVEST PROCESSING TECHNIQUES

During the quarter, project staff organized a training of trainers' session for 23 OBs and 19 field agents to enhance capacity to train OGs, In another session, 5,955 individuals (incl. 3,805 women) were trained in post- harvest handling practices by five OB field agents and four lead farmers across seven districts. The PHH training emphasized on bagging and storage to reduce weevil and rodent attacks...

Monitoring Post-Harvest Processing Activities-Grain Shelling. Among the post-harvest processes, grain shelling is one of the most laborious. The task is mainly performed by women and the youth. The project supported OBs to acquire crop shellers to enhance productivity and reduce menial labor by women and the youth. Monitoring visits during the quarter showed that 60 OBs were commercially operating shellers from November till the end of January 30, 2019. The OBs shelled and bagged 8,418 MT of maize and 5.274 MT of soybeans for 7,329 (incl. 3,185 females) smallholder farmers from 289 communities.

Lutu Iddrisu (SHF), going through MTN MOMO Subscription process at Bouti in the Sissala West district of the Upper West

1.3 TRAINING FOR INPUT DEALERS IN BUSINESS MANAGEMENT

The input dealers relate to several important actors in the OB services delivery model, and therefore, during the quarter, the project facilitated training for personnel from 30 key input businesses on business management. The project partnered with the National Board for Small-Scale industries (NBSSI), and four major importers and distributors of seeds, fertilizer, and other agro-inputs in Ghana including YARA, Adama (West Africa), Yahaya Enterprise and RMG to deliver the trainings. The key issues facing the identified input dealers were record keeping and stock management. Key topics discussed included:

- Entrepreneurship
- Marketing
- Owner-managed businesses
- Business planning and financial management
- Credit Management
- Costing and Pricing
- Safe chemical handling

The partnership is part of the project's sustainability plans to ensure that value chain actors' have reliable access to business services provided by government agencies and other value chain actors. The NBSSI, therefore, registered the input dealers as part of their client-base to provide continuous business support to the input dealers. The support offered by NBSSI's Business Advisory Centers (BACs) include business assessment for profit and growth.

At the end of the sessions the OBs showed much interest in buying bulk hybrid seeds, fertilizer, and insecticides to control pests, especially fall armyworms during the 2019 production season. The OBs from the Karaga and Gushegu Districts requested for 400 acres worth of hybrid seed from RMG.

1.4. ICT AND DIGITAL FINANCE OUTREACHOUTREACH

For the past four years, the project has been working with telecommunication companies, mobile phone vendors and digital service providers to improve the use of digital services among the value chain actors. Notwithstanding the issues of poor connectivity in rural communities and perception of unaffordability

among community members, the project has recorded steady increase in the number of value chain actors using digital services. During the quarter, the project focused on getting VSLA members to subscribe to digital financial services.

Connecting VSLA Groups to Mobile Money/Digital Finance

During the quarter, the project in collaboration with MTN, sensitized 1,612 smallholder farmers (incl. 1,200 females) on the advantages of using mobile money and 502 of them (incl. 386 women) subscribed to MTN mobile money services. To facilitate post-sensitization subscriptions, the project promotes the setup of agents/merchants in the communities where they are not present. During this reporting period, four community input agents subscribed as merchants to enhance the purchase of farm inputs and sell new digital finance-enabled sim cards.

1.5. STRENGTHENING SYSTEMS AND INCENTIVES FOR INVESTMENT

Building business relations with partners

A key result for the quarter was building business relationships between SSPs and key value chain partners, including input dealers, OBs and the department of agriculture staff in the districts. The project facilitated meetings for 150 SSPs, OBs and input dealers. The meeting discussed, among others, trust building and other mechanisms by which SSPs can receive inputs on soft or concessionary financing.

SSP networking

The project initiated the development of SSP networks. This initiative led to the formation of six pilot district or sub-zonal networks for 133 SSPs. The districts are Builsa North (6 SSPs), Builsa South (41 SSPs), Kassena Nankana Municipa (11 SSPs), Bawku West (22 SSPs), East Mamprusi (35 SSPs) and Mamprugu Moagduri (18 SSPs). The networks are expected to engage with the relevant state institutions such as EPA and MoFA's department of agriculture and other regulatory bodies on their activities and official recognition and certification.

Spin-off from established SSPs

During the quarter, the project identified new SSPs that were set up and operating under the supervision of already established SSPs. Five farmers who are SSPs from Samakuse Farmer Group (incl. 300 members) located in Fufulso in the Central Gonja District, have in turn trained 22 other individuals to operate as SSPs, because the demand for spraying services by the group members has increased beyond the SSPs capacity recently.

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

USAID's ADVANCE project conducted activities aimed at enhancing entrepreneurship and leadership skills of women in the zone of influence. The activities included formal but practical training sessions targeted at individual women and groups, especially the VSLAs. Other activities included mentoring, coaching and practical support that provides women with the confidence to undertake operations on their own and engage other stakeholders. A recent project study conducted by P&H Consultants indicates that these activities made impact by empowering women and enhancing their agency.

Facilitating market relationships for community women aggregators

Agrisolve Ghana Limited is a produce buying company that deals in maize and soybean. Agrisolve has partnered with USAID's ADVANCE project to establish strong market relationships with smallholders, OBs and community aggregators. During the quarter, 37 women aggregators from five communities, who are also VSLA members, concluded discussions and agreement with Agrisolve Ghana Limited to supply

43.6MT of soybeans and 250MT of maize. Agrisolve will pre-finance the purchases, which will be delivered on a bi-weekly basis.

OBs with End Market contracts

Seven OBs, with end-buyer contracts under the USAID's ADVANCE project buyer-outgrower scheme, required support to identify local aggregators of maize from communities to enable them to fulfil their supply commitments. These OBs include Umar Abdul Latif, Alhaji Alhassan Iddrisu, Abukari Fuseini, Muhib Husein, Philemon Donumbo, Alhassan Seidu, and Fati Zakaria. The project facilitated discussions with 113 community-based women aggregators, also members of the VSLA, to aggregate from community smallholder farmers for the aggregators.

Strengthening leadership skills

The project assessed two VSLA groups' leadership (mainly females), one in Bouti in the Sissala West District and the other in Kong in the Sissala East District, which showed that they require training to strengthen their leaders' skills. The project conducted this training for nine women using the Women Leadership Training manual (2015) developed by USAID's ADVANCE project.

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 of apex organizations
(iii) Capacity assessment and progress of grantees

3.1.ADVOCACY CAPACITY BUILDING

The development of 15 zonal OB networks is a project strategic approach to ensure sustainability of relationships, systems and services developed during the project. The zonal networks will directly provide services to their members. Currently all 15 zonal networks have the requisite interim or substantive executives in place. Some of them have acquired offices with support from the Department of Agriculture. During the quarter, the project conducted several activities intended to strengthen the networks' operations. These included:

- Drafting business and action plans
- Developing statutory procedures and processes
- Training on leadership and advocacy
- Forming regional networks

Drafting of Strategic and action plans

All 15 networks completed their 3-year strategic plans, including action plans. The networks' service provision for their members focuses on the following;

- Bulk input procurement
- Plough services, and
- Cooperative marketing

Development of statutory procedures and processes

This includes rules and regulations regarding composition of executives, elections, meetings, conflict resolution. These have been completed for all 15 zonal networks.

Training on leadership and advocacy

One activity that is important to the effective functioning of OB networks is advocacy. OB network leaders require advocacy skills to e engage with stakeholders for the benefit of OBs.. During the quarter, the project conducted training for 65 leaders from the 15 networks in four locations, namely Wa, Tumu, Tamale and Bolgatanga. The topics discussed included

- Using advocacy in groups and organizations
- Identifying priority issues for advocacy
- Identifying and mapping influential stakeholders for advocacy
- Developing an advocacy action plan
- Implementing an advocacy action plan
- Engaging stakeholders for advocacy

This is one of the trainings I have attended and learnt a lot to develop my business and to support the zonal network. The content and delivery were to my level of understanding and participatory. We need more of such trainings so to improve out grower businesses" remarked Peter Waja chairman of the Yendi Zonal Network.

The training included group exercises during which small groups developed sample advocacy processes and plans. The groups discussed advocacy best practices in a plenary exercise on how to engage influential stakeholders on specific issues. It was very beneficial to participants as it became apparent that many of the participants make choices based on public perception or influential people but not on analysis of the issue at hand. They pledged to utilize the knowledge gained to improve advocacy actions for the collective benefit of farmers.

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 15 OB zonal networks.

Formation of Regional-level OB networks

The project completed the development of three regional networks that will support the zonal networks in Upper West (3 zonal networks), Upper East (5 Zonal networks) and Northern (6 Zonal networks) Regions. The structure of the interim executives differs slightly across regions, but they perform similar functions such as:

- improving capacity of leaders of zonal networks,
- building regional and national level relationships with governmental and other authorities and bodies,
- advocating for policy initiatives.
- The last of the regional networks to be formed was the Upper West Regional OB network, involving the three zonal OB networks. The project facilitated a day's workshop to form a regional executive body that will advocate for policies promoting OBs' interests. The project took 13 executive members through the exercise of formulating action plans and core values to guide the respective zonal and regional OB network operations in the respective regions

3.3. ASSESSMENT OF GENERAL CAPACITY AND STATUS OF GRANTEES

During 2017, five local NGOs were selected through competitive bidding process and provided with grants totaling $111,786 (GHS503,283) to undertake advocacy actions in key areas identified with the project. In addition, the awards were also to provide the organizations the opportunity to improve their capacity to implement donor-funded projects. Before awarding grants, the project trained the NGOs in governance, organization and project management for their key personnel of the local NGOs. The NGOs were

- NORTHCODE for access to land for women in selected communities
- Youth Harvest Foundation (YHF) for safe disposal of used agrochemical containers
- Community Development Alliance (CDA) to increase access to the government's subsidized fertilizer
- URBANET for access to extension services
- Sung Foundation to form new VSLAs in the Northern Region

- The assignment undertaken by Sung Foundation was not an advocacy action, they were targeted mainly for capacity building.
- During FY19 Q2, the project held a meeting with the representatives of the five organizations, and discussed the following:
- Experiences in executing grants
    - Organizational capacity assessment tool (OCAT) to capture status
    - Sustainability of operations of local NGOs in the face of emergence of social enterprises and dwindling donor funding

Review of experiences in executing grant award

- The meeting reviewed the outcomes of the grantees' activities, especially the lessons learned. The following are the highlights:
- CDA was able to bring fertilizer smuggling to the fore of national agenda, which brought high media coverage and strong commitment from OMOFA to deal with the issue. The Minster for Food and Agriculture visited the border towns.
- YHF adequately highlighted the activity on safe disposal of empty pesticide containers, which also caught media attention. However, it appeared the solutions required are far-reaching and requires the collaboration of several government agencies and private entrepreneurs.
- URBANET used the community scorecard to hold district agriculture extension agents accountable for their services. The meeting agreed that the community should be able to go ahead and publicly display the scorecard results (through community radio broadcast or similar media) to publicize the accountability mechanism and stimulate debate.
- Sung Foundation established 130 new VSLAs in the short space of time, between November 2017 and June 2018. The project encouraged field agents to continue to support the VSLA groups beyond the project's lifespan.

Administration of Organizational Capacity Assessment Tool (OCAT) to capture organization's status

During the meeting, each grantee's representative conducted their organization's self-assessment using the OCAT. The analysis showed that in general the organizations have moderate capacity in most of the assessment areas, except for performance management that scored low. NORTHCODE ratings were the highest overall, including a high capacity in performance management. CDA had the lowest overall rating.

Table 10: Ratings of five local NGOs

Organization	Governance	Administration	Human Resources	Financial management	Program management	Organizational Management	Performance management	Average by organization
CDA	3.00	3.00	3.00	3.00	2.90	3.33	2.17	2.91
YHF	3.80	3.20	3.60	3.30	3.30	3.60	3.10	3.41
NORTHCODE	3.80	4.00	3.90	3.00	3.80	3.60	4.00	3.73
URBANET	3.20	2.80	2.80	3.00	3.00	3.30	2.80	2.99
SUNG Foundation	3.60	4.00	3.40	4.00	3.60	3.30	2.83	3.53
Average	**3.48**	**3.40**	**3.34**	**3.26**	**3.32**	**3.43**	**2.98**	**3.32**

1.00– 1.49 =Low capacity; 1.50 – 2.49 = Basic Capacity; 2.50 – 3.49 = Moderate capacity; 3.50 – 4.0 = High capacity

Funding of activities for Grantees

The representatives indicated that their organizations do not face short-term funding challenges for their activities. However, long-term funding is a challenge and hey discussed the idea of hiring retired experienced agricultural workers as consultants to develop concepts and proposals for funding and get paid (a percentage) on success-only basis.

Gender Program

Apart from the work plan activities conducted during q2, the project reviewed the results of four years of activities towards empowering women. The review involved examining data and the conduct of a special study. The study had two broad learning questions:

1.To assess gender issues with regard to:

(i) access and control over assets and resources,

(ii) gender roles,

(iii) responsibilities and time used, and

(iv) patterns of power and decision making within the maize, rice and soya value chains

2. To assess the extent to which program activities had unintentionally strengthened youth participation and partnership within the maize, rice and soya value chains.

The gender study found that Women's decision-making power has increased at the household level, and the Out-Grower Business (OB) model has been instrumental in ensuring access for female farmers' access to agricultural services. This is borne out by the LOP data that shows that 60.949 have been trained of which 33,097 were on good agronomic practices. Other capacity building activities that has supported the improvement in decision-making include

Post-harvest handling (19,512)

Quality standards (41,879)

Farming as a business (23,610)

Numeracy (20,613)

Outgrower schemes has enabled women smallholder farmers to increase not only their access to improved seeds and fertilizer but also their farm yields, going from an average production of 1.2 MT to 3.14 MT maize per hectare.

Contracts between women OBs and FBOs and end buyers have enabled 63, 278 women beneficiaries to obtain incremental sales of $31,208,339 from maize, paddy rice and soybean between 2015 and 2018.

The study also found that grants issued by ADVANCE have been instrumental in saving women's time and energy and have increased their opportunity to socialize and attend other community events. However, while the OB model has increased women's access to services, there are multiple constraints for women in leadership in agriculture groups and most of the positions are still held by male members.

The study also found that youth are playing a critical role in the advisory and extension services as field agents for OBs and as Community Input Agents, providing information and inputs to smallholder farmers, although this role can be significantly scaled up.

The project (in collaboration with other stakeholders) has created several other avenues for the youth to participate in crop production and community development. These include

- Commercial Spraying Service Providers (SSPs)
- Fire volunteers
- Community Plant Doctors
- VSLA gents
- Community Extension Scorecard Advocates

USAID ADVANCE direct participants by 2018 was 131,493 of which 23% were youth, including 21,057 (16%) male youth and 9,551 (7%) were female youth. These youth have been supported to achieve significant objectives of their own, be it learning, crop yield increase, commodity sales or incomes.

Monitoring, Evaluation and Learning

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 third and final phase of the 2018 annual gross margin survey.

Phase III Gross Margin Data Collection

The project completed the third phase of the FY18 gross margin annual survey in March 2019 by collecting additional sales data to triangulate the initial data captured during the second phase of the survey in October 2018. During the annual survey in October, 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. Final gross margin results are presented in the key results section of this report.

LEARNING ACTIVITIES

The project finalized reports on three of the five studies commissioned in September 2018. The studies assessed the impact and sustainability of specific project strategies and interventions, including the sustainability of the OB model, buyer sponsored outgrower schemes, grants as incentives in promoting competitiveness, VSLA, input dealer business expansion, and management of FAW. Four consultants and 12 supervisors undertook the assignment, with support from project staff in Ghana and the home office. The consultants adopted a mixed method (qualitative and quantitative) and administered structured and semi-structured questionnaires for both primary and secondary data collection from various value chain actors.

A summary of the studies' findings are as follows:

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. Findings from the study on 265 active 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 majority (71 percent) of OBs perceive the impact of their relationships on their agribusiness enterprises as high.

Village Savings and Loans Association (VSLA): The overall study objective was to assess the impact of VSLAs on smallholder investments in crop production, and application of new and/or improved practices to improve yields and incomes. The study confirmed that VSLAs significantly improved smallholder farmers' investments and application of improved technologies. The respondents indicated that this has led to improved living conditions, especially women who are VSLA participants, in the areas of child education, health and nutrition, and investment in alternative livelihoods ventures, among others. The study also confirms the sustainability of the project's innovative approach linking VSLAs to agricultural input dealers. This is grounded in the mutual trust among members, VSLA members' well-developed understanding of the concept, and the benefits derived from the linkages. Finally, VSLA membership enhanced women's participation in decision making at the community and household levels.

Business case for buyer sponsored outgrower schemes: This study assessed the level of success, or otherwise, of the various outgrower schemes facilitated by the project since 2014. 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 the project enabled them to increase their business profitability. Most OBs are confident in maintaining their current relationships with buyers in the absence of project support.

Input 'dealer's business expansion 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 available choices. 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 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 agriculture extension professionals, sensitization of media personnel, poster production, use of radio, establishment of call centers, and setting up of pheromone traps helped create awareness among farmers. As a result, 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.

Grants. This study assessed the extent to which the grants provided incentives to stimulate investments along the project's commodity value chains. The study found that because of the project's grant scheme, OBs' increased the number of outgrowers and the size of their farms. OBs have expanded 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 a single tractor provided by the project as in-kind grant (with a 30% leverage contribution by the grantees) enabled some OBs to double or triple their equipment stock. The provision of motorbike as in-kind grants enabled extension agents working directly with the OBs to reach up to 76 percent of OGs on a weekly basis. The use of tarpaulins, shellers/threshers, and reapers led to improved quality and more marketable grains, which resulted in supply contracts with structured market such as Agrisolve, Vester Oils, and Agricare.

The project will share the studies with USAID and key stakeholders in a stakeholder forum scheduled for May 2019.

PUBLIC RELATIONS AND COMMUNICATIONS

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

Biweekly Updates
During the quarter, the project delivered five biweekly updates to USAID. The bullets outlined the project's successes and results in various areas, such as formation of mechanized service providers' association, anti-bushfire campaigns, formation and establishment of OB networks, SSP and input dealer business expansion, post-harvest handling (PHH), among others.

Annex 1: Indicator Table

PROJECT INDICATOR TARGETS AND ACHIEVEMENTS - FY 19 Q2

Indicator Source	Indicator Type	Indicator/Disaggregation	FY19 Targets	FY19 Q2 Actuals	% FY19 Achievement to Q2[5]	Comments
CI	OP1	Number of direct project beneficiaries	40,000	6,019	15%	The project scaled down activities during the latter part of the no-cost extension period. and focused on strengthening OB networks and forming OB network apex bodies to support individual OBs
		Male	*23,500*	*2,213*		
		Female	*16,500*	*3,806*		
FTF	OP3	Number of individuals who have received USG supported short-term agricultural sector productivity or food security trainings	30,000	5,955	20%	The project focused on strengthening groups, apex associations and network. This reduced the engagements with individual direct smallholder beneficiaries.
		Male	*17,500*	*3,805*		
		Female	*12,500*	*2,150*		
FTF	OP4	Value of agricultural and rural loans	200,000			No actor received loans during the quarter.
		Male				
		Female				
FTF	OP5	Value of new private sector investment in agricultural sector or value chain (USD)	NA	NA		There were no new investments during the period and this was expected.

FTF	OP6	Number of MSME including farmers receiving USG assistance to access loans	50	2	4%	The recent instability in the financial sector made many financial institutions hesitant to lend . also, with high interest rates, farmers have relied on VSLA loans rather than formal loans to invest in production. The project has put efforts in building capacity of VSLAs to raise savings and provide loans to members
FTF	OC1	Gross margins per hectare for selected crops US Dollar under marketing arrangements fostered by the activity (USD/ha)				Male maize farmers achieved higher margins than their female counterparts, primarily due to higher yields and average price. Similarly, female soy farmers obtained higher gross margins than their male counterparts as a
		Maize	**835**	**781.43**	**93%**	
		Male	820	829.98		
		Female	850	704.32		
		Soy	**700**	**535.43**	**76%**	
		Male	730	514.48		
		Female	610	548.11		

[5]Results of Q1 and Q2 aggregated.

						result of higher selling price.
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	NA		The 2018 season has not fully ended for the project to measure application of technology and management practices by enterprises.
FTF	OC5	Value of incremental sales (collected at farm-level) attributed to FTF implementation	$10,500,000	$27,688,141.84	205.%	Overall most farmers maintained their plot sizes and applied more improved
		Maize	$9,500,000	$27,319,310.57		

		Soy	$1,000,000	$368,831.27		technologies which enabled them to increase yield. Also farmers have increased their sales volumes over the years.
		Rice	NA	NA		
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	26	250%	The project supported the development of apex organizations for two actor groups, OBs and FBOs. There are currently 15 OB Zonal networks and 11 FBO networks.
FTF	OP9	Number of awards made directly to local organizations by USAID	5	5	100%	No new award was made to any grantee, but the project continued to work with existing grantees
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 VSLA schemes and quality standards
FTF	OP14	Number of MSMEs including farmers, receiving Business Development Services as result of USG assistance	NA	163		Some farmers, and OBs received capacity building on quality standards and savings through the VSLA schemes.
CI	OC9	Value chain actors accessing finance	50	0	4%	This is actor driven. There was instability in the financial sector during the first and second quarters. Financial institutions were unwilling to lend money.

PROJECT LOP INDICATOR TARGETS AND ACHIEVEMENTS AS AT MARCH, 2019

Indicator Source	Indicator Type	Indicator/ Disaggregation	LOP Actuals	LOP Target	% LOP Achievement so far	Comments
CI	OP1	Number of direct project beneficiaries	131,493	127,000	104%	
		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 organizations (CBOs) receiving USG assistance	1,228	1,100	112%	The overachievement is due to the project targeting more producer enterprises and training them on product quality standards.
FTF	OP3	Number of individuals who have received USG supported short-term agricultural sector productivity or food security trainings	124,572	120,000	103%	More smallholder farmers received trainings in GAPs, FAW preventive measures, product quality standards during the production seasons.
		Male	63,344	63600	99.6%	
		Female	61,228	56400	109%	
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)	3,731280	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

Indicator Source	Indicator Type	Indicator/ Disaggregation	LOP Actuals	LOP Target	% LOP Achievement so far	Comments
						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)				
		Maize	**781.43**	835		
		Male	829.98	900		
		Female	704.32	880		
		Rice	**886**	**814**		
		Male	752	867		
		Female	1,038	760		
		Soy	**535.43**	**700**		
		Male	514.78	800		
		Female	548	600		
FTF	OC2	Number of hectares under improved technologies or management practices as a result of USG assistance	303,881.64	312,200	97%	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

Indicator Source	Indicator Type	Indicator/ Disaggregation	LOP Actuals	LOP Target	% LOP Achievement so far	Comments
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	$110,055,056.52	$67,880,000	162%	Overall most farmers maintained their plot sizes and applied more improved technologies which enabled them to increase yield. Also farmers increased their sales volumes over the years.
		Maize	$106,623,676.67	53,840,000	198%	
		Rice	($2,238,556.27)	9,730,000	-23%	
		Soy	$3,431,379.85	4,310,000	80%	
FTF	OC6	Number of firms (excluding farms) or Civil Society Organizations (CSOs) engaged in agricultural and food security-related manufacturing	379	225	168%	Many more firms than anticipated needed support and were supported by the project to improve productivity. Thus more firms have

Indicator Source	Indicator Type	Indicator/ Disaggregation	LOP Actuals	LOP Target	% LOP Achievement so far	Comments
		and services now operating more profitably (at or above cost) because of USG assistance				been surveyed 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.
FTF	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.%	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

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

SUCCESS STORY

LINKAGE TO FORMAL MARKETS INCREASE FARMERS' SALES AND INCOME

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

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

Yakubu Kasule standing in front of his enterprise.

Yakubu Kasule, an aggregator and owner of Kasule Enterprise, a sole proprietorship business in Tamale is a project beneficiary of the capacity development initiatives aimed at enhancing trade. His enterprise aggregates and supplies maize and soybeans to buyers in southern Ghana. The business has the capacity to sell 1,000 metric tons (MT) annually in the open market. Until Yakubu became a participant of USAID's ADVANCE project in 2016, his end market buyers were only limited to women aggregators and poultry farmers in Accra. The project directly linked him to buyer firms, including Premium Foods Limited, Vestor Oils, and Agrisolve Limited to sell his produce formally. In 2017,Yakubu was also linked to a producer group, Samankuse Farmers Association in the Northern Region's Central Gonja District, where he was able to purchase 250MT of maize.

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

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

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

SUCCESS STORY

LEVERAGING OUTGROWER SCHEMES TO ENHANCE WOMEN'S ACCESS TO AGRICULTURAL PRODUCTION INPUT

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

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

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

According to the OBs, many women farmers are credit worthy, yet they face challenges accessing inputs from outgrower schemes because of costs. To address this issue, five OBs, including Yahaya Seidu, John Dimah, Fulera Adamu, Emmanuel Yobo, and Yahaya Tahiro Moro, linked 252 women farmers in Bouti, Vamboi, Kusali, Bullu, and Bugbelle in the Upper West Region's Sissala West and East Districts with Agricare's outgrower scheme for the 2018 production season to cultivate 527 acres (210.4 ha) of maize. The 252 women applied the inputs and good agronomic practices they learned from demonstration sites on their farms. This adoption led to increased yields, from an average of 1.25MT/ha in previous seasons to 4MT/ha at the end of the 2018 production season. In addition, they successfully repaid OBs with 2 MT of maize to cover the cost of inputs they received, and will sell 2 MT of remaining maize. On average, each woman earned GHS2,000 (US$408.16) per hectare, supported with the outgrower scheme's input package.

Saharatu Sumani, a 52-year-old widow from Bullu in Upper West Region's Sissala District and a project beneficiary, said, *"I harvested* 3 MT *from my one acre (0.4ha) farm in the 2018 planting season as compared to between 0.5 and* 1 MT *in previous years. I paid 0.8 MT to my OB to cover my cost of inputs and I still have 2.*2 MT *of maize and likely to make a profit of GHS2,200 (US$445). I will use this money to pay my children's school fees, care of their health*

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

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SUCCESS STORY

POSITIVE IMPACT OF ADVANCE FAW TRAINING ON MAIZE YIELD – THE CASE OF AWINTOMA FARMS

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

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

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

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

To mitigate FAW, USAID's ADVANCE project collaborated with the Ministry of Food and Agriculture (MoFA) and the National Fall Armyworm Taskforce to implement various interventions. The project trained and reached 424 OBs, 131,394 smallholder farmers, and over 70 agricultural professionals on FAW management. The project produced 45,336 print materials, including posters and leaflets, and aired radio jingles in English and 11 local languages on 31 radio stations in the three northern regions and Brong-Ahafo regions. These outreach efforts disseminated accurate pest management information to the general population.

In addition, the USAID's ADVANCE project also set up dedicated call centers (MTN, Airtel-Tigo and Vodafone) to educate farmers and the general public on the worm and its mitigating measures, and further set up 57 pheromone traps to monitor the presence of egg-laying moths. Also, four pesticide observation fields were estabisghed by the project to observe the efficacy of FAW pesticides in order to determine which one works best.
In April 2018, USAID's ADVANCE project conducted a three-day workshop on FAW management for agricultural extension agents and outgrower businesses. The training taught participants to set up pheromone traps, scout the field, and use a backpack sprayer.

Awintoma Akande, an OB at Tilly in the Bawku West district, Upper East region, chose to participate in the workshop due to the heavy losses he suffered on his farm during the previous season. In 2017, Awintoma invested GHS30,000 (US$6,678) on production inputs, including seed, fertilizer, and weeding,

to cultivate a 24- hectare maize farm. Unfortunately, he only harvested 40 MT at the end of the season. After attending the FAW management training, he felt empowered to manage the pest by setting traps, monitoring, and managing sanitation on his farm. He increased his acreage to 40 hectares and invested GHS 85,000 (US$ 18,889) in production input for the 2018 cropping season, ultimately producing 108 MT on his 60- acre farm.

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

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