



FEED THE FUTURE

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



AGRICULTURAL DEVELOPMENT AND VALUE CHAIN ENHANCEMENT PROJECT (ADVANCE)

FY 2017 Q2 REPORT: JANUARY - MARCH 2017

Submitted April 28, 2017



USAID
FROM THE AMERICAN PEOPLE



ADVANCE FY17 Q2 REPORT

JANUARY 2017 – MARCH 2017

COOPERATIVE AGREEMENT No. AID-641-A-14-00001

AOR USAID: PEARL ACKAH

CHIEF OF PARTY: EMMANUEL DORMON

DISCLAIMER

This report is made possible by the generous support of the American people through the United States Agency for International Development (USAID). The contents are the responsibility of ACDI/VOCA and do not necessarily reflect the views of USAID or the United States Government.

CONTENTS

EXECUTIVE SUMMARY	1
A. INTRODUCTION	3
B. COLLABORATION	3
1. COLLABORATION WITH THE MINISTRY OF FOOD AND AGRICULTURE	3
2. COLLABORATION WITH OTHER PARTNERS	3
C. KEY RESULTS.....	5
1. DIRECT BENEFICIARIES	5
2. VALUE OF AGRICULTURAL AND RURAL LOANS AND NEW PRIVATE SECTOR INVESTMENTS	6
3. GROSS MARGIN – 2016 CROP SEASON	7
4. APPLICATION OF TECHNOLOGIES – 2016 CROP SEASON	8
D. PROGRESS WITH TECHNICAL DELIVERY.....	9
1. SUB-PURPOSE 1: INCREASED AGRICULTURAL PRODUCTIVITY IN TARGETED COMMODITIES	9
1.1. DEMONSTRATION SITES AND GAPS TRAININGS	9
1.2. ICT OUTREACH AND PRODUCTION TECHNOLOGY DISSEMINATION	10
1.3. INCREASED ACCESS TO INPUTS AND EQUIPMENT.....	12
1.4. FARM CLINICS.....	12
1.5. OUTGROWER BUSINESS MANAGEMENT	13
1.6. BUSINESS DEVELOPMENT SERVICES	13
1.7. FARMER MENTORSHIP PROGRAM.....	15
1.8. PRE-SEASON EVENT	15
1.9. CLIMATE SMART AGRICULTURE.....	16
2. SUB-PURPOSE 2: INCREASED MARKET ACCESS AND TRADE OF TARGETED COMMODITIES	16
2.1. MARKET LINKAGE DEVELOPMENT	17
2.2. LEAD FIRM COMPETITIVENESS.....	22
2.3. TRADE ASSOCIATION SUPPORT.....	23
2.4. NORTH GHANA PROCESSING UPGRADE	24
2.5. COMMUNITY BASED MARKET SYSTEMS STRENGTHENED.....	24
3. SUB-PURPOSE 3: STRENGTHENED CAPACITY FOR ADVOCACY AND ACTIVITY IMPLEMENTATION	25
3.1. ADVOCACY GROUP DEVELOPMENT.....	25
3.2. SMALLHOLDER CAPACITY BUILDING.....	26
3.3. CAPACITY DEVELOPMENT Farmer Based Enterprises.....	28
E. PROGRAM SUPPORT.....	29
1. GENDER PROGRAM.....	29
1.1. IMPROVING WOMEN’S ACCESS TO LAND.....	29
1.2. NUTRITION EDUCATION AND SOYBEAN UTILIZATION TRAINING.....	30
1.3. RADIO PROGRAM FOR WOMEN	31
1.4. INTERNATIONAL WOMEN’S DAY	31
1.5. ADVANCE BENEFICIARY RECEIVES ‘STOP HUNGER AWARD’	32
2. ENVIRONMENT SUPPORT	32
2.1. GENERAL ENVIRONMENTAL COMPLIANCE.....	32
2.2. IMPROVING AGROCHEMICAL MANAGEMENT	33

3.	GRANTS PROGRAM	33
3.1.	INNOVATION AND INVESTMENT INCENTIVE GRANTS (I-3)	33
3.2.	LOCAL PARTNERSHIP GRANTS (LPG)	33
4.	MONITORING, EVALUATION AND LEARNING.....	34
4.1.	MONITORING AND EVALUATION.....	34
4.2.	GEOGRAPHIC INFORMATION SYSTEM (GIS) AND MAPPING	35
5.	PUBLIC RELATIONS AND COMMUNICATIONS.....	36
ANNEX 1 : INDICATOR TABLE		39
ANNEX 2: SUCCESS STORIES		43
ANNEX 3: SUMMARY OF PROJECT’S STRATEGY TO PREVENT AND CONTROL FALL ARMYWORM OUTBREAK		51

ACRONYM LIST

(M)SME	(Medium) Small and Micro Enterprise
ACDEP	Association of Church-Based Development Projects
ADVANCE	Agricultural Development and Value Chain Enhancement
AEA	Agriculture Extension Agent
AgNRM	Agriculture and Natural Resources Management Project
AMPLIFIES	Assisting Management in the Poultry and Layer Industries by Feed Improvement and Efficiency Strategies
APO	Agricultural Production Officer
ATT	Agricultural Technology Transfer
BDS	Business Development Services
CSA	Climate Smart Agriculture
DAIP	District Agricultural Investment Plan
DVCC	District Value Chain Committees
EPA	Environmental Protection Agency
F2F	Farmer-to-Farmer
FaaB	Farming as a Business
FBE	Farmer-Based Enterprise
FBO	Farmer-Based Organization
FI	Financial Institution
FTF	Feed the Future
FY	Fiscal Year
GAIP	Ghana Agricultural Insurance Pool
GAP	Good Agronomic Practice
GGC	Ghana Grain Council
GIS	Geographic Information System
GPP	Ghana Poultry Project
GPRTU	Ghana Private Road Transport Union
GPS	Global Positioning System
GRIB	Ghana Rice Inter-Professional Body
GSA	Ghana Standards Authority
I-3	Innovation and Investment Incentive Grants
ICT	Information and Communication Technology
IDRW	International Day of Rural Women
IITA	International Institute of Tropical Agriculture
IP	Implementing Partner
KML	Knowledge Management and Learning
LDC	Louis Dreyfus Company
MMDA	Metropolitan Municipal and District Assemblies
MoFA	Ministry of Food and Agriculture
MoU	Memorandum of Understanding
MWRS	Manual Warehouse Receipt System
NF	Nucleus Farmer
NGO	Nongovernmental Organization
NORTHCODE	Northern Region Western Corridor Development
NPK	Nitrogen, Phosphorous, and Potash
NR	Northern Region
NRGP	Northern Rural Growth Programme
OB	Outgrower Business

OBM	Outgrower Business Management
OG	Outgrower
OVCF	Outgrower Value Chain Fund
PERSUAP	Pesticide Evaluation Report and Safe Use Action Plan
PFI	Partner Financial Institution
PHH	Post-Harvest Handling
PPE	Personal Protection Equipment
PRC	Public Relations and Communication
PROTOA	Progressive Transport Owners Association
RMG	Regional Marketing Group Concept Limited
RDF	Rural Development Fund
SARI	Savanna Agricultural Research Institute
SEG	Small Equipment Grant
SIF	Social Investment Fund
SMFM	Sell More for More
SOW	Scope of Work
SSP	Spray Services providers
STTA	Short-Term Technical Assistance
TNS	TechnoServe
UDS	University of Development Studies
UENR	University of Energy and Natural Resources
UER	Upper East Region
USAID	United States Agency for International Development
UWR	Upper West Region
VSLA	Village Savings and Loan Association
WIAD	Women in Agriculture Department
WRS	Warehouse Receipt System

EXECUTIVE SUMMARY

This report presents the main achievements and key activities implemented by the USAID Agricultural Development and Value Chain Enhancement (ADVANCE) project during the second quarter of Fiscal Year (FY) 17.

During the quarter, 52,234 individuals from 47,379 households, including 51,917 smallholder farmers benefitted from various project interventions. A total of 29,284 of the smallholders or 56 percent were women. This represents 64.9 percent of the total FY17 target of 80,000. A total of 40,424 were continuing beneficiaries whilst 11,810 started benefitting from the project from this quarter.

With this quarter's achievement, the project reached 118,879 smallholder beneficiaries (including 56,412 women or 47.45 percent) since it started, representing 105.2 percent of its life of project target of 113,000.

Almost all the beneficiaries, 52,229 individuals (including 29,312 or 56 percent women), received trainings on Good Agronomic Practices (GAPs), Post-Harvest Handling, Produce Quality Standards, Farming as a Business (Faab), Numeracy, Mycotoxins Management and Control, Soybean Utilization and Nutrition, etc. Women were specifically targeted in capacity building activities to improve their numeracy, entrepreneurship, leadership skills, and household nutrition.

This quarter ADVANCE facilitated GHS 100,000 (\$22,947¹) in agriculture cash loans. Since it is still early in the season, especially in Northern Ghana, and the banks are still appraising most of the credit facilities, we expect for this number to continue to increase in the coming quarters. The loans taken this quarter were for the purchase of equipment and inputs for production as well as working capital. Moreover, GHS 352,508 (\$80,891) of investment was realized by the beneficiaries, which were made up of GHS 244,196 (\$56,037) of capital investment and GHS 108,312 (\$24,855) of production inputs.

Thus far 500 new Village Savings and Loans Associations (VSLAs) have been formed, benefiting 12,425 Out Growers (OGs), 3,935 males and 8,490 females. This brings the total number of VSLA groups supported by the project to 714.

In Q2FY17 we determined the yields and gross margin provisional figures after the end of the data collection exercise in December 2016. Average maize yield was 3.33 MT/ha while rice yield was 2.9MT/ha and soybean 2.22Mt/ha. The 2016 maize and rice yields were lower than the 2015 average due to Fall Army Worm (FAW) infestation of several maize fields, mostly in Northern Region, and excessive flooding in the Northern and Upper East Regions. Maize was the most profitable crop with a gross margin of \$902.10/ha. Rice gross margin stood at \$784.20/ha and soy at \$616.06/ha. These figures are provisional, awaiting the 2016 produce sales data that will be collected from April to July 2017.

Data on the application of improved technologies and management practices were also collected during both phases of the gross margin survey. Across technologies, female application rates were lower than the males'. The biggest gaps were seen on application of post-harvest, Information and Communication Technologies (ICT), and climate management technologies. In total, thus far in 2016, 73,846.78 ha were under improved land based technologies by 86,570 out of 89,687 farmers.

¹ Exchange rate used throughout the report is \$1=GHS 4.3578

Moreover, ADVANCE increased beneficiaries' access to markets and trade, 46 contracts covering 3,564 MT of maize, paddy, and soybean, valued at GHS 3,469,408 (\$796,137) were facilitated during the period.

During the quarter, ADVANCE also joined thousands around the world on March 8, to celebrate this year's International Women's Day with the theme "Women in the Changing World of Sustainable Agribusiness" at the Nkoranza District of the Brong Ahafo Region. This year's event was jointly celebrated with the USDA-funded Ghana Poultry Project (GPP) implemented by ACDI/VOCA. It recognized and celebrated women, especially women farmers. There were speeches emphasizing the importance of women's roles, role plays, solidarity messages, and awards, and brought together about 350 women and men in and around Brong-Ahafo and Ashanti Regions.

A. INTRODUCTION

This report presents the main accomplishments of the USAID ADVANCE project implemented by ACDI/VOCA and its sub-awardees, ACDEP, PAB, and TechnoServe, during the second quarter of FY17 (January to March 2017). ADVANCE's goal is to increase the competitiveness of the maize, rice and soya value chains in Ghana. The report summarizes the project's achievements against this goal and its indicators, and presents the main activities undertaken during the quarter. It is 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 with the collaboration ADVANCE had 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.

B. COLLABORATION

1. Collaboration with the Ministry of Food and Agriculture

In Q2FY17, MoFA Agriculture Extension Agents (AEAs) together with ADVANCE jointly implemented off-demo site Good Agronomic Practices (GAPs) and Post-Harvest Handling (PHH) trainings. Furthermore, teams from the MoFA's Women in Agriculture Development (WIAD) facilitated the training of 6,962 ADVANCE farmer beneficiaries (out of which 6,477 were females) in Northern Ghana on nutrition and soybean utilization. More information on this activity is provided in [Section E.1](#). Another area of collaboration during this reporting period was the Farming as a Business (FaaB) and Numeracy trainings, in which AEAs were involved as community trainers.

2. Collaboration with Other Partners

AFGRI-Ghana/John Deere

Jointly with John Deere, ADVANCE launched the Model Farms establishment activity with two Model Farms set up during the reporting period. These larger demo sites are especially meant to promote the use of affordable mechanization equipment and other improved agricultural technologies and practices by commercial farmers. More information on this initiative can be found in [Section C.1.1](#) of this report.

AMPLIFIES

During the quarter, the USDA-funded Assisting Management in the Poultry and Layer Industries by Feed Improvement and Efficiency Strategies (AMPLIFIES) project completed harvesting and post-harvesting training for 20 ADVANCE Farmer Based Organizations (FBOs) with a total membership of 566 maize and soy farmers. These FBOs are linked to poultry farmers in southern Ghana to supply maize and soya for feed preparation. The overall objective of the training was to improve the quality of grain supplied to poultry farms.

Agriculture Technology Transfer (ATT)

ADVANCE logistically and technically supported the ATT project to organize the 7th Pre-Season Event, held on March 30th in Tamale (see [Section 1.8](#)).

Nestlé Ghana Limited

In December, 2016, Nestlé Ghana and ADVANCE signed a Memorandum of Understanding (MoU) to jointly build the capacity of ADVANCE farmers and aggregators in the three Northern regions to produce and supply maize that meets Nestlé's quality standards. During Q2FY17, 1,729 ADVANCE maize farmers linked to the three Outgrower Businesses (OBs) selected to participate in this program: Karmah Farms in Karaga, Kukobila Nasia Farms in Nasia, and Gundaa Produce Company in Tamale were trained on mycotoxin control and management benefitted.

In addition, soybeans and maize samples from these OBs were collected and sent to Nestlé for laboratory testing and analysis. The results of the tests are expected in late April 2017.



Smallholders participating in Mycotoxin Management training

Northern Sector Agriculture Investment Coordination Unit

ADVANCE has continued to participate actively in the Northern and Upper East Regions' working group sessions organized by the Northern Sector Agriculture Investment Coordination Unit (NSAICU). Staff from agriculture-related projects in this group will be trained by ADVANCE on control measures of the Fall Armyworm as part of preparations in readiness to tackle the pest if it attacks crops in the coming season.

Peace Corps

The three Peace Corp Volunteers linked to ADVANCE have been active in the establishment of Village Savings and Loans Associations (VSLAs) and the implementation of the FaaB and Numeracy trainings. They also participated in the Pre-Season Event to learn more about the different options for technologies and inputs that the OBs they are working with may access.

Regional Marketing Group Concept Limited (RMG)

ADVANCE gave a training to all Sales Representatives of the input supply company RMG on the USAID Pesticide Evaluation Report and Safer Use Action Plan (PERSUAP). The project shared the reasons behind the selection of the agrochemicals that are approved. ADVANCE collaborates with RMG to make selected agrochemicals and maize hybrid seeds available to farmers through joint community input promotion activities.

Voto Mobile

ADVANCE has been collaborating with AFGRI Ghana/John Deere and Voto Mobile to develop voice messages on basic tractor maintenance tips that will be sent to OBs and their operators for them to improve their tractor operations and management. The details of 16 OBs who own John Deere tractors have been shared with Voto Mobile. The latter has also been linked to AFGRI Ghana/John Deere to provide maintenance tips for farmers outside ADVANCE beneficiaries.

In addition, the project is working with Voto Mobile to use voice messages as communication means between the OBs and their OGs to reduce operational costs and improve relationships.

Yara Ghana Ltd.

Yara Ghana and ADVANCE have been collaborating to strategize on ways to improve and scale up fertilizer distribution to remote areas. Some of the measures taken include working with their Input Retailer stores and involving the firm in the ADVANCE Community Inputs Promotion events. Yara Ghana also offered to register committed agents recommended by the project to become part of their sales force in remote areas.

C. KEY RESULTS

I. Direct Beneficiaries

During Q2FY17, 52,234 individuals from 47,379 households, including 51,917 smallholder farmers benefitted from ADVANCE interventions. A total of 29,284 of the smallholders or 56 percent were women (Table 1). This represents 64.9 percent of the FY17 target of 80,000 and indicates that the year's smallholder beneficiaries target number is on pace to be achieved. A total of 40,424 were continuing beneficiaries whilst 11,810 started benefitting from the project from this quarter.

With this quarter's achievement, the project reached 118,879 smallholder beneficiaries (including 56,412 women or 47.45 percent) since it started, representing 105.2 percent of its life of project target of 113,000.

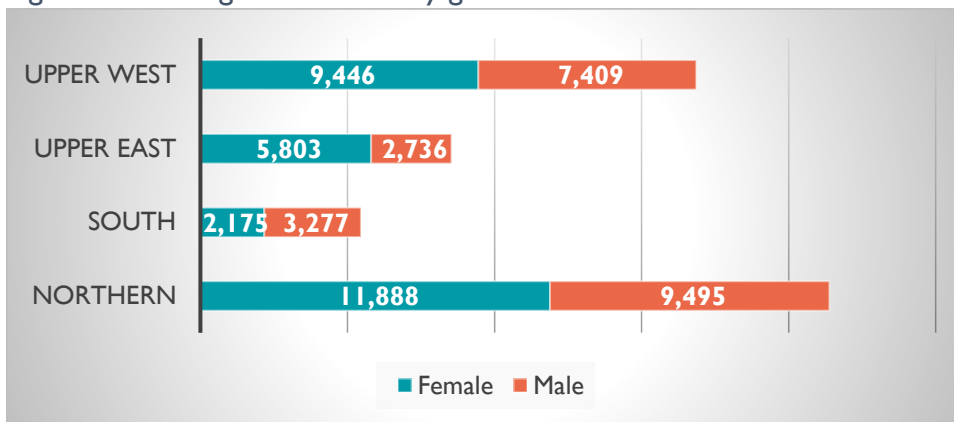
Table I: Smallholders direct beneficiaries by gender and region

Gender	FY17 New	Continue	FY17-Q2	▲
Male	New		4,722	
	Continue		17,911	
	Total		22,633	
Female	New		7,036	
	Continue		22,248	
	Total		29,284	
Total			51,917	

Almost all the beneficiaries, 52,229 individuals (including 29,312 or 56 percent women), received trainings on Good Agronomic Practices (GAPs), Post-Harvest Handling, Produce Quality Standards, Farming as a Business (Faab), Numeracy, Mycotoxins Management and Control, Soybean Utilization and Nutrition, etc. Women were

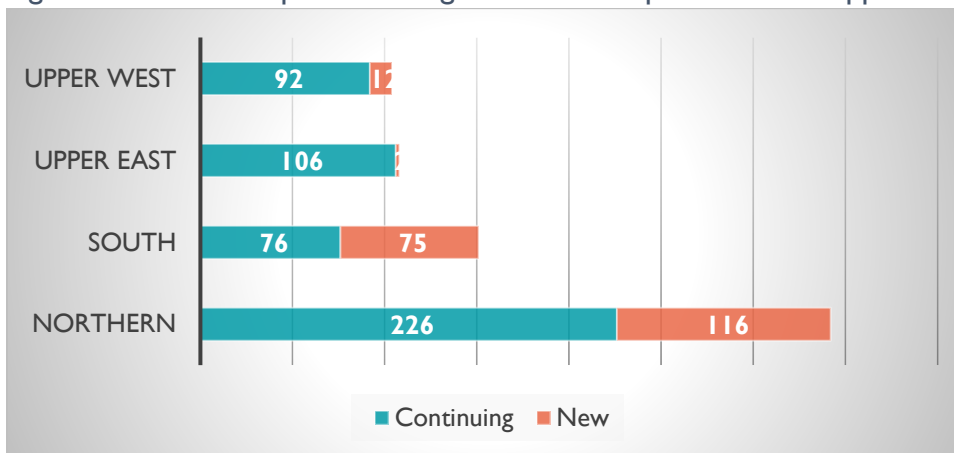
specifically targeted to benefit from capacity building activities to improve their numeracy, entrepreneurship and leadership skills, as well as household nutrition.

Figure 1: Training beneficiaries by gender and zone



Furthermore, ADVANCE supported 690 producer organizations and private firms through training and business development services among others. Most of them were from Northern Region (Figure 2).

Figure 2: Number of producer organizations and private firms supported



2. Value of Agricultural and Rural Loans and New Private Sector Investments

The project continues to support actors in accessing financial tools through financial institutions, where necessary. However, because it is still early in the season, the banks are still appraising most of the credit facilities. This quarter, a total of GHS 131,000 (\$30,061²) of cash loans from formal financial institutions were disbursed to project beneficiaries for the purchase of equipment and inputs for production as well as working capital. ADVANCE will make additional efforts to facilitate more loans for women beneficiaries in the next quarters.

In addition, a total of GHS 452,622 (\$103,865) made up of GHS 344,310 (\$79,010) of capital investment and GHS 108,312 (\$24,855) of production support was invested by project beneficiaries into the value chains, majority of which were done by male beneficiaries in ADVANCE south.

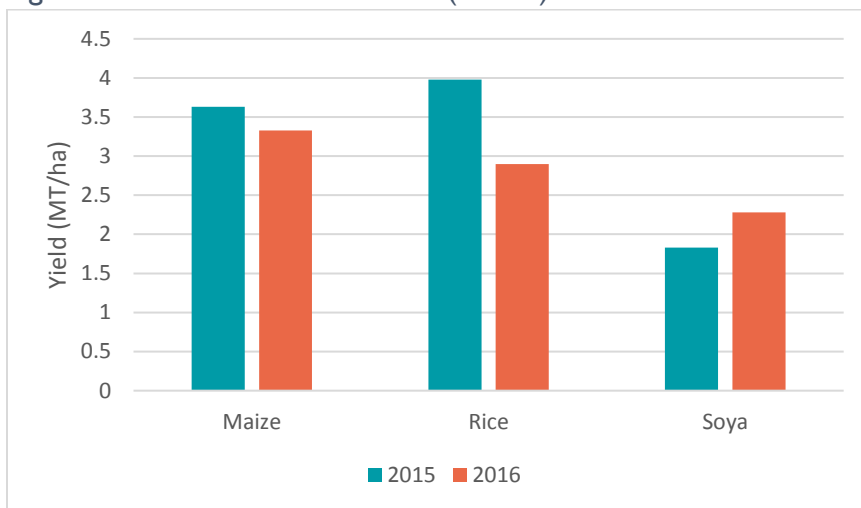
² Exchange rate used throughout the report is \$1=GHS 4.3578

3. Gross margin – 2016 crop season

ADVANCE produced and presented the gross margin *provisional* figures for the 2016 crop season during the reporting period. Using the Feed the Future Beneficiary Sampling Guide, data was collected from 2,218 randomly selected smallholder farmers. The project conducted the survey in two phases, the first phase happened in April 2016 for the southern part of the operational area and August to September 2016 for the north, and consisted of measuring the area planted using GPS devices, collecting data on production cost and technologies applied, and demarcating a sample area. The second phase implemented in July 2016 for the southern part and November to December for the north, was to gather the remaining inputs costs and technology application data, harvest the sample area to estimate yields, collect data on household dietary diversity, household hunger score and household storage systems.

Average maize yields were 3.33 MT/ha while rice was 2.9MT/ha and soybean 2.22Mt/ha. The 2016 maize and rice yields were lower than 2015 averages due to Fall Army Worm (FAW)³ infestation of several maize fields across the country, and excessive flooding in the Northern and Upper East Regions (see Figure 3).

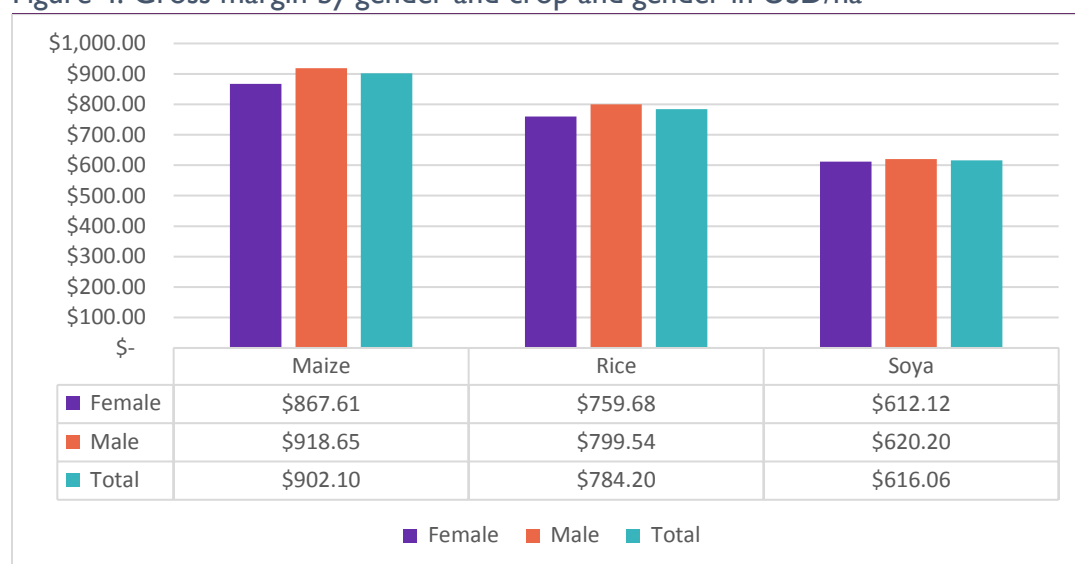
Figure 3: Yields in 2015 and 2016 (MT/ha)



The pest and weather events translated into a lower gross margin for rice smallholder farmers as compared to 2015 but a significantly higher gross margin for maize. Figure 4 shows that maize was the most profitable crop with a gross margin of \$902.10/ha. Rice gross margin stood at \$784.20/ha and soy at \$616.06/ha.

³ See

Figure 4: Gross margin by gender and crop and gender in USD/ha



4. Application of technologies – 2016 crop season

Data on application of improved technologies and management practices were collected during both phases of the gross margin survey. Table 2 below presents the main findings for the 2016 season. Almost all project beneficiaries applied one or more improved technologies and/or management practice. However, the application rates vary across technologies and gender. Soil related technologies are applied the most, including Integrated Soil Fertility Management; soil management practices that increase biotic activity and soil organic matter levels, such as soil amendments that increase fertilizer-use efficiency (e.g. soil organic matter, mulching). Improved seeds; improved fertilizer use practices; erosion control are less prevalent and ICT is the least applied.

Across technologies, application rates among women were lower than among men, though for most technologies, the differences were not statistically significant. The biggest gaps were seen on application of soil related technologies, cultural practices and pest management. In order to further understand and reduce this gender gap, ADVANCE has identified “technology application by women farmers” as one of its learning studies for FY17. Furthermore, the project will intensify efforts to train more women on GAPs and increase their access to fertilizers and agrochemicals through the VSLAs, community inputs promotion, gender trainings and sensitization, and other activities.

In total, 73,847 ha were under improved land based technologies by 86,570 out of 89,687 farmers. Women planted smaller plots of land and, in addition, they applied improved technologies on a smaller portion of that land. The number of farmers who applied one or more improved technologies (land based and non-land based) was 86,848, which is 155.09 percent of the FY17 target of 56,000.

Table 2: Application of technologies by men and women farmers

Technology Type	Application Rate Women	Application Rate Men	Hectares Women	Hectares Men
Crop genetics	34.89%	35.47%	11,064.43	18,923.94
Soil related	47.06%	52.85%	13,387.57	28,734.73
Cultural practices	39.35%	45.64%	13,165.61	27,739.89
Pest management	43.09%	52.89%	17,010.23	34,345.97

Technology Type	Application Rate Women	Application Rate Men	Hectares Women	Hectares Men
One or more land based	80.81%	83.37%	26,063.28	47,783.50
ICT	17.49%	18.49%		
Climate mitigation	31.88%	33.83%		
One or more tech.	81.18%	83.54%		

D. PROGRESS WITH TECHNICAL DELIVERY

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

I. Sub-purpose I: Increased Agricultural Productivity in Targeted Commodities

During Q2FY17, the project focused on:

- Planning for the selection of demonstration sites and conducting GAPs and PHH trainings
- Continuing the use of ICT to disseminate GAPs and improve adoption of technologies
- Conducting farm clinic activities
- Continuing the enhancement of OBs’ management capacity
- Reinforcing the provision of business development services
- Facilitating farmer mentorship
- Supporting the organization of the pre-season event

I.I. DEMONSTRATION SITES AND GAPs TRAININGS

Actor Supported Demo Sites

Demonstration sites will continue to be a key means to train smallholders and OBs on GAPs/PHH and to introduce them to improved technologies and practices. They also offer an opportunity to create and reinforce linkages between farmers and input suppliers, who donate 100 percent of the materials for the sites and use these outlets to promote their products. ADVANCE’s 2017 actor-supported demo sites target is 542, including 446 conventional demos and 96 Climate Smart Agriculture (CSA) demos. A total of 401 (74 percent) will be on maize, 49 (9 percent) will be on rice and 102 (17 percent) will be on soy. At the end of the reporting quarter, the project has identified 504 potential demo sites and discussions are underway to secure sponsorship. So far, 13 input dealers have been identified.

The project will establish Model Farms during the cropping season. Unlike the regular demonstration sites that measure one eighth to half of an acre and are mainly targeted towards the smallholders, Model Farms are 10 to 20 acre maize demonstration sites on which all the improved technologies and practices promoted by the project will be implemented (e.g. effective use of mechanization, minimum tillage, improved seeds, row planting, use of fertilizers and agrochemicals). They are mainly intended to make commercial farmers understand and apply these technologies and practices and increase their yields substantially as well as attract the smallholder farmers to aim at expansion. Maize yields from these farms are expected to be at least 5MT/Ha.

By the end of 2017, 10 Model Farms will be set up. So far, two Model Farms have been established in partnership with AFGRI Ghana/John Deere where 18 acres has been ripped and planted.

GAPs/PHH Training and Beneficiaries

During Q2FY17, 6,629 farmers (including 3,127 women) benefitted from GAPs training while 329 (including 153 women) received PHH trainings.

Table 3: GAP trainings beneficiaries

Zone	Female	Male	Total
NORTHERN	1,308	1,552	2,860
SOUTH	845	1,223	2,068
UPPER EAST	305	163	468
UPPER WEST	669	564	1,233
Total	3,127	3,502	6,629



*Classroom GAPs training at Zorbisi, Bolgatanga
Municipal Assembly, Upper East*



*Under-tree training on GAPs at Yipalla, Kintampo South
district, Brong Ahafo*

Crop Production Protocols

Following the analysis of the 2016 demo results, ADVANCE started the revision of its Crop Production Protocol during an Agricultural Strategic Meeting held in February 2017. The Northern Region team made the first revision to drop the least technically and/or economically effective practices. An example of technology that will be dropped is the spot planting in soy production, which will be replaced by drilling, seen as more productive. A full revision will be done during Q3FY17.

1.2. ICT OUTREACH AND PRODUCTION TECHNOLOGY DISSEMINATION

GAPs Dissemination

ADVANCE is exploring a mix of grants and private sector arrangements to sponsor agricultural radio programs. In the long run, the expectation is that the private sector firms will fully fund such programs. To that effect, concept papers were developed and submitted for consideration to a few input suppliers (Heritage Seeds, Seseku Company Ltd, RMG, and Yara Ghana Ltd).

Furthermore, a survey of 2,681 farmers in Kintampo North and South was conducted by Voto Mobile. The objective was to obtain their feedback on frequency of message reception, understanding the contents of

“When the season had already started, the voice calls were still useful to us in terms of our land preparations, use of certified seed, rate and timeliness of fertilizer applications, timely weed control, pests control, timely harvesting and weather forecasting, ADVANCE is working hard to make us better.” Seidu Alhassan, Amoma Nkwanta, Kintampo South

messages, and impacts on their farming practices and yields. These farmers were among 2,749 ADVANCE beneficiaries who received voice messages on Fall Armyworm incidence and control, GAPs, damages and prevention of bushfires, and weather in 2016 through a collaboration between the project

and Voto Mobile. Data showed that 81 percent responded their satisfaction with the services provided by Voto Mobile and 94 percent would be willing to pay to receive these services.

In addition, weekly Agriculture tips on GAPs and PHH covering the three targeted crops were uploaded on to the Esoko Platform and sent out to beneficiaries during the period. In total, 20,261 beneficiaries received such tips through SMS during the period.

“(…) we learn a lot from [the messages], all the farming activities, starting from ploughing, planting, applying fertilizer, spraying and also about rain pattern. How to harvest, when to harvest and even storage, where and how to store your produce. And also when to inspect, they sometimes tell you, go and inspect your produce. We really benefit from the messages.” OB Suleman Ibn Alhassan

Sensitization Messages on Soybean Utilization and Nutrition

To expand its efforts to make its activities more nutrition sensitive and to help improve the food utilization and nutritional status of its beneficiaries, 2,366 women farmers received soybean utilization and nutrition related SMS during a period of six weeks during the quarter.

Weather and Market Price Information

During Q2FY17, a total of 8,304 beneficiaries continued to receive daily weather forecasts and 19,367 received weekly market price information respectively through their mobile phones. Their subscription, paid by the project for a year, ended this quarter. As they have seen the benefits of these services, they are expected to pay for them themselves from now on while a group of farmers will be enrolled in the coming quarter.

ICT Program with Grameen Foundation

The project continues to partner with Grameen Foundation to help OBs and their field agents provide ICT based extension services to smallholders using tools and equipment such as tablets, portable pico projectors, Bluetooth speakers, and SD cards. ADVANCE and Grameen successfully completed quarterly review meetings and refresher training for 127 field agents were successfully completed in all regions during Q2FY17.

“The use of this Pico Projector to show videos is making agriculture extension service very exciting yet educative. Our smallholder farmers are excited to participate in these trainings through the video shows as they engage in effective discussions on GAPs after every sessions.” Basil Dapillah, a field agent, Sentu community

The quarter ended with significant increase in field activities and better performance from the agents following the training. Total field activities as of end of December 2016 were 608, they were 2,904 at the end of the quarter. Using the web-based messaging application *WhatsApp*, ADVANCE established technical groups to provide remote assistance to the field agents in the regions. The groups have been helpful, enabling agents to get assistance from Grameen and ADVANCE with a very quick response times. However, unwillingness to pre-finance activities of field agents by some OBs remained a challenge during Q2FY17 and impeded the

smooth operations of these agents. Discussions are underway with Grameen to identify the best approach to understand and address this issue.



Field Agents trying to use pico projectors, SD cards, and Bluetooth speakers to show videos during the refresher training in Upper West Region



A Field Agent using the tablet to profile a smallholder Farmer in Upper East Region

I.3. INCREASED ACCESS TO INPUTS AND EQUIPMENT

During Q2FY17, ADVANCE trained 22 OBs and 11 tractor operators on proper handling of tractors, rippers, and planters as part of the “Model Farm field days” through a collaboration with AFGRI Ghana/John Deere.

ADVANCE also carried out a needs assessment of 24 tractor operators in five districts of the Upper West Region to ascertain their challenges regarding tractor handling and maintenance. The findings will be available in Q3FY17 and will help to design upcoming tractor operators’ trainings.

Furthermore, in collaboration with Timothy Agro-chemicals the project carried out three in-community input promotions in the Kintampo South District, to improve smallholders’ access to inputs. A total of 185 farmers invested GHS 9,334 (\$2,142) to purchase weedicides, cutlasses, and seeds for the 2017 maize and rice major production season . ADVANCE facilitated an in–community input agent to be set up and linked to Timothy Agro for sustainable input supply and access by the farmers.

“Because of distance and cost, for years now we always had to wait until Kintampo market days before we could buy farm inputs during production season. But now access to inputs have been made easier and less costly as we do not need to travel far to Kintampo. ADVANCE has helped to [bring] inputs to our doorstep today and linked us to timely inputs from Mr. Timothy.” Alhassan, Nyamekyere, Kintampo South



Sales of inputs during a Community Input Promotion

I.4. FARM CLINICS

In the past three years, the project noticed the increasing population of Black Ants (*Messor galla*), causing damage especially to maize farms in Northern Ghana. Among its farm clinic activities to prevent and control the invasion by these pests, ADVANCE conducted tests to identify the local foods they were the most attracted to in order to make the most appropriate ant bait. Data showed their preference for a groundnut mix.

ADVANCE will implement further testing at the beginning of the 2017 crop season to determine the best pesticide that would destroy the colonies.

I.5. OUTGROWER BUSINESS MANAGEMENT

Outgrower Business Management Training

The OBs are trained continuously on a seven module OG Business Management curriculum, an eighth module is dedicated to female OBs and FBO leaders.

During the quarter, OBs were trained on three of the modules: 40 OBs on Marketing, Contract, and Contracts Negotiations, 124 OBs on Business Planning and Financial Management, and 55 on Outgrower Management.

The OBs received training on marketing, contracting. Participants were provided with sample purchase and sales contracts to assist them when entering into contracts on their own.

ADVANCE continues to use the OB categorization tool to rate each OB's performance regarding their application of the technologies and management practices promoted by the project. In Q2FY17, the project categorized 130 OBs: 14 were classified as performing excellently; 2 were high performing; 27 were medium performing and 89 were low performing. This categorization enables the project team to design tailor-made interventions to support the OBs, while encouraging those who are rated highly to mentor the lower performers through the OB mentorship program.

OG Business Modules:

1. Understanding value chain concepts, end market trends and how to operate and compete effectively
2. Business planning and financial management
3. Outgrower management
4. Marketing, contracts and contract negotiation
5. Demonstration farm management and out grower extension services
6. Tractor operation and management
7. Post-harvest handling and storage
8. Women entrepreneurship and leadership

OB Office Program

Outgrower Businesses are continuously encouraged to set up small office units from which they can manage their operations effectively. In Q2FY17, two OBs have set up their offices.

Furthermore, nine OBs in the South received a refresher training on how to use the Sales Tracker software. In the past years, those OBs were granted laptops with a 3 in 1 printer/scanner/photocopier and power surges to enable them keep verifiable records and make informed decisions.

ADVANCE trained eight additional OBs in record keeping systems. Some of the topics discussed during the training were:

- Types of records keeping system required for the successful operation of an OB
- Types of data and information to collect
- Uses and users of the information

I.6. BUSINESS DEVELOPMENT SERVICES

Farm Business Planning

In Q2FY17, ADVANCE supported nine new actors to develop their business plans and helped 16 to update their plans. Additionally, 17 OBs went through business diagnostics as a prelude to prepare their business plans. The business plans guide the operations of the OBs to enhance their OB management and determine the

required financial resources. The plans also allow the project to tailor its technical assistance to help the OBs achieve their business projections.

Furthermore, 27 OBs had their crop budgets developed with them and were taken through the cost - benefit scenarios with regards to in-kind lending of input and tractor services to smallholders.

OBs are always encouraged to register and legalize their operations with the Registrar General's Department to enable them to transact with established end markets and input suppliers. As many as 11 OBs had their businesses registered during this reporting period.

Financial Services

To increase financial inclusion and encourage savings as a source of production investment among OGs, 500 new VSLAs were formed from the last quarter and completed in Q2FY17, benefiting 12,425 OGs (3,935 males, 8,490 females). The groups save between GHS 1 to GHS 5 per share per week and a social fund contribution of GHS 0.20 to GHS 0.50 per person per week depending on the constitution adopted by the group.

These groups, in addition to the 214 previously formed, will share out their savings just before the beginning of the 2017 production season to enable them purchase inputs. ADVANCE monitored a total of 431 groups during Q2FY17. The groups accumulated a total savings of GHS 517,771 (\$118,815) and gave out loans of GHS 100,598 (\$23,085). With assistance from ADVANCE, 35 of them, made up of 875 members, have been linked to four financial institutions⁴ to open group savings bank accounts. This will allow them to safely save by eliminating the risk of keeping the cash in the metal box, earn interest on their savings⁵ and, be financially included.

Digital Financial Services

During Q2FY17, with support from mobile network service providers MTN and Vodafone, ADVANCE continued to promote the use of mobile money to its beneficiaries as a savings platform and to allow them to transact business safely with buyers and input dealers using e-wallets. Seven new OBs have been set up as merchants with 991 OGs as subscribers, while 47 OBs who received related trainings applied to MTN and Vodafone to become merchants. Two of the ADVANCE OB mobile money merchants carried out transactions amounting to GHS 76,962 (\$17,661), serving 1,641 subscribers.

"In fact the introduction of the MTN mobile money transaction into my business has helped me a lot because it reduces cost of transportation, missing of money and armed robbers attack," Kofi Timothy, from Kofi Agro-Chemical. Kofi was set up as MTN mobile money merchant and serves communities in Kintampo

Though the mobile money drive has been successful, the uptake has been low due to the low ownership of mobile phone handsets among smallholder farmers. To solve this problem, the project is working with two mobile phone companies to supply low end phones and sell them to interested beneficiaries during sim card activation sessions in the communities. The purpose is not only to increase the number of beneficiaries using mobile money but also to increase the number of farmers who have access to other information shared by the project (weather forecast, market prices, GAPs, etc.) through SMS, voice messages and radio, since the phones have in-built radio. During Q2FY17, about 50 handsets have been sold.

⁴ Yendi National Investment Bank, Wamfi Rural Bank, Kintampo Rural Bank and GN Bank

⁵ GN Bank is offering 9% on savings and a life insurance cover for each group member



Vodafone cash and mobile phone sales promotion at Tamalgu, Northern Region



Vodafone cash and mobile phone sales promotion at Zolugu, Northern Region

I.7. FARMER MENTORSHIP PROGRAM

In Q2FY17, eight OBs mentored 45 inexperienced or new OB mentees from Northern and Upper West Regions. Mentees were trained on a wide range of agri-business activities, including farm planning, crop budgeting, farm record keeping, financial management, farm equipment handling and maintenance, quality grain assurance and produce marketing. The mentorship training resulted in one of the participants installing a shed for his tractors to protect from the deterioration by the weather.

At the Wa Municipality, mentees visited various integrated units of Antika Company including the state of the art seed processing equipment, an 800 MT capacity warehouse, agrochemical shop, technical/production and mechanization units.

"I am glad for the opportunity to introduce my business to my colleagues and their business to me, we are no longer strangers in ADVANCE activities because our mentor has coached us fully by sharing his experience with us." Alhassan Yussif, Yong Dakpemyili, Tamale Metro

"I am happy with the point on dealing with financial institutions and managing OGs for good recovery rate, it will help me in recovery," Yakubu Imoro, Chahi Yepalsi, Tolon District

I.8. PRE-SEASON EVENT

This quarter, ADVANCE supported the National Seed Trade Association of Ghana (NASTAG) and ATT to organize the Seventh Annual Northern Ghana Agricultural Pre-Season Planning and Networking Forum under the theme **"Northern Ghana – Open for Agricultural Investments."** The event took place in Tamale on March 30, 2017 and brought together about 800 participants. Out of this number, approximately 359 were ADVANCE actors operating along the maize, rice, soybean value chains across the four operational zones.



Cross section of the plenary session's participants



Registration and exhibition grounds

1.9. CLIMATE SMART AGRICULTURE

Thirty ADVANCE technical staff participated in a four-day theoretical and practical training program by the Participatory Approaches for Integrated Development (PAFID), an organization based in Kenya. The session trained staff to understand the benefits of minimum tillage, the importance of residue retention, and the ways to implement these practices and demonstrate them to farmers. The event offered technical training on:

- minimum tillage using a hoe
- knapsack calibration
- mechanized minimum tillage

In addition, ADVANCE set up ten minimum tillage demonstration plots to train 10 OBs and their OGs. Sixty more minimum tillage demonstration plots will be established for GAPs training for farmers.

Twenty-one OBs in the Upper East and Upper West Regions have planned to plant a combined area of 150 acres of farmland with Mahogany, Moringa, Mango and Cashew trees. The estimated total number of seedlings to be planted is 775. Two nurseries have been engaged in Zebilla and Nandom to raise the seedlings.

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

During Q2FY17, under Sub-purpose 2, the project continued with the following activities:

- Developing market linkages between OBs and large buyers (primarily large aggregators and processors)
- Reinforcing lead firms' competitiveness
- Supporting trade associations
- Strengthening community based marketing

2.1. MARKET LINKAGE DEVELOPMENT

New Buyers Identified

ADVANCE identified five new buyers during the quarter. Their annual purchase requirement for 2017 is 35,100 MT of maize, 26,700 MT of rice paddy, and 13,000 MT of soybean (Table 4). Three of these buyers already have relationships with farmers in the ADVANCE area of operation. They are however interested in working with the ADVANCE project to deepen these relationships as well as build new ones.

Table 4: New Buyers Identified

Firm Name	Region	Firm Type	Purchase Requirement for 2017 (Mt)		
			Maize	Paddy	Soy
Agrocenta	Accra	Aggregator	3,600		
Agrisolve Co. Ltd	Tema	Aggregator	10,000		10,000
Amfani Royal Co. Ltd	Tamale	Aggregator	500	1,700	1,000
Tampuri Grains Co.	Tamale	Aggregator	20,000	25,000	2,000
Oseboba	Tema	Processor - Foods	1,000		
Annual Purchase Requirement for 2017			35,100	26,700	13,000

Two-way Trade Missions

ADVANCE facilitated 10 trade missions for eight buyers and 57 OBs and FBOs during the quarter. Trade missions consist of buyers visiting OBs and their OGs to connect with them, assess the OBs' and OGs' capacities and communicate their requirements and specifications of the produce these buyers would procure. All trade missions ended with open or closed contracts between these parties.

Table 5: Trade Missions Facilitated

Name of Buyer	Location of Buyer	No of Participating OBs/FBOs	Regional Coverage of OBs/FBOs	Commodity
Agrocenta	Accra	2	Brong Ahafo	Maize
Agricare Ltd	Kumasi	30	Northern, Upper West	Maize
AVNASH/Shinkafa Buni	Tamale	1	Northern	Paddy
Ejura - Afranso Rice Millers Group	Afranso	1	Northern	Paddy
Premium Foods	Kumasi	4	Northern	Maize
Agrisolve	Accra	7	Northern	Soy, Maize
AVNASH/Shinkafa Buni	Tamale	7	Upper East	Paddy
Sumaila A. Zakaria	Kumasi	4	Upper East	Paddy
Rosemary Atindema	Tamale	1	Upper East	Paddy
Total		57		

Among the key outcomes of these trade missions,

- Agricare discussed indicative contract terms for input credit for the 2017 farming season with OBs based in Northern Region

- Shinkafa Buni, the supply chain subsidiary of AVNASH Industries, purchased GHS 295,514 (\$67,813) worth of rice paddies from OBs in the Upper East Region.
- A total of 34 OBs visited the processing plants of two key end market buyers (Agricare and Premium Foods Ltd) in Kumasi to enhance their understanding of the quality requirements of the companies. They also discussed the terms for input credit for the 2017 farming season.
- Guinness Ghana Breweries emerged as a potential buyer of maize from OBs, albeit through an aggregator, Agrocenta.

"Seeing is believing, I thought Premium Foods was being difficult for rejecting the maize of Tindana because of brokenness. After all they will mill the maize for processing, but having gone through the factory visit I now understand why they had to reject the maize and the need to meet the quality requirements of the company," Abukari Abdul Manan, OB, Tamale



MD of Agricare discussing 2017 outgrower contract for yellow maize with OBs in Tamale



Discussion between OBs and PFL after factory tour during trade mission to PFL

Contract Facilitation

A total of 46 contracts covering 3,564 MT of maize, rice paddy and soybean, valued at GHS 3,469,408 (\$796,137) were facilitated between 16 buyers and 31 OBs and FBOs this quarter.

Table 6: Contracts Facilitated

Type of Contract ⁶	Number of Contracts	Volume (MT)	Value (GHS)*
Closed Contracts	8	168	163,542
Closed Sale without Formal Contract	21	1,716	1,605,296
Purchase and Supply Agreements	17	1,680	1,700,570
Grand Total	46	3,564	3,469,408

*For contracts with values

These contracts represent new business relationships between OBs and buyers. Aside these contracts, OBs and buyers with existing relationships have signed contracts and executed purchase and sale transactions using the skills and experience gained from previous market linkage facilitation and training provided by the project.

⁶ Closed contracts are definitive and binding agreements between buyers and farmers for the exchange of a specified quantity of produce at a specified price within a specified period. Outgrower contracts are agreements where the buyer provides mechanization services and inputs to the farmer, with the farmer paying back with produce at harvest. Purchase and supply agreements are non-binding contracts between buyers and farmers with key terms like quantities, price, and delivery period to be agreed between the parties at a later date. These contracts have been a key feature of the trade missions. Typically, the buyer and farmer do not commit to a definitive price and supply volume at the initial meeting. The contracts are eventually finalized and executed by the parties at a later date.

Transport Linkages

ADVANCE collaborated with the local branches of Ghana Private Road Transport Union (GPRTU) to update grains cargo haulage fares from supplier locations in the north to buyer destinations in southern Ghana. The charts have been disseminated to OBs and buyers.

Table 7: Transport Fare chart – ADVANCE South

Final Destination of Produce (Maize)	Haulage fare per 130kg bag (GHS) from Techiman	Haulage fare 130kg bag (GHS) from Ejura	Haulage fare per 130kg bag (GHS) from Wenchi
Accra	18	16	19
Kumasi	12	10	10-11
Ashiaman	19	17	19
Cape Coast	18.5	18	19
Oda	19	18	19
Ada	20	18	19
Tema	19	17	19
Madina	19	16	19
Koforidua	18	16	19
Kasoa	19.50	16	19
Winneba	18.5	16	20

Training of Farmers in Produce Quality Requirements and Standards

In January 2017, the project started training smallholder farmers on produce quality standards for maize and soybean. The content of the training is based on the Ghana National Standards for maize (GSS 211: 2013: Specification for Maize) and soybean (GSS 1039: 2013: Specification for Soybean). During the quarter, the project trained 25,939 (including 13,414 women) out of the targeted 52,000 (including 23,400 women) smallholder farmers for FY17. The remaining farmers will be trained during the next quarters.

Table 8: Number of Smallholders Trained in Produce Quality Requirements and Standards

Operational Area	# Trained	FY 17 Target
Northern Region	9,538	16,000
Upper West Region	13,565	14,000
Upper East Region	790	14,000
South	2,046	8,000
Total	25,939	52,000



Women smallholder farmers at quality standards training

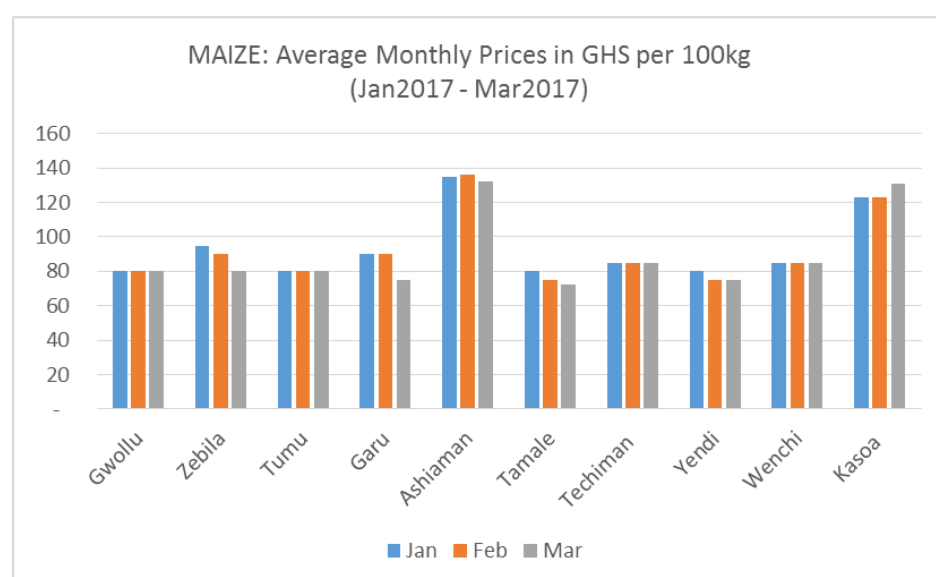
Key Market Developments

In this section, the quarter's commodity price trends from key markets monitored weekly by the project are presented.

Maize

Overall, maize prices remained relatively stable in four out of the ten key markets tracked during the quarter (Figure 5). The demand for yellow maize in the Upper West Region overshadowed the demand for white maize, resulting in farmers with stocks of white maize in search of buyers. In the Northern region, maize prices in the markets monitored by ADVANCE rose by 9 percent except in Tamale where price dropped by 4 percent. The decline in maize prices in Tamale has been attributed to excess supply over demand because most of the maize from the other districts end up in the Tamale market. Maize prices in the Upper East Region declined slightly over the period. This has been explained by the low price quotes by buyers seeking the grain and cross border trade activities. Farmers in the South have sold their maize to finance cultivation of the 2017 major season crop.

Figure 5: Average Monthly Maize Prices from Selected Markets



Source: ADVANCE market monitoring

Rice Paddy

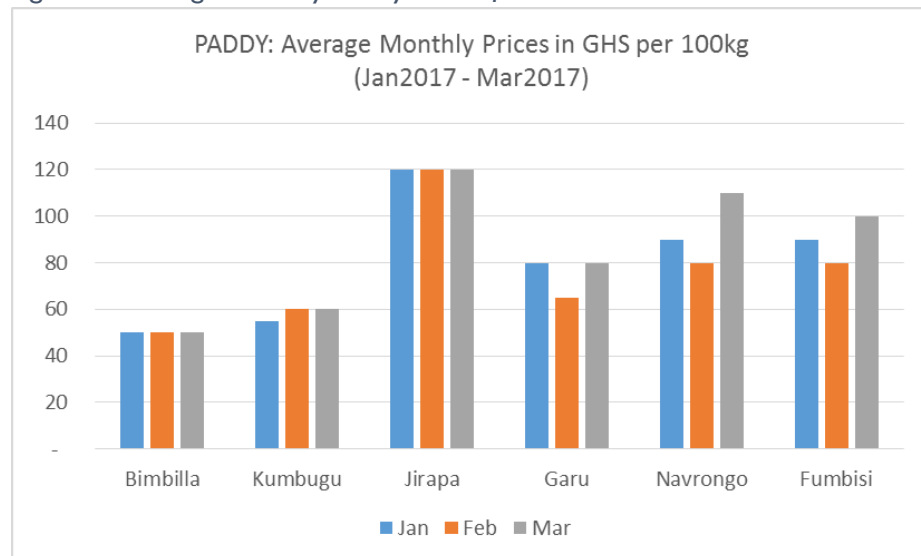
Paddy prices fluctuated slightly in four out of the six key markets monitored during the period (Figure 6). In the Northern Region, the presence of Shinkafa Buni in the market, buying paddy at prices above the prevailing market price was expected to drive up paddy price in the open markets. However, this expectation did not materialize because farmers did not have the aromatic long grain varieties (Jasmine, Agra, and Togo Marshall) the company required. In addition, farmers with the required stocks also found it challenging to sell to Shinkafa Buni because of the formal procurement processes they needed to observe, as opposed to the informal purchase-sale transactions they were familiar with in the open market.

In the Upper East Region, Shinkafa Buni's buying exerted an upward influence on prices in Navrongo and the Fumbisi area in March. These areas produced the Agra and Jasmine rice varieties. Paddy stocks were low at the end of the March.

The slight rise in the price of paddy recorded in February in the Kumbungu area was the result of increased demand at the irrigated fields of Dulung.

Price for paddy in Upper West region remained the same in all the markets that provided price data. The region is a marginal rice production area which attracts little buyer interest outside the region because of the absence of significant supply volumes. The regional supplies of paddy are largely absorbed in local markets which have previously recorded relatively high prices compared to markets in the Northern and Upper East regions.

Figure 6: Average Monthly Paddy Prices from Selected Markets



Source: ADVANCE market monitoring

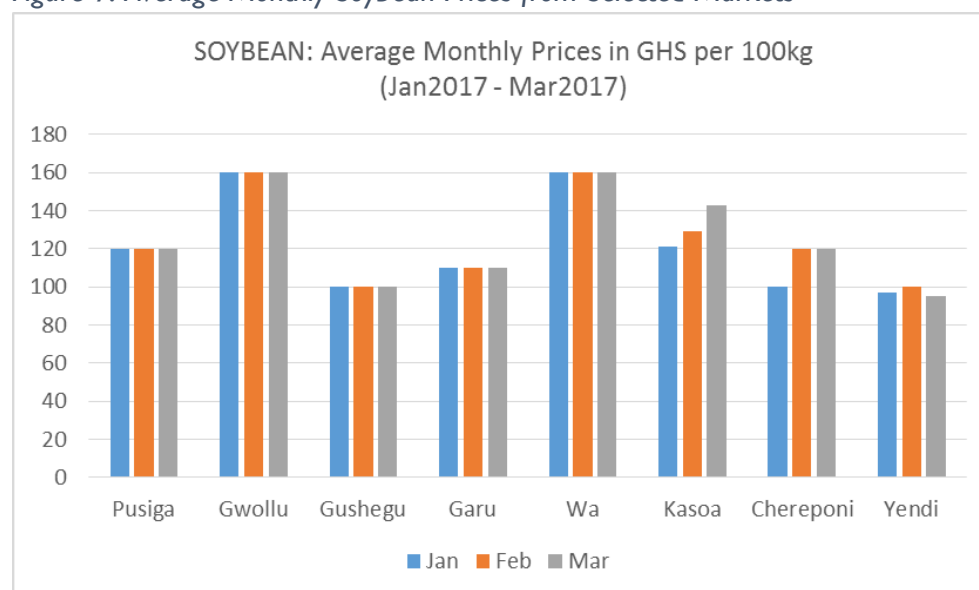
Soybean

Overall, soybean prices rose slightly in some of the markets tracked by ADVANCE (Figure 7). Soybean prices across markets in Northern Region increased by an average of 11 percent during the quarter. Prices in Chereponi market, that increased more significantly, is believed to have been influenced by the activities of Togolese aggregators who offered higher prices than Ghanaian buyers.

Prices of soy in the major producing areas in the Upper East was stable during the quarter on account of low cross border trade with Burkina Faso in the commodity in the region.

In the Upper West, prices remained stable in all the markets. The region recorded low stocks as well as low demand for the product. Burkinabe buyers who are usually present and actively demanding the product were absent, contributing to the stability of the price of the product. The Upper West region has a marginally production area for soybean and has previously recorded relatively high prices for the commodity compared to markets in the Northern and Upper East regions.

Figure 7: Average Monthly Soybean Prices from Selected Markets



Source: ADVANCE market monitoring

2.2. LEAD FIRM COMPETITIVENESS

Support for Buyer Outgrower Development

During the quarter, ADVANCE supported buyers recover maize repayments on input credit provided by Agricare and Akate Farms for the 2016 farming season and Premium Foods⁷ for the 2015 farming season. Overall recovery on the Agricare scheme stood at 47 percent at the end of March 2017 with the South operational area suffering severe challenges primarily because of the army worm attack in the minor season. Premium Foods agreed with farmers who were unable to settle their liabilities in full to extend repayment to September 2017.

Recovery on the Akate Farms scheme was 89 percent at the end of March 2017. Inadequate shelling services and weighing scales have constrained recovery efforts.

Table 9: Agricare Support Outgrower for 2016 Farming Season

Operational Area	Expected Recovery (MT)	Actual Recovery (MT)	% Recovery
Northern	94	94	100%
Upper East	95	83	87%
Upper West	182	182	100%
South (Major Season)	138	88	63%
South (Minor Season)	481	16	3%
Total	990	462	47%

⁷ The firm did not provide input credit for the 2016 farming season because of low repayment on the 2015 support

2.3. TRADE ASSOCIATION SUPPORT

The Ghana Grains Council (GGC) continued implementing activities under the third-year grant agreement of US\$200,000 for the period September 1, 2016 to August 31, 2017. The primary objective of this grant is to establish a Manual Warehouse Receipt System (MWRS) targeted particularly at farmers, aggregators, traders, and rural and community banks.

The following activities were carried out during the reporting period.

Objective 1: Restructuring and Strengthening the WRS to meet emerging challenges and expansion prospects.

- Grains stock movements at warehouses were monitored with physical checks at six approved warehouses in the Northern Region.
- A total of 855 MT of grains were received into stock during the period under review in the five regions of interventions and 500 MT were issued out of stock in the Northern Zone. The details of inventories and movement are available at www.ggcwarehouse.mfarms.org
- The owners of seven new warehouses, located in in the northern section of the Ghana Commercial Agriculture Project, expressed interest in enrolling into the warehouse receipts system program. In total, these warehouses have a grain capacity of 3,500 MT.
- The draft pictorial and handbook on the paddy rice standard (GSS 1122: 2016) was submitted for review and approval by the Ghana Standards Authority Technical Committee.
- In collaboration with the Ghana Agricultural Insurance Pool (GAIP), discussions commenced with an insurance firm to underwrite risks identified in the WRS Rules & Regulations
- The upgrade of the Central Depository software to support the inclusion of community-based warehouses under Tier 2⁸ began

Objective 2: Optimize GGC Members' Benefits

- The subscription with Esoko Ghana was renewed for the period March 1 to December 31, 2017. The platform enables GGC to collect and disseminate contract prices for graded grains from GGC warehouses and disseminate via SMS to its members.
- The Council participated and exhibited at the 7th Annual Northern Ghana Agricultural Pre-Season Planning and Networking Forum held on March 30, 2017 in Tamale.
- Membership care visits were undertaken to 15 members in the Northern zone.
- Membership application of two firms (Integrity Commodities as a Gold member, and Agrisolve as Bronze member) have been received.

Sustainability/Income Generation Initiatives

- GGC is seeking a grant of €50,000 from the Green Innovation Center to equip 16 community warehouses in the southern zone targeted for WRS Tier 2. GGC expects to generate revenue through a commission on grain trade transactions at these warehouses. In addition, beneficiaries of the grant will pay 20 percent of the grant to GGC over a 2-year period.

⁸ The Manual Warehouse Receipt System (MWRS) or WRS Tier 2 is a system designed to use pre-printed booklets in triplicate with security features (hologram) issued by GGC and completed by hand at approved warehouses. When fully deployed copies of the stock receipts and issues will be send to GGC's offices and keyed into the GGC Central Depository (CD) for the processing of warehouse receipts. Tier 2 complements the existing WRS which requires real time data uploads, the use of computers and availability of internet connectivity from warehouses to the CD hosted in the Accra office of GGC.

- The Council carried out consultancy services for the International Fertilizer Development Center which generated gross revenue of GHS 6,756 (\$1,550). The service covered facilitation of a study tour by a delegation from five Francophone countries.
- A service contract with Physikalisch-Technische Bundesanstalt covering five months (January to May, 2017) was signed at a fee of \$11,320.

2.4. NORTH GHANA PROCESSING UPGRADE

The project has continued efforts to develop the processing capacity and/or increase the quality of the output of grain in the north. The following are summaries of actions in each of the commodities targeted.

Rice milling upgrade

Below is an update of progress of work on the three rice mills targeted in the Northern Region for expansion and upgrading.

Table 10: North Ghana MSME Agro Processors Identified for Milling Expansion and Upgrade

Enterprise	Location	Processing Capacity (MT)/ Hr	Milling Upgrade Needs	Status of Engagement
Tiyumba Women's Rice Processing Centre	Tamale, Northern region	0.13	Rehabilitation of processing center	The project Grant Committee reviewed and approved the grant applications
AMSIG Resources / Shekinah Agribusiness Centre	Worebuoggu (near Nyankpala), Northern region	0.5	Replacement of specific components of the mill, and provision of grader	
Nyebu Nyona Rice Processing Centre	Nyerizi, Northern region	0.13	New rice mill upgrade	

Food (Maize/Soy) Processing Upgrade

A needs assessment was conducted on Total Foods Ltd., a Tamale based MSME producer of instant foods (breakfast cereals) formulated from a mix of maize, soybeans, rice and guinea corn. Various intervention areas covering processing upgrade, marketing, food safety and financial management was agreed with the business owner with implementation commencing.

BDS Support to North Ghana MSME Agro Processors

A business linkage between SAMBAY Rice Mill and two aggregators from Kumasi was established for toll milling services. The two aggregators mill upward of 50 MT per week when paddy is readily available.

2.5. COMMUNITY BASED MARKET SYSTEMS STRENGTHENED

To ensure community based market systems are strengthened, *Sell More for More* Training was extended to 21 newly identified FBOs with 87 individuals made up of 58 males and 29 females. The objective of the training was to empower these FBO executives to perform better with regards to managing their groups, to improve

productivity and enhance quality produce that would attract high demand and enable them to earn more. The SMFM curriculum is based on four modules: Membership, Money, Management and Marketing.

At the end of the training sessions, participants resolved to immediately put what they have learnt into practice. Six action areas were given to participants to select three to start acting on. These include: Planning farm activities, seeking extension services for members, seeking financial services for members, collective purchasing of inputs for members, record keeping and ensuring gender equity in roles and access to services.

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

Under sub-purpose three, the project continued focusing on:

- (i) Development of advocacy groups
- (ii) Development of district agricultural investment plans
- (iii) Capacity development for program implementation, and
- (iv) Capacity development for farmer based enterprises

3.1. ADVOCACY GROUP DEVELOPMENT

Advocacy support to Trade Associations

ADVANCE supports Trade Associations to initiate and lead trade and marketing related advocacy actions. To that effect, a one-day session on identification and prioritization of advocacy issues and preparation of an advocacy strategy was organized for members of the Techiman Maize Traders Association. The session provided a platform for members to discuss three advocacy issues identified by the association. These are:

- Inadequate market facilities (no lighting system, no drainage facilities, no security gates etc.) in Techiman Maize Market.
- Non-involvement of Traders Association in District Assembly Fee Fixing Resolution.
- Non-utilization of standard measures in agriculture commodity trade.

Further discussions were held with Dr. Baba Salisu Ashmara of the Green Innovation Centre which previously collaborated with the Techiman Municipal Assembly to provide 120 market sheds in the Techiman Maize Market. As a result of these discussions, it was recommended that an advocacy action aimed at influencing the Techiman Municipal Assembly to provide infrastructure in the market be initiated by the Techiman Maize Traders Association with support from ADVANCE.

Support to FBOs Network

Training workshops were organized during the quarter to facilitate the formation of district networks of selected active FBOs in the Kintampo North and Kintampo South Districts. The workshops involved 28 Executives from seven Farmer Based Enterprises (FBEs) and 13 FBOs. As a result, two district FBO Networks were formed with interim executives to enable them work together and through advocacy, address issues such as lack of standard measures in agriculture



FBO network workshop in Kintampo South

commodity trade, destruction of farmlands by activities of Fulani Herdsmen etc. The complete membership of the district FBO Networks will be drawn from the various FBEs/FBOs in the district and will be linked to the District Value Chain Committees (DVCC) for synergy.

Following the formation of the Kintampo North FBO Network, a one day training workshop was organized for some selected members. It focused on leadership, networking and coalition building, and basic advocacy. A total of 29 members (7 females and 22 males) of the network, representing 13 FBOs out of 15 FBOs, participated.



A session on advocacy using pictures and soft boards

OBs Network Formation

During the reporting period, a one-day network formation meeting was organized for 13 OBs operating around the Kintampo North District. The OBs welcomed the idea of forming a network and understood the benefits to be derived from the network. They resolved to organize a meeting to further discuss the idea.

Furthermore, to ensure the continuous functioning of Zonal OB Networks, monitoring visits were carried out to the East Mamprusi - Bunkpurungu/Yunyoo OBs Zonal Network. It was observed that the network met monthly to discuss matters related to their growth and had opened a bank account. The network members were also found to be committed to payment of dues.

Advocacy Grant

During the quarter under review, the Coalition for Northern Region Western Corridor Development (NORTHCODE) was selected through a competitive process to receive a grant. The purpose of that grant will be to implement an advocacy action on women access to land through establishment of land banks in the West Gonja, Sawla/Tuna/Kalba, Mion and West Mamprusi Districts. As part of the grant award process, an Organizational Capacity Assessment was conducted. The implementation of this advocacy project is expected to produce the following results:

- At least 800 women will have access to at least two acres of productive agricultural land each for use in cultivating maize, rice or soybeans
- At least 800 women will have access to credit opportunities to improve their access to agricultural inputs such as improved seeds, tractor services, labor among others

3.2. SMALLHOLDER CAPACITY BUILDING

Numeracy Trainings

By improving farmers' capacity to carry out basic arithmetic calculations, numeracy training did not only increase their knowledge but also their self-confidence to deal with aggregators in their daily transactions. The numeracy curriculum is made up of nine sessions which happen during the nights, when women are usually done with their daily chores. During the quarter, a total of 11,644 smallholders (out of whom 58.7 percent were women) were trained. Trainings in Upper East and Upper West will continue during the next quarter.

Table 11: Number of Farmers Trained on Numeracy

Zone	FY17 Targets	# Males trained so far	#females trained so far	Total
Northern and South	6,000	3,248	4,042	7,290
Upper East	3,000	1,077	1,884	2,961
Upper West	3,000	479	914	1,393
Total	12,000	4,804	6,840	11,644



Learners trying their hands-on writing numerals



Age is not a barrier to learning

Feedback from 100 beneficiaries of previous years' numeracy trainings provides some insights into the impact of this activity. They included:

- Being able to identify expiring dates on inputs such as chemicals and medication.
- Knowledge of the weights of their produce when they are weighed by aggregators: farmers are no longer cheated because of not knowing numerals.
- Beneficiaries can identify the different denominations of the Ghanaian currency and easily determine appropriate change when needed.
- Female beneficiaries can monitor the performance of their children when they are sent to the clinics for weighing.
- Beneficiaries can now support their children who are learning how to write numerals.
- Identify and take other actors' phone numbers to engage them in businesses.



Learners being learning to identify expiry dates on chemicals containers

FaaB Trainings

During the quarter, 15,336 smallholders received FaaB training. Out of them, 8,009 were females. More smallholders will be trained during the next quarter to reach each regional target.

Table 12: Number of Farmers Trained on FaaB

REGION	FY17 Targets	# Males trained so far	#females trained so far	Total
Northern	6,000	3,930	3,989	7,919
Upper East	3,000	916	1,294	2,210
Upper West	3,000	1,796	2,184	3,980
South	1,000	685	542	1,227
Total	13,000	7,327	8,009	15,336

ADVANCE gathered feedback from 100 of the previous years' FaaB beneficiaries. The feedback indicated that:

- Beneficiaries now keep records of their farming activities which enables them to determine whether they are making profits or losses.
- The training enabled beneficiaries to plan their farm activities before the season, which they were not doing in the past.
- The pictorial story of Azara and Sumaya presented during the training, exposed them to the use of certified seed.
- Beneficiaries now draw up crop budgets before the season to project their expenditure in the coming season.
- Before the FaaB training, farmers were not seeking extension services from MoFA, but now they invite them to support them select their farm site, seed, and other agro-inputs.
- The training inculcated the spirit of collectiveness in farming activities especially among FBO beneficiaries.



A participant explaining the pictorial chart to members

3.3. CAPACITY DEVELOPMENT Farmer Based Enterprises

FBO/FBE capacity assessment

As part of the process of transforming Farmer Based Organizations (FBOs) to Farmer Based Enterprises (FBEs), the team assessed potential FBEs for the second time to ascertain their level of progression. The second assessment showed that 18 FBOs made significant progress and moved to higher categories. For example, Tampola Asungtaba from Upper East, Boamasa Farmers Association and Peace and Love Cooperative Farmers in Northern Region moved from mid-transition to model FBE progressed from mid-transition to model FBE. Table 13 compares the average scores for the first and second assessments.

Table 13: Average scores for first and second assessments by zone

REGION	# FBE Assessed	Average of first Assessment (/100)	Average of second Assessment (/100)
Northern	36	52.1	57.9
Upper East	20	59.6	64.2
Upper West	15	49.8	58.5
Kintampo	34	40.9	48.3

Mentorship Program for FBOs

Mentorship programs were carried out as part of the activities to transform FBOs to FBEs. Peace and Love Cooperative Farmers, now a model FBE, hosted 30 FBO leaders from 10 FBOs and shared their experiences.

Two more FBOs hosted six-week mentorship programs. The main learning areas included agronomic practices, marketing of produce, rendering services for members, and documentation.

The exchange visits proved to be fruitful and would be repeated during the year.

"My knowledge has been enhanced on income generation (dues, rendering services for a fee, group farm, etc.) and assets acquisition, your FBO has a strong leadership and that explains your success. I will also strengthen the leadership in my FBO and aim at doing a profitable business." Suleman Issifu, visiting Peace and Love

FBO VSLA

FBOs usually experience financial challenges as they approach the season. Some FBOs were selected and trained on the VSLA concept to be able to raise funds for their farming activities. Most of them are awaiting their share out time to be able to purchase inputs for their farming activities.



Monitoring of VSLA operations by the ADVANCE staff

A total of 10 FBOs in Upper East Region received VSLA training and have started saving. Bonia and Yuwoniba groups have shared out and purchased inputs.

In the Kintampo North District, 26 FBOs were monitored to ensure proper application of the VSLA concept. The groups have mobilized a total of GHS 45,026 (\$10,332) in savings, out of which GHS 12,900 (\$2,960) has been loaned out to members to support their farming activities.

E. PROGRAM SUPPORT

I. Gender Program

In addition to the gender dimension of the VSLAs and access to information and other training by the women mentioned in section D.1., this quarter, ADVANCE made some progress in increasing women's access to land. It also conducted nutrition education and soybean utilization training for its women beneficiaries. Furthermore, the project celebrated the International Women's Day on 8th March 2017 in the Nkoranza District.

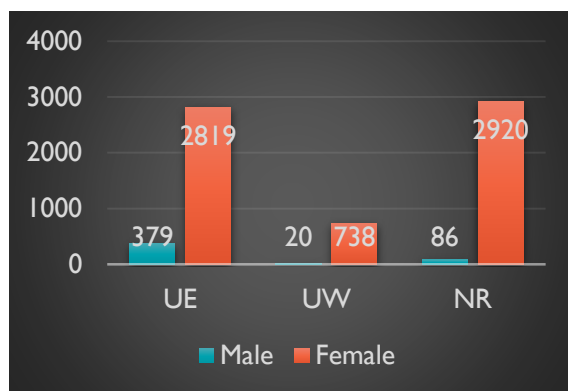
1.1. IMPROVING WOMEN'S ACCESS TO LAND

Through the project's facilitation, Nicholas Lambini, OB in the Chereponi District, successfully negotiated with traditional authorities and husbands to secure 500 acres of fertile land for 500 women for production during the upcoming 2017 production season. He further pledged to provide Triple Superphosphate fertilizer on credit for the women to produce soya and improve their yields and income. The project will continue to work with similar actors through advocacy to make available fertile land for women.

I.2. NUTRITION EDUCATION AND SOYBEAN UTILIZATION TRAINING

During the quarter under review, the project collaborated with the Directorate of Women in Agricultural Development (WIAD) at MoFA to undertake nutrition education and training on soybean utilization, especially the women. The aim was to improve the nutritional status and food security of their households. The OBs and their smallholder farmers supported the project with soybeans and maize for the cooking demonstrations. In total, 6,962 smallholder farmers (6,477 female, 485 males) were trained across the three regions of the North. The farmers were taught how to process soybean into quality and nutritious flour, and the ease with which it blended with different local recipes. They learned how to prepare four different dishes (Tubani, soy porridge, soy milk and Aprapransa).

Figure 8: Regional Breakdown of Nutrition Education and Soybean Utilization Training Beneficiaries



Educating participants on processing of soy using picture chart at Bouti

“Now that we have been taught how to incorporate soybeans into our dishes, we will grow more soybeans,” Lydia Langa

“The soy bean utilization training will help reduce consumption of maize in my home. Previously, my family and I consume 1.2 MT of maize per annum. After this training, I know the consumption rate of maize will reduce as we are going to incorporate soy into our everyday diets. We are grateful to ADVANCE for the teaching us how to eat soybeans”. Abukari Shaibu, with beaming smiles

“For what I have seen and observed with my smallholder farmers, this training is not for women alone! I will be supporting 50 women this season to produce soybean on an acre each. I will start processing soy milk for sale in the local community to diverse my source of income.” Ben Awuni

I.3. RADIO PROGRAM FOR WOMEN

As part of the project's initiatives to strengthen women's participation in agricultural production and increase their productivity, URA radio hosted the ADVANCE Regional Coordinator of Upper East Region, Michael Amaniampong, and Abugpoka Enterprise managed by Esther Akabzaa, a female OB, on a program dubbed *Women and Development*. This program was used as a platform to get established women sharing their experiences and mentor women desirous of making a change in their households and communities. The discussions centered on the ways in which women can participate in the Government of Ghana "Planting for Food and Jobs" program when it rolls out later this year. Also, challenges such as improper handling of produce and storage at farm level were discussed.



The Upper East Regional Coordinator and Esther Akabzaa at URA Radio

I.4. INTERNATIONAL WOMEN'S DAY

ADVANCE joined thousands around the world on March 8 to celebrate this year's International Women's Day with the theme "Women in the Changing World of Sustainable Agribusiness" at the Nkoranza District in the Brong Ahafo Region. This year's event was jointly celebrated with the USDA funded Ghana Poultry Project (GPP) implemented by ACIDI/VOCA. It recognized and celebrated women, especially women farmers, in speeches, role plays, solidarity messages and awards.

The event was hosted by ADVANCE's OB beneficiaries, Mary Alamisi Azongo, Margarete Asabea, and Kandida Subertahiru, and brought together about 350 women and men in and around Brong-Ahafo and Ashanti Regions. In attendance were the Chiefs from the Nkoranza traditional council and representatives from the Ministry of Food and Agriculture, the District Assembly and the District Health Directorate.

Smallholder farmers linked to Mary Azongo and GPP staged a drama highlighting technology adoption, good agronomic practices and benefits of a smallholder farmer working with an OB scheme in the ADVANCE model. The GPP's skit highlighted an educational health message and benefits of egg consumption to pregnant mothers and children under the age of five.

ADVANCE awarded three distinguished individuals and a group for their outstanding performance in appropriate use of inputs, support in setting up demonstrations, application of improved technologies and management practices, timely repayment of credit and regular attendance to meetings. They each received a manual dibbler as their award. The Donkro Nkwanta Farmers group was adjudged the best group, Mary Alamisi Azongo, the best OB, and Baffouaa Appiah, as the best smallholder farmer.



Best Women Outgrower Madam Baffouaa Appiah receiving her prize from District MoFA Director Mr. Amenga Dennis Abugre

A smaller celebration took place at Fielmua, in the Sissala West District of the Upper West Region. The event was hosted by OB Hajia Maria Kobzie. It highlighted the important contributions women were making especially in agriculture, to sustain their families and the nation. A total of 130 farmers attended, including 93 females and 37 males from six selected farming communities under her operation.

1.5. ADVANCE BENEFICIARY RECEIVES 'STOP HUNGER AWARD'

On March 8, Lucilla Dayuori, OB owner and leader of the Tuna women Development Project, received the Sodexo Women Stop Hunger Award in Paris, France. The award came along with a €10,000 prize. An additional fund raising activity was initiated following her appeal to support the Tuna women's group to the organizers and attendees and this resulted in raising an additional amount of almost €9,000.



Lucilla (center), proudly holding her Award

2. Environment Support

In addition to the climate smart activities mentioned in section 1.9., during the reporting period, project activities focused on:

- Ensuring compliance with Title 22 of the Code of Federal Regulation, section 216
- Improving agrochemical management among project actors

2.1. GENERAL ENVIRONMENTAL COMPLIANCE

Twenty tractor grant applications were screened for potential environmental impacts in line with §216.3 (a) (7) (i) of Title 22 of the Code of Federal Regulation. The screening was done along the potential uses of the tractor including land preparation, threshing/shelling, carting of goods, pesticide applications using boom sprayers, and tractor maintenance. Each activity was measured against the potential to impact soils, water, air, flora, fauna, human health, climate, and the socioeconomics of people. The following potential concerns were identified after analysis:

- Potential erosion and agrochemical drift from farms into rivers and streams.
- Challenges with disposal of spent engine oil.
- Potential soil erosion for farms located on hills.
- Lack of/or inadequate tractor operator's license.
- Inadequate protective gear for tractor operators.

Environmental review reports, detailing mitigations actions to be carried out, were completed for each applicant. The proposed mitigation actions included the following:

- Ploughing should be done only for farms that meet the requirements of the Riparian buffer zone Policy 2011 which require farms to be at least 10 m away from the banks of rivers
- Farms that are near water bodies should maintain a grass strip of at least 1 m in-between plots.
- Tractor Grant Applicants whose Operators are not properly licensed should at a minimum have started the process of licensing at the time of taking delivery of the tractor.
- Acquisition of basic protective gear including hand gloves, nose masks, eye protection gear by applicants.

The project will work with each applicant to put in place systems and structures that ensure mitigation of the potential environmental concerns peculiar to them.

2.2. IMPROVING AGROCHEMICAL MANAGEMENT

A total of 330 individual Spray Service Providers (SSPs) connected to 116 OBs, FBOs and input dealers were formed (seen Table 16).

Table 14: Number of SSPs formed

Region	Number of individual SSPs	Number of OBs/FBOs/Input dealers
Northern Region	156	67
Upper West	59	21
Upper East	67	15
South	48	13
Total	13,000	6,490 (47.1%)

In addition, 47 individuals were trained this quarter on safe handling and application of agrochemicals, in collaboration with the Plant Protection and Regulatory Services Department of MoFA.

3. Grants Program

3.1. INNOVATION AND INVESTMENT INCENTIVE GRANTS (I-3)

During the second quarter, 20 OBs were selected to benefit from tractor grants for the 2017 production season: seven from the Northern Region, five each in Upper East and Upper West Regions, and three in the South. A total of 856 pieces of small agricultural equipment have also been selected and recommended to farmers in the season. These included tarpaulins, dibblers, and motorized tri-cycles. Moreover, six OBs received rippers to facilitate land preparation.

3.2. LOCAL PARTNERSHIP GRANTS (LPG)

Ghana Agricultural Insurance Pool (GAIP)

ADVANCE continued to support the Ghana Agricultural Insurance Pool (GAIP) with a \$90,000 grant to expand their activities in the three northern regions. This quarter has seen marketing activities targeting Financial Institutions (FIs) in preparation for the upcoming cropping seasons.

During the quarter, GAIP established contacts with three fund managers to provide funds for on-lending to FIs and onward to farmers: Social Investment Fund (SIF), Rural Development Fund (RDF) and Outgrower Value Chain Fund (OVCF). GAIP has finalized discussions with them and organized training for 26 banks that SIF supported, including the National Investment Bank and the APEX Bank. Rural Development Fund agreed to pay 100 percent subsidy of the insurance premium for the Banks they would be dealing with.

GAIP is also collaborating with rural/community banks such as Bessfa in Garu Upper East, Bulsa Community Bank at Sandema, and Bonzale Rural Banks to provide financial support for their activities. Also, GAIP is in discussions with GPP, funded by USDA and implemented by ACIDI/VOCA, to provide agricultural insurance for the poultry industry.

Ghana Grains Council (GGC)

The current GGC grant entered its second quarter, with disbursements to support the development of the MWRS and strengthen partnership with other projects in the SADA Zone. The main technical results for the reporting quarter were summarized in section 2.3.

4. Monitoring, Evaluation and Learning

4.1. MONITORING AND EVALUATION

During the reporting period, ADVANCE continued its routine data collection on activities such as profiling and training, undertook data verification exercises at regional level and updated its database and data collection forms.

Technical Review Meeting

In January 2017, the project's team leaders had a three-day workshop in Tamale to review progress and develop strategies to scale impact and sustainability for the FY. During the sessions, FY16 achievements and shortfalls as well as FY17 targets were shared. Findings from five learning studies implemented in FY16 were discussed and learning topics for FY17 studies identified. The FY17 activities and approaches were reshaped accordingly.

Data Quality Assessment and Data Verification

Regional M&E teams continued to perform monthly data verification exercises to authenticate the data submitted by the technical team during the period. Challenges were highlighted, discussed and addressed with all staff involved in the data collection, analysis and filing process.

Updating Databases, Data Collection Forms and Data Reporting Interfaces

During the reporting quarter, ADVANCE improved its database, forms and interfaces to accommodate new developments and concerns. For example, training schedule forms and training data entry interfaces were updated to include fields to capture environmental and spraying service providers' activities and the training on quality standards.

Analysis of Demo Datasets

Data for FY16 demonstration farms were analyzed to show the performance of various technologies introduced and applied on demonstration farms vis-à-vis farmers' conventional methodologies. Yields and gross margins from demonstration plots showed a positive relationship with the application of improved technologies.

The analysis included the comparison of performance (as measured by yield and gross margins) of the various agro-inputs provided by each sponsor who supported the demonstration plots. The related results have been shared with all sponsors.

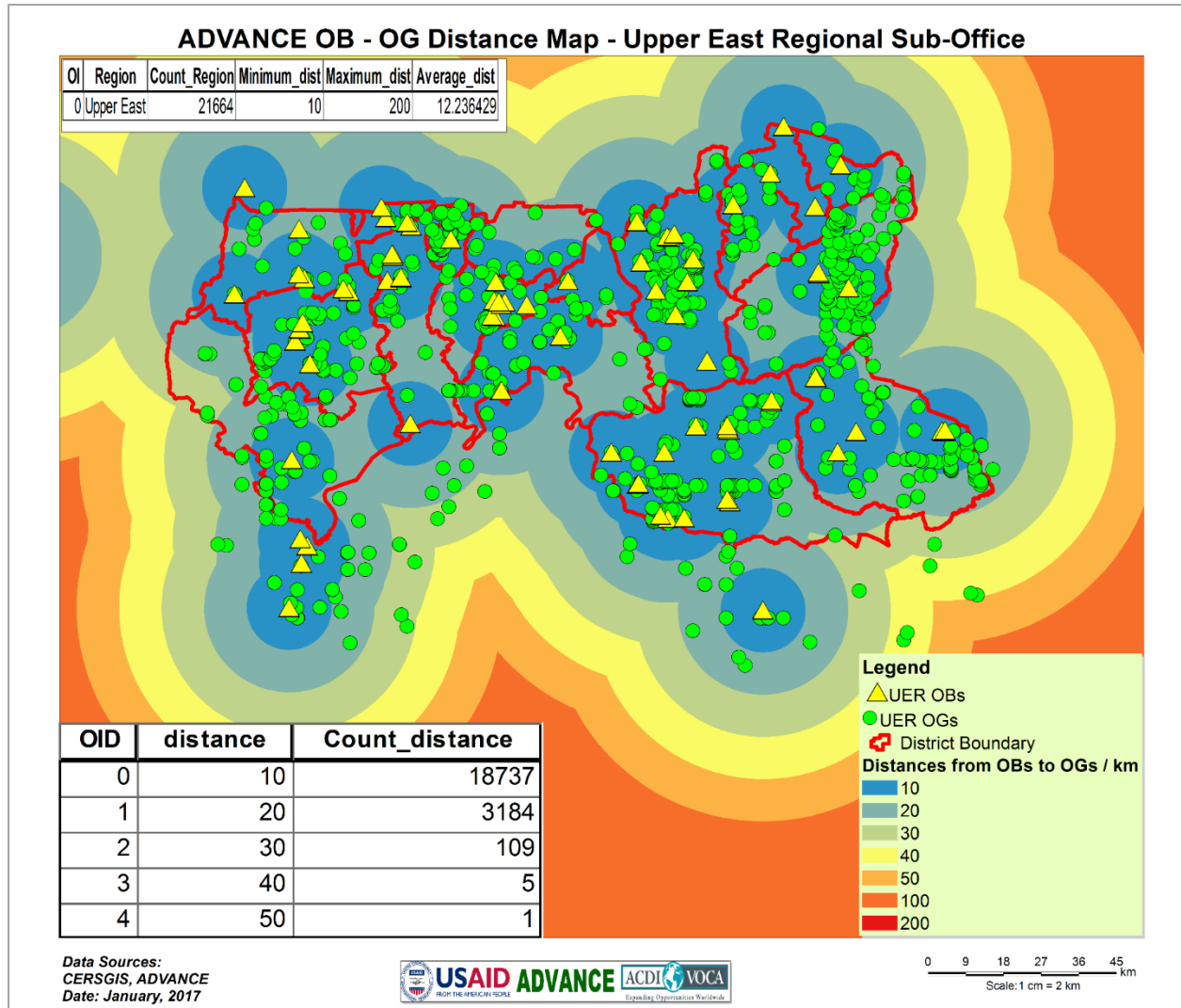
Learning studies and surveys

During the period, results for one of the project FY17 learning studies on proper application of seed and fertilizer by beneficiaries were completed and shared with the project. The study used data collected from the FY16 Gross Margin survey and assessed how maize farmers properly used seed and fertilizers and their effects on yields.

In addition, nine learning topics were identified for implementation in the FY. The SOW have been developed for review and consideration and implementation by the regional teams.

2016 gross margins

The project conducted the cleaning and analysis of the 2016 season's gross margin and technology application data. The present figures are provisional, waiting for sales data for the 2016 produce that is ongoing.



5. Public Relations and Communications

The project continues to ensure its visibility and that of USAID by ensuring that the project’s activities, progress, impact and successes were shared through various means.

Bi-Weekly Bullets

During the quarter, seven informational bi-weekly bullets were submitted to USAID to provide updates on key activities, outputs and outcomes. The content of these bullets covered the following topics: International Women’s Day Celebration, ADVANCE’S female beneficiary winning 2017 Stop Hunger Project Award, mentorship program for outgrower businesses, and establishment of demonstration site, GAPs training and access to inputs, establishment of model farms, digital financing, and capacity development.

Building Public Awareness

During the reporting period, both the electronic and print media covered two major project events: International Women’s Day Celebration, and the Technical Summit.

- A radio story on the International Women’s Day event in Nkoranza in the Brong Ahafo Region was aired on ACHAA FM and ASTA radio stations in Brong Ahafo Region
- News on our Technical Summit went viral as over 25 news items – in print, online, on radio, and TV, were published by eleven media houses. Some of the news were published under the following themes in the links below:
 - Ghana seeks to become food basket of Africa (By News Ghana) - <https://www.newsghana.com.gh/ghana-seeks-to-become-food-basket-of-africa/>
 - Ghana seeks to become food basket of Africa (By China.org) - http://news.xinhuanet.com/english/2017-03/02/c_136097479.htm
 - USAID Intensifies Efforts to Boost Agricultural Opportunities (By EIN NEWS) - http://www.einnews.com/pr_news/369056152/usaids-intensifies-efforts-to-boost-agricultural-opportunities
 - Agric Minister Pushes For More Private Sector Support (By News Ghana) - <https://www.newsghana.com.gh/agric-minister-pushes-for-more-private-sector-support/>
 - ADVANCE, USAID support more than 100,000 farmers in Ghana to increase productivity (By GhanaWeb) <http://www.ghanaweb.com/GhanaHomePage/business/ADVANCE-USAID-support-more-than-100-000-farmers-in-Ghana-to-increase-productivity-514843>
 - Ghana’s reliance on imports because of uncompetitive Agriculture sector – USAID Chief of Party (Business News 2017, 03-03-17) <http://www.ghanaweb.com/GhanaHomePage/NewsArchive/Ghana-s-reliance-on-imports-because-of-uncompetitive-Agriculture-sector-USAID-Chief-of-Party-523475>
 - Agric Minister lobbies for more private sector support (B&FT Newspaper, 01-03-17 2017) <http://thebftonline.com/business/agribusiness/23284/agric-minister-lobbies-for-more-private-sector-support.html>
 - Improve infrastructure in farming communities---Grains Council (B&FT newspaper, March 10, 2017) <http://thebftonline.com/business/agribusiness/23341/improve-infrastructure-in-farming-communities-grains-council-.html>
 - Ghana Planting for Food and Job policy to cost GH¢560m – Afriyie Akoto (Ghanabusiness news.com, 01-03-2017) <https://www.ghanabusinessnews.com/2017/03/01/ghana-planting-for-food-and-job-policy-to-cost-gh%20a2560m-afriyie-akoto/>
 - Government employs 1000 graduates as extension officers to improve agriculture-Minister/ (Ghanabusiness news.com, 01-03-2017) <https://www.ghanabusinessnews.com/2017/03/02/government-employs-1000-graduates-as-extension-officers-to-improve-agriculture-minister/>
 - Business Live program-“Interview of the day” with Dr Emmanuel Dormon on low productivity and budget expectations (Joy News, 01-03-17) Video file attached: https://drive.google.com/file/d/0Bw3v0MdeM7_VdHVCa2tNWXNmaGc/view
 - The USAID Feed the Future ADVANCE is holding a 2-day technical summit in Accra to discuss the future of agriculture inn Accra (GBC RADIO, 01-03-2017). Audio file attached: https://drive.google.com/file/d/0Bw3v0MdeM7_VRzJSb2hJNGFidXM/view
 - USAID Feed the Future ADVANCE has associated itself with government’s policy on planting for food and jobs. (GBC RADIO, 02-03-2017). Audio file attached: https://drive.google.com/file/d/0Bw3v0MdeM7_VWEJVZ1dfs2RWb0E/view
 - Ghana rice farmers increase yield – Agriculture is key to Ghana’s economy employing almost 50% of Ghanaians. Although it is vital to growth, its share of GDP has decreased in recent years. (West Africa Democracy Radio (WADR), March 5, 2017) Audio clip attached: https://drive.google.com/file/d/0Bw3v0MdeM7_Vc3VIT3RGR2U5TG8/view

- Agric Minister lobbies for more private support (B&FT, March 7, 2017)

ANNEX I : INDICATOR TABLE

Indicat or Source	Indicat or Type	Indicator/Disaggregation	FY17 Target	FY17 Q2 Actuals	% FY17 Achievement	Comments
CI	OP1	Number of direct project beneficiaries	80,000	51,917	64.9%	The progress made so far shows that the target for the year will be achieved
		Male	44,000	22,633		
		Female	36,000	29,284		
FTF	OP2	Number of private enterprises (for profit), producers organizations, water users associations, women's groups, trade and business associations, and community-based organizations (CBOs) receiving USG assistance	450	690	153.33%	More FBOs, OBs, Aggregators and Input dealers were trained on PHH, GAPs training, Quality Standards, Nutrition, FaaB and numeracy, etc.
FTF	OP3	Number of individuals who have received USG supported short-term agricultural sector productivity or food security trainings	60,000	52,229	87.05%	More individuals will be trained as the crop season starts later in the year
		Male	33,000	22,917		
		Female	27,000	29,312		
FTF	OP4	Value of agricultural and rural loans	\$1,000,000	\$30,061	3%	Loans will be applied for and disbursed when the season starts later this year
FTF	OP5	Value of new private sector investment in agricultural sector or value chain (USD)	\$800,000	\$79,010	9.87%	More investment will occur when the season starts, later this year
FTF	OP6	Number of MSME including farmers receiving USG assistance to access loans	10,000	1,087	11%	More famers will access loans in the next quarters as the season starts

Indicat or Source	Indicat or Type	Indicator/Disaggregation	FY17 Target	FY17 Q2 Actuals	% FY17 Achievement	Comments
FTF	OC1	Gross margins per hectare for selected crops US Dollar under marketing arrangements fostered by the activity (USD/ha)				Reported figures are provisional and will be final in Q4 report
		Maize				
		Male	\$499	\$918.65		
		Female	\$522	\$867.61		
		Rice				
		Male	\$908	\$799.54		
		Female	\$875	\$759.68		
		Soy				
		Male	\$537	\$620.20		
		Female	\$490	\$612.12		
FTF	OC2	Number of hectares under improved technologies or management practices as a result of USG assistance	84,000			Figures will be presented in Q4
FTF	OC3	Number of farmers and others who have applied new technologies or management practices as a result of USG assistance	56,000			Figures will be presented in Q4
		Male	30,800			
		Female	25,200			
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	338		N/A	Survey will take place in Q4 and data will be reported in Q4
FTF	OC5	Value of incremental sales (collected at farm-level) attributed to FTF implementation	\$36,000,000		N/A	Due to the agricultural calendar, data will be provided in Q4
		Maize	\$14,310,000			

Indicat or Source	Indicat or Type	Indicator/Disaggregation	FY17 Target	FY17 Q2 Actuals	% FY17 Achievement	Comments
		Rice	\$15,710,000			
		Soy	\$5,980,000			
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	75	N/A		Survey will take place in Q4 and data will be reported in Q4
CI	OC8	Number of organizations/enterprises identified as high potential for future awards	5	N/A		The project will report on this indicator in the next quarter
CI	OP8	Number of organizations/enterprises receiving capacity building support against key milestones	40	N/A		The project will report on this indicator in the next quarter
F	OP9	Number of awards made directly to local organizations by USAID	4	N/A		The project will report on this indicator in the next quarter
FTF	OP10	Number of Households benefiting directly from the Project	56,000	47,379	84.6%	The progress made so far was due to a lot of rural vulnerable households receiving training on PHH and AG-tips during the quarter
FTF	OP12	Number of members of producer organizations and community based organizations receiving USG assistance	6,750	9,175	135.9%	More members from FBOs received SMS messages on PHH and AG-tips
FTF	OP13	Number of MSMEs including farmers, receiving Business Development Services as result of USG assistance	32,000	47,977	150%	More individuals were reached through the training activities

Indicat or Source	Indicat or Type	Indicator/Disaggregation	FY17 Target	FY17 Q2 Actuals	% FY17 Achievement	Comments
						(quality standards, FaaB etc.)
CI	OC9	Value chain actors accessing finance	225	5	2.22%	Actors will access loans as the season starts

ANNEX 2: SUCCESS STORIES

Improved Quality Services Contributes to Large Outgrower Base

ADVANCE Facilitates an OB to Expand His Business by Over 600 Farmers within Four Years

Enoch Akisiba started his outgrower business (OB) in 2012 with 14 farmers. In 2016, Mr. Akisiba successfully grew his business from 265 outgrower farmers to 637. The exponential growth, Enoch Mr. Akisiba believes, is due to the provision of quality services.



Enoch Akisiba in his office

“The key to success is to deliver quality services that

credit to his outgrowers. Mr. Akisiba plans to invest in a combine harvester to encourage Agra seed production by his smallholders.

Mr. Akisiba also aggregates on behalf of his outgrowers to offer them a better value for their product in the market. Through a linkage made possible by USAID ADVANCE, he has a contract with AVNASH, a large rice mill, but he notes the standards can be challenging to achieve. Rice is graded based on purity and sometimes the process of agreeing on grades is complicated. In 2016, Mr. Akisiba delivered 16 metric tons on contract to AVNASH. Mr. Akisiba plans to continue this relationship with AVNASH but is also looking to expand to other markets.

Mr. Akisiba is optimistic about the future and expects to further grow his business. Some of his long term outgrowers are no longer seeking traditional, subsistence services. Instead, they are coming to him to buy seeds with cash. Because of this he feels his business is making a sustainable difference in people's lives. Mr. Akisiba is grateful to USAID ADVANCE for helping him improve the quality of his services and expand his outgrower business.

Mr. Akisiba believes that customer service is one of the most important criteria to making a business successful. He organizes quarterly meetings with all his outgrowers where he updates them on emerging trends and farming practices. Working together with outgrowers, he sponsors farm demonstrations. While he funds the cost of the demonstration (seeds, fertilizers and chemical input) the outgrowers provide the land and labor.

Through USAID ADVANCE, Mr. Akisiba learned how to manage his growing business, including how to keep an accurate record of accounts. He also participated in trainings on good agricultural practices, post-harvest handling, quality and standards, Farming as a Business, numeracy, and outgrower business management (OBM). In turn, he has taught outgrowers the skills they need to succeed.

When outgrowers voiced concern about access to certified rice seeds, Mr. Akisiba turned to seed growing to address his outgrower's needs. He receives foundation seed from SARI and his farm is inspected by the Bolgatanga Seed Company at least three times per year. He then provides the highly sought after Agra and Jasmin 85 seeds varieties on



Increasing Access to Finance Through VSLA

Suglo Mbori Buni members bring benefits to their community

In 2015, USAID ADVANCE introduced the concept of Village Savings and Loan Associations (VSLAs) to the women of Kpanashe. The community in the Northern Ghana self-mobilized to generate savings for on-farm investments. More than 50 women saw an opportunity to work together to save money and implement the farming practices they learned through demonstrations hosted by USAID ADVANCE.



Members of Suglo Mbori Buni VSLA Group

**“With our savings,
we bought
improved
[drought-tolerant]
seeds”**

The Sung Foundation, a local community organization, received a grant from USAID ADVANCE to help establish these VSLAs. They taught women to establish by-laws, implement savings and credit procedures, and also provided a lock box to help secure the funds. The women formed two groups called, in Dagbani, *Suglo Mbori Buni*, meaning “to seek wealth with patience”. They elected their leaders and began operation. Within the first year, the groups accumulated a total savings of GHS 13,007 (approx. \$3,000).

During the 2016 share-out, the period when the contributed funds are disbursed, USAID ADVANCE facilitated a community input promotion event whereby representatives from Yara and Heritage Seeds and Input Supplies presented their products to the community members. Coupled with participation in previous USAID ADVANCE sponsored demonstrations, the women increased their understanding of the importance of purchasing drought-tolerant seed produced by Savanna Agricultural Research Institute (SARI), instead of using grains.

That same year, when their outgrower business dispatched a tractor to their community to plow their fields, the rains had not yet started in their area. As the ground was too dry, the tractor was dispatched elsewhere and they were left without services. The women were concerned, as they knew the importance of double-plowing to help retain moisture in the soil. They were able to find another operator to plow their land. The women had enough money saved in their VSLA boxes to pay the tractor operator in cash after the work was completed.

These bottlenecks are increasingly common with rainfall variability and the logistical challenges of planning plowing services across disparate communities. Adaptation measures such as building savings as a safety net, provided by the VSLAs, are important resiliency measures. USAID ADVANCE’s VSLA strategy and a wide range of climate-smart practices help farmers mitigate the impact of climate change in their communities. Suglo Mbori Buni has benefited from this intervention and was therefore able to recover from the shocks in 2016. They also managed to earn enough money to re-invest in improved farming practices for the coming year.



Village Savings and Loans Support

In 2016, USAID ADVANCE supported financial access and encouraged farmer savings as a source of investment capital into production. The project formed a total of 214 VSLA groups through local partners including Sung Foundation, Youth and Advocacy Rights Organization, Concern Universal and Community Resilience. The VSLAs benefit 4,890 (1,420 males, 3,470 females) smallholders. The share out of the savings is scheduled to coincide with Community Input Promotions, so that VSLA members are able to buy the required production inputs. Input dealers who took part in these promotions realized sales of GHS 78,936 (\$20,430). Through the project, 500 more VSLA groups are being established and are expected to benefit 12,500 farmers.



Promoting the Adoption of Climate Smart Practices

An Outgrower Business Demonstrates that Increased Access to Finance Contributes to the Adoption of Climate Smart Practices



Mary Azongo, an outgrower business owner in Ahyiaem community, is a teacher at Ahyiaem Junior High School and began trading maize in 1980. Ms. Azongo has a knack for succeeding at whatever she sets her mind to, including her farming business. In 2010, she decided to return to farming. She cultivates about 10 acres on her own and has supported up to five of her neighbors with fertilizer to cultivate their farms.

Ms. Azongo started receiving support from USAID ADVANCE in 2014. She benefitted from several trainings on Good Agronomic Practices (GAPs), attended demonstrations on good management of maize and was introduced to a new way of farming. Later that year, she attended the pre-harvest conference hosted by ADVANCE where she was introduced to ancillary services Dizengoff, John Deere, and Sinapi Aba Savings and Loans.

In 2014, she obtained a GHS 15,000 (approx. \$3,500) loan from Sinapi Aba Savings and Loans to support more than 50 outgrowers with pre-financing services and was able to pay back in full.

*"The agreement
with Sinapi Aba
Trust gave me
confidence to invest*

In the 2016 major season, through the assistance from ADVANCE, Ms. Azongo signed a contract with Agricare, a feed processing company in Kumasi. Through the contract, she delivered 150 metric tons of maize to Agricare. To meet the quality standards, she supported her farmers to access mechanized shellers. One of the key benefits Ms. Azongo saw in the relationship with Agricare was the ability to commit to a set price. The commitment from Agricare therefore gave her farmers the confidence to invest.

In the 2016 minor crop season, Agricare expanded the contract arrangement with Ms. Azongo to include more farmers. The abnormally high rainfall in the minor season however caused significant losses and many farms were unable to repay. Rather than abandoning the scheme, Agricare and Ms. Azongo are planning to reinvest again in the outgrowers in 2017. This is a key sign of the trust which has developed and the resiliency of these commercial relationships to rebound from shocks. It also signals that this is a win-win relationship for both smallholder farmers and companies like Agricare.

As of 2017, Ms. Azongo has grown her outgrower network to 145 farmers, providing them with seeds, fertilizers, and ploughing services on credit. She also continues her banking relationship with Sinapi Aba Savings and Loans.



Anchored on a good financial base, Ms. Azongo, with three of her outgrowers, has adopted climate smart practices⁹ on a total of 44.5 acres. Now that her farmers are using the right seeds and inputs and are planting correctly, she sees ripping as the next big technology investment. She plans to invest in a tractor and ripper this year. She affirms that such technologies are critical to addressing the impacts that climate change has on farming businesses. When Ms. Azongo looks to the future she hopes to support other farmers to accomplish the same benefits.

Climate-Smart Practices

The objective of the USAID ADVANCE Climate Smart Agriculture Program is to increase awareness and adoption of climate smart practices among farmers and ultimately enhance their productivity and income, make cropping systems more resilient and contribute to mitigating climate change. The strategy has three focal areas: minimum tillage, cover crop systems and agroforestry. Outgrower Businesses (OBs) ripped 296.3 acres in 2016 compared to only 9.6 acres in 2015. This year for the first time, OBs commercially offered ripping services to their outgrowers with the support of USAID ADVANCE and AFGRI Ghana. Three cover crops– *Mucuna*, *Cajanus*, and *Dolichos* – are being introduced to farmers, in succession and as intercrops with maize. USAID ADVANCE launched no-burn campaigns which, to date, have reached over 8,970 farmers, highlight the dangers and negative consequences of bushfires. USAID ADVANCE also supported a pilot initiative with a Farmer-to-Farmer volunteer, to assess the Sandema Farm and design a sustainable land development strategy Two hundred mahogany seedlings were integrated into the 60-acre farm.

⁹ Brief of ADVANCE's Climate-Smart Practices concept is found in the text book



Supporting Emerging Outgrower Businesses

A Smallholder Farmer Capitalizes on USAID ADVANCE's Business Management Training to Enhance His Outgrower Business Operations

Starting as an outgrower of the Gundaa Produce Company where he plowed on credit, in 2012 Subila Iddrisu set up an outgrower business (OB) of his own. He bought a tractor, and became an associate OB providing services to over 100 outgrowers. He christened his OB as Yong Dakpemayili Company, Ltd.

The start of Mr. Iddrisu's business was shaky. In the first year nearly 30 percent of his outgrowers defaulted. He then waited until the rainy season to find outgrowers, and did not work to establish the relationship with them, thus most of them did not honor their commitments to repay. According to Mr. Iddrisu, through that experience he learned one of his most valuable lessons: in order to be successful, he had to plan ahead and build trust with his outgrowers.



Subila Iddrisu (right) walking with some outgrowers on his farm

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

Subila Iddrisu

With assistance from USAID ADVANCE, in 2014 his field agents were trained in good agricultural practices. During planting, he and his agents ensured that farmers used the right seed, planted in rows, and applied the correct fertilizer. The farmers observed increased yields from the demonstrations conducted by USAID ADVANCE and increasingly heeded the practices. In addition, with the support of USAID ADVANCE, Mr. Iddrisu accessed a loan from Sinapi Aba Trust in 2015 to purchase a new tractor.

As Mr. Iddrisu anticipated, the benefits have been enormous. Yong Dakpemayili Company Ltd. has over 400 outgrowers in eight communities, nearly 40 percent of whom are women. Mr. Iddrisu now has a default rate of less than 10 percent on services provided. The company employs two field agents and two part-time machinery operators. In each community he has a lead farmer who coordinates on behalf of the outgrowers. Yong Dakpemayili sells most of their produce to Gundaa Produce Company, a large aggregator, which in turn transacts with buyers such as World Food Program (WFP) and Nestle Ghana. Mr. Iddrisu sells a substantial number of bags of maize at very competitive prices. In addition, he gets his maize cleaned and re-bagged at Gundaa's warehouse, which was constructed with the support of USAID ADVANCE.

Yong Dakpemayili Company Ltd. operations are expanding and its outgrowers are developing as well. Moving forward, Mr. Iddrisu intends to provide services that will continue to improve farm practices and outgrower loyalty, such as additional plowing services for free. He would also like to grow his business to take on direct marketing.



Outgrower Business Management Training

In 2016 a total of 290 OBs were trained on the USAID ADVANCE seven-module OBM curriculum aimed at educating OBs on proper business management practices with an eighth-module dedicated to female OBs and FBO leaders. The OBM modules were deliberately run along the cropping calendar, so that OBs can have a thorough understanding of how they can plan and operate their businesses efficiently, profitably, and sustainably. Each module took two days and participants were given certificates of competency after post training monitoring and evaluation.

USAID ADVANCE designed a tool to rate and categorize the OBs according to their performance along key metrics such as access to end market linkages, service provision, record keeping, accounting systems, access to financial services, outgrower management, asset acquisition, and hosting demonstrations. Those who were rated as low performing are being mentored by the high performing OBs, through the OB mentorship program. USAID ADVANCE continues to strengthen OBs with training, linkages and the support they need to deliver services to farmers.

ANNEX 3: SUMMARY OF PROJECT'S STRATEGY TO PREVENT AND CONTROL FALL ARMYWORM OUTBREAK

USAID ADVANCE in cooperation with the Ministry of Food and Agriculture will establish and maintain a Regional Armyworm Monitoring and Reporting system for northern Ghana, starting in May 2017.

Goals

- Grower preparation
- Early armyworm detection and early intervention
- Integrated Control

Pre-season grower survey

In April and May prior to the maize planting season, ADVANCE Agricultural Production Officers (APO) will interview maize farmers to determine which insecticides they have on hand and which insecticides they have access to for armyworm control. APOs will distribute Fall Armyworm (FAW) identification and management handouts.

Pre-season training for Agricultural Professionals

In April prior to the growing season, ADVANCE and MOFA will host a workshop for agricultural professionals in Tamale, Ghana. Participants will be updated on the FAW situation in western Africa. They will be instructed in how to set up and maintain pheromone traps, how to scout maize fields for FAW infestations, and how to apply appropriate insecticides using FAW action thresholds. Twenty five agricultural professionals from northern Ghana will leave the workshop with pheromone traps and field scouting protocols, prepared to participate in a regional monitoring and reporting program.

Regional Monitoring and Reporting

During the maize growing season (June-October) in northern Ghana, field data from around the region will be gathered by email, analyzed, and reported back to agricultural professionals by email and text. We will monitor for both *Spodoptera frugiperda* and *Spodoptera exigua*. Questions that we hope to answer include: 1) Is there a discrete start to armyworm egg laying in northern Ghana? 2) During the growing season, are there discrete egg-laying periods or are there multiple overlapping armyworm egg-laying flights? 3) Can we detect through monitoring and field scouting, changes in the level of armyworm egg-laying pressure?

Insecticide Trials

Two FAW insecticide trials will be established and evaluated in maize in the Tamale area. Questions we hope to answer include: 1) Are three insecticide applications at two week intervals (CABI recommendation) sufficient to protect the maize crop? 2) Will early detection and treatment of armyworm infestations allow farmers to protect maize crops with biologically rational pesticides (examples: insecticidal compounds from *Bacillus thuringiensis* or *Saccharopolyspora spinosa*) during low and moderate levels of FAW infestation?

www.feedthefuture.org