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AGRICULTURAL DEVELOPMENT AND VALUE CHAIN ENHANCEMENT PROJECT (ADVANCE)

FY 2017 Q1 REPORT: OCTOBER 2016-DECEMBER 2016



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ADVANCE FY17 Q1 REPORT

OCTOBER 2016 – DECEMBER 2016

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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
APO	Agricultural Production Officer
ATT	Agricultural Technology Transfer
BDS	Business Development Services
CSA	Climate Smart Agriculture
DAIP	District Agricultural Investment Plan
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
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
MWRS	Manual Warehouse Receipt System
NF	Nucleus Farmer
NGO	Nongovernmental Organization
NPK	Nitrogen, Phosphorous, and Potash
NR	Northern Region
NRGP	Northern Rural Growth Programme
OB	Outgrower Business
OBM	Outgrower Business Management
OG	Outgrower
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
SARI	Savanna Agricultural Research Institute
SEG	Small Equipment Grant
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
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 first quarter of FY17, October to December 2016.

During the quarter, ADVANCE benefitted 34,163 individuals, including 33,809 smallholder farmers, of whom 13,131 or 38.4% were women. The number of beneficiaries reached represents 42.26% of the ADVANCE FY17 target. A total of 4,796 smallholders started benefitting from the project this quarter while 29,013 were continuing beneficiaries. With this achievement, the project achieved 107,888 smallholder beneficiaries (including 49,484 women or 45.9%) since it started, or 94.86% of its life of project target.

Through these individuals, the project benefitted 31,103 households, including 4,162 new households. This achievement represents 55.5% of the FY17 household beneficiaries target and brought the total number of households reached to 91,329.

One of the main benefits provided by the project during the quarter was training, which reached 16,219 individuals (of whom 8,446 or 52.1% were women). These trainings focused on Good Agronomic Practices, Post-Harvest Handling, Village Savings and Loans, and Outgrower Business Management and happened in majority in Northern Region. While this achievement represents 20.3% of the FY17 target, over the life of the project, ADVANCE has trained 89,601 individuals (including 44,329 women) or 89.6% of its overall target. The project will implement many more trainings as the agriculture season starts in March in the South and in June in the North.

ADVANCE beneficiaries invested \$28,137 as private investment during the quarter. No cash loans were disbursed by financial institutions during the reporting quarter. However, loans from the Village Savings and Loans Associations amounted GHS 86,622¹ (\$21,250). These were funded by their savings of GHS 153,130 (\$37,566), which has accumulated since August 2016. More investment and loans are expected when the 2017 agricultural season begins.

During the reporting period, the project provided 125 pieces of small agricultural equipment to beneficiaries, with a total cost of about \$37,000 through cost-shared grants. These included tarpaulins, weighing scales, moisture meters, dibblers, manual planters, bullock ploughs and donkey carts.

The Sixth Annual Pre-Harvest Agribusiness Event was held for the first time in Sunyani on October 20, 2016, under the theme “*Profiting Together*”. The event was hosted by the Ghana Grains Council (GGC) with support from ADVANCE. It attracted 779 registered participants including farmers, buyers, processors, transporters, input



Tarpaulin distribution, Ziong

¹ Exchange rate used throughout the report is GHS 4.06733 per 1\$

dealers, farm machinery dealers and financial institutions. The event provided a platform for farmers to establish business relationships and discuss contracts for the 2016 harvest of maize, rice, and soybean. A survey conducted during the event indicated that 23% of the participants rated the event excellent while 55% rated it as good. This illustrates the effectiveness of this event in facilitating market linkages, 81% of the attendees and 89% of the exhibitors who attended either the October 2015 event in Tamale or the March 2016 event in Kumasi reported having made business deals from those events.

Furthermore, five trade missions were facilitated for four buyers and 11 OBs during the quarter. As a result, the project facilitated six contracts covering 3,064 MT of maize and soybean between five buyers and six OBs and farmer groups during the period.

During the International Day for Rural Women (IDRW), the project recognized contributions made by four distinguished women value chain actors in enhancing rural life, thereby encouraging women to aspire to such positions by increasing their productivity and that of their fellow women.

Finally, the second phase of the 2016 season gross margin annual survey was completed in December 2016. Data on inputs costs, technology application practices, production and yields, smallholder farmers' household storage systems, and initial sales were collected from 2,282 smallholders. The data is currently being cleaned and analyzed, and the gross margin figures will be available by the end of the second quarter.

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 first quarter of FY17 (October to December 2016). 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.

COLLABORATION

1. Collaboration with the Ministry of Food and Agriculture

This reporting quarter, ADVANCE continued to collaborate with the Ministry of Food and Agriculture (MoFA) to train farmers in Post-Harvest Handling (PHH) in several districts of the five regions of operation. As in previous years, the project's staff participated actively in the National Farmers' Day, celebration held on December 4, 2016 under the leadership of MoFA. The project sponsored prizes such as knapsacks, sprayers, rubber boots, bicycles, and cutlasses that were awarded by MoFA for the best farmers in several districts.

The MoFA Agriculture Extension Agents (AEAs) in several districts collaborated with project staff in training farmers through 'farm clinics' and demonstration fields. Several AEAs also participated actively in anti-bush fire campaigns and rapid intervention to control the sudden invasion of the fall armyworm pest during the 2016 crop season.

2. Collaboration with Other Partners

Agriculture and Natural Resources Management Project

During the reporting period, the ADVANCE Upper West team hosted technical staff from the Agriculture and Natural Resources Management Project (AgNRM) and shared with them our experience in establishing minimum-tillage demonstrations using rippers, as part of the project's climate smart activities. The AgNRM team was educated on the advantages of ripping, which includes soil moisture conservation, soil structure maintenance, and soil erosion control.

Farmer-to-Farmer (F2F) Ghana

An F2F volunteer, an Entomologist and expert in Integrated Pest Management, supported two ADVANCE actors in the Upper East Region, and the whole ADVANCE field team, to analyze and control the infestation by the fall armyworm pest (FAW, *Spodoptera frugiperda*) as well as by an unidentified specie of black ants. Both species have affected production in the North and the FAW has also had a significant negative impact in the southern regions during the minor season. The entomologist trained the staff on the biology of the species and effective control methods.



Dan McGrath, F2F Volunteer, working with ADVANCE staff and farmers in Kintampo North to set a monitoring trap for adult fall armyworms

A second visit is planned in order to support

MoFA to establish a FAW monitoring system to alert farmers on time, whenever there is infestation. ADVANCE will engage all concerned institutions in designing the monitoring system.

Ghana Agricultural Insurance Pool

ADVANCE has supported the Ghana Agricultural Insurance Pool (GAIP)'s participation in ADVANCE trainings, including Good Agronomic Practices (GAP) and Outgrower Business Management (OBM) trainings among others. The project is working with GAIP to fine-tune the current crop insurance products and to develop new ones to ensure that the crop insurance initiative becomes sustainable.

Grameen Foundation

Since 2015, ADVANCE has been collaborating with Grameen Foundation to design and pilot the use of 'Smartex', a tablet based application that enables Outgrower Businesses (OBs) and their agents to provide interactive and tailored extension services to their outgrowers (OGs). During the reporting quarter, Grameen and ADVANCE conducted a refresher training for 120 agents on effective use of the application, agricultural extension videos and other equipment needed for such service provision.

Ghana National Fire Service

This quarter, the Ghana National Fire Service (GNFS), in the Upper West Region, collaborated with the project to organize two well-attended "No Burn Campaign" programs in Bussie and Bouti, in the Daffiama Bussie Issa and Sissala West Districts of the Upper West Region. The anti-bush fire campaign and sensitization program dubbed "***Get involved. Stop bushfires now***" was well attended by chiefs, elders, community leaders, Fulani herdsmen, representatives of district assemblies, school children, smallholder farmers, media, and other members of the communities.

The project committed to the Regional Fire Commander in UWR to collaborate with the unit in the prevention and fighting of fires, as part of the project's work in protecting the environment and sensitizing the communities on the harm caused and negative impact on their soils and the ecosystem as whole.

International Institute of Tropical Agriculture (IITA/N2Africa)

IITA/N2Africa provided inoculants for 80 ADVANCE soy demonstration plots during the 2016 season. As a follow-up, the Country Coordinator of N2Africa, Professor Samuel Adjei Nsiah, actively contributed in training

the project's smallholders on site selection, seed, plant density and population, diseases and field management, fertilization, yields and post-harvest management. ADVANCE will continue to collaborate with N2Africa in the coming year.

Nestlé Ghana Limited

ADVANCE and Nestlé Ghana Limited officially signed a memorandum of understanding (MoU) on December 6, 2016 to build the capacity of farmers and aggregators in the three northern regions to produce and supply maize that meets Nestlé's quality standards.

The supply chain development program is part of Nestlé's Creating Shared Value initiatives which seeks, in part, to implement responsible sourcing in the supply chain, and increase local sourcing of raw materials.

Peace Corps

The three field Peace Corps Volunteers (PCV) attached to ADVANCE participated in a training on fall armyworm and Black Ant biology and control organized by the project. They have managed demo plots in their communities and will transmit the knowledge to the farmers in their sites.

Radio Stations

The regional offices continued to engage and collaborate with three new and 25 continuing partner radio stations to cover project field demonstration activities and sensitization programs on "No Burn Campaigns" and re-broadcast them for wider listenership. These radio stations also continue to broadcast live agricultural talk shows to the benefit of the ADVANCE listenership clubs. The content of the agricultural talk shows was developed by the project.

Soybean Innovation Lab/Catholic Relief Services

The Soybean Innovation Lab and Catholic Relief Services designed soybean threshers for local reproduction. Along with the Agriculture Technology Transfer project (ATT), ADVANCE participated in the tests and their handing over to two communities in Northern Region. ATT and ADVANCE funded the training to 12 local manufacturers to be able to reproduce the design. The threshers will become an affordable solution to soybean threshing once minor design problems are addressed.

Voto Mobile

Through an MoU signed with Votomobile in 2016, 1,600 smallholders from Kintampo North and South have been enrolled in the Voto Mobile platform and have received voice messages on good agricultural practices in Twi and Dagbani languages. During the reporting period, these smallholders received information on fall armyworm incidence and control, agronomic practices, prevention of bush fires, and weather forecasts.

University of Development Studies (UDS)

Students from UDS have been learning while supporting ADVANCE activities in the three regions of the North. The students have been involved during this period in the gross margin surveys and other M&E data and information collection activities.

World Food Program (WFP)

ADVANCE is collaborating with the WFP, which is implementing a five-year project, the Enhanced Nutrition and Value Chains in Ghana (ENVAC). Eight ADVANCE nucleus farmers will be part of ENVAC to enhance their capacity to produce and provide quality maize to processors. Premium Food Ltd. and Yedent Food Ltd., two processors working with ADVANCE are also receiving support from ENVAC to produce quality and more nutritious processed products.

Yara Ghana Ltd.

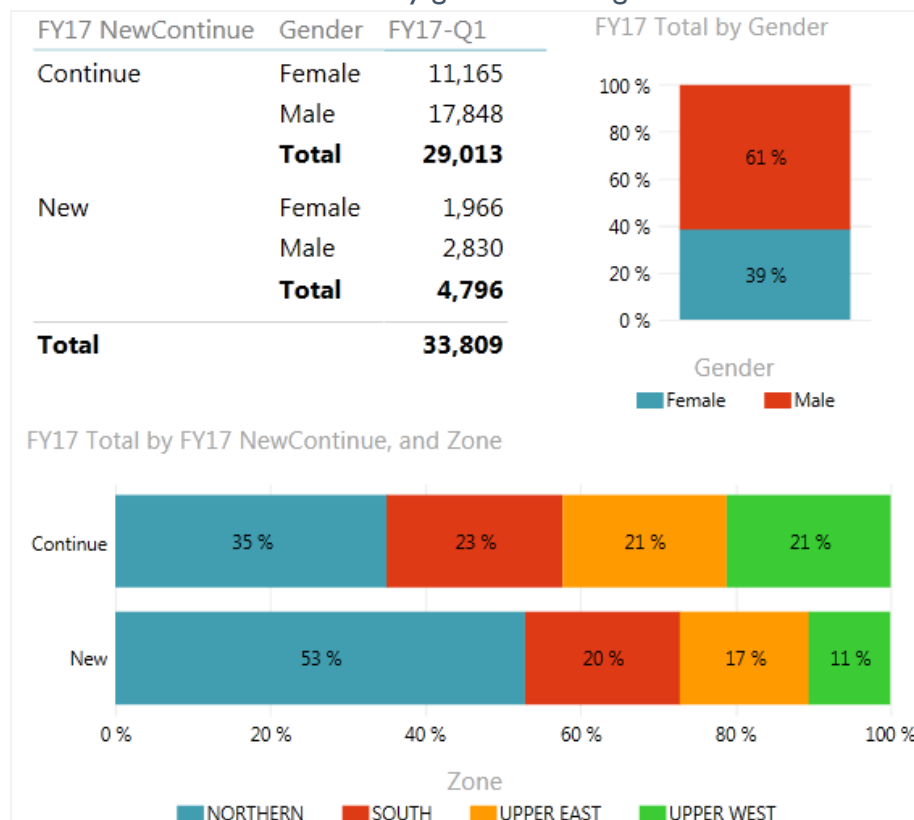
Staff from Yara, the multinational importer and formulator of specialized fertilizers has continued participating in ADVANCE Field Days to observe the yields and performance of crops on the demo sites they sponsored. The collaboration with Yara has been very beneficial as sales, especially in their newly developed distribution area in the Yendi, Bimbilla, Chereponi Districts, were increased thanks to ADVANCE’s activities in these areas and other parts of the north. Yara Ghana has pledged increased support for the coming crop seasons in the project intervention regions, not only sponsoring demos, but also participating more actively in the input promotion activities.

KEY RESULTS

I. Direct Beneficiaries

During the reporting period, ADVANCE reached 34,163 individuals, including 33,809 smallholder farmers, of whom 13,131 or 39%, were women. This represents 42.26% of ADVANCE FY17 target. A total of 4,796 smallholders started benefitting from the project this quarter while 29,013 were continuing beneficiaries. Their regional breakdown is presented in Figure 1 below. With this achievement, the project reached 107,888 smallholder beneficiaries (including 49,484 women or 45.9%) since it started. The number of beneficiaries reached is almost 95% of its life of project target.

Figure 1: Smallholders direct beneficiaries by gender and region

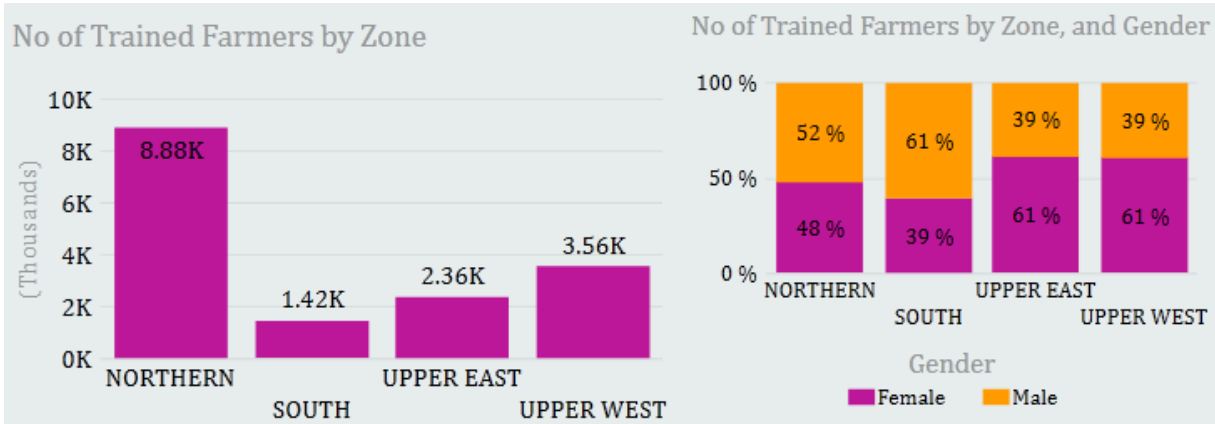


Through these individuals, the project benefitted 31,103 households, of which are 4,162 new households. This achievement represents 55.5% of the FY17 household beneficiaries target and brought the total number of

households reached to 91,329. Many more trainings will be implemented as the season starts in March in the South and in June in the North.

One of the main benefits provided by the project was training, which reached 16,219 individuals (of whom 8,446 or 52.1% were women) during the reporting quarter. These trainings focused on good agronomic practices, post-harvest handling, village savings and loans, and outgrower business management (Figure 2). While this achievement represents 20.3% of the FY17 target, over the life of the project, ADVANCE has trained 89,601 individuals (including 44,329 women) or 89.6% of its overall target.

Figure 2: Training beneficiaries by gender and zone

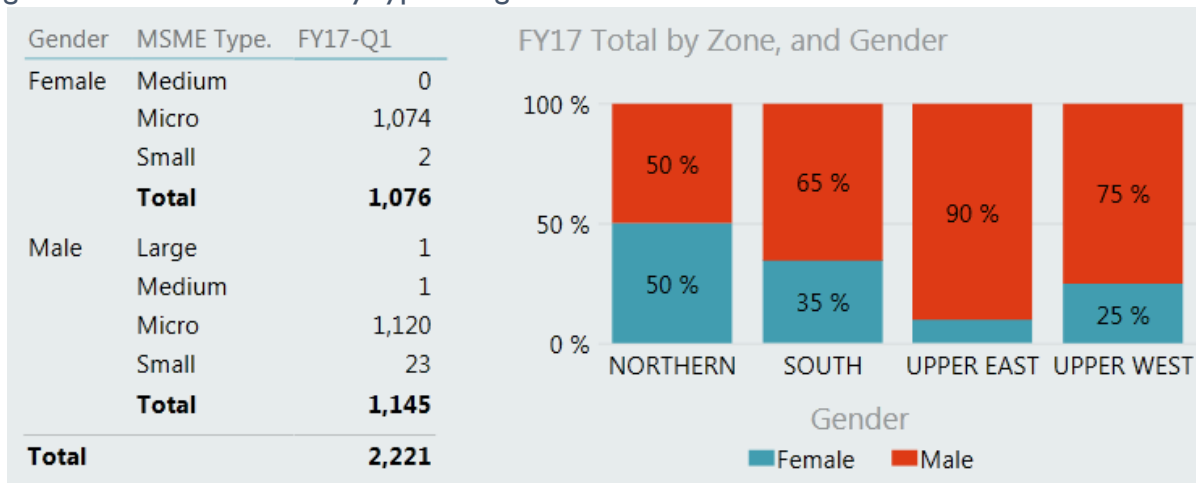


Furthermore, ADVANCE supported 736 producer organizations and private firms through training, business development services among others.

2. Business Development Services

During the quarter, the project provided Business Development Services (BDS) to 2,221 micro, small and medium enterprises (MSMEs). Most of these were microenterprises, of which 51.6% are owned by men. The services provided during the reporting period included training, designing and reviewing business plans, business diagnostics, and facilitating market linkages. These figures bring the life of project number of BDS beneficiaries to 60,656 MSMEs.

Figure 3: BDS beneficiaries by type and gender



ADVANCE beneficiaries invested \$28,137 as private investment during the quarter. No cash loans were disbursed by financial institutions during the reporting quarter. More investment and loans are expected when the 2017 agricultural season starts.

PROGRESS WITH TECHNICAL DELIVERY

This section is organized broadly 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 the reporting quarter, the project focused on:

- Supervising the demonstration sites and conducting GAPs and PHH trainings
- Organizing the pre-harvest event
- Continuing the use of ICT to disseminate GAPs and improve adoption of technologies
- Conducting farm clinics
- Continuing the enhancement of outgrower businesses' management capacity
- Reinforcing the provision of business development services
- Facilitating farmers mentorship
- Continuing the climate smart agriculture initiatives

I.I. DEMONSTRATION SITES AND GAPs TRAININGS

Actor Supported Demo Sites

The demonstrations set up in the 2016 season continued into FY17 with field supervision, green/brown field days, gross margin harvest data collection and analysis. During the quarter, 80 minor season demonstration sites were established in ADVANCE South, and used to sensitize and train the farmers on:

- Superior performance of maize hybrid varieties
- Positive effect of improved agronomic practices: row planting and right plant density, adequate amount and timely fertilizer application, and effective weed control
- Pest monitoring and control
- Cost-benefit analysis of investing in superior hybrids and improved agronomic practices

GAPs/PHH Training and Beneficiaries

To improve productivity and quality and reduce post-harvest losses in maize, rice, and soya, the project conducted several trainings on good agronomic practices and post-harvest handling both on demo sites during field visits and field days and off-demo sites. The trainings covered topics such as: benefits of using improved seeds, row planting, proper fertilizer application, pests and disease management, maturity dates and indices, timely harvest and methods of harvesting, shelling, temporary storage, bagging, and warehousing. The project

trained 9,539 smallholders, of whom 52.1% were women, while 9,901 farmers were trained on PHH, of whom 54.1% were women. Several agribusiness actor-partners and the Department of Agriculture’s AEAs participated in these trainings and delivered relevant messages to the smallholders.

“The TSP and Yara Legume and the ADVANCE spacing [recommendations] have worked wonders on the podding of the soy, and so friends let’s follow the teachings from their knowledge in agriculture.” Alhassan Abukari, Gumonayili, Northern Region

“Today it is clear that there is no magic about yield of crops, the only magic is adopting improved practices such as the one before us here, we can only accept the ADVANCE way of farming, if not that we cannot survive hunger.”, host farmer Yakubu Ziblim, Nambrugu, Northern Region

“I got six bags from quarter acre of the demo plot last year and this fed my family throughout the whole year, but did not get up to six bags from one acre of my own farm.” Abdulai Gbenjo, Kareboyili, Upper East Region

Table 1: GAP trainings beneficiaries

Zone	Female	Male	Total
NORTHERN	3,142	3,302	6,444
SOUTH	114	201	315
UPPER EAST	578	374	952
UPPER WEST	1,139	689	1,828
Total	4,973	4,566	9,539

Table 2: PHH training beneficiaries

Zone	Female	Male	Total
NORTHERN	2,088	2,132	4,220
SOUTH	354	526	880
UPPER EAST	1,057	655	1,712
UPPER WEST	1,862	1,227	3,089
Total	5,361	4,540	9,901



Timothy Agrochemicals staff addressing farmers at rice demonstration site at Cheranda (NR)



APO demonstrating to farmers how to spread tarpaulin to dry shelled maize at PHH training at Sazje (UWR)

Demo sites yields

The different varieties and technologies promoted during the 2016 crop commodity demonstrations recorded significant higher yields than the conventional methodologies applied by farmers. The maize hybrid seeds 30Y87, Pan 12 and Pan 53 recorded more than 6 MT/ha while farmers' saved seeds yielded 3 MT/ha. Demo planted with maize local open pollinated varieties saw as well significant higher yields at 4 MT/ha on average compared with farmers' own seeds at 1.5MT/Ha (Table 3).

Table 3: Demo sites yields vs. farmers' yields

Demo Variety	Average Yield (MT/ha)	
	Demo plots	Farmers' plots (farmers' variety)
Demos to demonstrate superior performance of hybrid maize varieties		
Pan 12	6.22	2.54
Pan 53	3.99	2.40
30Y87	5.47	2.63
Project Average	5.15	2.53
Demos to demonstrate the impact of standard improved practices on maize yields		
Abontem	4.76	3.11
Etubi	4.66	3.33
Mamaba	0.97	0.25
Obatampa	4.10	2.37
Omankwa	4.14	1.44
OPEIBURO	3.85	1.77
Proseed	5.33	2.37
Sanzal Sima	3.85	2.19
Wang Dataa	3.18	1.39
Project Average	3.81	1.97

I.2. ICT OUTREACH AND PRODUCTION TECHNOLOGY DISSEMINATION

Radio Programs

Through collaborations with MOFA and 28 local radio stations primarily in the district capitals, information on harvest, post-harvest handling, marketing tips and anti-bush fire messages were broadcast this quarter. Specific topics discussed included harvesting techniques of maize, rice and soybean, as well as use of tarpaulins, dryers, storage, good post-harvest handling practices and market information about the three products. Additionally, in order to make the agricultural radio programs practical, some program hosts from ADARS FM in Kintampo North and North Star radio in the Northern Region participated in field days at demonstration sites.



Radio discussion by Upper East RC and ICT Specialist at Word FM in Bolgatanga



A reporter from North Star interviewing a female farmer in Yong in Tamale Metro during a field day

Radio Listenership Clubs

During the quarter, all 996 radio listenership groups created by ADVANCE in FY16 continued to meet and listen to the agricultural radio programs of the various radio stations that reach their communities. Farmers used this platform to share experiences in best practices for the benefit of the others during the radio listenership group meetings and participated in phone-in sessions during the agricultural programs to ask questions and seek clarifications on issues they did not understand.

Visits were made to some listenership groups to discuss the impacts of the radio agricultural programs on their farming activities. The groups reported applying technologies explained during the radio programs, including: planting in rows, applying fertilizer, spraying to avoid pest infestation, early harvesting, using improved seeds, and improved storage practices. Some of the farmers reported doubling their yield, even in a context of poor rainfall.

These monitoring visits ended with education on the damage of bushfires to the environment. This led to the Secretary of Suhyen group (Bernard Besong) requesting a training on compost preparation for his group members.



Meeting with the Wumpini Radio Listenership Group in Shebo, in the Northern Region

“I used to get three bags from one acre of land, but this year I tried and adopted the practices and had eight bags of maize from one acre and I am happy”, Kubura Mohammed, Suglo Kong Bo Listenership Group, Tali Community

“They said after ploughing, sow in row, don’t broadcast. So this season I planted in rows and it was better than before when I was broadcasting. I got two bags on one acre before but now that I planted in rows on less than one acre of land with poor rains I got four bags”, Janet Kuomdoug, Suhyen Listenership Group, Yinduri Community

Voto Mobile/MTN/TIGO/Others

To implement the MoU signed with Voto Mobile, 1,600 smallholders from Kintampo North and South have been enrolled in the Voto Mobile platform to receive voice messages. During the reporting period, these smallholders received information on fall armyworm incidence and control, GAPs, damages and prevention of bushfires (damage and prevention) and weather.

Esoko Weather Information and Agronomic Tips

The seasonal forecasts and daily weather alerts from Esoko continued through the end of December 2016. The agronomic tips to beneficiaries will continue until the end of March 2017. During the quarter, 8,288 received the Esoko weather forecast messages. Weekly tips on GAP and PHH covering maize, rice, and soya uploaded to the Esoko platform were sent to beneficiaries during the period. Messages were sent to a total of 20,328 beneficiaries during the reporting period.

All 2016 season beneficiary farmers who received the subscription on weather and agronomic tips will be graduated to a self-subscription module in the 2017 planting season where they will have to pay for the daily alerts. A new set of beneficiary farmers (10,000 farmers for weather and 20,000 for agronomic tips) will be given the opportunity in 2017 to be introduced to this service.

ICT Program with Grameen Foundation

During the quarter, the project continued to partner with Grameen Foundation through a collaborative program aimed at providing extension services to smallholders through the use of ICT tools such as tablets, portable Pico projectors, Bluetooth speakers and SD Cards by OBs’ field agents. Out of the 38 OBs who were signed on to use these ICT tools in the South, 17 understood and used the tools and have been signed on for Grameen’s ‘pre-financing of agents activities’ pilot project in the South. This initiative is believed to challenge the rest of the OBs to improve their performance in using the tools.

In addition, 93 out of the 111 field agents in northern Ghana received refresher and technical backup training from the Grameen technical team to equip them with the necessary knowledge in F-Droid, Taro works, Smartex and also the use of the Pico projector & SD Cards. Another objective of the training was to train the agents on the use of the maize, rice and soya standard protocols developed by the ADVANCE project, on which the Smartex is based.

In a joint effort to provide remote assistance to the field agents, WhatsApp groups were created, linking the agents, Grameen technical team, and ADVANCE staff. These groups have helped agents get assistance from

a Grameen software specialist and technical teams on a daily basis. Monitoring and review of activities for this quarter are scheduled to take place in January 2017.

I.3. FARM CLINICS

As a result of the incidence of the FAW, two 'Farm Clinics' were held for 138 smallholders in the Kintampo North and South districts, and the Northern Region, during the minor crop season, with support from the Department of Agriculture. The farmers were trained on how to identify diseases and pests as well as how to control them through early weeding and timely spraying of pesticides.

Two traps with bait were set up at Amoma Nkwanta (Kintampo South District) in a demo maize field at the tassel stage, to monitor the presence of FAW in the vicinity. An entomologist (F2F volunteer) specialized in IPM met with FBO members and OGs in the field and talked to them about the impact of the fall armyworm on maize, and the need for a concerted effort to monitor its presence to control it in a cost-saving and environmentally-friendly manner. The volunteer showed farmers signs and symptoms of the presence of the FAW, by the distinct feeding of the young caterpillar: "window panes" on the leaf under surface, caused by inter-venal feeding and voracious feeding on leaves, emerging cobs and leaf whorls. Moth caterpillars were collected from the leaves and emerging maize cobs for rearing into pupa and adults at the Tamale office. Two traps were set up in the field to monitor the presence of adult FAWs on a weekly basis for six weeks.



A Department of Agriculture official showing the damage of the FAW pest to farmers at Bredi

As part of his mission, the volunteer visited Sulyaaba Enterprise, located at Boya in the Bawku West District of the Upper East Region to understand the nature of the black ant infestation, which is a major, widespread, and persistent pest in the three regions of the North.

"We did not know that this insect could be controlled by just applying [the right type of] pesticide and [it has] destroyed our farms, now that we know, we will deal with them".

Mr. Martin, Farm Clinic at Bredi,
Kintampo South

As effective management approaches vary with ant species, samples of the black ants were taken from three different communities, all within the OBs operational area. According to the volunteer, depending on the species of ants identified, a bait which is slow-acting, effective and safer than insecticide sprays is recommended. The 'ant workers' carry small portions of the bait back to the nest where it is transferred to other workers, larvae, and queens, and kills off the entire colony.

I.4. OUTGROWER BUSINESS MANAGEMENT

Outgrower Business Management Training

During the quarter under review, project beneficiaries were trained on two out of the eight modules of the Outgrower Business Management (OBM) training curricula: marketing and contracts, and post-harvest handling and storage. A total of 103 OBs were trained on marketing and contracts while another 48 were trained on post-harvest handling. The participants were provided with sample purchase and sales contracts to assist them in designing contracts on their own.

ADVANCE continues to use the OB categorization tool to rate each OB's performance with regards to their adoption of technology and management practices in their businesses. During the period under review, 66 OBs

were categorized; 18 were classified as performing excellently, 14 were high performing, 10 were medium-performing, and 24 were low performing. This brings the number of OBs categorized to 299 OBs.

Those who were rated as low performing are being mentored by the high performing OBs, through the OB mentorship program and are supported more closely by the team.

OB Office Program

Outgrower Businesses are continuously encouraged to set up small office units from which they can manage their operations. In the quarter under review, four OBs set up small office units. Eight OBs in ADVANCE South were also granted laptops with a 3-in-1 printer/scanner/photocopier and power surges to enable them keep verifiable records that will help them make profitable business decisions. Two OBs out of the four who opened offices were beneficiaries of these grant items.

Furthermore, 11 OBs were trained on effective record keeping systems. Some of the topics addressed during the training were:

- Type of records keeping system required for the successful operation of an OB.
- Type of data and information to be collected
- Identification of possible users of this information
- The type of system to use in collecting, managing and processing the data collected and how to use the information

Four OBs who made large investments in tractors were also trained on how to determine their breakeven point to enable them know when they are making profits or losses, and how to optimize profits.

I.5. BUSINESS DEVELOPMENT SERVICES

Farm Business Planning

During the reporting period, the project supported 16 new actors to develop their business plans while 16 had their plans reviewed to reflect their current business situation. These business plans will guide the operations of the OBs to enhance their outgrower business management (OBM) and determine the right financial services they either require through commercial credit, grants or both. It will also help the project to provide the best type of technical assistance to the OBs to achieve the various projections and targets of their business operations. An additional 17 OBs have had the business diagnostic tool administered, pending preparation of their business plans.

Outgrower Businesses are continuously being encouraged to register and legalize their operations with the Registrar General's Department to enable them transact business with better established end markets and input suppliers. Four OBs registered their businesses during the current reporting period.

Financial Services

The 2015/2016 season was a hard year for financial services. Most OBs have struggled to repay loans contracted to purchase equipment. During this reporting period, six OBs defaulted on loans amounting to GHS 715,000 (\$175,403) which they took to purchase farm equipment. In addition to the high interest rates, the reasons for the defaults differ per OB, from poor quality of equipment, low utilization, especially of tractors, and drought in some areas. The project is currently in talks with the Financial Institutions (FIs) and the OBs to reschedule

these loans and support OBs to find better ways of making their businesses more profitable to enable them meet their repayment schedules.

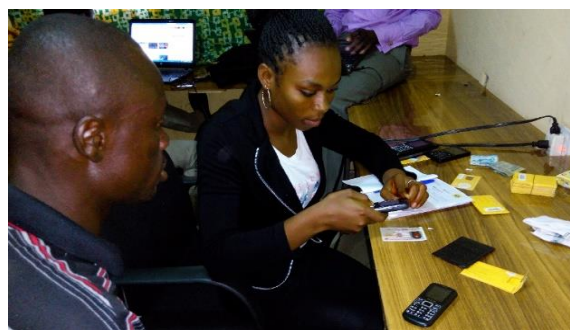
In order to increase financial inclusion and encourage savings as a source of investment into production among OGs, 214 Village Savings and Loans Associations (VSLAs) were formed in 2016, benefiting 4,890 OGs (1,420 males and 3,470 females). The groups saved between GHS 1 (\$0.25) to GHS 5 (\$1.23) per share per week and a social fund contribution of GHS 0.20 (\$0.05) to GHS 0.50 (\$0.12) per person per week depending on the constitution adopted by the group. These groups shared out before the 2016 production season in June 2016 to enable them to purchase inputs and then restarted the savings cycle in August 2016. The 107 groups that were monitored in the period under review made savings of GHS 153,130 (\$37,566) and gave out loans of GHS 86,622 (\$21,250). Forty of these groups, made up of 940 members, have been linked to three FIs, including National Investment Bank in Yendi, Fidelity Bank in Upper West and GN Bank in all three northern regions, to open group bank savings accounts. This will enable these members save their money safely by eliminating the risk of keeping large amounts of cash in a metal box, earn interest on their savings² and also be financially included.

Following the success of the formation of these savings groups, the project is scaling up to form another 500 groups (100 in Upper East, 100 in Upper West, 100 in ADVANCE South and 200 in the Northern Region) in FY17. Three organizations (SUNG Foundation, YARO and Access to Life) have been engaged to undertake the training of 12,500 project beneficiaries. SUNG Foundation has trained 2,000 beneficiaries to form 76 groups. Approximately 70% of the VSLAs are female farmers. YARO and Access to Life are as still mapping out the various communities for sensitization, with training to commence in the second quarter of the year.

Digital Financial Services

Outgrower Businesses and their OGs as well as Spraying Service Providers (SSP) and other service providers are continuously encouraged by the project to subscribe to mobile money as a savings platform and also to transact business safely with buyers, clients and input dealers on their e-wallets. Six new OBs have been set up as merchants with their 629 OGs as subscribers on MTN mobile money. Three OBs who have also been trained are set to receive their merchant SIMs and have their 200 OGs sensitized.

Though the mobile money drive has been successful, the uptake has been low due to the low ownership of mobile phone handsets among the smallholder farmers. To solve this problem, the project is currently in talks with business enterprise teams of Airtel, TiGo and Vodafone to support with cheap, low-end phones. This will enable ADVANCE to increase phone ownership and expand the use of mobile money to farmers on any of the telecommunication networks that provide better connectivity.



An SSP being set up on MTN mobile money in Kintampo

Monitoring of two OBs who were trained and set up as merchants showed that transactions carried out amounted to GHS 90,059 (\$22,093) in the last three months.

² GN Bank is offering 9% on savings and a life insurance cover for each group member

I.6. FARMER MENTORSHIP PROGRAM

During the quarter, four established OBs mentored six nascent OBs, focusing on business management practices such as record keeping, management of OGs, credit and investment, farm management and engagement with the end-market. One mentoring visit was facilitated by an OB for three other OBs to understudy the general set up and operation of a drying facility service. They were taken through the entire operations from the setup to cost-benefit analysis, and the associated challenges. Mentees expressed satisfaction with the interactions and willingness to apply the lessons learned.

Three OB networking meetings were held to identify challenges facing the OBs in their respective farming businesses especially on production, harvest and post-harvest management, marketing and repayment of input credit facilities offered to their OG's. They also considered issues such as climate change, formation of an OG business association, and a general discussion on the development of a National Farmers' Association.

I.7. CLIMATE SMART AGRICULTURE

Minimum Tillage

Five OBs and 13 of their OGs adopted ripping as an environmentally friendly land preparation technique on a commercial scale. About 107 acres of land were prepared using this technique in the Techiman and Nkoranza South Districts during the 2016 minor season. These OBs have a total of 1,300 OGs who are learning the benefits of minimum-tillage from the farms of the OBs and the 13 OGs who adopted minimum tillage. Farmers have already noticed the following benefits associated with ripping:

- The rip lines facilitate row planting
- If cutting across the slope, as ADVANCE recommends, it reduces erosion noticeably, even after torrential rains in the Savannah
- Ripped fields have tolerated dry spells better than ploughed fields – after planting there was a 3 week break in rainfall in most parts of the Techiman and Nkoranza areas
- Ripping uses less diesel compared to ploughing – average 2.5 liters/acre for ripping and 4.75 liters/acre for ploughing. Thus, the farmer saves GHS 7.81 (\$1.92) for each acre of ripped farm³
- Yields analyzed on ripped plots in the Upper West Region had an average yield of 4.0 MT/ha with certified seeds compared to farmers conventional practices of ploughing with farmers' own seed with an average yield of 1.8 MT/ha. Some indicative attributes shared by farmers included minimal lodging of plant stands in the ripped plots compared to ploughed plots

Cover Crop System

During the reporting period, 18 OGs in the Upper West Region who planted Macuna cover crop on their own farms were monitored. Interestingly, 11 OGs who planted the Macuna on Striga parasitic weed infested fields reported that the Macuna had suppressed the growth of the parasitic weed.

Two cover crop demos were analyzed for the relative benefits of Mucuna, Cajanus and Dolichos on maize yields. The two cover crop demos, located in Wiiga and Azum Sapelga in the Upper East Region, are in their second year of demonstration. Maize germination was slightly higher on plots where Cajanus was planted last year as a sole cover crop followed by plots where maize was intercropped with Cajanus. Maize yield followed the same trend. Mucuna plots gave the next highest yields followed by Dolichos plots. This trend was the same for the two maize varieties used – MS1 and Wang-data.

³ Current price of diesel per Liter is GHS 3.55 (\$0.87)

This trend matches the survival and quantum of biomass produced by the three cover crops used in these demonstrations. Cajanus survived through the dry season in locations, but Mucuna and Dolichos did not survive. Additionally, Mucuna produced more biomass than Dolichos.

No-burn Campaigns

Annual bushfires that occur across the Savannah landscape are a threat to farms and farm produce, and also negatively impact the soil and environment. Fires reduce the amount of biomass that returns to the soil as organic matter, making soils progressively poorer. To overcome this challenge the project embarked on an anti-bushfire campaign using radio jingles, field days, community durbars, and posters to educate farmers on the effects of bushfires on agriculture and soils in particular and simple measures that farmers should employ to prevent or manage bushfires. These activities were carried out in collaboration with the EPA, MOFA, Ghana National Fire Service and the Information Services Department.

As part of efforts to implement climate smart agriculture strategies to help farmers adjust to the threat of climate change, anti-bushfire radio jingle campaigns were developed, and 11 radio partner stations were contracted to air the jingles in nine different local languages across the project’s operational zones. The selected radio stations for this campaign included North Star FM, Radio Gaakii and Zaa FM in Northern Region; URA Radio, Radio Builsa and Quality FM in Upper East Region; Radford Radio and W93.5 FM in Upper West Region; Radio BAR, ASTA FM and ADARS FM in the South. Some of the stations ended the campaign in December while others will end it in January 2017. The radio messages are intended to reach direct project beneficiaries as well as the general public. Radio jingles played on eight of the radio stations were estimated to have reached 3,190,000 listeners.

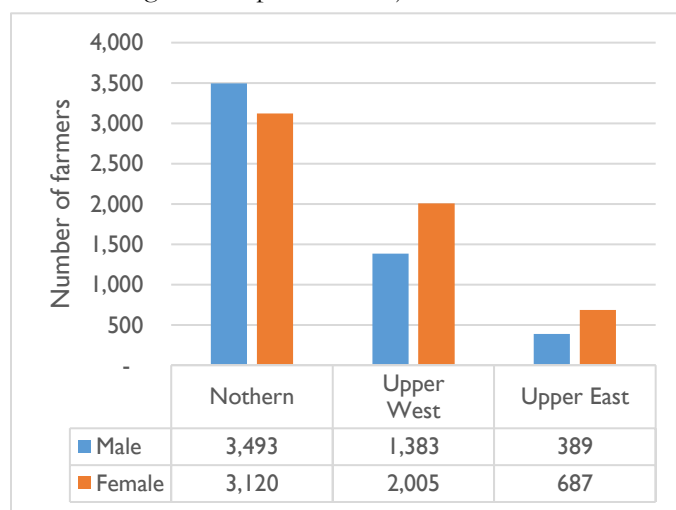


Figure 4 Number of farmers reached during Field Day Anti-bushfire Campaigns

As part of the No Burn campaign activities, the project conducted sensitization activities during the GAP training field days in Northern Ghana, reaching 11,077 farmers with regional and gender breakdown as shown in Figure 4.

Furthermore, 16 large banners and 570 posters with “No Burn” messages were designed and deployed at vantage points in all four regional zones as part of the campaign to raise awareness.

Another piece of the campaign, community durbars, were also held in eight communities and reached approximately 1,600 community members directly. In attendance were SHFs, OBs, NFs, officials from MoFA, Ghana National Fire Service, World Vision, EPA, the Media, Chiefs, and opinion leaders who gathered in the various communities to join forces to raise awareness about the harmful nature of bushfires. Officials from these organizations delivered messages highlighting the causes, control and devastating effects of bushfires and the need to conserve the fertility of our soils to increase food production. Various media houses, including North Star Radio, ASTA FM, URA Radio and Radio Upper West covered these events.



Anti-Bushfire Community Durbar at Bussie in the Upper West

“Today’s No Burn campaign has been an eye opener, since this is my first time of attending such an event. I will take this opportunity to thank ADVANCE for organizing such an event to educate my compatriots on the dangers and effects of bush burning. I personally have resolved not to burn a single grass and I will communicate this to my fellow Fulanis to say NO to bush burning”. Bussie Fulani Chief, Alamesa Santa

CSA for Rice Value Chain

The project’s climate smart agriculture efforts have so far focused on maize, as the crop with the largest area of cultivation thus being the most important for food security in the North. The strategy has now been expanded to include the rice value chain. Rice waste after harvest and from rice mills will be converted to compost for soil improvements. The project has requested a volunteer composting expert to provide technical advice on how to implement this effectively.

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

This reporting year, under sub-purpose 2, the project continued the following work:

- 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

Abiba Mohammed, an aggregator operating in the Mamprugu-Maogduri district of the Northern Region, was profiled by the project. She buys maize, paddy and milled rice with a purchase requirement of 700 MT for 2017. ADVANCE will connect her with its OB and OG beneficiaries through trade missions in order to increase the latter’s access to market.

Two-way Trade Missions

Five trade missions were facilitated for four buyers and 11 OBs during the quarter. Trade missions consist of buyers visiting OBs and their OGs in order to connect with them, assess the OBs’ and OGs’ capacities and

communicate their requirements and specifications of the produce these buyers would procure. Trade missions usually ends with open or close contracts between these parties.

Table 4: Trade Missions Facilitated

Name of Buyer	Location of Buyer	No of Participating OBs	Regional Coverage of OBs	Commodity
Sahel Grains Co	Techiman	2	Upper West	Maize
Naasons Agro Co.	Accra	2	Upper West	Maize
Nestle	Accra	5	Northern, Upper East	Maize
Regis Commodities	Kumasi	2	Ashanti, Brong Ahafo	Maize
Total		11		

- Sahel Grains of Techiman visited the Upper West Region twice in October 2016 to meet with two different maize OBs. It provided a sheller and tractor to OB Yahaya Moro on a one-month lease, and tractor and plough to OB John Mulnye on a one-year lease basis.
- Naasons Agro Company visited the Upper West Region and agreed to purchase 100 MT of maize per month from the Sissala West FBO and the OB Mekeballey Enterprise.
- The Procurement Manager, Agricultural Raw Materials, of Nestle Central West and Africa (CWA) visited the Northern and Upper East Regions in November 2016 to meet with five OBs to discuss maize supplies, quality requirements and indicative contracting terms. Nestle also used the trip to assess the storage facilities of the OBs. Three of the OBs have been selected to participate in Nestle's grain supplier development program.



Nestle Procurement Manager inspecting the newly constructed warehouse of Kharma Farms in Karaga, Northern Region

Contract Facilitation

Six contracts covering 3,064 MT of maize and soybean were facilitated between five buyers and six OBs and farmer groups during the period.

Table 5: Contracts Facilitated

Type of Contract ⁴	Number of Contracts	Volume (MT)	Value (GHS)
Closed Contracts	4	2,014	*2,250,000
Closed Sale without Formal Contract	1	800	80,000
Purchase and Supply Agreements	1	250	265,000
Grand Total	6	3,064	2,345,000

*For contracts with values

⁴ 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

These contracts were developed from new business relationships between OBs and buyers, facilitated through the trade missions detailed in Table 3. However, there are also clear indications that OBs and buyers are entering into contracts and executing trades on their own using the skills and experience gained from previous market linkages facilitated and training provided by the project. ADVANCE intends to use the annual profitability and investment survey of OBs and buyers to gather and report data on these contracts and trades.

Transport Linkages

ADVANCE collaborated with the local branches of two transport unions, the Ghana Private Road Transport Union (GPRTU) and the Progressive Transport Owners Association (PROTOA), to update grains cargo haulage fares from the following locations to various destinations:

- GRPTU – Tamale, Techiman, Ejura and Wenchi
- PROTOA – Kintampo

The haulage fare charts were provided to OBs and buyers to guide them when hiring transporters.

Representatives of the two transport unions were sponsored to attend the 6th Annual Pre-harvest Event organized in Sunyani in October 2016. They met and established relationships with actors who require transport services within their operational areas.

“Though my first time of participating in the program, I was able to establish and exchange contacts with farmers in the Northern region and processors, who intend to do business with us when they start selling and buying”. Ibrahim Jafaru – Cargo and Articulator Branch of GPRTU, Tamale

Training of Farmers in Produce Quality Requirements and Standards

In preparation to train 50,000 smallholders on grain quality standards beginning January 2017, three Training of Trainers (ToT) workshops were organized in Techiman and Tamale for 70 community trainers. The workshops were used to build the knowledge and skills of the community trainers to deliver the required training to farmers. Participants also used the sessions to share experiences on the trainings carried out in 2016. The content for the grain quality standards training is based on the Ghana National Standards for maize (GSS 211: 2013: Specification for Maize) and soybean (GSS 1039: 2013: Specification for Soybean).

The national standard for paddy rice (DGS 1122:2016 - Specification for Paddy (rough rice) was gazetted in August 2016. The Ghana Grains Council, an ADVANCE grantee, has begun the procurement process to hire a consultant to prepare a handbook and pictorials for the standard. When completed, ADVANCE will use these materials to develop training curriculum for paddy rice quality.

Sixth Annual Northern Ghana Pre-Harvest Agribusiness Event

The Sixth (6th) Annual Pre-Harvest Agribusiness Event was held for the first time in Sunyani on Thursday, October 20, 2016 under the theme *“Profiting Together”*. The event was hosted by the Ghana Grains Council (GGC) with support from ADVANCE.

The event attracted almost 800 registered participants including farmers, buyers, processors, transporters, input dealers, farm machinery dealers, financial institutions as well as other donor funded projects and some of their

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.

beneficiaries. The event provided a platform for farmers to establish business relationships and discuss contracts for the 2016 harvest of maize, rice and soybean.

ADVANCE used the 6th Pre-harvest event to begin a collaboration with the School of Agriculture and Technology of the University of Energy and Natural Resources (UENR) based in Sunyani and Dormaa Ahenkora. The school provided 15 students to assist in the organization of the event.



Opening ceremony of 2016 Pre-harvest event



Exhibition grounds of 2016 Pre-Harvest Event

Evaluation of the 2016 Pre-Harvest Event

Highlights of an evaluation conducted by a joint team from UDS and UENR involving a random sample of 159 participants and 21 exhibitors indicated that:

- 40% of participants were first time attendees, and 19% had participated in four or more previous events
- 9 out of 21 exhibitors (43%) had participated in a previous event
- 23% of participants rated the event as excellent; 55% rated it as good
- 21% of exhibitors rated the event as excellent, and 68% rated it as good
- The most useful activity for participants was the market place (40%), followed by networking (35%), and the exhibition (23%)
- 76% of participants and 86% of exhibitors want the event to be organized again next year
- 79 out of 98 participants (81%) and 8 out of 9 exhibitors (89%) who attended either the October 2015 event in Tamale and March 2016 event in Kumasi made business deals from those events

Key Market Developments

In this section, commodity price trends from 32 key markets monitored by the project on a weekly basis during the quarter, are presented.

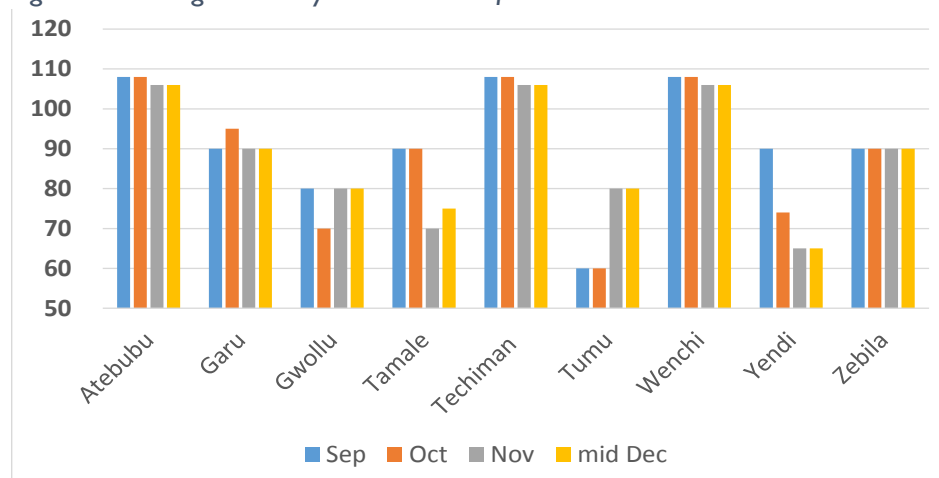
Maize

Overall, maize prices remained stable in five out of the nine key markets tracked between September and mid-December 2016. Prices in Southern markets (Atebubu, Techiman and Wenchi) were relatively higher than Northern markets (Garu, Gwollu, Tamale, Tumu, Yendi and Zebilla).

The following trends occurred between September and December 2016:

- Prices of maize in southern markets were comparatively low and stable compared to the previous quarter. This was due to the major season harvest and offloading of stock from farmers to raise money to start the minor season farming activities.
- Tamale and Yendi in the Northern Region recorded declining prices after September 2016, largely because of their status as major maize markets which attract large volumes of supplies from farmers and aggregators
- There were however price falls in markets in high maize producing areas such as Tumu and Gwollu in response to the sale of old stock of maize in preparation for new maize. In November prices rose in these markets after the previous year's stock was cleared. In addition, buyers were actively sourcing supplies in those areas at the time the farmers were still harvesting and shelling.

Figure 5: Average Monthly Maize Prices from Selected Markets

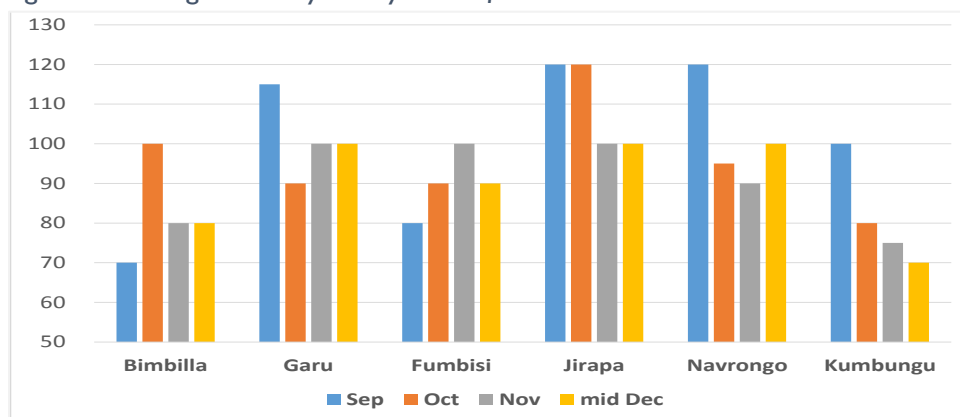


Source: ADVANCE market monitoring

Rice Paddy

Paddy prices were generally erratic with prices declining in most markets and rising again after November. The rising prices seen after November in the Upper East markets have been associated with low production due to flooding in the Navrongo, Fumbisi and Sandema areas. In the Upper West, it is anticipated that sale of paddy will continue to be relatively lower than maize and soybean because of the low level of production in the region.

Figure 6: Average Monthly Paddy Prices from Selected Markets

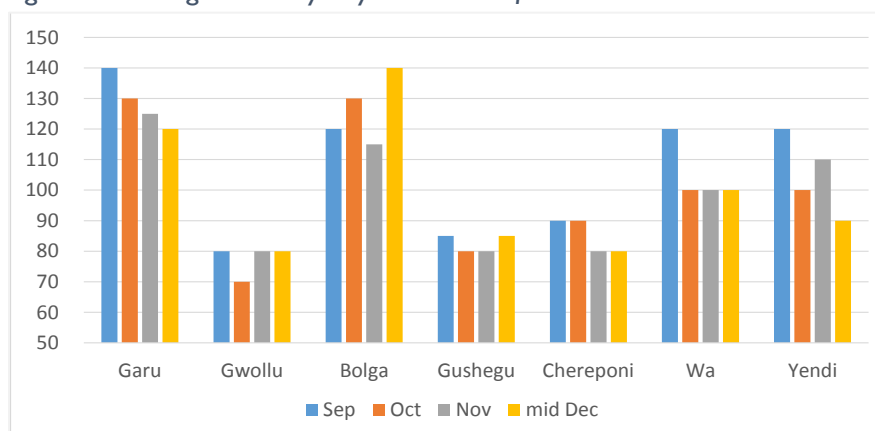


Source: ADVANCE market monitoring

Soybean

Overall, soybean prices declined by an average of 8% over the quarter. Stock was low in the Upper East Region, as a result, demand could not be met with the requisite supply hence the relative high prices compared to Northern and Upper West Region. Farmers offloading stocks on the market in anticipation of the new harvest contributed to dropping and stabilizing prices in Gwollu.

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 the project provided the following support to two out of the four buyer-outgrower⁵ schemes facilitated for the 2016 farming season.

Table 6: Support for Buyer Outgrower Schemes for 2016 Farming Season

Buyer Name	Crop	Type of support provided by the buyers ⁶	No. of OBs	Status - December 15, 2016
Agricare (North)	Maize	Seed, fertilizer and pesticide (farms affected by FAW)	10	Four OBs started repaying the input credit provided. The remaining six OBs are mobilizing grain from their OGs to pay back.
Agricare (South Major Season)	Maize	Seed, fertilizer	4	One OB has completed repayment. The remaining three OBs are at various stages of repayment. However, some experienced drought and low yields, which are affecting their ability to repay on schedule.
Agricare (South Minor Season)	Maize	Seed, fertilizer	14	The harvest began in late December. However, 12 out of the 14 OBs experienced drought and armyworm infestations. The project provided technical advice on the appropriate chemicals to use to eradicate the worm attack.
Akate Farms	Maize	Seed, fertilizer, weedicides	20	OBs in the Upper West Region are in the process of mobilizing grain from their OGs to repay the input support.
Total			48	

In addition, OBs who defaulted on the Premium Foods input credit for the 2015 farming season, and those whose repayment obligation was extended to the harvest from the 2016 crop, began repaying their outstanding liability.

BDS Needs Assessment of Firms

Table 6 details the business development services that were provided to buyers.

Table 7: BDS to Grain Buyers and Market Lead Firms

Firm/ Organization	Home Region of Firm	Source of Technical Assistance	Type of Technical Assistance	Status of Engagement
Royal Danemac, (Kumasi, Soybean Processor)	Ashanti	ADVANCE	– Preparation of a SOW for STTA to prepare technical drawings and bill of quantities for the extension of the factory building (to be financed by	Ongoing

⁵ The four buyers are Agricare, Akate Farms, Addicent Foods and Timothy Dassah.

⁶ The project is not involved in the procurement of the inputs.

Firm/ Organization	Home Region of Firm	Source of Technical Assistance	Type of Technical Assistance	Status of Engagement
			Royal Danemac) to house an edible oil bottling line	
			– Financial management advice	
Agricare Ltd, (Kumasi, Processor Feed Mill)	Ashanti	ADVANCE	– Expansion of maize outgrower scheme in all ADVANCE operational areas	Ongoing
			– Financial analysis and advice to support capital raising to finance expansion of maize outgrower scheme	
Akate Farms and Trading Company, (Integrated Poultry Producer)	Ashanti	ADVANCE	– Expansion of maize outgrower scheme in Upper West Region	Ongoing
Vester Oil Mills, (Kumasi, soybean processor)	Ashanti	ADVANCE	– Preparation of SOW for STTA to conduct proximate analysis on grain samples	Ongoing
			– Preparation of SOW for STTA to conduct market survey on fish feed and poultry feed market	
			– Advice for the acquisition of a franchise to produce Zeigler ⁷ animal feed products in Ghana	
Soybean Processors (Royal Danemac, Vester Oil, Inter-Grow, G. Bosomtwe, E-GABs)	Various	STTA Consultant	– Product quality audit of local soy cake using imported soymeal as a benchmark	Draft Final Report has been submitted. A stakeholder validation workshop is planned for the last week of January 2017 to discuss the findings and recommendations, and agree a way forward on interventions required

⁷ Zeigler <http://www.zeiglerfeed.com/> is an American company, and a major producer of poultry and livestock feeds

Firm/ Organization	Home Region of Firm	Source of Technical Assistance	Type of Technical Assistance	Status of Engagement
Naawin Enterprise, rice miller	Ashanti	ADVANCE	– Advise to resolve internal management challenges	Completed
G. Bosomtwe Ventures	Ashanti	STTA Consultant	– Development of soy based 5% poultry concentrate	Ongoing

2.3. TRADE ASSOCIATION SUPPORT

ADVANCE provided support to three trade associations during the quarter, including:

- Ghana Grains Council (GGC)
- Ghana Rice Inter-Professional Body (GRIB)
- Badu Maize Traders Association (in the Brong Ahafo region)

Ghana Grains Council

The Ghana Grains Council (GGC) began implementation of activities under their third year grant agreement for \$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 quarter:

- Nine new warehouses in the Northern and Upper East Regions constructed under GCAP and SADA-MVP were identified as prospects for MWRS. Their capacities range from 100 MT to 500 MT
- Eleven community warehouses in the Brong-Ahafo Region of 100 MT capacity each were assessed and classified as prospects for MWRS
- Reviewed the inventory recordkeeping of 25 warehouse managers in the Brong-Ahafo Region
- Introduced MWRS to eight rural banks in the Ashanti and Brong-Ahafo Regions, and GN Bank

In addition to the above, the council hosted and assisted ADVANCE to organize the Sixth Annual Pre-Harvest Agribusiness Event in October 2016. It generated a total revenue of GHS 98,320 from the event.

The GGC Secretariat staff also visited 28 of their members during the period as part of their membership care program. These visits were used to collect outstanding dues. A total of GHS 15,300 in annual membership subscriptions were collected. GGC also held its 5th Annual General Meeting (AGM) in Accra on 14 December, 2016.

Ghana Rice Inter-Professional Body (GRIB)

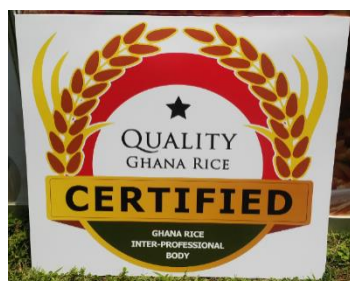
ADVANCE provided technical and financial support to GRIB to organize the 3rd Ghana Rice Festival in Accra on 7 and 8 October, 2016 under the theme “Eat Quality Ghana Rice for a Healthy Life”. GRIB also launched a branding and certification logo for Ghana rice at the event.

Table 8: Participants to the Ghana Rice Festival

Category	Number
Rice Farmers	117
Rice Processors	5
Marketers	14
Service Providers	6
Media Houses	18
Public Sector	32
Consumers	Over 1,800



Local rice on display on the 3rd Ghana Rice Festival



Ghana Rice Brand and Certification Logo

2.4. NORTH GHANA PROCESSING UPGRADE

Badu Maize Traders Association

Thirty members of the Badu Maize Traders Association in the Brong-Ahafo Region were trained on maize quality standards in October 2016. The training was based on the Ghana national standards for maize (GSS 211: 2013: Specification for Maize). The training session was also used to discuss advocacy strategies for wide dissemination of maize quality standards among traders in their market and beyond, and the use of weights and measures in the grains trade.

BDS Support to North Ghana MSME Agro Processors

Table 9 below gives an update of progress of work on the two rice mills targeted in the Northern Region for upgrading.

Table 9: 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	Completion of construction of additional storage rooms and drying patio; and general improvement of infrastructure	<ul style="list-style-type: none"> – Concept notes and budgets developed and submitted to the Grants Committee for the purchase of the materials – Environmental impact assessment completed

Enterprise	Location	Processing Capacity (MT)/ Hr	Milling Upgrade Needs	Status of Engagement
				<ul style="list-style-type: none"> – Expanded supply chain linkages for paddy – Support for promotion of products at 2016 Pre-Harvest Event
AMSIG Resources/ Shekinah Agribusiness Centre	Worebuoggu (near Nyankpala), Northern region	0.5	Replacement of specific components of the mill, and provision of grader	<ul style="list-style-type: none"> – Received and evaluated a concept paper from the enterprise – Carried out an engineering assessment of the existing mill

2.5. COMMUNITY BASED MARKET SYSTEMS STRENGTHENED

The quarter under review saw the first actions to expand Sell More for More (SMFM) training to FBOs in ADVANCE South, to strengthen their market systems and administrative capacity. The initial step was to identify and assess the capacities of selected FBOs and transform them into Farmer Based Enterprises (FBE). In total, 36 FBOs were identified as follows: five in Sunyani Zone, six in Techiman Zone, and 25 in Ejura Zone. Out of these, 25 were assessed and the first 20 are ready to be trained in SMFM.

Table 10: Summary of FBOs' assessment findings

Zone	Name of Group	Assessment Score (%)	Status
Sunyani	Badu Maize Farmers	49.5	Mid-Transition
	Gye Nyame Farmers	52	Mid-Transition
	Bre-nye Kwa Farmers	56	Mid-Transition
	Nyame Adom	46	Mid-Transition
Techiman	Ahodwo Kua	42	Mid-Transition
	Nkamom Ne Anua Do	75	Model FBE
	Twimia Nkwanta Farmers	59	Mid-Transition
	Nyame Bekyere Maize Farmers	58.5	Mid-Transition
	Gyewobuo Maize Farmers	70.5	Model FBE
	Ghana National Farmers	78.5	Model FBE
	Aorowa Cooperative Farmers	40	Mid-Transition
Ejura	Alagube Ndekengo	27.5	Early Transition
	Onuado Odo na eye	21	Early Transition
	Mmoden Mo Kuo	24	Early Transition
	Abubrokosua	21	Early Transition
	Asona Eye	22	Early Transition
	Tiyumtaba Ni Sunyini	17.5	Early Transition
	Nkabom	35	Mid-Transition
	Yenute Klingan	36	Mid-Transition
	Nyame ye	21	Early Transition
	Motoonan	22.5	Early Transition
	Suhudo	29.5	Early Transition

Zone	Name of Group	Assessment Score (%)	Status
	Borimanya	36	Mid-Transition
	Nso nyame ye	39.5	Mid-Transition
	Kasena Nemoro Kolama	24.5	Early Transition

Most of these groups are already involved in farming activities by mobilizing resources on their own for their production. Their biggest challenge is a lack of record keeping. Once their capacities are strengthened, they will be well-positioned to improve their operations. These groups try to mobilize resources through VSLAs and some have enough funds to cover their activities. Most of these groups do not have bank accounts, therefore the project will support them to open accounts in the coming quarter.

2.6. MARKET PRICE INFORMATION

During the period under review, a total of 12,018 individuals received the weekly Esoko SMS alerts on commodity prices in main markets.

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

During the period under review, the project monitored the level of progress of the Zonal OB Networks in Wa, Jirapa, Bole, Sissala and Bawku. Some of the challenges noted included limited access to government subsidized fertilizers due to poor distribution networks and governance issues. The OB networks expressed their readiness to explore the possibility of starting an OBs' Savings and Loans Scheme, prepare annual action plans to guide their operations and put in place and/or strengthen their internal structures to make the OB networks more competitive and attractive to members.

3.2. ADVOCACY CAPACITY FOR NATIONAL ORGANIZATIONS STRENGTHENED

Twelve local NGOs from the Upper East, Upper West and Northern Regions responded to a request for proposals launched by the project. The proposals had to address at least one of the Prioritized Enabling Environment Constraints listed. The proposals are currently being evaluated and the selection in its final stage.

3.3. DISTRICT ASSEMBLIES PLANS (DAIPs) FOR AGRICULTURAL DEVELOPMENT

ADVANCE facilitated a meeting with the Sissala East District Assembly and the Department of Food and Agriculture in Tumu on the results, promotion and lessons learned from the DAIPs process. Along with the promotion of the DAIP at an Investment Forum in Tamale, some initial contacts were made with the Ghana Investment Promotion Council for the promotion of the Sissala East District Investment Plan. The District Assembly and MoFA staff were generally positive about the DAIP process and called for its replication in other districts.

Prioritized Enabling Environment Constraints

- Limited access to quality seeds
- Inadequate farm machinery and skilled operators
- Late announcement of Fertilizer subsidy program implementation
- Challenges in registration of agribusinesses at the regional and local levels
- Low utilization of weights and measures in agricultural commodity trade
- Limited access to productive agricultural lands by women
- Improprate handling and disposal of agro-inputs containers

3.4. FBE CAPACITY DEVELOPMENT

As part of the process of transforming FBOs to FBEs, the project developed a capacity assessment tool. Following the administration of this tool to 45 FBOs in FY16, the team embarked on building their capacities through coaching, mentoring, one-on-one training, sensitization etc. Some of the trainings centered on leadership skills, how to render services to members i.e. ploughing, collective sales and collective purchases of inputs, and record keeping.

Furthermore, in FY17, the project will work with an additional 90 new FBOs to become FBEs. Thirty of these FBOs were identified in the Northern Region, and 15 each were in Upper West, Upper East, Kintampo North and Kintampo South. The results of their assessments are presented in Table 11. The results show that 86.7% are in mid transition, while 11.1% are in early transition and 2.2% in the formative stage.

Table 11: Summary of FBO capacity assessment findings

Stages	Northern Region	Kintampo North	Kintampo South	Upper East Region	Upper West	Total
Formative Stage	2	0	0	0	0	2
Early Transition	4	0	6	0	0	10
Mid Transition	24	15	9	15	15	78
Model FBE	0	0	0	0	0	0

3.5. SMALLHOLDER CAPACITY BUILDING

Numeracy and FaaB Training

As part of the activities lined up to enhance the performance of SHFs implementing their marketing activities effectively, the project commenced the training of trainers (ToT) in Tamale to expand Farming as a Business (FaaB) and numeracy trainings in the four operational zones. Trainers were identified by OBs and FBO leaders. A total of 52 trainers were trained to train a new set of 12,000 smallholders on numeracy and another 53 were trained to train 13,000 smallholders on FaaB. Both community level trainings will commence in January for a period of three months.



A participant demonstrating how to count with straws

PROGRAM SUPPORT

I. Gender Program

The project continued mainstreaming gender to ensure that its integration across all activities such as the PHH trainings and VSLA establishment, and in the planning process of other activities such as the FaaB and numeracy trainings. The project also celebrated the International Day of Rural Women this quarter.

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

During the quarter under review 19 women OBs participated in the Outgrower Business Management (OBM) training delivered by the project. The topics included the following

- Basics of marketing
- Buyers and their requirement
- Contract negotiation and contracting
- Aggregation

The OBM offers an excellent opportunity to increase the business and entrepreneurial skills of both men and women OBs.

1.2. INTERNATIONAL DAY OF RURAL WOMEN

The United Nations' (UN) International Day of Rural Women (IDRW) recognizes and honors the role of rural women on October 15 each year. It recognizes "the critical role and contribution of rural women, including indigenous women, in enhancing agricultural and rural development, improving food security and eradicating rural poverty." This day was established by the General Assembly in its resolution 62/136 of 18 December 2007.

As an agricultural enhancement project working to improve the lives of women in both urban and rural environments, ADVANCE sees IDRW as a platform to showcase its contribution to rural food security, and the empowerment of women along the three value chains. The project celebrates contributions made by distinguished women value chain actors in enhancing rural life, and encourages many other women to aspire to such positions by increasing their productivity and that of their fellow women.

During the reporting quarter, the project honored four distinguished women from Upper East, Upper West, Northern and Brong Ahafo Regions. They were Mary Anabiga, Fulera Adamu, Constance Ankomah, and Mary Azongo. Each was presented with a citation and a token present for their contribution to improving the livelihoods of smallholder women farmers by supporting them to adopt productivity enhancing technologies that increased their yields and incomes.



Awardees of 2016 International Day for Rural Women

1.3. WOMEN'S ACCESS TO IMPROVED TECHNOLOGIES

The project seeks to identify, test and showcase technologies that are women friendly through demonstrations and field days, and pursue access and adoption through matching grants in the early stages of introduction.



Gender Specialist demonstrating a dibbler usage to SHF in Jimbale in the Bunkprugu Yunyoo

During the quarter, the project facilitated equipment demonstrations with A&G Agro Mechanical Industries and Tamale Implement Factory on manual planters and dibblers, especially to women farmers. The implements were demonstrated to OBs, female FBO groups and lead farmers across the ADVANCE operational zones. This offered an opportunity to women farmers to have a first-hand experience on the use of the dibbler and planters. They gave feedback for improvement on both implements with expression of interest to buy some dibblers in particular. In the next quarter, the project will follow-up and facilitate grant application for the women, as these locally manufactured equipment will be available in the ADVANCE Small Equipment Grant list.

Women's Access to Small Equipment

During the quarter, through its small grant component, the project facilitated access to motorized tricycles by three women FBO groups with a membership of about 150. They are the Collaborative Mothers Group from Nakolo in the Kasena Nankana District, Bowku Women Association in the East Mamprusi, and the Binaba Women Group in the Bawku West District. This will enable them to cart farm produce from distant fields and to market. They will also serve as a means of transport and income generation for the groups.

“ADVANCE has relieved us from a heavy burden which we have endured for years. We shall ever be grateful”.
Janet Ali, Collaborative Mothers Group FBO leader

“With the acquisition of this implement we can now expand our farms as we can transport ourselves and produce, to and from our farm”. Victoria Asaaro of Binaba Women's group



Janet Ali of Collaborative Mothers Group receiving the keys of the group's motorized tricycle

2. Environment Support

During the reporting period, project activities in the area of the environment focused on:

- Improving agrochemical management among project actors
- Promoting climate smart technologies and practices among farmers

Activities of Spray Service Providers (SSP)

Trained SSPs of OB Kusi Baffour were selected to train 30 outgrowers of OB David Agyenim Boateng on appropriate use of weedicides and spraying techniques at Duayaw Nkwanta.

Three Spray Service groups were also monitored in Kintampo North and Bolgatanga. The purpose of this exercise was to assess equipment maintenance, issues with record keeping, and areas that require further training based on their records. Lessons learned that will be factored into training for the next batch of SSPs include the following:



SSPs demonstrating how to mix agrochemicals

- Some OBs do not fully understand the work of their SSPs and are not able to provide the proper support to the SSPs in terms of maintaining equipment and ensuring proper record keeping. The next training will therefore include a day for sensitization of the OBs.
- Areas for refresher training will focus on selecting the right pesticides, knapsack calibration, and understanding pesticide labels.

Pesticide Use Monitoring

During the reporting period data from pesticide use monitoring on demos was compiled and analyzed for 278 demos in the three regions of northern Ghana. The purpose of this activity was to monitor progress of implementation of the Safer Use Actions of the Pesticide Evaluation Report and Safe Use Action Plan (PERSUAP). The summary of the findings are presented below.

Pests and diseases: Nine different insect pests were recorded on demos. Maize demos were the most affected while rice demos were the least affected. Armyworms affected 79 maize demos most of which (62 demos) were in the Northern Region. Black ants affected 38 maize demos and 28 soya demos. Upper East did not record black ant infestation on demos. Other insects recorded were aphids, beetles, brown stink bug, hoppers, locusts, leaf miners and termites.

Bacterial and viral diseases affected 52 demos: 26 in Northern Region, 20 in Upper West and six in Upper East. The diseases were dwarf mosaic, leaf mosaic and maize streak virus disease.

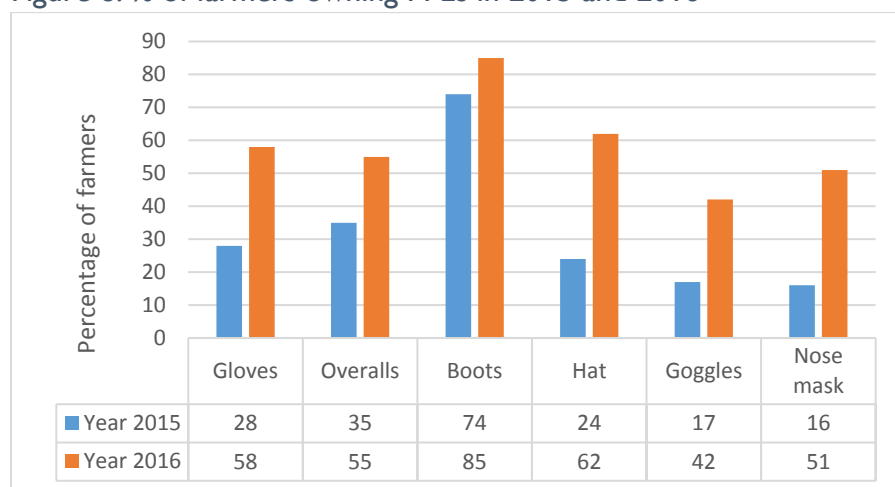
Striga affected 18 demos: eight in Northern Region and 10 in Upper East Region. Upper West did not record striga on any demo. This is a significantly higher incidence than previous years. Crop rotation is one of the topics that will be emphasized during GAP trainings in 2017, given the increased incidence of striga.

As many as 104 demos were affected by animal pests (domestic and wild animals), fairly distributed across the regions, with the highest in Upper West (48) and the lowest in Northern Region (28). Goats were the biggest culprits, affecting 39 demos, mostly in the Upper East Region.

Pesticides used: Ten active ingredients made of six herbicides and four insecticides were used in 373 instances on demos. Glyphosate was used in 272 instances while Lambda-cyhalothrin was used in 76 instances.

Personal Protective Equipment (PPEs): Generally there was an increase in the number of PPEs owned by farmers. Particularly, there was a significant increase in the proportion of farmers who now have nose masks and goggles compared to last year from 16% and 17% to 51% and 42% respectively (Figure 8).

Figure 8: % of farmers owning PPEs in 2015 and 2016



Pesticide application: A greater proportion of farmers (98%) applied pesticides either in the morning or evening. Only 2% of farmers applied pesticides in the afternoon. Except for one boom sprayer, all other applications were with a back-pack sprayer.

Patronage of SSP services on demos and by famers who hosted demos increased. Thirty-nine demos patronized the services of SSPs while 38 farmers who hosted demos patronized the services of SSPs for their own farms.

Climate Smart Agriculture Technologies and Practices

In order to reduce the impact of climate change, the project has focused on three major practices:

- Minimum-Tillage
- Cover Crop Systems
- Reduction of burning of crop residues

Refer to Section 1.7 to read the activities and achievements on these major practices and campaigns during the quarter.

3. Grants Program

During the reporting period, 125 pieces of small agricultural equipment which cost about \$37,000 were awarded to farmers under cost-shared in kind grants. These included tarpaulins, weighing scales, moisture meters, dibblers, manual planters, bullock ploughs and donkey carts. The program also worked to acquire more agricultural equipment for farmers to ensure delivery before the commencement of the farming season.

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

The project advertised in the national dailies for quotes for a variety of agricultural equipment to support farmers in both their production and post-harvest handling activities for the 2017 farming season. The grant equipment will serve as an incentive to farmers to adopt modern agricultural technologies to increase their yields, improve the quality of farm produce and increase farmers' incomes. The small equipment grant (items that cost below \$5,000) will enable beneficiaries to expand their production base and raise productivity. Other equipment with a cost over \$5,000 will target OBs to consolidate gains made over the project life, and enable them to offer further assistance to their OGs.

Table 12 presents the list of small equipment anticipated to be procured within the next quarter at an estimated cost of US\$1,500,000.

Table 12: Small equipment to be procured in Q2

No.	Equipment Type (SEG)	Quantity
1	Tarpaulins	450
2	Weighing Scale	55
3	Moisture Meter	30
4	Manual Hand Planter Maize &Soya	50
5	Harrows	13
6	Reapers	9
7	Dibbler for Seed and Fertilizer Holes	680
8	Donkey Cart	10
9	Transplanters for Rice	5
10	GPS Hand Sets	3
11	Bullock /Donkey Ploughs	25
12	Tractors and Accessories	20
13	Multi-purpose PTO/Engine-driven Sheller/Thresher	94
14	Power Tillers with Reapers	35

No.	Equipment Type (SEG)	Quantity
15	Mechanical 2-4 row planter with fertilizer hopper	17
16	Grain dryer	10
17	Seed Drill	4
18	Spring loaded rippers	38
19	Boom Sprayer	9
20	Mini Combine Harvester	16
21	Tractor Trailer	16
22	Rotovator	4
23	Motorized Tri-Cycles	37
24	Motor Bikes	39
Total		1,668

Applications and concept notes for some of these items have been received and the selection committee has commenced work on them.

3.2. LOCAL PARTNERSHIP GRANTS (LPG)

Ghana Agricultural Insurance Pool (GAIP)

During the quarter, ADVANCE continued to support the Ghana Agricultural Insurance Pool (GAIP) with a grant of \$20,000 to expand its activities within the three northern regions and consolidate gains in the weather-indexed insurance scheme for farmers. GAIP marketing officers continued to introduce the agricultural insurance products to farmers in the north to reduce the uncontrollable risks (drought, pests, crop failure etc.), taking advantage of the pre-season and pre-harvest events. In addition, GAIP will roll out outreach messages on agricultural insurance policies to mitigate risks and motivate new and existing farmers to sign on to crop insurance products.

Ghana Grains Council (GGC)

The current GGC grant entered its second quarter, with disbursements to support the development of the manual warehouse receipt system and strengthen partnership with other projects in the SADA Zone. Engagements were made with partner organizations executing warehouse development projects including the Ghana Commercial Agriculture Project (G-CAP), Northern Growth Project (NRGP), SADA - Millennium Village Project (SADA - MVP) on the need to extend the Warehouse Receipt System to the grain actors who are the beneficiaries of the various warehouses in their project areas. Additional activities by the GGC during the quarter included warehouse management and records keeping, sanitation and usage.

Other Local NGO Support

Discussions are on-going to engage some local NGOs in policy advocacy to address the limited access to quality and certified agro-inputs, limited involvement of private agro-input dealers, limited access to certified and quality seed due to poor distribution network and overly formal seed sector as well as ineffective agricultural mechanization service program.

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, GAP and PHH trainings, and updating its databases and data collection forms. Also, the project focused on completing the second phase of the 2016 annual gross margin survey where data was gathered on production, technology application and farmers' storage systems. An M&E review meeting was held for all M&E staff to update them on new developments in M&E, monthly data verification at regional levels, and also completed an internal data quality assessment during the quarter.

Phase II Gross Margin Data Collection

The second phase of the FY16 gross margin annual survey was completed in December 2016. Data on costs of inputs, technology application practices, production and yields, smallholder farmers' household storage systems, and initial sales were collected from 2,282 smallholders. The data is currently being cleaned and analyzed, and the gross margin figures will be available by the end of the second quarter.

M&E Quarterly Review Meeting and Capacity Building

The ADVANCE M&E staff met in Accra to review progress with achievements of the project's indicators, data collection, data processing, data analysis and data reporting processes. During the three-day workshop, project achievement and shortfalls for FY16 were reviewed and specific training was provided to help the team better collect and analyze data.

Also, the project staff were taken through the ADVANCE Demosys database, a system the project uses for entry, analysis and storage of data from demonstrations.

Updating Databases, Data Collection Forms and Data Reporting Interfaces

In September 2016, FTF published a revised indicator handbook with updated definitions, data collection procedures, data reporting formats and an indicator list. During the reporting quarter, ADVANCE improved its database, forms and interfaces to accommodate these changes. Also, the Demosys database deployed in June 2016 was enhanced to better address the project's needs.

Data Quality Assessment and Data Verification

ADVANCE performed monthly data verification exercises to authenticate the data submitted by the technical team during the period. Challenges were highlighted and discussed with all staff involved in the data collection, analysis and filing. Also, the team conducted an internal data quality assessment on the M&E systems and procedures implemented at the regional offices. Findings were shared with the staff and action plans put in place to further strengthen the system.

4.2. LEARNING ACTIVITIES

During the first quarter, the FY15 gross margin report which itemized technologies employed and the resulting margins was completed and shared with the technical team. In addition, three studies on three learning topics which employed both qualitative and quantitative study approaches were completed and shared:

- Women beneficiary empowerment: the analysis highlighted the relationship between improved technology adoption, yields, and women empowerment

- OB service provision to OGs: analyzing the number and gender of OGs served by the OBs as well as the number and types of services provided. It showed as well the level of satisfaction of the OGs vis a vis the quality of these services
- Use of shellers and threshers among ADVANCE beneficiaries: assessing the utilization of shellers and threshers among the rice and soybean farmers as well as the reasons of non-utilization

4.3. GEOGRAPHIC INFORMATION SYSTEM (GIS) AND MAPPING

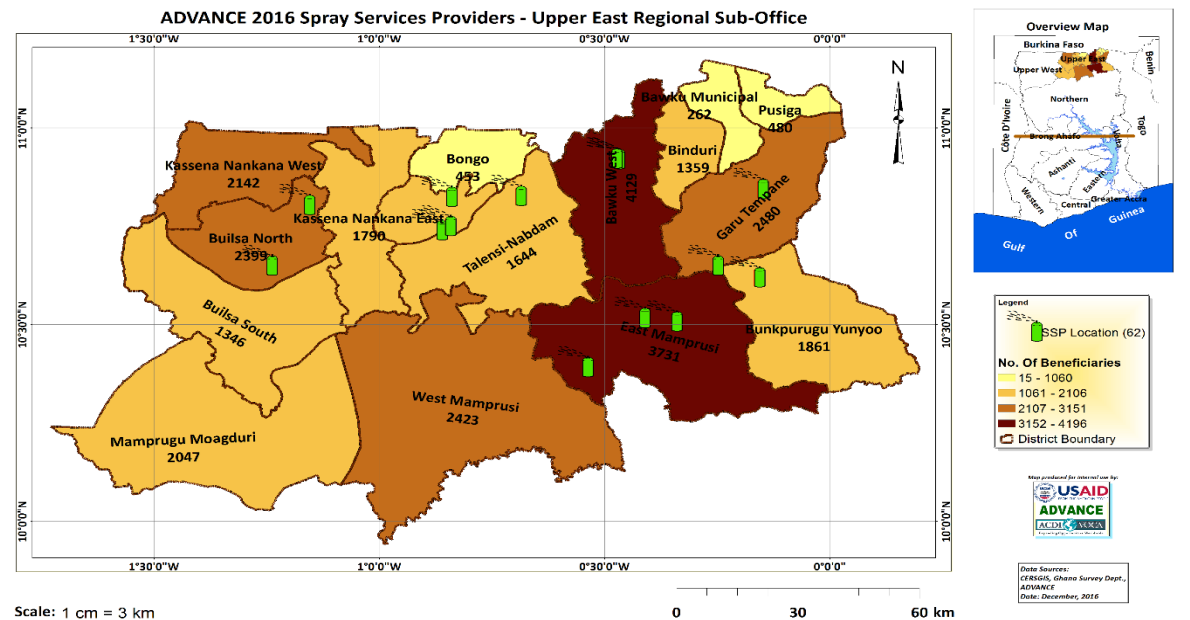
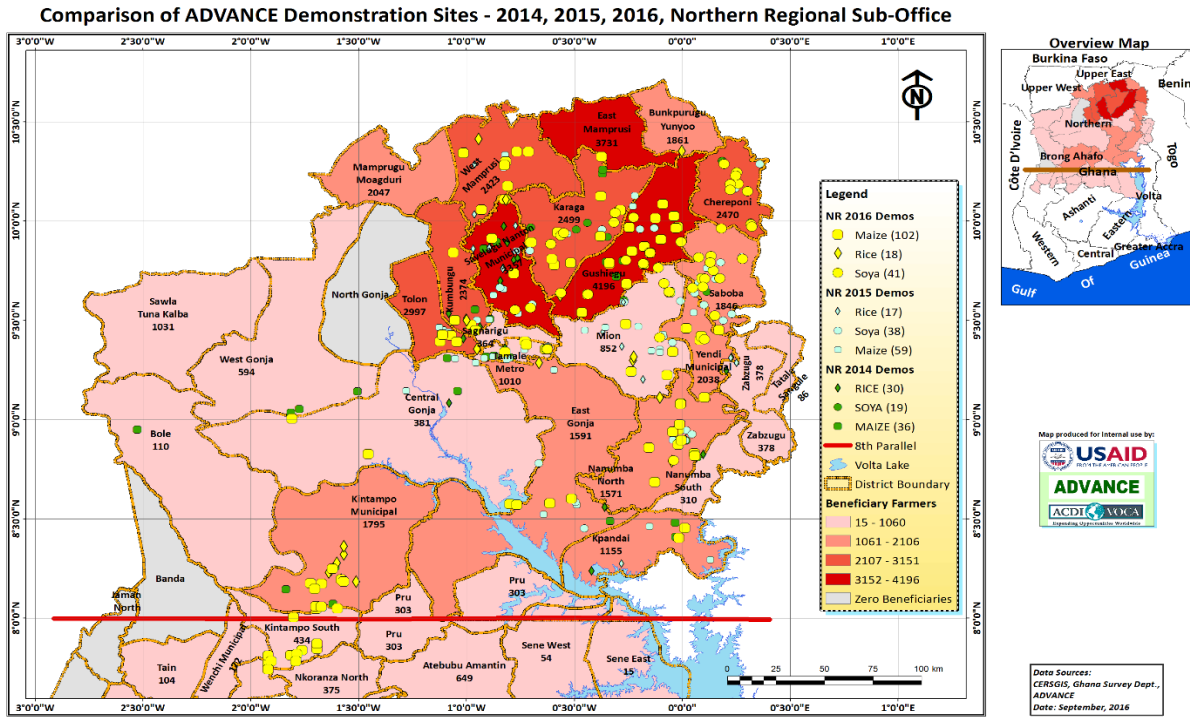
During the quarter under review, the team prepared various maps, including the following:

- Location of Spray Services Providers (SSPs)
- Updated actor information including aggregators, nucleus farmers and input dealers
- Demonstration sites of the three commodities – Maize, rice, and soya for the 2014, 2015 and 2016 planting seasons
- Locations of 2016 Demonstration
- GGC Warehouse update

Furthermore, in collaboration with the USAID/Monitoring and Evaluation Technical Support Services (METSS), ADVANCE designed its online maps platforms:

<https://metss.maps.arcgis.com/apps/View/index.html?appid=a79ee150fdc44f5b95d7d955e3d0469f>
<http://arcg.is/2gKL88x>
<http://arcg.is/2gKL88x>

Examples of produced maps



5. Public Relations and Communications

Through its public relations and communications activities, ADVANCE continued to highlight its progress, impact and successes while ensuring visibility of the project and USAID.

Bi-Weekly Bullets

During this quarter, 17 informational bi-weekly bullets were submitted to USAID. The bullets outlined USAID/ADVANCE's key activities, results and impact.

Success Stories

Four "Telling our Story" and personal interest stories are included in this report for submission to USAID. The following three stories were published on the ACDI/VOCA website and also featured in the ACDI/VOCA's weekly e-newsletter distributed to all international field offices:

- Tablet-based App enhances data collection and extension services
- 6th Annual Pre-harvest Agribusiness Event
- Ghana ADVANCE II signs MoU with Nestle Ghana

Link to the stories:

- avglobal=acdivoca.org@mail136.atl221.rsgsv.net
- avglobal=acdivoca.org@mail11.atl161.mcsv.net
- avglobal=acdivoca.org@mail135.suw18.rsgsv.net

Quarterly Newsletter

The December 2016 edition of the ADVANCE Newsletter, our quarterly newsletter illustrating USAID/ADVANCE's continued support and impact was published and distributed to more than 1,000 recipients including partners, clients and actors involved in the project, in both electronic and printed form.

Building up Project Photo Database

Two Communication and Outreach team members from the ACDI/VOCA Headquarters office, Jessica Taglieri and Maria Castro, organized a photography training for 16 ACDI/VOCA staff in its Accra office. The training was to enable staff take quality photos for the project.

Building Public Awareness

Both the electronic and print media covered several ADVANCE project activities thereby creating public awareness of USAID's support, as well as the project's accomplishment and impact. Media coverage for some of the activities are listed below:

- A story on Nestle Ghana partnering USAID ADVANCE for regular supply of high quality maize carried in the Friday, December 9, 2016 edition of the Daily Graphic
- A story on the 6th Annual Pre-harvest Agribusiness Event in the Monday, October 24, 2016 edition of the Business & Financial Times
- A Story on one of ADVANCE beneficiaries who won the District Best Female Award on the National Farmers' Day – Esther Akabzaa – carried in the edition of Daily Graphic
- An online story carried by Citifm on-line on the Anti-bushfire campaign launched by ADVANCE across the three northern regions: <http://citifmonline.com/2016/11/28/ngos-lead-fight-against-rampant-bushfires/>
- A radio story on the Anti-bushfire campaign in the Northern Region.

ANNEX I : INDICATOR TABLE

Indicator Source	Indicator Type	Indicator/Disaggregation	FY17 Target	FY17 Q1 Actuals	% FY17 Achievement	Comments
CI	OP1	Number of direct project beneficiaries	80,000	33,809	42%	The progress made so far shows that the target for the year will be achieved
		Male	44,000	20,678		
		Female	36,000	13,131		
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	736	164%	More FBOs, OBs, Aggregators and Input dealers were trained on PHH, GAPs training, etc.
FTF	OP3	Number of individuals who have received USG supported short-term agricultural sector productivity or food security trainings	60,000	16,219	27%	More individuals will be trained as the crop season starts later in the year
		Male	33,000	7,773		
		Female	27,000	8,446		
FTF	OP4	Value of agricultural and rural loans	\$1,000,000	0.00	0%	Loans will be applied for and disbursed when the season starts later this year
		Male				
		Female				
FTF	OP5	Value of new private sector investment in agricultural sector or value chain (USD)	\$800,000	\$28,136.77	4%	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%	The progress made so far was due to farmers assessing loans through VSLA groups
FTF	OC1	Gross margins per hectare for selected crops US Dollar under marketing arrangements fostered by the activity (USD/ha)				Data will be reported in Q4
		Maize				
		Male	499	N/A		
		Female	522	N/A		
		Rice				

Indicator Source	Indicator Type	Indicator/Disaggregation	FY17 Target	FY17 Q1 Actuals	% FY17 Achievement	Comments
		Male	908	N/A		
		Female	875	N/A		
		Soy				
		Male	537	N/A		
		Female	490	N/A		
FTF	OC2	Number of hectares under improved technologies or management practices as a result of USG assistance	84,000	N/A		Data will be reported 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	N/A		Data will be reported in Q4
		Male	30,800	N/A		
		Female	25,200	N/A		
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		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			
		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

Indicator Source	Indicator Type	Indicator/Disaggregation	FY17 Target	FY17 Q1 Actuals	% FY17 Achievement	Comments
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	31,103	56%	The progress made far was due to a lot of rural vulnerable households receiving trainings on PHH and AG-tips from Esoko
FTF	OP12	Number of members of producer organizations and community based organizations receiving USG assistance	6,750	4,292	66%	More members from FBOs received trainings on PHH and AG-tips from Esoko
FTF	OP13	Number of MSMEs including farmers, receiving Business Development Services as result of USG assistance	32,000	2,221	7%	More individuals will be receiving BDS as the crop season starts later in the year
CI	OC9	Value chain actors accessing finance	225	0	0%	Actors will access loans as the season starts

ANNEX 2 : SUCCESS STORIES



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FROM THE AMERICAN PEOPLE

SUCCESS STORY

Female Farmer-Based Organization Grows into Technology Promoters



Madam Lucila Dayour (Right), assisted by other group executives, happily explaining some of the technologies adopted on their own established demo site

Photo credit: ADVANCE Project, Tamale Office

“Our husbands now learn from us because we beat them in farming.” Madam Lydia

Telling Our Story
U.S. Agency for International Development
Washington, DC 20523-1000
<http://stories.usaid.gov>

A women’s farmer-based organization based in Tuna located within the Sawla-Tuna-Kalba District of the Northern Region of Ghana is building members’ skills and income as well as leading the way to technology promotion through the support of the USAID/Ghana’s Feed the Future ADVANCE project. The Tuna women’s group is a 150-member female group drawn from five communities in Tuna and its surrounding towns. The group, which was formed by like-minded women striving to improve their standard of living and pay medical bills, school fees, food, rent for their families among others. The women had no agricultural and entrepreneurial skill, but only the desire to learn and continuously improve. The group was introduced to ADVANCE in 2014 from colleagues in a neighboring community and expressed interest to participate in the project.

Since their collaboration, ADVANCE has been working with the Tuna group to identify gaps in agriculture knowledge, and business management. ADVANCE trained the group’s members to become literate in math, on farm operations planning and budgeting, cost-benefit analysis and profitability as well as managing farming operations. They also received training on sustainable organizational practices such as collective marketing, group savings, collective purchase of inputs, taking and keeping records, and leadership skills. Demonstration sites were also established where the women were trained on Good Agricultural Practices (GAPs), such as use of hybrid or improved seed, plant population, burying of fertilizer, good field sanitation and management, and reducing post-harvest loss.

Two years after receiving training on GAPs, the women challenged themselves by asking the project staff not to do any more for them in 2016. They asked the staff to visit them rather and inspect what they were able to do for themselves. True to their word, they took the initiative to establish a demo field in the heart of the Tuna township, along a major road, to implement all the good agricultural practices they learned from ADVANCE for other non-project beneficiaries to learn. They purchased hybrid seed (PAN 53) and fertilizers on their own, followed all the GAPs.

The results were good and fellow villagers, who pass to the church, market, and school, stop to observe how the high yields were accomplished. The group members have also replicated the good work on their own farms and are expecting high yields. Participants are not able to hold their joy whenever a staff of ADVANCE pays them a visit. Madam Jacintha Tuordakuu disclosed to the Upper west Regional Coordinator that, “We now feed our husbands and children, last year I just asked my husband to put his small harvest aside so that we use my own. We have lived on it up to date”. Madam Lucila Dayour, the leader of the group was happy to inform the ACDI/VOCA Program Manager and the ADVANCE Chief of Party how she was able to set up an input shop through ADVANCE linkages. She explained how ADVANCE invited her to a pre-season event in Tamale where she linked up with a major input distributor and has become an input agent.

The immediate impact of the ADVANCE intervention is how the women put their benefits to good use such as paying school fees, medical bill, building and above all setting up businesses.



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SUCCESS STORY

Empowering Farmers to Invest in Themselves



Smallholder farmers meet on a share out day to receive their savings

Photo credit: Doris Owusu, ADVANCE Project, Tamale Office

“I have not been able to purchase this volume of inputs during my farming history not even with my father,” Mr. Kubio after completing a VSLA cycle

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Ametus Kubio, a 35 year old maize farmer, has been farming for more than 20 years. Mr. Kubio recently took over the family farm, located just outside of Kintampo in the Brong Afofo Region of Ghana and produces maize, rice and groundnut. Since childhood, Mr. Kubio has faced many challenges: poor soils, reliance on manual labor, poor access to finance, and low yields. Each farming season is a struggle and often there is no ability to save for the ensuing season. “Finance has been a major challenge during the season and as a result our farm sizes have remained” said Mr. Kubio. The small farms coupled with low access to inputs, including seeds and fertilizers, lead to poor yields. This adversely affects household income and food security. Mr. Kubio wanted to expand but did not have savings or pay for loans that often attract an interest rates of 30% or higher for farmers.

The USAID funded ADVANCE II project assists farmers in accessing agriculture inputs by linking them with Outgrower Businesses that will provide products and services on credit. Recently, ADVANCE added to its activities the establishment of 214 Village Savings and Loans Associations (VSLAs), which encourage farmers to save through the off season and decrease the reliance on grants and credit. In the Kintampo South District, six different communities formed ten associations, reaching 245 smallholder farmers. The training emphasized the importance of savings and included a basic business training to allow farmers to better monitor their expenses, grow their businesses, and reach their financial goals. It covered aspects of group dynamics, election of leaders, drafting and adopting group constitutions, how to save, borrow, repay and share out at the end of the cycle. Each group took ownership of a VSLA box, membership cards and relevant materials to facilitate their operations.

After ten months, the groups shared out the savings based on the shares purchased by each individual. The sharing out of the funds was intentionally coincided with the onset of the production season, during which ADVANCE organizes Input Promotions at the community level with input dealers. These events provide the farmers with logistical and financial access to improved seeds, fertilizer, weedicide, and other equipment which they often lack. The ten groups were able to mobilize savings of GHS 59,165.00 (\$14,546) with GHS 12,939.00 (\$3,181) invested in seed, agrochemicals spraying backpacks and fertilizer for production.

“I was very happy on the day of the share out. I had GHS 320.00 (\$79) as amount saved during the period. A penny was not left with me to the house as I used all the money to buy inputs,” remarked Ametus Kubio. This major season, Mr. Kubio has expanded his farm from one acre of maize to two and a half acres and committed to using fertilizer, weedicide, improved seeds, and row planting, all of which are increased yield techniques taught by the ADVANCE project Good Agricultural Practices training.



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SUCCESS STORY

Transport Union Teams up with Farmers to Move Increased Yields to Market



Farmers Load their Harvest on to Lorries Headed to Aggregators

Photo credit: ADVANCE Project, Tamale Office

“If not by the intervention of ADVANCE project we would not have been able to save this much within the shortest time.

This amount as profit from transportation alone will go a long way to solve a lot of problems for us in our farming businesses”. Lambini Nicholas

Chereponi is a district located near the Ghana-Togo border and it is one of the major farming districts in Northern Ghana. Farmers in this remote district, mainly smallholders, cultivate a wide variety of crops but struggle to bring their harvest to market.

The ADVANCE project is operating in the district on soy production. Working through two Outgrower Businesses (OBs), Ansoi Ernest and Lambini Nicholas, ADVANCE has reached more than 1,500 smallholder female farmers. The intervention has seen an average of 300 kg to 700 kg increase per acre per farmer over the period. ADVANCE linked these OBs to buyers from Ashanti and Brong Ahafo regions and as a result, they signed contracts to supply 80 MT of soya to Royal Danemac, a soy processor in Kumasi.

However, one of the major challenges facing farmers in the area is how to transport their produce to market centers. Due to a lack of well-maintained vehicles and poor road networks, increased yields are not guaranteed to generate increased income. Producers and aggregators encounter challenges as high transport fares erode any gains made during the sale of produce thereby robbing them of their profit margins. The ADVANCE project facilitated an agreement with the Ghana Private Road Transportation Union, the organization that oversees all commercial vehicles in the country. Leveraging on this relationship, the project has been able to link the transport union to farmers and aggregators in the Chereponi District.

Lambini Nicholas and Ansoi Ernest have benefitted from this initiative. Before the intervention by ADVANCE, if the farmers could get access to a vehicle at all, it was often an unreliable vehicle or driver making the end transport a substantial risk. After ADVANCE linked the OBs to transport union, they were able to get discounts and hired trucks to transport 80 MT of soybeans to Royal Danemac in Kumasi at GHS 12.00 (\$3) per 100kg bag, resulting in an average savings of GHS 6.00 (\$1.5) per bag.

With these savings, they generated an increased profit totalling GHS 4,800.00 (\$1,178). Not only are the cost saved substantial in itself but hiring registered vehicles gives a greater level of security that the product will arrive in timely fashion and in good condition. The intervention has made it easier and simple for their produce to get to the end market, which further drives these OBs to invest profits into production inputs and increase farmers’ yields with the comfort of knowing they have an accessible market for their goods.

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