Agricultural Development and Value Chain Enhancement Feed the Future Activity (ADVANCE II)

A USAID FEED THE FUTURE INITIATIVE

2017 Annual Implementation Plan

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September 1, 2016

This report covers activities under USAID Cooperative Agreement No. AID-6

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Acronyms

ACDEP	Association of Church-based Development NGOs
ADVANCE	Agricultural Development and Value Chain Enhancement
ASWG	Agriculture Sector Working Group
BDS	Business Development Service
CAADP	Comprehensive Africa Agriculture Development Program
DCA	Development Credit Authority
DAIP	District Agricultural Investment Plans
EPA	Environmental Protection Agency
FASDEP II	Food and Agriculture Sector Development Policy II
FBE	Farmer Based Enterprise
FBO	Farmer Based Organization
FinGAP	Financing Ghanaian Agriculture Project
FTF	Feed the Future
FMP	Field Management Program
GAIP	Ghana Agricultural Insurance Program
GAPs	Good Agricultural Practices
GCX	Ghana Commodity Exchange
GDA	Global Development Alliance
GGC	Ghana Grains Council
GIS	Geographic Information System
GIZ	German Development Cooperation
GPRTU	Ghana Private Road Transporters Union
GRIB	Ghana Rice Inter-Professional Body
GSA	Ghana Standards Authority
Ha	Hectare
IFAD	International Fund for Agricultural Development
IFDC	International Fertilizer Development Center
IITA	International Institute of Tropical Agriculture
MCC	Millennium Challenge Corporation
METASIP	Medium Term Agriculture Sector Investment Plan
MIS	Market Information Services
MM	Mobile Money
MMDA	Metropolitan, Municipality, and District Assembly
MoFA	Ministry of Food And Agriculture
MSME	Micro, Small And Medium Enterprise
MT	Metric Ton
NF	Nucleus Farmer
NGRP	Northern Rural Growth Program
OB	Outgrower Business
OG	Outgrower
PERSUAP	Pesticide Evaluation Report and Safe Use Action Plan
PPRSD	Plant Protection and Regulatory Services Directorate
QPM	Quality Protein Maize
RaFIP	Rural and Agricultural Finance Program
RFBO	Regional Farmer Based Organizations
SARI	Savanna Agricultural Research Institute
SASL	Sinapi Aba Savings and Loans
SEG	Small Equipment Grant

SIL	Soybean Innovation Lab
SMFM	Sell More for More [market tool for FBOs)
SSP	Spraying Service Provider
USAID	United States Agency for International Development

Introduction

The ADVANCE Project, Cooperative Agreement # Aid-641-A-14-0001, was awarded to ACDI/VOCA on February 5th, 2014 and is scheduled to end on September 30th, 2018. This four-year eight month program is a follow-on to the Ghana Agricultural Development and Value Chain Enhancement (ADVANCE) project which ended on March 13th, 2014. ADVANCE is one of the flagship projects under the USAID Ghana mission's Feed the Future (FTF) program.

This 2017 implementation plan was conceptualized, discussed and deliberated by the full complement of all ADVANCE staff, as well as senior managers from the implementing partners, who met for a full week in June 2016.

This implementation plan for FY2017 touches on all aspects of the project's three main components including agricultural productivity, trade and marketing, and capacity development. The plan was drawn starting with a thorough analysis of the results from previous years and making adjustments as a result of the lessons learned. The plan includes strategies for collaborating with other Feed the Future implementing partners to ensure synergies and avoid duplication. The plan briefly describes the project approach, how this will be monitored during implementation and a conscious effort to document the processes, outputs and immediate outcomes to ensure effective learning and adaptive management.

Specific activities that will lead to the achievement of the broad objectives have been identified for each of the project's three sub purposes. Activities for cross cutting areas (gender, environment, grants, and nutrition sensitive agriculture) are also presented as well as an elaborate monitoring, evaluation and learning plan.

The plan has been designed keeping in mind previous results and learning experience, however, in keeping with our adaptive management approach, there may be a need to modify some of the strategies as new learning occurs during implementation. Any modifications in implementation strategies will not affect the targets but rather enhance their attainment in the most efficient manner.

A. Project Management

A.1 Implementing Partners

ADVANCE is managed by ACDI/VOCA as the prime contractor and has a well-balanced and experienced project team, some of who were retained from the initial ADVANCE project. ACDI/VOCA, as well as the implementing partners: ACDEP, PAB Consult and TechnoServe, have extensive experience managing development projects across the world. All the partners have great experience working in northern Ghana and the technical capabilities to manage the project. Together, the implementing partners have a combined total of 142 full time staff (Annex 1) working on the project and posted to various locations within the intervention zones.

ACDI/VOCA provides overall management, technical direction, administrative services; reporting to USAID; coordination with other donor activities; and oversight of sub-awardees' activities. Coordination among partners ensures maximum benefit of each partner's technical expertise, and is driven by the COP through the ADVANCE Management Steering Committee comprised of the leadership of the implementing partners. The committee meets quarterly to review project progress on results and objectives. The committee also serves as an avenue to resolve any contractual issues that may arise, update staff requirements, and assess project approaches and activities.

A.2 Office Operations & Staffing

The project has five office locations. The ACDI/VOCA Country Office in Accra houses the ADVANCE Project office where the COP (Dr Emmanuel Dormon), and two DCOPs for Monitoring, Evaluation, Learning and Quality Assurance (Dr. Nirinjaka Ramasinjatovo), and Operations and Grants (Philip Ataarem), are based. A few key staff also operate from Accra including the Senior Accountant (Patrick Addai), Monitoring and Evaluation Coordinator (Samuel Akoi Wontumi), Project Database Manager (Robert Sackey), Technical Leader for Trade and Marketing (Nicholas Issaka Gbana), Program Specialist for Policy and Advocacy (Roland Akabzaa), and the Program Specialist for Public Relations/Communications (Adwoa Mensima Sey).

The Tamale office is the main hub for project implementation in the North. The DCOP Technical (Allan Pineda), directs all technical programs in the field, along with Technical Leaders for agricultural production (Peter Asibey-Bonsu), business services (Doris Owusu), and capacity development (Chrysanthe Ataarem). This team is supported in Tamale by program specialists for ICT outreach (recruitment in progress) environment (Victor Mombu), Grants Specialist (Agatha Ayirewogye) also operate from the Tamale office.

Regional technical teams are led by Regional Coordinators (RC) who are very experienced staff who have worked with the project since ADVANCE I. The regional technical team based in Wa (Upper West Region) is led by Emmanuel Gyarteng, the Bolgatanga team (Upper East Region) is headed by Michael Amaniampong, and the RC for the Northern Region team in Tamale is Francis Essuman. A new office has been established in Sunyani to serve as the coordination

point for the maize belt of Brong Ahafo and Ashanti Regions, and covers 25 districts. The location of the new office is much closer to the actual field operations and will improve the efficiency of the team that was originally based in Kumasi and spending a lot of resources travelling to support the three Senior Agricultural Production Officers (SAPOs) based in Sunyani, Techiman and Ejura. The Regional Coordinator (Peter Asibey-Bonsu) is supported by an M&E Officer, a Business Service Officer, and a Marketing Officer. The Kumasi office now only has a Marketing Specialist whose focus is on the market catchment areas in the Ashanti Region for the target staple crops. Both the Kumasi and Sunyani offices are shared with the USDA funded Poultry Project to promote efficient use of resources and proper accounting records are kept to ensure accurate billing and accounting.

A.3 Development Partner Coordination

ADVANCE will continue to play an active role in the coordination and leveraging of FTF projects namely; Agricultural Technology Transfer (ATT), Financing Ghanaian Agriculture Project (FinGAP), Resiliency in Northern Ghana (RING), the Agricultural Policy Support Project (APSP), the World Bank/USAID Ghana Commercial Agriculture Project (GCAP), the SPRING Project, as well as the new Natural Resource Management Project. Periodic COP meetings will be held regularly to coordinate and avoid duplication of activities in our respective work plans and grants programs, among others, and ADVANCE will continue to play an active role in these coordination efforts in the coming year.

ADVANCE will also continue to participate in other technical sub-groups from the various Feed the Future (FTF) projects that meet regularly. The groups include Public Relations and Communication (PR&C), Monitoring and Evaluation (M&E), and Grants. The Monitoring, Evaluation and Technical Support Services (METSS) project has led the coordination of the all the FTF projects' effort on knowledge management and learning (KM&L) and ADVANCE will continue to support that effort.

The ADVANCE project management team will continue to work closely with MoFA at the district and regional levels, and collaborate with the Northern Sector Agriculture Investment Coordination Unit (NSAICU) under the Savannah Agricultural Development Authority (SADA). With the large number of value chain initiatives in the north, there is a significant need to ensure consistency across technical assistance programs and for carefully measured investments grounded in sound market development practices that put local partners and private sector actors at the forefront of planning and implementation. As we have seen, this can best be achieved through these coordination efforts.

During the 2017 implementation year, the project will continue to link activities with other key development players through collaboration with the projects in the north, including but not limited to the MOFA/IFAD/ADB's Northern Rural Growth Program (NRGP), AGRA/IFDC's Farmer to Markets, MEDA's soybean program in the western corridor around the Upper West Region, and the Rice Sector Support Project (RSSP). This will entail periodic collaborative review meetings,

joint workshops with key value chain stakeholders in the three target crops, as well as the annual preseason and pre-harvest agribusiness fairs.

B. Implementation Strategy

B.1 Background

Ghana is currently facing economic challenges with annual inflation rate above 18%, interest rates above 30% per year, and an agricultural growth rate of less than one percent in 2015. Northern Ghana faces greater challenges than most parts of the country with complex interrelated economic, health, environmental and educational challenges that have contributed to this disparity for the majority of its 4.3 million people (17% of total Ghana population). Low levels of literacy, poor nutrition, inconsistent weather patterns, geographic isolation from market centers, periodic insecurity, inaccessibility of inputs, and a low adoption of modern farming practices have contributed to persistent low productivity. Women smallholder farmers are even more disadvantaged due to limited access to and control over land and production resources, lower education levels, and access to training. Analysis of data collected by the project in 2015 showed that only 32% of women in the project's area of operation had access to any form of credit or financial service (input credit, savings and loans, grants, mobile money etc), and this constrains their ability to invest in production inputs and improve their productivity.

In the past five years, Ghana imported on average 480,000 MT of rice, in excess of 14,000 MT of soy products, and almost 15,000 MT of maize. With urban populations and incomes generally on the rise, demand for such staple foods is increasing. The economic conditions, although challenging, presents some opportunities for the North, where the economy relies heavily on the production of these key staple food crops. The Ghanaian government and development partners, as well as the private sector, are now investing in commercial agriculture initiatives in northern Ghana to unearth the agricultural potential.

The ADVANCE II theory of change posits that there are three functions of value chain competitiveness—agricultural productivity, market access and trade, and an enabling environment—which are catalyzed by three enablers of competitiveness - *clear incentives for investment, strong local capacity and mutually beneficial relationships* (see Figure 1). Underpinning the theory is that private sector actors, including men and women farmers (both large and smallholders), are the drivers of competitiveness, while the government and local stakeholders are facilitators, empowered by ADVANCE II investment in capacity building and innovation promotion.

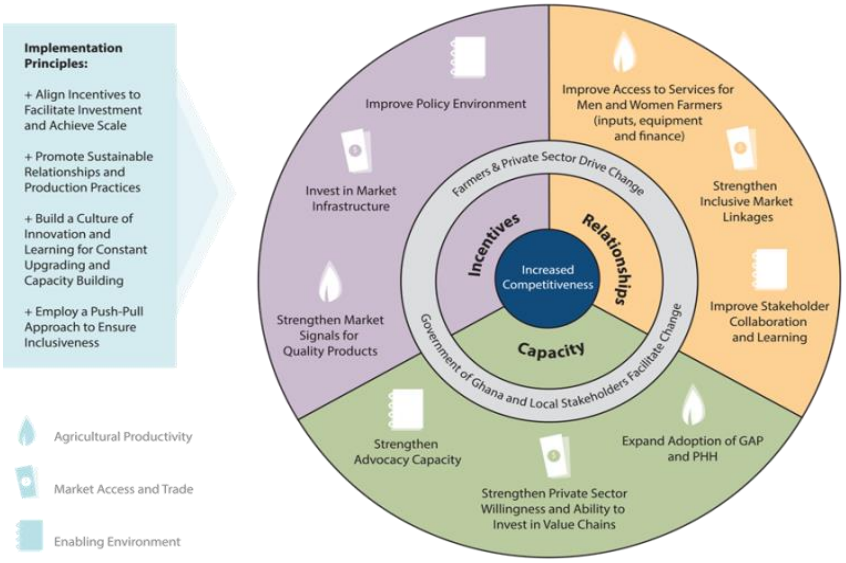


Figure 1: ADVANCE's theory of change

The 2017 implementation plan is designed to expose targeted farmers to new commercial opportunities to access markets, while strengthening existing long-term relationships with businesses investing in the value chain, improved access to market information, improved access to services and products including financing, high-quality inputs, new technologies, mechanization services, and improved ability to meet market requirements. The end result will be increased productivity and profitability for both large and smallholder farmers.

The central approach is to focus on end-market opportunities that provide compelling incentives for businesses throughout the value chain to invest in the chain, including upgrading their own performance. For example, competition from imported rice should drive investment in Ghana's domestic rice value chain by millers to expand their capacity and the quality of the end product with upgraded machinery; by traders to develop dedicated smallholder farmer suppliers; and by farmers to improve productivity through the efficient use of quality inputs and improved varieties. ADVANCE II's strategic focus on growing end-markets also attracts investment from businesses in supporting markets such as financial institutions, input dealers, and equipment service providers who recognize the potential to grow their own businesses by servicing actors in these value chains. Ultimately, the upgrades to the value chains sustainably, will benefit smallholder farmers by building their capacity and improving their access to markets, information and services.

To encourage businesses to make these investments, ADVANCE II employs a facilitative approach. The project targets lead firms in the value chains and supports markets that are able to impact large numbers of smallholders and are willing and able to invest in performance upgrades. ADVANCE II ensures that targeted lead firms demonstrate considerable commitment and exert ownership of the upgrading process.

B.2 Technical Challenges

The ADVANCE II project targets smallholder farmers through business service providers that provide the farmers with either in-kind or cash-up-front services. These providers (processors, commercial farmers, aggregators, input dealers) reach large numbers of smallholders and are willing and have the cash flow to invest in upgrading the value chain. Of the farmers participating in the ADVANCE II project, 99 percent are smallholders with an average farm size of 1.5 ha or less; and each farmer is linked to one or more service providers.

The project's target smallholder male and female farmer population in the northern Ghana face many challenges including poor infrastructure, high cost of borrowing, inadequate access to production inputs, machinery, and markets, and therefore the project is implemented with these constraints in mind. The technical interventions described in this implementation plan are designed to consolidate the gains from ADVANCE I and the first two (2) years of ADVANCE II, and leverage where momentum is occurring in new technology adoption, more efficient use of mechanization, stronger links to end markets, and actors' willingness to invest in the value chain and industry.

B.3 Lessons learned from project implementation

An important strategy of the ADVANCE project is to use an adaptive management approach, where the project team consistently assesses the project strategies vis-à-vis the outputs and outcomes and consequently adjusts the strategies accordingly, where necessary, to ensure that the desired results are attained in the most effective and efficient manner.

Recognizing the complexity of increasing productivity and incomes of smallholder farmers the project's Monitoring and Evaluation (M&E) system is structured around a data collection and analysis cycle that establishes a learning environment. The cycle involves a planning, implementation, monitoring, research, and subsequent re-examination of actions. The process involves a series of feedback loops that provide managers and decision-makers with information on the outcomes of their choices, results of past management decisions and on present conditions. Our learning agenda integrates with the project's standard indicator monitoring and effectiveness evaluation methodologies. Feedback and dialogue among beneficiaries is a central component and learning reviews are scheduled to ensure that everyone has the opportunity to continuously examine results and learn from the project's experiences.

One of ADVANCE's key intermediate goals is to improve smallholders' productivity. The project works to achieve this by training the farmers on improved agricultural technologies, which in turn will improve their yields. The project ensured that women in particular are targeted for training. As part of the projects' learning activities in 2016, we analyzed the impact of training project beneficiaries on technology application and yields in order to test the validity of the following fundamental assumptions:

- Training will influence uptake of technologies by women;

- The longer the farmers (male and female) interact with ADVANCE, the more they will apply certain technologies, and
- Application of technologies by both male and female farmers will increase their yield.

The technologies tested were the use of certified seeds (i.e. non-saved seeds), fertilizers, row planting, mechanical land preparation, and rice transplanting, based on their presumed effect on yields. Most of the data was collected during the 2015 gross margin survey, during which data on production and application of technologies from over 3,200 randomly selected maize, rice and soybean farmers who were reached by the project in FY15 was collected. A brief description of how the data was collected and the findings, are summarized below. Please note that the surveyed farmers are project beneficiaries, except that most beneficiaries are not likely to benefit from all the services facilitated by the project, or have the chance to be trained directly by the project. The results must therefore be seen in the context of what service or project activity impacted most on improving productivity of beneficiaries.

Assumption 1: *Training influences improved uptake of technologies by female farmers*
During the 2015 gross margin survey, under the gender component, female farmers were asked whether they had attended any training on Good Agronomic Practices (GAPs) from ADVANCE I or ADVANCE II and tests were conducted to assess how these trainings influenced their application of technologies during the 2015 season.

Table 1: Application of improved technologies by trained and non-trained women maize farmers[1]

GAPs	Non-saved seeds***	Fertilizers***	Row planting***	Mechanical land prep***
Non trained	66%	66%	14%	26%
Trained	73%	84%	63%	36%
Grand Total	69%	74%	34%	30%

The results shows that significantly, trained female maize farmers used certified seeds (non-saved seeds) and fertilizers, and adopted row planting and mechanical land preparation more often than those who were not trained (see Table 1). However, in both categories, mechanical land preparation remained low. The technology that had the most significant impact from training is row planting.

For rice, the results shows that row planting, transplanting and mechanical land preparation are not common practices among women rice farmers, whether they were trained or not (see Table 2).

[1] The stars in the tables correspond to the level of significance of the tests' results. *** means p-value<0.001, ** means p-value<0.01, * means p-value<0.05

Table 2: Trained and non-trained women rice farmers' application of improved technologies

GAPs	Non-saved seeds***	Fertilizers	Row planting	Mechanical land prep	Transplanting
Non trained	30%	65%	5%	0%	4.88%
Trained	60%	67%	8%	0%	15.89%
Grand Total	53%	67%	8%	0%	12.84%

Therefore, in rice, the effect of training seemed to be significant only on use of non-saved seeds. Use of fertilizers were lower than among maize farmers (67% vs. 74%).

Table 3 presents the results for the female soy farmers, for whom training did not seem to be linked to any significant difference in behavior in any of the assessed technologies. One can also note that the use of fertilizers is very low.

Table 3: Trained and non-trained female soy farmers' application of technologies

GAPs	Non-saved seeds	Fertilizers	Row planting	Mechanical land prep
Non trained	45%	12%	60%	46%
Trained	35%	9%	55%	47%
Grand Total	37%	10%	56%	47%

Further probing showed that ADVANCE trains soybean farmers on the use of triple superphosphate (TSP) which is not readily available at the community level, while non-trained farmers use any fertilizer that is readily available. Although one would have expected that using fertilizers other than TSP will not lead to any significant increases in yield, they actually did (see Table 12 and Table 13), hence, the project team will explore further and re-package the message on fertilizer use in soybean production in the coming season.

Some of the key lessons learned from the results on training and technology adoption include the following:

1. Trained farmers do not always apply more technology than the non-trained because of the ability to afford the cost of the technology. This is not surprising, and the project will intensify efforts to ensure that trained farmers access the necessary funds to purchase the inputs required to improve their productivity, rather than rely solely on the Outgrower Business (OB) who may not be able to provide all their needs;
2. Trainings do not directly impact access to mechanization especially with rains delays; also, where the OB is unable to provide outgrowers with the service, it is those who have money to afford mechanization that receive this service from elsewhere and not necessarily those trained; and
3. The use of fertilizer and certified seed seems to be more dependent on farmers' capacity to access fertilizer rather than the training provided to farmers. However, the training will ensure proper application leading to better results.

Assumption 2: *The longer farmers interact with ADVANCE, the more they will access and apply improved technologies*

To test the second assumption, data on improved technologies application were compared with the enrolment year of the farmers in the survey. Table 4 and Table 5 below shows the results for male and female maize farmers respectively. For both sexes, more of those enrolled in FY14 applied all the technologies than those in FY15, with the exception of mechanical land preparation by women.

Table 4: Male maize farmers' application of improved technologies by enrolment year

Enrollment year	Non saved seeds	Fertilizers***	Row planting***	Mechanical land prep
FY14	72%	79%	47%	39%
FY15	65%	65%	25%	31%
Total	66%	68%	29%	33%

Table 5: Female maize farmers' application of improved technologies by enrolment year

Enrollment year	Non saved seeds**	Fertilizers***	Row planting***	Mechanical land prep
FY14	76%	84%	62%	28%
FY15	66%	70%	25%	31%
Total	69%	74%	34%	30%

This is very significant for fertilizers and row planting for both women and men, and significant for non-saved seeds for the women. This may mean that the assumption is valid for those technologies, especially where the number of years enrolled impacted on access to inputs. It also highlights the fact that even one year after the interaction with the project, access to mechanical land preparation for maize farming remains low, which further strengthens the point made earlier about access to such services where the OB is unable to provide it for his/her outgrowers.

For rice, the assumption that the longer farmers interact with ADVANCE, the more they will apply improved technologies seems to be confirmed (see Table 6 and Table 7) for both male and female rice farmers. Application of non-saved seeds and fertilizers are more frequent among the FY14 enrolled farmers than the FY15 ones. The results also shows that even if transplanting is rarely used, FY14 farmers are more likely to apply it than the FY15 farmers. However, row planting is not influenced by the length of the interaction with the project.

In order to address this, this year, the project will intensify efforts at forming transplanting gangs to provide this service for a fee. Also, the project will, in addition to transplanting, promote seed drilling where transplanting is not possible due to lack of labor or time.

Table 6: Male rice farmers' application of technologies by enrolment year

Enrollment year	Non saved seeds***	Fertilizers***	Row planting	Transplanting*
FY14	73%	83%	10%	15.20%
FY15	42%	64%	12%	7.14%
Total	56%	73%	11%	10.42%

Table 7: Female rice farmers' application of technologies by enrolment year

Enrollment year	Non saved seeds***	Fertilizers***	Row planting	Transplanting*
FY14	64%	77%	6%	16.67%
FY15	38%	53%	9%	8.57%
Total	53%	67%	8%	12.84%

Among soybean farmers, mechanical land preparation is significantly more common among the FY14 enrolled male and female farmers than the FY15 enrolled ones. More of the FY14 farmers adopted row planting compared with the FY15 ones, for both sexes. Interestingly, use of non-saved seeds is less prevalent among the FY14 female soy farmers than the FY15's. That trend is even more significant when the use of fertilizers is considered, where only 7% of the FY14 female soy farmers against 12% of the FY15 ones applied fertilizers. This observation will be given attention in designing training and field demonstration activities in 2017, as well as supporting the establishment of VSLAs to enable smallholder farers purchase fertilizers and other inputs.

Table 8: Male soy farmers' application of technologies by enrolment year

Enrollment year	Non saved seeds*	Fertilizers	Row planting***	Mechanical land prep***
FY14	52%	19%	65%	61%
FY15	41%	18%	44%	39%
Total	46%	19%	54%	50%

Table 9: Female soy farmers' application of technologies by enrolment year

Enrollment year	Non saved seeds	Fertilizers***	Row planting	Mechanical land prep*
FY14	37%	7%	62%	57%
FY15	38%	12%	53%	41%
Total	37%	10%	56%	47%

Assumption 3: *Application of technologies increases yield*

Analysis of the data shows, unsurprisingly, that the hybrid and improved varieties promoted by the project produce significantly higher yields than other varieties and the farmers' saved seeds. The difference can be as high as 100%. For example, Pioneer 30Y87 produced a yield of 2,155.83 kg/acre against Abrohoma (an open pollinated variety released by the Crops Research Institute of Ghana in 2010) at 826.25 kg/acre for female maize farmers, for rice the research released variety, IR841 produced 1,979.24 kg/acre against Tox (an old variety) at 1,258.66 kg/acre for male rice farmers. For soybean, Sambimba produced 756 kg/acre against Jenguma's 642 kg/acre on average.

However, only two thirds of the maize farmers, half of the rice farmers and less than half of the soy farmers used non-saved seeds. The findings confirms higher yields for non-hybrid varieties of maize planted by farmers (see Table 10).

Table 10: Yields in kg/acre by variety

Maize variety	Male	Female
Abrohoma	902.50	826.85
Pioneer 30Y87	2,025.96	2,155.83
Obatanpa	1,075.65	1,181.05
Mamaba	1,526.54	1,393.34
Pan53	1,557.08	1,724.55
Etubi	1,731.37	968.38
Pan12	1,385.56	1,611.67
Pioneer 30F32	1,534.24	1,529.76

Variety	Male	Female
IR841	1,979.24	1,432.67
Jasmin 85	1,472.57	1,472.57
Tox	1,258.66	1,246.11
Togo Marshall	1,117.15	1,136.05
Saved seeds	*1,844.07*	*1,613.97*

Soya variety	Male	Female
Jenguma	626.25	660.61
Sambimba	754.39	758.45

From the results, row planting can significantly increase yields by an average of 18% for the maize male farmers and 30% for their female counterparts. However, only 29% of the maize male and 34% of the female maize farmers planted in rows. In the coming year, the project will support farmers to adopt row planting using various strategies, including the provision of matching grants to purchase simple planters and dibblers.

Also, mechanical land preparation could increase maize yields by 10% to 13% (Table 11and Table 12). These differences seems low and will be further investigated in the coming season, while at the same time actively promote mechanical land preparation using climate smart equipment, especially rippers. Incentives will be provided through matching grants at discounted rates for farmers who are willing to adopt this method.

Table 11: Maize yield among male farmers by application of technology

Application	Row planting***	Mechanical land prep*
Yes	1,470.80	1,390.31
No	1,243.31	1,261.20
Difference	18.30%	10.24%

Table 12: Maize yield among female farmers by application of technology

Application	Row planting***	Mechanical land prep
Yes	1,485.21	1,362.09
No	1,142.08	1,201.48
Difference	30.04%	13.37%

The use of fertilizers could increase rice yield on average by 13% for male farmers and 12% for female farmers and soy yield by 42% for male and 32% for female farmers. However, only 19%

of the soy male farmers and 10% of the female ones applied fertilizers on soy. A major constraint to fertilizer application is access and cost.

Table 13: Soy yield among male farmers by application of fertilizers

Application	Fertilizers***
Yes	1,064.06
No	749.63
Difference	41.94%

Table 14: Soy yield among male farmers by application of fertilizers

Application	Fertilizers
Yes	939.62
No	713.55
Difference	31.68%

There is the added complexity of the government fertilizer subsidy program that tends to create uncertainties when the modalities are not announced early and the program itself takes off late, leaving farmers to decide whether they should buy the unsubsidized product from the open market, or wait and risk receiving the fertilizer late or not at all. The project will, in the coming season, re-examine our past strategies and design more effective ways of ensuring access to fertilizers.

Recommendations from the findings

- *Assess further the reasons for low adoption of row planting and mechanical land preparation for maize and rice and non-saved seeds and fertilizers for soy,*
- *Intensify support to increase the application of the above cited technologies, this could include a review of the trainings delivery mechanisms, promoting equipment in the grant scheme among others.*
- *Prioritize the high impact and most economical technologies that increase yields most significantly (e.g. row planting),*
- *Increase farmers' access to authentically certified and high yielding seeds, and*
- *Integrate a gendered approach when promoting and training on technologies: women seemed more prone to apply maize technologies as well as soy row planting and rice transplanting. Identify and address why they seem to struggle more than the men on all other technologies*

C. Strengthening the Value Chains

The overall goal of the ADVANCE Project involves scaling up private sector investment and involvement in the maize, rice and soybean value chains to achieve a greater degree of food security, while increasing competitiveness in these respective commodity value chains.

The project is organized into three sub-purposes including:

i) increased productivity in targeted commodities;
ii) increased market access and trade; and
iii) strengthened local capacity.

The project also has crosscutting areas including gender, environment, nutrition sensitive agriculture, and a strong monitoring, evaluation, and learning, component. Detailed activity plans and tracking progress are presented in Annex 2 while the indicator targets are presented in Annex 3.

C.1. Sub-Purpose 1: Increased Agricultural Productivity in Targeted Commodities

Objective 1: Adoption of improved productivity-enhancing technologies, services and practices by women and men farmers increased.
Objective 2: Sustainable [business] systems for financial, advisory, aggregation and on-farm, post-harvest service provision and input distribution strengthened.
Objective 3: Incentives for smallholder investment in new productivity enhancing technologies, services and practices strengthened.

C.1.1 Increased Adoption of improved productivity-enhancing technologies services and practices by women and men farmers

The ADVANCE II technical team will implement several activities in 2017 that will enhance crop productivity and improve gross margins. The team will do this by scaling up the climate-smart agriculture technologies introduced in the 2015 crop season and continued in 2016. This will mitigate some of the impacts of climate change, particularly the shorter and erratic rainfall pattern, and allow for earlier land preparation. Some of the specific activities that will be implemented are described in this section.

Actor supported technology demonstration sites

Demonstration sites have proved to be an effective training point for showing farmers how to apply productivity enhancing technologies. Results in previous years have reaffirmed the trust and support from private input companies who donate 100% of the materials for the sites. New sites will be selected for 2017 to expand the reach. The project will collaborate with both previous and new participants to establish at least 480 sites in 2017. New products are entering the market,

especially fertilizers, and input companies see the demonstration sites as the opportunity to show the effectiveness of these products and to market them.

The specific tasks that will be undertaken include:

- Sponsors will be identified for all the inputs required;
- Sites will be selected strategically for easy access by both male and female farmers, and the all the relevant actors, as well as non-project beneficiaries;
- Good agricultural practices and post-harvest training will be conducted at all the sites (and selected farms) together with the private sector firms, nucleus farmer and MoFA extension agent, where possible; and
- Sites will be monitored regularly and data recorded for analysis and sharing of the results.

Field Management Program.

The nucleus farmer field management program started in 2014, and will continue to be expanded further in 2017. The Farm Management Program (FMP) has become part of the business plans developed with, and for OBs and are also incorporated in the Outgrower Business Management (OBM) curriculum. Outgrower Businesses are encouraged to invest in a field manager to be trained by the project while mobility costs are being supported through the ADVANCE grant program.

Some specific tasks that will be implemented in 2017 under this activity include the following:

- Project staff will identify interested OBs and discuss the FMP with them;
- Where it is not yet incorporated, the project will support the OBs to incorporate the field management program in their business plans;
- Facilitate the engagement of paid field agents by willing OBs;
- Organize capacity building training for engaged agents and managers;
- Facilitate delivery of technical services through the OBs' field agents. This will include extension and tractor service management, input distribution to OGs, post-harvest mechanization services, GAPs, including post-harvest training, management of demo site, aggregation of product, community liaison, and lead farmer development;
- Use the projects matching grant mechanism to provide incentives to offset some of the startup costs. This will be limited to motorcycle or "motor-king" to aid in mobility required for the job; and
- Support OBs and their agents with grants to use ICT tools for training OGs. This will be done through grants for ICT tools such as Tablets, with the extension software installed on it, Pico projectors and simple speakers. This will ensure that agricultural advisory services become embedded in the services provided by the OBs to ensure effective and efficient use the production inputs they provide to the outgrowers.

Climate Smart Conservation Agriculture.

Since 2014, ADVANCE has been introducing Climate Smart Agriculture (CSA) practices with the aim of reducing and/or mitigating the risk associated with climate change, especially its effect on the rainfall pattern in northern Ghana. In 2015 and 2016, significant progress was made in

disseminating knowledge of CSA techniques, including the provision of grants to encourage investments in rippers (for land preparation with minimum disturbance of the soil).

In 2017, the project will double its efforts to scale up CSA activities through the following:

- Establishing new minimum tillage demonstrations;
- Promoting a no-burn policy campaign in all the regions in the north, in collaboration with District Assemblies;
- Provide weather forecasting information through SMS and other electronic media; and
- Expand the area under minimum tillage by facilitating ripping for interested OBs and OGs.

Organize Farm Clinics

New agronomical challenges are encountered each season, some for which there may be no precedent. The farm clinics will provide an opportunity to consult appropriate experts from the research institutions or the Ministry of Agriculture on the matter and use the affected farm to teach not only ADVANCE's beneficiaries but also its staff. During the 2017 cropping season, project staff will identify unusual problems affecting project beneficiaries, measure its spread and document all observations. The project will then coordinate with identified experts at regional MoFA office to assess those within their capacity and address them, and refer those that fall outside their capacity to researchers to assess them and organize clinics to address the problems

Digital Financial Services

As an expansion of this activity which started in 2015, and increased in use in 2016, 50 more OBs will be supported to make transactions through mobile-money to pay their OGs and also have the option of becoming merchants or agents in their communities. This activity will be carried out by linking actors to Mobile Money Service providers (MTN, VODAFONE, TIGO, AIRTEL) as merchants to incorporate digital financial services into operations

Outgrower/Smallholder Farmers Credit Management

In order to reduce the risk of OBs who provide services on credit to OGs, the latter will be sensitized and trained on credit management by project staff. The project will sensitize and train at least 20,000 of the smallholder beneficiaries on credit management. The project will develop a curriculum and selected project lead farmers will be trained as trainers to conduct the credit management training before the start of the 2017 crop season.

C.1.2 Strengthened sustainable systems for financial, advisory, aggregation and on-farm, post-harvest service provision and input distribution

Farm Business Planning

The business services team, with Agricultural Production Officers (APOs) of the prroject, will work with all value chain actors to develop an annual OB business plan that will guide both the actor and the facilitators in annual scheduling, and will determine what resources will be required to implement their plans. The plans will follow a fiscal year format that will cover the planting and production seasons and most of the post-harvest and marketing season. The main objective of these plans is to encourage investment in OG services that include but are not limited to tractor

services, provision of seed, fertilizer and other agrochemicals, post-harvest mechanization for shelling and threshing, aggregation and marketing services. These plans will be drafted keeping in mind the lessons learned from previous years, including some of the results articulated in section B3 above.

Specific tasks will include:

- Administering the project's business diagnostics tool to new OBs prior to the planning process, to identify significant strengths and weaknesses of the operation;
- Determining what, if any, financial assistance is required through commercial credit or grants;
- Supporting OBs to operationalize their business plans, monitor implementation and make adjustments where necessary to ensure that set goals in the plan are achieved;
- Using the concept of the OB networks to source volumes of inputs and enjoy discounts; and
- Developing four-year strategic plans for more developed OBs.

Input access at community level improved and SSP support.

Facilitate a wider distribution of certified seeds, agrochemicals and fertilizer through improved linkages between input dealers and community agents, OBs, FBOs and OGs.

Specific tasks will include:

- Identify targeted communities which are potential markets for agro inputs but where there is no input retailer or agent;
- Facilitate the setting up of community input agents, by creating linkages between distributors and local retailers, this will improve the access to inputs by smallholder farmers, especially women;
- Link community input promotion to the share-out phase by the Village Savings and Loans Associations (VSLAs) where possible, to promote investment in production inputs by the farmers; and
- Support Spraying Service Providers (SSPs) through training and some equipment through the project's matching grant funds. The training will be done in collaboration with the Ministry of Food and Agriculture and the Environmental Protection Agency (EPA).

Facilitate OB Networking.

The project will continue to support the 13 zonal networks established in the three northern regions in 2016, to play advocacy roles for farmers, achieve volumes of scale in transporting goods, make bulk purchases and engage in other activities that will improve their efficiency and benefit members.

We will organize in the following way:

- Group OBs based on their operational zones;
- Organize three OB forums to introduce the concept of the Outgrower Business Network to OBs who are not yet part of the network groups;
- Facilitate the first Networks' meeting for these OBs;

- Organize capacity building training for the networks on service demand and delivery to members; and
- Introduce members to efficient service delivery to members.

Outgrower Business Management.

The Outgrower Business Management (OBM) capacity-building program was started in the 2015 season with positive results. The OBM program builds on ADVANCE's training resources and lessons learned to develop a certified training program for OBs. Program participants will be required to complete the core business curriculum that will include a mix of classroom time, study tour visits and practical application exercises. Annual farm business plans and budgets will be produced through this program.

Under the OBM program, OBs will be trained on 8 modules in the Project's OBM curriculum, and OBs will be assisted to start utilizing effective records keeping systems to aid business decisions. The OBM curricula will include the following topics:

- Computer accounting
- Computer and internet competency
- Value chain concepts and how to compete profitably
- Business and financial planning
- Effective management of outgrower schemes
- Management of demonstration farms/sites
- Proper tractor operation and maintenance
- Post-harvest handling
- Contracts, marketing and negotiation
- Women entrepreneurship and leadership

Outgrower Business Office Program.

Outgrower Businesses will be encouraged to create simple "offices" at their business locations where they and/or their managers can conduct business, maintain records and safely keep computer equipment for accounting and other business record keeping. In line with the business training, business planning and management, the project promotes the office concept, which has become popular with OBs since 2014. Experienced OBs who conduct farmer-to-farmer visits have supported this concept and will continue in 2017. Interns from the local Universities will be assigned to OBs to assist the OB manager with new office systems and procedures which will build on experience from the past two years.

Financial Services.

From our learning survey, it was not surprising to realize that training farmers, and not supporting them adequately to access seeds, fertilizer and land preparation services, will not lead to application of improved technologies. Part of the challenge has been the over reliance on OBs by OGs for inputs and all their service needs, meanwhile most OBs are unable to raise adequate working capital to reach all the OGs. Therefore, the business service team will identify alternative sources of finance and also continue to provide the linkage between actors and appropriate financial institutions, to bridge the gap. These will be done through the following:

- Promoting the formation of VSLAs with emphasis on women groups and FBOs;
- Promoting finance through tripartite arrangements i.e. financial institution (FI), buyer and OB to facilitate credit recovery;
- Linking actors to financial institutions, based on investment gaps in business plans;
- Collaboration with FinGAP to support actors to access finance through FinGAPs business advisory service providers; and
- Organize in-community input promotions during the VSLA share outs.

Input Dealer Business Development Program

This activity addresses the need to improve farmer access to inputs by improving input dealer services, better management practices and expansion of their business operations. The program started in 2015, and was developed in collaboration with the Agricultural Technology Transfer (ATT) project. This season the project will expand the program to at least 10 new input dealers.

Some specific tasks that will be undertaken include:

- Assess the capacities of existing input dealers (who did not receive the training in the previous season) using a business diagnostic tool developed by the project;
- The project staff will train the input dealers on management systems to enable them to manage effectively;
- Introduce the input dealers to mobile networks to set up E-payment platforms to reduce transaction costs;
- Design strategies that will ensure access to inputs at the community level, and especially target female outgrowers; and
- Develop business plans for input dealers where necessary.

Expand the formation of VSLAs.

Having achieved positive results from the savings done by community groups in 2016, and the use of the share-outs to purchase inputs (fertilizer, seed and pesticides), small equipment and pay for mechanization services. VSLAs are particularly useful for smallholder women farmers to save and access production inputs at the right time. We intend to facilitate the establishment of 500 VSLA groups in 2017. The VSLAs will be linked to FIs to encourage further savings culture and create formal relationship with the banking system.

C.1.3 Strengthened incentives for smallholder investment in new productivity enhancing technologies, services and practices

Pre-Season Agri-Business Forum

The preseason agribusiness event is co-managed by ADVANCE II, ATT, and the Ghana Agricultural Input Dealers Association (GAIDA) and is focused on pre-season priorities including the promotion of agro inputs, equipment, technology, finance, and messaging services among others.

All OBs and viable FBOs are invited, while other private sector players are the key participants. This event will be held in March 2017 to kick start preparations for the cropping season.

Standard crop production protocols

Standard crop production protocols were developed for maize in 2016, in collaboration with ATT, and with feedback from SPRING, MoFA and SARI. Flip sheets were printed out for trainings and will continue to be used for GAPs dissemination. Similar training material for rice will be revised and printed in the coming year and distributed to OBs and lead farmers. Also, GAPs will be disseminated through SMS and other electronic media to reach OGs.

Farmer Mentor Program

This Ghanaian "farmer-to-farmer" program introduces new or inexperienced farmers to experienced OBs working with ADVANCE. Introduced in 2015, the program has proved to be a persuasive "seeing is believing" methodology for new 'associate nucleus farmers' and for those averse to risk in expanding their operations. This program will be intensified in 2017, through the following tasks:

- Identify established OBs with strengths in various project intervention areas for OBM and invite them to mentor new and other OBs, emphasizing the program benefits and risks;
- Organize training for mentors on effective mentoring;
- Identify and establish capacity gaps of various prospective mentees (new & old) and appropriately align them to the right OB mentors;
- Visits between prospective OBs to experienced OBs' farms for first-hand experience in what a multi-service operation looks like;
- Organize special visits to hybrid maize sites to view the merits of high quality hybrid seed for promotion of hybrid seeds adoption; and
- Organize special visits to model farms (especially CSA) to learn best farm practices and their benefits.

Facilitate equipment access and use

From the learning survey conducted in 2016 (results presented in section B3 of this document), less than half of project beneficiaries accessed mechanical land preparation services in 2015. In 2017, the project will intensify support to beneficiaries to access mechanization for both large and small equipment to increase efficiency, especially targeted at women. Linking women farmers to equipment and technology demonstration trainings and to vendors/local fabricators will enable them understand how labor saving implements and equipment can help address the drudgery and time-burden on manual operations. It will also eliminate the fear associated with women and technology (remove the socio-cultural notion that machines are a preserve of man) and improve adoption of these equipment, leading to increases in their productivity and income.

The project will work with local equipment manufacturers with support through grant funds to fabricate simple and basic equipment appropriate for smallholder farmers. The local fabricators, as well as larger equipment importers, will be invited to display and demonstrate the performance of their equipment at the annual pre-season and pre-harvest fairs. The project will use the grant

program to strategically promote mechanization, especially with small equipment grants, and for simple inexpensive tools including dibblers, that have great potential to significantly increase yields. As evidenced in the learning survey, row planting increases female maize farmers' yields by 30%, and this does not account for proper plant spacing, which will certainly increase that percentage, hence the need to focus on simple tools like dibblers.

In 2016, the project, in collaboration with ATT and the Soybean Innovation lab (SIL) trained local manufacturers to build an affordable thresher. In 2017, the local manufacturers will be encouraged and supported to manufacture simple tools and small sized equipment. The project's Small Equipment Grants program (SEG) will promote the purchase of these simple tools.

Some of the specific tasks that will be undertaken include:

- Assess the capacities of identified fabricators to establish knowledge and skill;
- Facilitate capacity development to address knowledge and skill gaps of selected fabricators; and
- Facilitate linkages between fabricators, OBs and OGs on the equipment use, availability and after sales maintenance services.

Agriculture Lending and Product Development

ADVANCE will collaborate with FINGAP to increase access to financial services for agriculture. Some specific tasks will include the following:

- Identify interested financial institutions with presence in the project's operational areas;
- Identify the existing agriculture financial products available together with FINGAP to uncover areas that can be strengthened to promote lending to the agriculture sector;
- Develop appropriate training materials to address the gaps identified; and
- Collaborate with FINGAP to train the FIs to develop new products that are suitable to the agricultural sector and seasonal calendar.

Support OB Record Keeping, Interpretation and Decision making

Through the support of trained interns, record keeping will continue to be promoted among OBs to inform their economic and financial decisions. The project staff will help OBs analyze their business situation and make sound decisions using the transaction records and activities. Outgrower Businesses will be trained to use their records to conduct break even analysis and cost/benefit analysis. This will help them to manage their businesses more efficiently and profitably.

Crop Insurance

ADVANCE will continue to mitigate production risk (partly due to climate change) by working with the Ghana Agricultural Insurance Pool (GAIP) to provide crop insurance services and products. Outgrower businesses will be sensitized and advised to include crop insurance in the production package given to their OGs. This will enable them to minimize the risk of non-repayment by OGs as a result of drought. Banks will also be targeted and encouraged to insure loans against drought to minimize the risk of non-repayment of loans due to drought leading to crop failure.

C.2. Sub-Purpose 2: Increased Market Access and Trade in Targeted Commodities

The ADVANCE project's strategy for increasing access to markets and trade is guided by the three enablers of competitiveness described in the theory of change. The project will continue to identify end market opportunities for lead firms, OBs, FBOs, and other value chain actors, and build their capacity to also identify and respond to these opportunities.

There are three objectives under this sub-purpose, as follows:

Objective 1: Availability and use of affordable/sustainable services increased.
Objective 2: Capacity of women and men (and firms) to participate in markets improved.
Objective 3: Private sector investment and innovation to support value chain development increased.
Objective 4: Depth and breadth of benefits from market participation for women, men and firms expanded.

In 2017, ADVANCE will continue to assist OBs expand trade and market opportunities with end market buyers as well as strengthen existing trade relationships. There are indications of these relationships being sustained beyond the ADVANCE program as evidenced by some OBs and buyers undertaking trade missions and entering into formal contracts on their own with the knowledge and experience gained from earlier facilitation by ADVANCE. The program will also provide technical assistance to lead firms to address specific business issues particularly relating to finance, marketing, quality management and food safety.

The initiative to support the growth of small and medium (SME) agro processors, especially rice millers and maize-soy processors in the North by providing technical assistance and grant support to expand or upgrade processing facilities will continue. In 2017 this support will be extended to SME agro-processors based in Southern Ghana that source commodity supplies from ADVANCE OBs. The lessons learned from the north will be applied to the interventions that will be extended this year into the south.

As part of the ADVANCE program, sub goal of developing the capacity of local organizations, the project will extend support to other trade associations beyond the Ghana Grains Council. The focus will be to strengthen these organizations to deliver services to their members and value chain actors; undertake advocacy for enabling environment constraints; and also improve internal management systems relating to governance, finance, administration and programs.

C.2.1 Availability and use of affordable and sustainable services increased

The project will work to strengthen channels that provide sustainable market access for all the value chain actors, whether they are marketing products or providing services and inputs. The project will work with Trade Associations, provide market intelligence information, and promote the warehouse receipt system in collaboration with the GGC, among others.

Trade Association Support.

Trade associations such as GGC, Borderless Alliance, GAIDA, Techiman Maize Traders Association, and GRIB to name a few, are important to the grain (and staple) sector. Provision of services to members and the public alike is important for their long-term purpose. To ensure sustainability, the project will support the associations this year. Other trade associations that will be considered for capacity building support are the regional branches of the Seed Producers Association of Ghana (SEEDPAG) in the three northern regions, the Ghana Rice Inter-professional Body (GRIB), and maize traders associations in the South (Techiman, Wenchi, Badu, Odumasi). The thematic areas for capacity building support are service delivery to member value chain actors, advocacy and organizational development to address weaknesses identified during the organizational capacity assessment (OCA) conducted by the project.

Provision of market intelligence and information services

In PY 2016, ADVANCE began preparing and disseminating to value chain actors (on a limited basis) quarterly reports analyzing market trends in the maize, rice and soybean sectors at the global, West African and national levels. The purpose of these reports was to improve understanding of the markets and provide background information for enterprise level decision making. The principal target for these reports were buyers, OBs and trade associations. This activity will be continued in 2017, and dissemination broadened to a wider audience. The project will also collaborate with Esoko, using SMS to send out price information of the three commodities in the main markets of the country to OBs and outgrowers.

Promotion of Warehouse Receipts with GGC

GGC's third year program with ADVANCE is expected to span the greater part of 2017, and will focus on rolling out the manual warehouse receipts system (WRS) developed and piloted in PY 2016, at the community level. This will be a second tier WRS that brings WRS closer to the nucleus farmers and aggregators, who connect directly to smallholder farmers.

Promotion of Grains Standards with Trade Associations

ADVANCE will work with commodity-based trade associations to promote the application and adoption of the Ghana national standards for maize, rice and soybean. The promotion will include knowledge sharing with traders as well as advocacy using various communications channels. The advocacy will also cover the use of weights and measures in the grains trade to ensure market efficiency.

Support for Buy Ghana

To promote the brand image and marketing of local foods formulated with maize, rice and soybean, ADVANCE will identify and provide technical and financial support to events organized by trade associations and other parties. This will provide a platform for enterprises in the three value chains to promote their products as locally produced and locally sold. These events will complement the annual pre-harvest event, and also reach out to the wider public and national consumers.

C.2.2 Capacity of women and men (and firms) to participate in markets improved.

Under the objective of building capacity of value chain actors to participate in markets more effectively in PY2017, the project will work to strengthen market linkages, organize trade missions, and the pre-harvest event, to facilitate contracts and transport linkages. The project will also train OBs on concepts of effective sales and marketing, and OGs on produce quality and standards.

Market Linkage Development

The objective of this activity is to identify markets for farmers and link them to sustainable business relationships with buyers. The project has a trade and marketing officer at each of the three regional offices in the north and one in Sunyani, as well as a senior marketing officer in Kumasi. In 2016, the project developed *Quarterly Market Intelligence* reports with market data from the most important local markets, including regional trends, and will continue to do so. To ensure sustainability, the project will support the GGC to develop capacity and take this up as a service to their members and the grain industry in general.

Two Way Trade missions

Trade missions have been an effective and popular activity with OBs and buyers in 2015 and 2016. Typically, the buyer travels to the OBs' community to meet her/him (and outgrowers in some instances) to explore business relationships. These meetings facilitate conversations leading to purchase and supply agreements for volumes of produce to be supplied by the OB to buyer at later dates. These face to face meetings have assisted the OB and buyer interacting for the first time to begin new relationships. It has also often helped strengthen existing relationships between parties that have conducted business for some time without face to face interaction.

In 2017, ADVANCE will focus on those farmers and buyers with existing business relationships to participate in reciprocal trade missions to acquaint themselves with their locations, business operations and quality requirements first hand. Buyers will continue to participate in trade missions at their own expense, however, farmers who will be making these visits for the first time will be supported with their travel costs by the project. The signing of non-binding purchase and sales agreements (open ended contracts) will be a key end goal of these trade missions that the project will track and report on.

Pre-Harvest Agri-Business Conference and Exhibition

Held every October since 2011, the pre-harvest event has provided a platform for networking, knowledge sharing and relationship building amongst value chain actors particularly farmers, buyers, input dealers, equipment dealers and financial institutions who participate in the event. It has facilitated the exchange of information between buyers and farmers on their respective market expectations, and has contributed to closing successful deals. The exhibitions and testimonies shared by value chain actors at the event has increased participants' knowledge and exposed them to new technologies and practices.

In 2016, two separate events were held – the main event in Tamale in the north in October 2015; and another in Kumasi in the south. The Kumasi event was to cater for the maize farmers in the ADVANCE south zone of influence, covering the Ashanti and Brong-Ahafo Regions, and their

counterpart buyers based in the south. In 2017, the two events will be consolidated into one and hosted in Sunyani in the Brong-Ahafo Region to cater for all value chain actors, from both the north and south. Sunyani was chosen because it is more central and the event will reach both the actors from the north and southern operational areas of the project, and reduce costs.

Contract facilitation

The program will continue to facilitate formalized contracts between buyers and OBs. The feedback from OBs, after trainings on contracts and negotiations, and follow on facilitation provided by the project in the past two years indicates that some buyers and OBs are executing contracts on their own without support from the project. This is a positive sign that formalized contracts amongst buyers and OBs are taking root as a result of prior project interventions. Accordingly, the focus on contract facilitation in 2017, will be on new and recent business relationships that require the project's continued facilitation to consolidate.

Transport linkages

Buyers and OBs have developed good relationships with transporters especially belonging to the cargo wing of the Ghana Private Road Transport Union (GPRTU) in the regions. The benefits for OBs and buyers as a result of these transport linkages have been increased information on back-haulage opportunities and haulage rates lower than prevailing market rates. ADVANCE will facilitate similar linkages to transporters for new OBs. The project will continue working with various regional and district branches of GPRTU to update and provide information regularly, regarding haulage rates.

Training of OBs in Sales and Marketing

This training will be provided in groups for new OBs and existing OBs that have benefitted from the training previously. The training content has been updated with a case study on the topic "Margin Analysis for Nucleus Farmer/Aggregator Sales Transactions". The learning goal of this new topic is to teach OBs how to do margin analysis to determine an optimum price for negotiating contracts with buyers. This is to help improve the rate of conversion of non-binding purchase and supply agreements between OBs and buyers into binding contracts and sales.

Training OGs in Produce Quality Requirements

The activity to train smallholders on quality standards, which began in PY 2016 will continue in PY 2017. The basis for the training are the national government standards for maize, rice and soybean. These trainings will be carried out using community trainers who will undergo a training of trainers program, and subsequently proceed to communities to train the smallholders in groups of 25 – 50.

C.2.3 Private Sector investment and innovation to support value chain development increased.

Under this objective, the project will work closely with buyers and other lead firms to improve their competitiveness. The project will support the development of sustainable buyer-OB relationships, facilitate access to financing for buyers, support buyers to provide effective business development

services, and also continue with efforts to support processors in northern Ghana to upgrade their operations.

Market Lead Firm Competitiveness

The project will continue its support to buyers (processors and large aggregators) to grow, increase market share, and become more competitive and profitable. A one-on-one basis method to determine business needs will continue as it has been yielding results with buyers since ADVANCE I. Most of the buyers are based in the South, particularly the Ashanti and Brong-Ahafo regions. Accordingly, the Trade and Marketing Specialist based in the Kumasi office will continue to play a key role in ADVANCE's work with these buyers.

Support Buyer-Outgrower Development

The results from this activity represents ADVANCE's core mission: buyers financing farmers in kind through inputs and obtaining produce at harvest as repayment with valued addition possibilities. Assisting buyer firms develop their supply chains with OBs and their respective outgrowers by strengthening the outgrower schemes continues to be an important mechanism. This further facilitates investment by buyers in supporting farmer productivity through providing inputs on credit. In 2017, ADVANCE will support buyers and OBs to expand and sustain these existing schemes. Opportunities that emerge for new schemes will also be supported by the project.

Facilitate Financing for Buyers

Buyers with financing needs for capital investments and working capital will be assisted to secure financing from financial institutions for both debt and equity capital. ADVANCE will collaborate with FINGAP to facilitate the linkages for such financing transactions based on results of business plans developed.

Support Business Development Services for Buyers

This activity includes the delivery of needs-based technical assistance in the areas of product development, marketing, quality improvement, financial, and operations management. If necessary, consultants may be engaged to complement ADVANCE staff's effort to deliver these services. The project will also support agro processors based in northern Ghana with technical assistance in product development, marketing, quality improvement, financial, and operations management. These services will be delivered in response to the specific needs of the enterprises. Consultants will be engaged to complement ADVANCE staff's to deliver the specialized services.

The project will consider using part of the matching grants (usually 30%) to support small and medium enterprises to expand processing plants and equipment to upgrade operations. Priority for grants will be given to those firms that have an established commodity trading relationship with OBs and adequate self-investment potential.

North Ghana Processing Upgrade

Supporting processors increases demand for the three commodities the project directly promotes. Such interventions also promotes the broader goal of increasing processing and value addition in the north, which is closer to the agricultural production areas, thereby expanding economic opportunities. This activity includes technical assistance to the firms to strengthen their business operations especially in the areas of finance, product development, supply chain management, marketing, and quality management. Grants may be provided to qualifying firms to upgrade or expand their processing capacity. Beneficiaries will be expected to contribute at least 30% towards the cost of these capital investments.

Some specific processing opportunities targeted for enhancement in 2017 include the following:

- *North Ghana Rice Milling Upgrade*. The project will continue this process which involves the use of grants to support the upgrade and expansion of some existing rice mills in the North;
- *Food (Maize/Soy) Processing Upgrade*. As with rice, the upgrades will involve applying grants to support the upgrade and expansion of some existing maize and soybean processors in the North;
- *Improvement in Rice Parboiling Techniques*. Parboiling of rice before milling remains widespread in northern Ghana. It makes rice easier to mill, boosts its nutritional profile and changes the texture. Parboiling is necessary to mill rice in the north, as the low humidity at which the rice is harvested does not allow for the straight milling method without causing high loss of quality. It is a women-dominated activity which involves the use of simple household items such as aluminum cooking pots, firewood and baskets/sieves. The project intervention seeks to improve the efficiency, – reduced time in parboiling, less drudgery and labor use, less use of fuel wood, increased parboiling capacity of current parboiling methods through training of women parboiling groups affiliated to rice millers. The Small Equipment Grant (SEG) may be used, where necessary, to replace the cooking pots and use of firewood with efficient vessels, solar based stoves, and tarpaulins for drying.

C.2.4 Depth and breadth of benefits from market participation for women, men and firms expanded.

To increase the benefits of market participation for smallholders, ADVANCE will continue to ensure that FBOs improve their capacity and take advantage of identified market opportunities through collective purchases and marketing and postharvest handling including proper storage. The program will work to increase FBOs' capacity to market produce collectively through affiliated OBs and aggregators linked to larger institutional buyers, or where necessary, directly to processors. The project will facilitate a mentorship program where the leaders of well-established FBOs will be organized to coach the weaker ones. The project will facilitate 10 learning visits among FBOs for experience sharing.

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

There are two major objectives that will be pursued under this sub purpose. They are the following:

Objective 1: Strengthen advocacy capacity of value chain actors and their respective associations to address identified value chain-specific enabling environment constraints particular to the north; and
Objective 2: Strengthen local institutions to implement inclusive value chain development.

ADVANCE will work to increase the capacity of actors to participate in the development process that positively impacts the enabling environment necessary for value chain competitiveness. The project will build organizational capacity of stakeholders at various levels, to effect change and promote investment and improve the business enabling environment for targeted value chains. Through a robust capacity building program, the project will strengthen value chain relationships to improve stakeholders' collaboration, and deepen local partnerships.

C.3.1 Advocacy capacity of value chain actors and their associations strengthened

Under this objective, the project will identify and address specific enabling environment constraints, build capacity of OBs and FBOs on policy advocacy, and support district assemblies to develop agricultural investment plans to attract investments to their localities.

Identifying and addressing specific enabling environment constraints

ADVANCE seeks to tackle policy issues and constraints that inhibit agricultural growth, particularly those related to maize, rice and soybean value chains. In this activity, ADVANCE will use grants to fund innovative ways of influencing policies and programs through advocacy to improve the enabling environment for agricultural development in the project's area of operation. The grants will fund activities oriented towards advocacy issues that are considered critical to improving the agribusiness environment. Specific tasks will include:

- Train and support grantees to develop long term advocacy strategies to address agribusiness environmental constraints;
- Award grants to selected organizations that develop innovative plans to implement specific advocacy actions to address specific enabling environment constraints; and
- Monitor and evaluate the results of the advocacy actions by the grantees.

Build capacity of OBs and FBOs on policy and advocacy

The OBs and FBOs have a fundamental role to play in improving the business environment for agribusiness. It is for this reason that the Project formed OB networks across the three northern regions in 2016. In 2017, the OB networks established at the zonal level will federate to form regional networks. These regional networks will eventually evolve to form the Savannah OB's Network, which will be an umbrella network operating in northern Ghana. A total of 13 zonal OB Networks have been formed. These will be strengthened with leadership skills, policy education and policy advocacy skills. They will also be supported to develop advocacy action plans as well

as establish relationships with local authorities for policy engagement. This strategy will be replicated with FBOs as well, when their capacity has been built to an appreciable level.

Specific tasks that will be undertaken include the following:

- Facilitate the formation of regional FBO and Zonal OB networks;
- Train the leadership of the FBO and OB networks on effective leadership, coalition/network building, and gender awareness and strategies to reach out to women;
- Train the leadership of FBOs and OBs on basic advocacy skills, local governance system, and policy processes at the local level;
- Train the members of the OB networks on effective advocacy, policy engagement and lobbying (advocacy planning, implementation and, monitoring and evaluation);
- Support the regional OB networks to identify specific advocacy issues and develop advocacy plans to address them;
- Support regional OB networks to implement their advocacy plans (carry out policy advocacy and engagements to address specific advocacy issues identified at the local and regional levels);
- Facilitate mentorship visits by established business/cooperative associations to share experiences with OBs and FBOs networks;
- Monitor and support zonal OB networks; and
- Support OB and FBO networks to create awareness among themselves and their communities about the need for women to access productive farm land.

Development and promotion of District Agricultural Investment Profiles (DAIP)

Two pilot District Assemblies were supported to develop District Agricultural Investment Plans (DAIPs) which were exhibited at the 2015 pre-harvest event organized by ADVANCE. The project has lessons learned from this process that will guide the development of such plans in the future. These lessons include the best way to engage the district assemblies, what arras to focus on and the exact role that project staff should play.

The profiles documented the agricultural potential of the districts and suggests ways to motivate and attract investors as well as facilitate Public Private Partnerships (PPPs) investment in agribusinesses in the district. ADVANCE will continue to support Metropolitan, Municipal and District Assemblies (MMDAs) to tackle constraints that inhibit agribusinesses at the local level and attract investment from within and outside the district to the agricultural sector.

In the coming year, the project will:

- Support 10 MMDAs to complete their District Agricultural Investment Profiles;
- Support MMDAs to print and disseminate DAIPs both in hard and soft copies (including publishing them on MMDAs websites, Ghana Investment Promotion Council website);
- Train MMDAs (the DAIPs development Committees and others) on investment promotion skills in collaboration with the Ghana Investment Promotion Council (GIPC);
- Facilitate the exhibition of DAIPs by MMDAs in major events including the annual pre-season and pre-harvest events; and

- Collaborate with beneficiary MMDAs to monitor and document the outcomes and lessons learned from their agribusiness investment promotion activities.

C.3.2 Local institutions strengthened to implement inclusive value chain development

The second objective for capacity development has two parts. The first is to build capacity of local institutions, and activities have been designed for local institutions, including local NGOs. The second objective is focused on FBOs, and as such, some of the activities have been previously mentioned under sub-purposes one and two. The aim of this objective is to transform non-commercial FBOs into farmer based-enterprises (FBE). These FBOs fall into two distinct groups: (1) Those that are informal community groups linked/affiliated to an outgrower business which are being assisted to become formal FBEs with the aim of distributing inputs or aggregating produce through the OB structure, and their members being counted as OB beneficiaries. (2) Those FBOs which are independent of an OB, or those which wish to become independent, and strive to deliver commercial services to their members with the ultimate objective of becoming a registered FBE (which could become an OB in its own right).

Build capacity of local institutions

During 2016, the project focused on building the capacity of local organizations to work effectively with USAID funding to complement the efforts of the project. This follows an earlier organizational capacity assessments conducted by project staff, during which issues of finance and administration were identified among others, as hampering effective implementation of activities by these organizations. In 2017, a training on finance and administration will be rolled out for staff of these organizations, and it is expected that ADVANCE will provide them with support funding to implement some of the project's activities in areas which are out of easy reach by project staff. The project will request proposals from these organizations and those who submit the best proposals will be selected.

Twenty-two staff from seven organizations will participate in a three day training to focus on managing a USAID award, with special emphasis on the rules and regulations of the donor. In relation to the above, there are plans to support the Ghana Inter-Professional Rice Body (GRIB) with a grant to disseminate and promote quality standards within the rice industry. The project will continue to support the Ghana Grains Council (GGC) and the Ghana Agricultural Insurance Pool (GAIP) in regard to operationalizing the warehouse receipt scheme and agricultural insurance respectively.

Capacity development for program implementation

The project has been implementing numeracy training (targeting women) and Farming as a Business (FaaB) since 2015. In 2016 the number of trainees, mostly smallholder farmers, increased to 26,000 beneficiaries. In 2017, the numeracy training will be extended to 20,000 additional smallholder farmers to reduce numeracy illiteracy among women and to build a more business minded farmer who is able to keep basic records for decision making.

Capacity development for FBEs

The project will continue to monitor and support FBOs that have been trained on the concepts of Sell More for More (SMFM). A new group of FBOs will undergo a capacity assessment and will be supported to develop business plans and capacity development plans which will guide the assistance and resource allocation for their development. The FBOs that were mentored during 2015 and 2016 will be supported to ensure they fully transform into commercially-oriented Farmer Based Enterprises. The process of developing FBOs into FBEs will be extended to the south this year starting with 20 FBOs that will be selected using a criteria that will rank the FBOs.

Some of the specific task that will be undertaken include the following:

- Classify FBOs into categories based on their current capacities (ADVANCE South);
- Support the FBOs to make collective sale linkages to end markets through trade missions;
- Provide OBM training for promising FBOs that can be transformed into FBEs;
- Facilitate FBEs to access matching grants from the project to support their growth and development;
- Develop sustainability plans, including business plans, succession plans; and
- Link the FBOs to services providers for mechanization, financial services, among others, depending on their needs.

D. Program Support

The project has a program support component to ensure that the competitiveness of the three value chains, and the efficiency of the on the functioning of the value chains is optimal. This component is cross-cutting and includes gender, environment, public relations, and matching grants that support innovative activities across the value chains.

D.1 Gender Mainstreaming

ADVANCE will continue to mainstream gender equity across all project activities, and into the community level where gender inequalities are manifest the most. The project will implement strategies and specific activities that will minimize the inequality between women and men. The project's vision is to create equitable and sustainable opportunities for both women and men along the target value chains. We will continue to implement the ADVANCE gender strategy, which was designed based upon a 2014 gender analysis, that promotes identifying and addressing inequality, building public and private sector awareness and capacity, strengthening networks of individuals and organizations supporting gender parity, creating public awareness and targeting innovation investments in areas of benefit to women.

The project staffing structure has been designed to support gender integration across all activities. The Gender Advisor, based in the Tamale office, oversees the mainstreaming of gender throughout the project interventions. He has facilitated gender-equity and women's empowerment training for all ADVANCE partner staff, and will work closely with field staff to ensure that all activities target both men and women, and where necessary, develop targeted activities that address women specific issues. He is able to access ACDI/VOCA's gender community of practice and consults with colleagues. He also accesses materials and lessons learned from similar ACDI/VOCA projects to share widely within the project. He also receives regular backstopping from ACDI/VOCA headquarters' gender Director.

The project will also coordinate with government, other donors and civil society organizations conducting similar gender-related activities in the field to avoid duplication, expand outreach and share success stories and lessons learned.

The highlights of the project's gender approach are descried below.

Gender equity training linked to technical support

Within ADVANCE, the integration of gender-equitable approaches is everyone's responsibility. All staff members are aware of (1) how gender influences their own assumptions and actions, (2) why gender is important to the project, and (3) how they can and should integrate gender into their daily work. Training for staff, partners and beneficiaries in years one and tow, enabled technical and field staff to integrate gender into activities. In 2017, refresher training will be conducted for all staff in order to ensure that particularly, new staff also understand and adopt a gender sensitive approach in carrying out their activities. Short follow-up trainings will be

integrated into other staff trainings, workshops, and team meetings to reinforce the importance of consciously integrating gender equity in their work.

Evidence based approach

The ADVANCE gender strategy is based primarily on gender analysis conducted at the start of the project. Subsequently, elements of the findings and factors contributing to women empowerment, as reported in the baseline study of the Ghana Feed the Future program, have been incorporated. ADVANCE's gender and M&E staff will continue to explore the factors that influence women's empowerment and ensure that project activities are responsive to identified constraints. The ADVANCE project will conduct a gender impact assessment in 2017 to measure progress on the gender strategy and gender indicators. The results of the gender impact assessment will be used to develop recommendations for project implementation and inform the revision of the project's gender strategy and action plan.

The gender strategy will be revised in 2017 based on data collected through the gender impact assessment, project annual surveys and learning agenda topics that will be identified with project stakeholders in the course of the year. This will serve to identify new activities to expand women's empowerment and participation in the value chain, such as increasing the number of female nucleus farmers, and women-run businesses as well as promoting women's leadership in value chain governance. The project will receive support from ACDI/VOCA Director in charge of Gender who will travel to Ghana to guide the revision of the strategy.

Child Labor

The value chain beneficiaries of ADVANCE in northern Ghana are smallholder farmers, nucleus farmers, aggregators, processors, input dealers and financial institutions. ADVANCE works closely with farmers, businessmen and women to ensure that they upgrade and invest in their agribusiness operations to improve crop productivity and processing, increase purchases and sales through market linkages, and ultimately improve household incomes. By doing so, the project supports these families to increase their income and invest in their children's education, for both boys and girls. Since 2016, ADVANCE has trained beneficiaries on the safe use, storage and disposal of agro-chemicals, and the correct use of agricultural equipment to ensure children's safety on the farm or anything to do with the business. The support has expanded to small grants to equip Spraying Service Providers (SSP s) with Personal Protection Equipment (PPEs).

In furtherance of the broad approach described above, the project will implement the following specific activities:

Women engaged to increase agricultural productivity

For every project activity (training, grant support etc.), women will be encouraged to participate actively. Additional efforts will be made in communities where women's empowerment seems to be lower than the norm to ensure their participation.

Specific tasks that will be undertaken will include the following:

- Support women who show interest in becoming OBs or lead farmers by training them to acquire leadership and entrepreneurship skills required to manage outgrower networks, and link them to formal structured markets;
- Encourage women OBs and female lead farmers to host environmentally friendly technology demonstrations used to expose farmers to the benefits of adopting GAPs using a 'learning-by-doing' methodology. All OBs are encouraged to set up demo sites so their OGs can learn good practices that will increase their productivity and be able to repay their in-kind loans;
- Identify appropriate and relevant technologies that meet women's needs and preferences using a demand-driven approach. The emphasis will be on technologies that are time saving, less physically demanding, and affordable. Locally manufactured dibblers and rice transplanters will be promoted to help women and men improve their plant population density and reduce the drudgery in rice transplanting;
- Showcase these technologies through demonstration and field days, and encourage access and adoption through credit or matching grants;
- Continue the leadership and entrepreneurship course dedicated to women, which started in 2015;
- Link women farmers and women farmer groups to OBs to access technology and services. This include tractor service, agro-inputs, post-harvest mechanization, GAPs and Post-Harvest Handling (PHH) trainings;
- Provide in-kind grants with flexible leverage requirements to women depending on their vulnerability. In prior years, the project has observed lower application numbers by women for the project's small equipment grants (SEGs). One of the possible causes is that women are unable to raise the leverage requirements. For certain equipment targeted for women, the project will consider lowering the leverage percentage for women to improve uptake;
- The project will continue to build the capacity of women farmers by training them on improved technologies in general, and value addition, as well as in FaaB. The project will target women with numeracy training;

  - Announce publicly that both women and men are invited to attend trainings.
  - Communicate social and economic benefits of women's participation to village chief's community leaders, and members.
  - Encourage men to bring their wives or other women in the household to training.
  - Reach out to women's groups.
  - Ensure materials are gender appropriate and that trainings/location of demo plots and organization of field days are scheduled at times and locations that are suitable for women to attend.

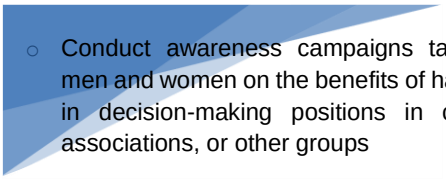
- Expand the establishment of VSLAs for women and men, and link these groups to access agro-inputs and market opportunities;
- Raise awareness on land rights. In 2015 and 2016, this has proven to be an impactful activity and will be continued in 2017. The project will continue to raise awareness regarding the importance of land ownership/larger land size for women through campaigns; organizing informal meetings in villages or clusters; promoting success stories to demonstrate impact on the community, and organizing community meetings;
- Facilitate women's access to land using the existing outgrower structures, as well as the traditional authorities; and

- Ensure women have access to information. The promotion of appropriate technologies such as the use of mobile devices and women's listenership clubs to disseminate information including weather forecasts, market prices, GAPs, as well as women's specific information needs, will continue and/or be intensified during 2017.

Increase women's access to markets and trade of targeted commodities

Women play an active role in the trade of agricultural produce. The project will support the women to ensure that they have access to market opportunities that will be identified in the course of the year. The project will specifically:

- Build capacity of women to access markets by providing training in business, financial and IT skills to women's business owners and group members;
- Introduce market linkages between women farmers, and women's groups (self-help groups, VSLAs, women's producer groups) to formal markets and develop structures to help women maintain control over their income; and
- Build women's leadership capacity through skills and leadership training for women at different levels of the value chain (producer/marketing groups, associations, business manager).



- Conduct awareness campaigns targeting both men and women on the benefits of having women in decision-making positions in cooperatives, associations, or other groups
- Take women on exposure visits to places where they see their peer women in leadership roles in order to raise their aspirations and confidence.
- Create opportunities for women to speak in public at events such as conferences and fairs or around International Women's Day or other such days

D. 2 Environment

The project will focus on three activity areas in PY 2017. These include (1) improving agrochemical management, (2) supporting climate change adaptation, and (3) ensuring compliance with title 22 of the code of federal regulations section 216 (22CFR216). The project will continue to support smallholder farmers and agrochemical dealers through training and outreach in print, radio broadcast and other electronic media on safeguards and leverage the services of trained spray service providers (SSPs) to significantly reduce unsafe agrochemical applications by smallholder farmers. The efforts towards building climate change resilience will continue through the promotion of a weather index drought insurance scheme in collaboration with the Ghana Agricultural Insurance Pool (GAIP); and weather forecasting through Esoko Ltd. Climate Smart Agriculture (CSA) implementation, which was started in 2015, will focus on promoting minimum tillage as well as cover crop systems and agroforestry. The project will continue to ensure compliance with Ghana EPA (Environmental Protection Agency) and United States Environmental Protection Agency (USEPA) environmental regulations through the implementation of the Environmental Mitigation and Monitoring Plan (EMMP), while ensuring that all sub-grants are within the Initial Environmental Examination (IEE) of the project.

General environmental compliance

The ADVANCE field offices will continue to collaborate with the media, the EPA and the major agrochemical retailers to ensure that nucleus farmers, OBs and smallholder farmers continue to receive training in regard to pesticide safeguards and management of pesticides, particularly recognizing unregistered and banned chemicals. The project will collaborate with other NGOs and FTF Projects operating within the three northern regions to scale up activities and campaigns that will further improve safety in pesticide handling amongst clients.

Some of the specific tasks that will be undertaken include:

- Update ADVANCE PERSUAP to ensure the list of recommended pesticides are up to date with the EPA register of pesticides and those available on the market;
- The project's environmental specialist will conduct environmental compliance trainings for field staff and clients;
- Ensure sub-grant activities are in the scope of the Initial Environmental Examination; and
- Conduct pesticide use monitoring on demonstration plots in line with the requirements of the PERSUAP.

Improving agrochemical management

In 2016, the project trained and equipped 185 individuals as spray service providers (SSPs) to provide commercial spray services to smallholder farmers. In collaboration with MoFA, the project will monitor the activities of SSPs and provide refresher training based on areas that require improvement. About 120 new individuals made of 30 groups will be targeted for training in 2017 and supported with spray equipment for their initial set up. The project will also leverage on the activities of SSPs to set up container collection centers to retrieve and properly dispose of empty pesticide containers from the field. This will be tied in with training of input dealers in safety and environment based on safety gaps that were identified in 2016.

Specific tasks will include:

- Conduct environmental and safety management training for agrochemical dealers in Upper West and Northern Regions, based on safety gaps identified;
- Monitor and report on the impact of existing spray service providers;
- Support training for new SSPs on safe pesticide handling and application;
- Set up container management centers with selected input dealers based on location of SSPs;
- Discourage women from undertaking pesticide applications directly.

Climate Smart Agriculture.

Since 2015, the project has expanded the responsibilities of the Environmental Specialist to include conservation agriculture, which has been described under sub-purpose 1. Conservation Agriculture involves alternative land preparation and management techniques that introduce or preserve soil organic matter for carbon sequestration and moisture retention, reduction of the requirement for inorganic fertilizers or increasing the impact of its use. The first efforts were made in 2015, to test several cover crops which can provide a range of benefits, including the enhancement of soil fertility, improvement in soil structure, and water retention. Minimum tillage

practices were also tested in 2015 and 2016 through ripping of various demonstration plots. Based on the results of these initial tests and advice from external experts, the project has developed a strategy to guide the implementation of climate smart agriculture in the coming years.

The strategy focuses on promoting minimum tillage through ripping. In 2015, the acreage under minimum tillage was eight acres, increasing to 200 acres in 2016. In 2017, the area under minimum tillage is expected to reach 1,391acres. Ripping improves soil drainage by opening up the soil and allowing water to infiltrate at a faster rate. This reduces surface runoff which causes soil erosion, and conserves moisture. Ripping increases soil aeration which stimulates soil microbial activity and accelerates the breakdown of soil organic matter, and also provides plant roots with sufficient oxygen. Ripping will further facilitate row planting, one of the good practices promoted by the project.

Cover crop systems and agroforestry will be promoted in specific communities and locations based on the environmental need of those locations. Cover crop systems serve the purpose of providing soil cover, keeping the soil surface protected while providing organic matter through producing a dense biomass from multifunctional plants in associations with, or in succession with the main crop. The project will focus on three main cover crop species- *Cajanus cajan, Dolichos species, and Mucuna prupriens* and facilitate farmers' access to seeds, to improve adoption especially in the southern parts of the project's operational zone.

There are farmers with up to 300 ha of farmland where the tree cover is nearly entirely removed. This exposes the soil to wind and water erosion, and also exposes crops to strong winds during storms. The project will work with such farmers to introduce trees around the boundaries and along access roads within the farms at intervals that do not cause over shading. Tree species will be selected based on farmers' choice and technical advice from ADVANCE. The technical advice provided will, among other things, depend on the species that have a positive relation with the crops planted, and which provides a long-term economic benefit to the farmer.
The ecological function of trees has the potential of increasing food production while simultaneously reducing agriculture's footprint on the environment. Perhaps even more important is to make these solutions work for the poor, whose lives are the most affected by environmental degradation.

Some specific tasks will include the following:

- Set-up of 11 community-based cover crop demonstration plots for participatory adaptive learning;
- Expand area under minimum tillage by facilitating ripping for interested OBs and OGs; and
- Facilitate implementation of agroforestry systems with interested farmers.

D.3 Nutrition Sensitive Agriculture

Since the inception of the project, some activities, including the promotion of Quality Protein Maize (QPM) have been incorporated to improve nutrition at the farmers' household level. ADVANCE will introduce additional activities in PY2017 to improve the nutrition of women, children and the

household in general. The nutrition-related activities will include the promotion of household consumption of soybean, through sensitization and training. Also, the ACDI/VOCA Senior Director for nutrition will travel to Ghana to work with the project team to identify strategies that can be incorporated in the project's value chains to promote improved nutrition for the smallholder beneficiaries.

Some specific tasks to be undertaken include:

- Promote the production of high yielding protein maize varieties by women farmers through demonstrations and in community promotions;
- Promote production of soybean as farm family protein source;
- Facilitate training in soybean utilization for various kinds of meals by women farmers
- Conduct training in cover crops using edible leguminous crops to provide an additional source of household protein and farm family income;
- Collaborate with other projects and MoFA's Women in Agriculture Development Directorate (WIAD) to build capacity of women FBO groups, female OBs, and women farmers on soy and cereal nutrition formulation that benefits both children and adults alike; and
- Link women's groups to ICT firms (Esoko, Voto Mobile, Radio stations) for dissemination of nutrition messages on soy, rice and maize formulations.

D. 4 Grants

Grants will be utilized to support value chain actors to adopt innovative technologies, including for instance CSA. Project staff will assist OBs and other major actors to identify equipment gaps within the business plans from a purely business perspective and recommend OBs and other actors in the targeted commodity value chains for grant support. A percentage of the grants will also be used to support local organizations to build their capacity to play advocacy roles to improve the business enabling environment, provide services to their members, or implement specific activities the project will identify and assign to them.

The project's grant program has two parts, namely:

i) The Innovation and Investment Incentive (I-3) fund and
ii) The Local Partnership Grants (LPG).

The DCOP (Operations and Grants) has overall responsibility for managing the grant component (both the I-3 and the LPG funds) and is assisted by a Grants Specialist to manage in collaboration with the Technical Director and Technical Leaders.

The Innovation and Investment Incentive (I-3) Fund

The Innovation and Investment Incentive (I-3) fund is a flexible financing mechanism to reduce the risks associated with investing in new technology and business approaches, foster innovation, leverage resources, and provide incentives to stimulate private sector investment and mitigate constraints in the targeted value chains in northern Ghana.

The project will follow up on stakeholders' use of small and large equipment provided to actors in previous program years. It is expected that numerous OBs, aggregators and FBOs will procure small equipment using the small equipment grant (SEG) scheme where equipment is valued at less than $5,000. Particular attention will be paid to women to encourage them to apply for these grants. Nucleus farmers and OBs will also be supported to procure large equipment like tractors and implements including shellers, rippers, dryers etc. through the large equipment grants (LEG) or equipment which exceed $5000. This equipment will enable OBs to provide services to their out growers.

The grants team will monitor all equipment use and train actors on record keeping and determine the equipment value as a profitable asset to the farmer/aggregator business.

Local Partnership Grant Fund

Local partnership grants will be used to engage local NGOs, Business Development Service (BDS) providers, trade groups and other actors to directly provide services to value chain actors while building the capacity of the local institutions through the grant management process. The LPG funds will be managed through the following process:

- *Pre-award Survey*: All applicants selected through the Local Partnership Grant Fund will be required to undergo a survey to determine eligibility for funding and to identify financial, administrative and legal gaps where direct support can be provided.
- *Organizational Capacity Assessment (OCA):* The OCA process supports the Implementation and procurement reform efforts under USAID Forward. Recipients will be tiered and grouped in various levels and the type of support required, for which a portion of each grant will be earmarked for capacity building.
- *Direct Capacity-Building Support*: Direct support in capacity-building areas such as human resources, financial planning or MIS will be contracted in accordance with the recipient's grant requirements and support plans.
- *Mid-Term OCA*: Each recipient will be required to repeat the OCA midway through implementation of their grant. Repeat OCAs will be used to determine if the results achieved are up-to-date or modify their respective plans.

Grants Monitoring.

Throughout the year, the grants team will work with the technical teams and grantees to monitor the use and impact of grant awards. The grants team will prepare quarterly reports and updates highlighting funds obligated to the various value chains and private sector actors and resources leveraged, and these will be disaggregated by value chain and geographic location.

D. 5 Public Relations and Communication

Communication continues to play an important role in projecting and promoting the activities, progress, impact and successes of the ADVANCE II project. The ADVANCE Program will focus on communicating the impact of the project through a variety of methods.

The Public Relations and Communication (PR&C) Specialist works closely with the COP and technical staff to frame communications strategies, and develop specific communication outputs to ensure effective information flow both internally and for external audiences.

The PR&C Specialist plays an active role as a member of the Monitoring, Evaluation and Learning (M&EL) team to document and communicate the project's results and activities through:

- Three to four success stories every quarter;
- Quarterly newsletters of which 1,000 copies are printed and distributed to the project's main stakeholders. The newsletters are also published on ACDI/VOCA' website, and distributed electronically;
- Bi-weekly bullets to USAID;
- Production of videos; and
- Organization of media events.

Furthermore, the PR&C Specialist will train the technical staff on reporting, writing skills, and effective photograph techniques.

The project will periodically develop success stories and submit these and other reports and informational products to USAID's Development Experience Clearinghouse as required. All materials and activities comply with ADVANCE's Branding Implementation and Marking Plan. These stories include:

- Success stories, "Telling our Story", or personal interest stories submitted each quarter;
- Weekly bullets to USAID that illustrate ADVANCE's continued impact throughout the year;
- Increased publicity at organized events to reflect the Feed the Future initiative;
- Adhere to USAID branding and marking plan during program activities (demonstration sites, field days);
- Four video productions each year depicting project achievements and personal interest stories;
- Quarterly and annual reports; and
- Member and contributor of the multi-project FTF knowledge management and learning team.

The project will publicize major activities and results by involving the media (radio and newspapers) in some project activities and the use of press releases on demonstrations and field days' accomplishments.

E. Monitoring, Evaluation and Learning

The project's monitoring, evaluation and learning component comprises of two interrelated areas: (i) monitoring, evaluation and reporting and (ii) knowledge management and learning. In 2017, the project will also develop and implement exit strategies to ensure sustainability of the achievements made by the project.

E.1 Monitoring and Evaluation.

The focus of monitoring and evaluation during the third year of the project will be to close any gaps in program measurement, documentation and communication of change on any of the components and M&E activities. The project will continue populating our database, and further develop systems/tools for data capture and storage, retrieval and analysis; assessing data quality and taking corrective measures to address any shortfalls. We will also strengthen the program M&E team and build staff capacity to assess and attribute change to project interventions as well as effective and accurate reporting.

Improvement of databases.

In FY2017, the M&EL team will continue improving the project's databases. This will mainly consist of adding new data collection forms to track the new activities/approaches the project implements, and also add dashboards that will be used at the operational level. A system tracking the implementation of the annual work plan will also be implemented.

As is currently the case, new tools will be accessible both online and offline to the technical team to give them a live status of the project's situation and performance.

Capacity development in M&E

The project will conduct refresher trainings for all technical staff on the indicators and the use of the dashboards that will be created. The trainings will be organized per region and will last one day each on average. All new staff and enumerators will also be trained on the use of Global Positioning System devices. The team will also train the agricultural productivity staff in each region on the use of the Demonstration Plots Data Management System that was developed in 2016.

In addition, the M&EL team will hold quarterly review meetings. This is a two to three-day meeting during which issues from the past quarter are discussed, activities for the following quarter are prioritized, and new or updated tools (forms, dashboards, donor's guidance documents etc.) are presented. The last day of each meeting will be dedicated to train the team on advanced data collection, analysis, visualization and reporting. Before each survey and major profiling activity, the team will train all recruited enumerators as well as all technical staff who will be involved in the related data collection.

The M&EL team, with assistance from the Business Services and the Trade and Marketing team, designed the *sales tracker,* a tool that helps the project supported OBs to track the support they provide to their OGs. Every year, the M&EL team train interns to use the *sales tracker* to assist

OBs collect accurate data on their operations. In FY2017, this activity is planned to take place in May and June 2017.

Routine activities

The team will continue supporting the technical staff during the profiling activities and routine data collection. In FY2017, the potential beneficiaries' profiling will be done using tablets and mobile devices only. The team will also be in charge of data cleaning and import into the databases, as well as the enrolment and printing of the smartcards that the technical staff will distribute to the beneficiaries.

Annual surveys

In FY2017, like in FY16, the project will conduct the gross margin survey in three phases. The first phase will be conducted at planting during which data on the first occurring input costs and application of technologies will be collected, and the area for the crop cut to estimate yields at harvest, will be demarcated. The second phase will take place at harvest and will collect the production data and the remaining input costs and applied technologies. For both phases, approximately 2,400 maize, rice and soya farmers will be surveyed. They will be randomly selected from the FY2017 beneficiaries in the project's database. The data collection will be done through mobile devices. The third phase will be conducted by phone in April and July 2017 on a sample of the two phases' respondents to collect the January to March and April to June sales data respectively.

In addition to the gross margin survey, ADVANCE conducts every year a firm profit survey to report on its indicator "number of firms operating more profitably". The application of technologies data by these firms and the OBs will be collected concurrently.

Mapping and spatial analysis

The M&EL team includes a Geographic Information System (GIS) Specialist. Apart from the GPS trainings, collection and processing of the project's spatial data, the GIS Specialist will continue assessing the data needs of the project and producing the corresponding maps. An example of certain maps include the beneficiaries' location, demo plots' location, and input suppliers' location. Maps will also be produced to facilitate the planning and implementation of the different surveys.

Data Quality Review

Data quality reviews are a key activity of the M&EL team and will be implemented both by the field team and the Accra team. Field data quality reviews will consist of verification of the quality of the data collected and reported by the field staff. This will be done through spot visits to the beneficiaries and verification of the support and benefits they received against the regional records. In addition to the field level, the Accra team will visit the regional offices, will observe the documentation and filing of all data collection forms, assess the regional capacities and will verify the regional records against the central databases. Tools have been developed to help the team to conduct the reviews. Each review will be documented in a report that will be shared with all relevant staff, and which will include an action plan to address any noted shortfalls.

The USAID Monitoring and Evaluation Technical Support Services (METSS) project will conduct a data quality review of the figures reported in the annual report. ACDI/VOCA HQ also plans to conduct a data quality assessment on the Ghana projects in FY2017.

E.2 Knowledge Management and Learning.

The learning activities that will be implemented during 2017 will consist mainly of:

- Conducting learning studies
- Quarterly technical review meetings
- Annual work planning
- Mid-term evaluation
- Documentation and public sharing of the project's activities and successes
- Developing an exit strategy

Learning studies

In 2017, the project will undertake eight studies during the year. The learning topics will be identified by the Program Specialists and Technical Leaders with the Regional Coordinators during the first quarterly technical review meeting of the fiscal year. The findings from each study will be shared with all relevant partners and stakeholders during the knowledge forums in the regions. The project will also share results achieved from some of the innovative strategies at one global forum for agricultural innovation. We anticipate to send two project staff to such forum to present and share some of our achievements.

In 2017, the ADVANCE outgrower business model will be one of the learning activities' main focuses. With the support of the Technical Learning and Application (TLA) team of ACDI/VOCA HQ, the project will study the factors that makes the model the most effective and efficient, through the lens of its theory of change. The team will also assess how inclusive and equitable that model is and will look at the best approach to ensure its continuation and expansion beyond the project. This will inform the project's sustainability plan and exit strategy. For this purpose, TLA staff from the ACDI/OCA headquarters will visit the project twice during 2017. The team will use the project's gross margin and routine data, and will collect additional qualitative and quantitative ones through surveys.

Other studies will include the impact of the project's matching grant and the extent to which capacity of local institutions have been developed to enable them implement advocacy programs and sustainable value chain projects. For these studies, two staff members from ACDI/VOCA's headquarters will visit the project and provide support.

Quarterly technical review meetings

Every quarter, the project will organize a technical review meeting attended by the program specialists, technical leaders, regional coordinators and senior management. During the meeting, each project component and each region will discuss their achievements, challenges and lessons learned from the previous quarter, review the strategy and prioritize the activities for the next quarter.

Annual work planning workshop

ADVANCE will hold its FY2018 annual work planning meeting, which is attended by all staff, in June 2017. In addition to the usual review of the FY2017 achievements and lessons learned as well as the main activities for FY2018, the team will discuss the continuance of its exit strategy and preparation for its final evaluation. The ADVANCE Program Manager will join the project team in Ghana for the annual planning meeting and provide support.

Midterm evaluation by METSS

The midterm evaluation of ADVANCE is planned to take place in early FY2017. The whole exercise will be led by USAID/METSS with the support by and preparation of the project.

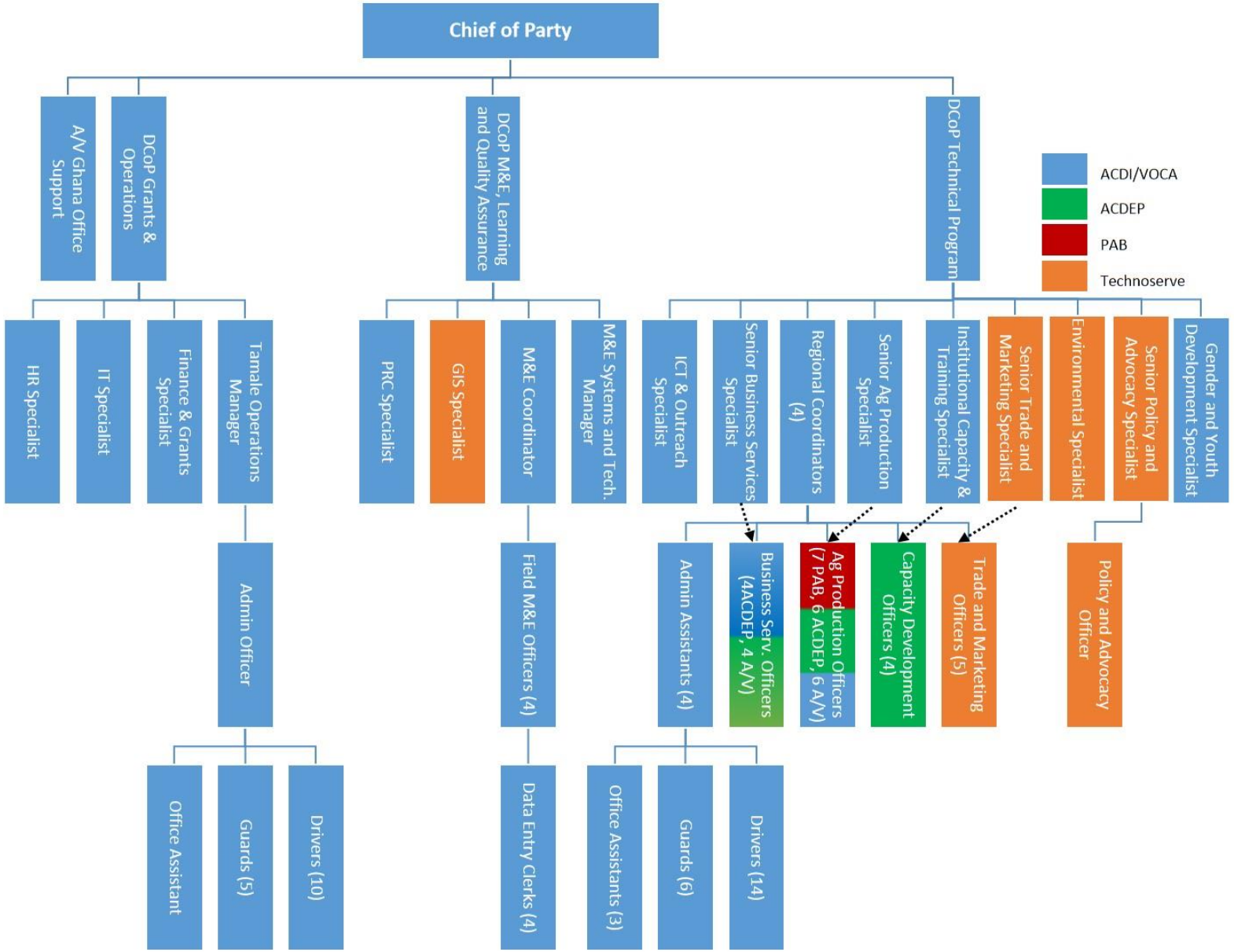
Exit strategy

Sustainability is a core principle and inherent in all the ADVANCE project's strategies. Therefore, there are many achievements and activities that are already at a level that will be sustained beyond the life of the project. Examples of sustainable achievements include the functioning of the outgrower business model. However, there are other areas that require additional effort to ensure they become sustainable by the close of the project. These include capacity building of new OBs and the process of transforming FBOs into FBEs to become businesses that provide services to their members and their communities in the same manner as the OBs.

There are also areas where ADVANCE continuously explores new markets for the OBs, provide market intelligence information for decision making by OBs and OGs, facilitates relationships between the value chain actors. Other areas where strategies have to be adopted to ensure sustainability are the implementation of the warehouse receipt system by GGC and crop insurance by GAIP.

The project will organize stakeholder fora with all project stakeholders, including USAID, to brainstorm and design strategies to ensure that all aspects of the project are taken up by actors and stakeholders before the project closes in 2018. At least two workshops will be held to deliberate and act on this matter.

Annex 1: ADVANCE Organigram



Annex 2: ADVANCE II Implementation Plan Tracking Sheet - PY 2017

																Regional Targets			
	Activity	Responsible	Targets	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Tamale	Bolga	Wa	Sunyani
1	SUB-PURPOSE 1: INCREASE AGRICULTURAL PRODUCTIVITY IN TARGETED COMMODITIES																		
1.1	Strengthened sustainable systems for financial, advisory, aggregation and on-farm, post-harvest service provision and input distribution																		
1.1.1	Farm Business Planning																		
1.1.1.1	Administer Business Diagnostic Tool on new OBs for information to write plans	BSO	120													42	27	30	22
1.1.1.2	Develop Business Plan (BP)	BSO	120													42	27	30	22
1.1.1.3	Continue and make adjustments to BPs when necessary	BSO	150													53	33	38	27
1.1.1.4	Assist OBs to legalize business operations with Registrar Generals Department	BSO/APO	70													25	16	18	13
1.1.1.5	Mentor & Coach Low , Medium Performing Outgrower Businesses to develop to High Performing Outgrower Businesses	BSO/APO	80													28	18	20	15
1.1.1.6	Develop Long Term Strategic Plans(4 years) for OBs with Business Plans	BSO/APO	100													35	22	25	18
1.1.2	Input Access at Community Level Improved																		
1.1.2.1	Identify targeted communities	APO/SAPO	80													28	18	20	15
1.1.2.2	Facilitate Community input agents setup	APO/SAPO/BSO	40 community input agents setup													14	9	10	7
1.1.2.3	Facilitate the formation of SSPs in targeted communities	APO/ES/GS	30 SSPs facilitated													11	6	8	5
1.1.2.4	Support SSPs with training and equipment using grant funds	APO/ES/GS	30 SSPs Supported													11	6	8	5

																Regional Targets			
	Activity	Responsible	Targets	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Tamale	Bolga	Wa	Sunyani
1.1.2.5	Facilitate linkages between local Input Dealers, OBs and SSPs	APO/ES/GS	30 OBs and input dealers linked to SSPs													11	6	8	5
1.1.3	Facilitate OB Networking																		
1.1.3.1	Group OBs into zones based on their locations in the South		3 zonal networks																3
1.1.3.2	Organize Zonal Sensitization forums of OBs (South only)	SAPO	3 Zonal forums																3
1.1.3.3	Facilitate the first meeting of a networking platform (South only)	SAPO	3 Meetings																3
1.1.3.4	Organize capacity building training for Networks on service demand and delivery to members	PAS/SAPO	4 (1 per region)													1	1	1	1
1.1.3.5	Facilitate service delivery of networks to members		15 netwoks deliver a service to members													5	3	4	3
1.1.3.6	Organize quarterly review meeting with networks to assess progress, successes and challenges for lesson learning		12 meetings (3 X 4 regions)													3	3	3	3
1.1.4	Outgrower Business Management																		
1.1.4.1	Train Outgrower Businesses on 8 Modules in collaboration with respective Technical Teams(Emphasis on OBs participation)	BSO/APO/TMO	130													46	29	33	24
1.1.4.2	Assist OBs to put in place records keeping system	BSO	130													46	29	33	24
1.1.4.3	Follow up to monitor application and progress of skills transferred	BSO/APO/TMO	130													46	29	33	24
1.1.5	OB Office Program	BS Team																	
1.1.5.1	Encourage OBs to set up office and keep a proper filing system	BS Team/RC	60													21	14	15	11

																Regional Targets			
	Activity	Responsible	Targets	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Tamale	Bolga	Wa	Sunyani
1.1.5.2	Interns from Universities will be assigned to OBs to assist the OB with new office systems and procedures including records keeping	BS Team/RC	60													21	14	15	11
1.1.6	Financial Services																		
1.1.6.1	Promote finance through tripartite arrangements	BSO/CDO/GS	$1,000,000													$350,000	$220,000	$250,000	$180,000
1.1.6.2	Promote savings by smallholder farmers and OBs for inputs and mechanized services in collaboration with FI's	BSO/APO/TMO																	
1.1.6.3	Link actors to FIs based on investment gaps in business plans especially on inputs and equipment	BSO/APO																	
1.1.6.4	Coordination of PFI and actor development with FinGAP	BSO																	
1.1.7	Input Dealer Business Development Program																		
1.1.7.1	Assess the capacities of existing Input Dealers using BDT	BSO	30 Businesses													11	6	8	6
1.1.7.2	Train Input Dealers on management systems	BSO/ES	30 Businesses													11	6	8	6
1.1.7.3	Set up ID on E-payment platforms to reduce transaction costs	BSO/APO/ES	30 Merchant Sims													11	6	8	6
1.1.7.4	Collaborate with the Ag production team to facilitate access to inputs at the community level	BSO/ES														11	6	8	6
1.1.7.5	Develop Business Plan for ID's where necessary																		
1.1.7.6	Assist ID Businesses to legalize their businesses Government Agencies		30 BUSINESS PLANS													11	6	8	6
1.1.8	Village Savings and Loans Associations																		

																Regional Targets			
	Activity	Responsible	Targets	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Tamale	Bolga	Wa	Sunyani
1.1.8.1	Expand VSLA implementation by creating 500 new groups using local organizations	BS Team/GAIP/APO/ICT	500													175	110	125	90
1.1.8.2	Monitor groups activities for savings and loans and track progress		500													175	110	125	90
1.1.8.3	Link VSLA s to FI s trying to capture savings	BS Team/CDO/GS	10 FI's LINKED TO GROUPS													4	2	3	1
1.1.8.4	Organize in-community input promos taking advantage of VSLA share outs		80 promotions, 80 communities													36	18	20	
1.2	Strengthened incentives for smallholder investment in new productivity enhancing technologies, services and practices																		
1.2.1	Pre-Season Agri-Business Forum	TD/RCs/ICT/PR	1 Number of pre-season events																
1.2.1.1	Invite all OBs and viable FBOs	RCs/APO/SAPO/CDO	ALL OBs and FBEs																
1.2.1.2	Invite Private sector actors (including local fabricators) as key participants for inputs, finance, equipment and other services	ICT	40 other actors/exhibitors																
1.2.1.3	Collaborate on event management with other FTF projects and other programs		5 FTF proj																
1.2.2	Standard crop production protocols																		
1.2.2.1	Coordinate with partners to finalize standard crop protocols for Rice	TLA/ICT	Rice protocols																

																Regional Targets			
	Activity	Responsible	Targets	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Tamale	Bolga	Wa	Sunyani
1.2.2.2	Modify existing ADVANCE training modules when necessary and share extension information through outgrower networks, lead farmers, private sector partners and information and communication technology (ICT) platforms		15000 distributed Maize (60%), Rice (15%), soy (25%)																
1.2.2.3	Disseminate planting advice through SMS/voice message service providers, call centers, the media, mainly radio and radio listener groups.	ICT/TLA	10,000 SMS 5,000 voice 25 radio stations 20 radio dramas 10,000 MIS 150 listener groups													3,500 SMS, 1,750 voice,9 radio stations ,3,500 MIS 53 listener groups	2,200 SMS, 1,100 voice, 6 radio stations , 2,200 MIS, 33 listener groups	2,500 SMS , 1,200 voice, 7 radio stations, 2,500 MIS , 38 listener groups	1,800 SMS, 900 voice, 3 radio stations, 1,800 MIS, 27 listernership groups
1.2.3	Farmer Mentor Program																		
1.2.3.1	Identify established OBs with strengths in the various project intervention areas for OBM and invite them to mentor new and other OBs to the program benefits and risks		60 OBs/FBEs mentor													21	13	15	11
1.2.3.2	Organize training for mentors on Effective Mentoring"		4 (1 per region)													1	1	1	1
1.2.3.3	Identify and establish the capacity gaps of various prospective mentees (new & old) and appropriately align them to the right mentors		180 Mentees													81	40	45	32

																Regional Targets			
	Activity	Responsible	Targets	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Tamale	Bolga	Wa	Sunyani
1.2.3.4	Organize groups of prospective OBs with certain established capacity gaps to visit OB farms for first-hand experience in what a multi-service operation can look like		60 OBs visit OBs													21	13	15	11
1.2.3.5	Organize special visits to HYBRID MAIZE sites to view the merits of high quality hybrid seed for promotion of hybrid seeds adoption		50 OBs visit sites													18	11	13	9
1.2.3.6	Organize special visits to Model farms (especially CSA ones) to learn application of all the best farm practices and their benefits		16 visits													5	4	5	2
1.2.4	Facilitate equipment access and use																		
1.2.4.1	Conduct equipment demonstrations with vendors/local fabricators where possible		8 demonstrations													3	2	2	1
1.2.4.2	Tractor Service Operators and Maintenance Training Program		7 workshops 280 operators													3 Workshops, 126 operators	2 Workshop, 62 operators	2 workshops 70 operators	1 workshop, 50 operators
1.2.4.3	The grant program will be used strategically to promote mechanization especially with small equipment grants																		
1.2.5	Facilitate local production of adoptable tools/equipment																		
1.2.5.1	Identify willing and capable local equipment fabricators in each region	APOs	4 fabricators identified													2	2	2	2
1.2.5.2	Assess the capacities of identified fabricators to establish knowledge and skill	APOs/BSO / experts	Capacity gaps identified for 4 fabricators													1	1	1	1
1.2.5.3	Facilitate capacity development to address knowledge and skill gaps of these selected fabricators to produce useable equipment		1 training workshop													1	1	1	1

																Regional Targets			
	Activity	Responsible	Targets	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Tamale	Bolga	Wa	Sunyani
1.2.5.4	Facilitate linkages between fabricators, OBs and OGs/SHF on the equipment use and availability		8 demonstrations													3	2	2	1
1.2.6	Promote Nutrition Sensitive Agriculture																		
1.2.6.1	Promote production of QPM by more women farmers		4000 women farmers													1,400	880	1,000	720
1.2.6.2	Promote production of soybean with potential as farm family food source by more women farmers		4000 women farmers													1,800	1,000	1,200	
1.2.6.3	Facilitate training in soybean utilization for various kinds of meals by women farmers		19 trainings , 1000 women farmers,													8 Trainings, 450 women	5 Trainings, 200 women	6 Trainings, 350 women	105
1.2.6.4	Conduct training in cover crops as source of household protein and farm family income		10 trainings , 500 women farmers,													5 trainings, 225 women	2 trainings, 125 Women	3 trainings, 150 women	
1.2.7	Agric Lending and Product Development																		
1.2.7.1	Identify Financial Institutions interested in developing more and/or better Agriculture Credit financial products	BS TL/FINGAP	5 FI's No. of FI's identified													2	1	1	1
1.2.7.2	Diagnose existing products with FINGAP	BS TL/FINGAP	All products																
1.2.7.3	Develop Training materials (FINGAP)	BS TL/FINGAP	Training material developed																
1.2.7.4	Conduct training with FINGAP	BS TL/FINGAP	2 No. of trainings conducted																

																Regional Targets			
	Activity	Responsible	Targets	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Tamale	Bolga	Wa	Sunyani
1.2.7.5	Coach FIs to develop/ modify Agric products more adapted to the crop calendar	BS TL/FINGAP	2 products completed																
1.2.7.6	Monitor product/ Lending implementation process.	BS TL/FINGAP																	
1.2.8	Support OB Records Keeping, Interpretation and Decision Making																		
1.2.8.1	Determine relevant Financial Analysis to help OBs make decisions based on available records Break Even Analysis Cost Benefit Analysis	BS Team	300 OBs													105	66	75	54
1.2.8.2	Follow up on decision making and application of knowledge	BS Team	200 OBs													70	44	50	36
1.2.9	GRANTS																		
1.2.9.1	Assist OBs to identify equipment gaps in their operations and Business Plan from the business point	BSO/APO																	
1.2.9.2	Assist Actors to apply for the grant based on their needs and available equipment for granting	BSO/APO																	
1.2.10	CROPS INSURANCE																		
1.2.10.1	Sensitize Actors to purchase crop insurance to mitigate against drought	BSO	100 Policies													35	22	25	18
1.3	Increased Adoption of improved productivity -enhancing technologies, services and practices by women and men farmers																		
1.3.1	ACTOR SUPPORTED TECHNOLOGY DEMONSTRATION SITES																		
1.3.1.1	Sites selected strategically for easy access by farmers, qualified lead farmers, and productivity factors	APO/M&E	480 sites													168	106	120	86

																Regional Targets			
	Activity	Responsible	Targets	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Tamale	Bolga	Wa	Sunyani
1.3.1.2	Sponsors identified for all inputs required	APO/RCs/ SAPO	20 firms													9	4	5	2
1.3.1.3	GAP training to take place at all sites (and selected farms) with private sector firms, nucleus farmer and MOFA AEA where possible.	APO/RCs/ SAPO	1600 training events 45,000 SHF													560 training events, 15,750 SHF	352 training events, 9,900SHF	400 Trainings events, 11,250 SHF	288 Trainings, 8,100 SHF
1.3.1.3.1	PHH training to take place at all sites (and selected farms) with private sector firms, nucleus farmer and MOFA AEA where possible.	APO/RCs/ SAPO	480 training events 26,400 SHF													216 training events, 9,240 SHF	106 training event, 5,808 SHF	120 Trainings 6,600 SHF	86 Trainings, 4,752 SHF
1.3.1.3.2	Sites monitored and data recorded on results	APO/RCs/ SAPO	480 sites													216	106	120	86
1.3.1.4	Promote the use of ICT tool for Ag extension with Grameen Foundation	ICT/APO/ SAPO	50 Field Agents trained to use the ICT application													22	11	30	9
1.3.1.4.1	Identify Field Agents to be trained on the ICT Tool	ICT/APO /Grameen	50													18	10	13	9
1.3.1.4.2	Facilitate training of selected Agents	ICT/APO /Grameen	50													18	10	13	9
1.3.1.4.3	Provide ICT Tablets for use by the field agents	ICT/Grants	50													18	10	13	9
1.3.1.4.4	Support the Field Agents to monitor usage of the Tablets	ICT/APO/ SAPO/ Grameen																	
1.3.1.5	Monitor pesticide use on demos	ES/APOs	400 demos monitored													216	106	120	72
1.3.1.6	Conduct off demo site GAPs training	APO/SAPO	26,400 farmers trained on GAPs													9,240	5,808	6,600	4,752

																Regional Targets			
	Activity	Responsible	Targets	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Tamale	Bolga	Wa	Sunyani
1.3.2	Field Management Program																		
1.3.2.1	Identify interested and capable OBs and sign a compact with them	Team	159 OBs/FBEs													56	35	40	29
1.3.2.2	Field management is incorporated into the OB business plan and actor slide	TLA/APO	159 OBs/FBEs													56	35	40	29
1.3.2.3	Facilitate the engagement of paid field agents by willing OBs		159 OBs/FBEs													56	35	40	29
1.3.2.4	Organize capacity building training for engaged agents		159 agents													56 (2 workshops)	35 (1 workshop)	40 (1 workshop)	29(1 workshop)
1.3.2.5	Facilitate delivery of technical services through a paid field agent which should include extension and tractor service management, OG input distribution, post-harvest mechanization, GAP/PHH training, demo site management, production collection and aggregation, community liaison, lead farmer development	TLA/APO	159 agents													56	35	40	29
1.3.2.6	Support OBs and agents with grants to use ICT tools (tablets, Pico projectors etc.) for extension to their OGs	ICT/Grant/AP	159 agents													56	35	40	29
1.3.2.7	Use Grant program to provide further incentive to offset startup costs - limited to motorcycle or "motor-king" to aid in necessary mobility required for the job	ICT/Grant/AP	100 grants to OBs													35 grants	22 grants	25 grants	18 grants
1.3.2.8	Organize quarterly review meeting with agents for review of progress, challenges, successes and lesson sharing		12 review meetings													3	3	3	3
1.3.2.9	Conduct monitoring visits and report on progress of the FMP		380 visits (2/agent)													133	84	95	68

																Regional Targets			
	Activity	Responsible	Targets	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Tamale	Bolga	Wa	Sunyani
1.3.3	Promote Climate Smart Agriculture																		
1.3.3.1	Conduct cover crop demonstrations		11 cover crop demos (9+3 by PCVs)													4	3	4	
1.3.3.2	Maintain and monitor 2016 ripped plots		40 Minimum-Tillage Demos MTDs													16	10	12	2
1.3.3.3	Conduct new minimum tillage demonstrations (MTD)		75 new MTDs													27	17	19	13
1.3.3.4	Facilitate no-burn policy campaign in all regions District Assembly, MOFA and policy to coordinate		4 Districts, (1 / region)													1	1	1	1
1.3.3.5	Organize relevant information from EPA	ICT/ES																	
1.3.3.6	Draft messages for airing on partner radio stations	ICT/ES																	
1.3.3.7	Esoko to provide weather forecasting through SMS technology	ICT	10,000 new users receiving Esoko weather forecasting													3,500	2,200	2,500	1,800
1.3.3.8	Work closely with Agricultural production team to expand area under minimum- tillage by facilitating ripping for interested OBs and OG s	APOs/ES	1,300 acres ripped													455	286	325	234
1.3.3.9	Facilitate implementation of agroforestry systems with selected farmers.	ES/ICT	6 farmers assisted													2	-	2	2
1.3.3.10	Identify new users from M&E database for MIS	ICT/MIS																	
1.3.3.11	Support Esoko to deploy technology	ICT																	

																Regional Targets			
	Activity	Responsible	Targets	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Tamale	Bolga	Wa	Sunyani
1.3.3.12	Monitor usage by new SMS Weather users and document successes through focus groups	ICT																	
1.3.4	ORGANIZE FARM CLINICS																		
1.3.4.1	Identify field problems affecting a considerable number of OGs measuring its spread and document its details	APO/TLA	8 (2 per region)													2	2	2	2
1.3.4.2	Coordinate with experts at regional MoFA-PPRSD to assess those within their capacity		8 (2 per region)													2	2	2	2
1.3.4.3	Coordinate with experts/research to assess those within their capacity and beyond MoFA		4 problems													1	1	1	1
1.3.4.4	Organize clinics to address the identified problems		8 clinics													2	2	2	1
1.3.5	Digital Finance Services																		
1.3.5.1	Link Actors to Mobile Money Service providers(MTN, VODAFONE, TIGO, AIRTEL) as Merchants	BSO/ICT/ APO/TMO /GS																	
1.3.7.2	Register/ Setup Actors	BSO/ICT/ APO/TMO /GS	10,000 smallholder farmers													3,500	2,200	2,500	1,800
1.3.7.3	Encourage Actors to incorporate DFS into operations	BSO/ICT/ APO/TMO /GS																	
1.3.7.4	Monitor service usage	BSO/ICT/ APO/TMO /GS																	
1.3.6	OUTGROWER/SMALLHOLDER FARMERS CREDIT MANAGEMENT																		
1.3.6.1	Identify OG's receiving credit services.	BS Team/AP Team																	
1.3.6.2	Train APO's and CDO s (TOT) on credit management	BSO TL																	

																Regional Targets			
	Activity	Responsible	Targets	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Tamale	Bolga	Wa	Sunyani
1.3.6.3	Implement training with APO's/ FI's	BSO/AP Team	30,000 stallholder farmers													10,500	7,500	6,600	5,400
1.3.6.4	Monitor repayments by smallholder farmers	BSO/AP Team																	
2	SUB-PURPOSE 2: INCREASE MARKET ACCESS AND TRADE OF TARGETED COMMODITIES																		
2.1	Increase availability and use of affordable/sustainable services																		
2.1.1	Market Linkage Development																		
2.1.1.1	Two Way Trade Missions	TLT/TMS/ TMO	20 Trade Missions													6	5	5	4
2.1.1.2	Pre-Harvest Event	DCOP(T)/ TLT	1 Event Organized																
2.1.1.3	Contract Facilitation	TLT/TMO	100 Contracts													27	25	25	23
2.1.1.4	Transport Linkages	TLT/TMO	All new OBs and Buyers Linked to Transporters																
2.1.1.5	Training of OBs in Sales and Marketing	TLT/TMO	All OBs Trained																
2.1.1.6	Training of OGs in Produce Quality Requirements	TLT/TMO	50,000 OGs													16,000	14,000	14,000	6,000
2.1.1.6	Market Information Service Provided by Esoko	TLT/TMO	20,000 OGs													7,000	4,400	5,000	3,600
2.2																			
2.2.1	Market Lead Firm Competiveness																		

																Regional Targets			
	Activity	Responsible	Targets	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Tamale	Bolga	Wa	Sunyani
2.2.1.1	Support Buyer Outgrower Development	TLT/TMS/ TMO/APO /BSO	Expand & Improve 9 Existing Buyer Schemes , Facilitate 2 New Buyer Schemes													4 old/1 new	2 old/1 new	3 old/ 1 new	2 new
2.2.1.2	Finance Facilitation for Buyers	TLT/TMS	US$500, 000 in Finance Facilitated for Buyers																
2.2.1.3	BDS/Grant Support to Buyers	TLT/TMS/ TMOs	50 Buyers Supported; 4 SMEs accessing Grants																
2.3	Increase private sector investment and innovation to support value chain development																		
2.3.1	Trade Association Support																		
2.3.1.1	Provision of Market Information & Intelligence Services	TLT/TMS/ TMO/ GGC	4 Quarterly Market Intelligence Reports																
2.3.1.2	Promotion of Warehouse Receipts (with GGC)	TLT/TMS/ TMO/ GGC	Per GGC Year 3 Grant																
2.3.1.3	Promotion of Grain Standards with Trade Associations	TLT/TMOs/Grants	5 Participating Trade Associations																

																Regional Targets			
	Activity	Responsible	Targets	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Tamale	Bolga	Wa	Sunyani
2.3.1.4	Support for 'Buy Ghana' Promotion Events	TLT/TMS/ TMOs	1 Event Supported																
2.3.1.5	Capacity Building for Trade Associations (Finance, Governance, Advocacy, etc.)	TLT/TMS/ PA	4 Trade Associations Supported																
2.4	Expanded depth and breadth of benefits from market participation for women, men and firms																		
2.4.1	North Ghana Processing Upgrade																		
2.4.1.1	North Ghana Rice Milling Upgrade	TLT/TMO/ Grants	3 Rice Mills Upgraded													2	1	-	-
2.4.1.2	Food (Maize/Soy) Processing Upgrade	TLT/TMO/ Grants	3 Food Processors Upgraded													2	1	1	-
2.4.1.3	Improvement in Parboil Rice Techniques	TLT/TMO/ Grants	10 Ent./ groups trained; 10 Ent./ groups accessing SEGs (Parboil Vessels)													4	4	2	-
2.4.1.4	BDS Support to North Ghana Agro Processors	TLT/TMO/ Grants	10 North Ghana Agro Processors accessing BDS support													6	4	-	-
2.5	Community-based administrative systems strengthened																		
2.5.1	Assess impact of Sell More For More	TL/TMOs/ CDOs	45 FBOs													20	11	15	-
2.5.1.1	Participate in beneficiary FBOs' meetings to identify specific constraints and best practices	CDOs/TMOs	200 meetings held													70	44	50	36

																Regional Targets			
	Activity	Responsible	Targets	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Tamale	Bolga	Wa	Sunyani
2.5.1.2	Mentor and coach beneficiary FBOs on Good Administrative practices	CDOs/TMOs/APOs	200 visits conducted													90	50	60	-
2.5.1.3	Facilitate learning visits among for experience sharing		10 visits													4	2	2	-
2.5.1.4	Monitor and Evaluate activities of beneficiary FBOs																		-
2.5.1.5	Identify and train new and potential FBOs on SMFM	TL/CDOs	20 FBOs																20
3	SUB-PURPOSE 3: STRENGTHEN CAPACITY FOR ADVOCACY AND ACTIVITY IMPLEMENTATION																		
3.1	Strengthen advocacy capacity of value chain actors and their associations to address identified value chain-specific enabling environment constraints particularly to the north																		
3.1.1	Identifying and addressing specific Enabling Environment Constraints																		
3.1.1.1	Award grants to selected organizations to implement specific advocacy actions to address specific enabling environment constraints	PAS, TML &CDOs	4 organizations awarded grant													1	1	1	1
3.1.1.2	Monitor and evaluate the results of the advocacy actions by the grantees	PAS &CDOs	4 grantees monitored													1	1	1	1
3.1.1.3	Train and support grantees to develop long term advocacy strategies to address agribusiness environmental constraints	PAS &CDOs	4 organizations trained													1	1	1	1
3.1.2	Build capacity of OBs and FBOS on policy and advocacy																		
3.1.2.1	Facilitate the formation of RFBOs (Regional FBO s) and ZOBs (Zonal OB s) networks	PAS &CDOs	2 RFBOs & 3 ZOBs networks formed													1 RFBO	1 RFBO		3 Obs

																Regional Targets			
	Activity	Responsible	Targets	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Tamale	Bolga	Wa	Sunyani
3.1.2.2	Train FBOs & OBs network leadership on effective leadership, coalition/network building & gender	PAS &CDOs	4 training events; 3 RFB0s and 3 ZOBs networks trained													1	1	1	1
3.1.2.3	Train FBOs & OBs leadership on basic advocacy skills, local governance system, policy processes at the local level	PAS &CDOs	4 training events; 3 RFBOs & 16 ZOBs Networks trained													1	1	1	1
3.1.2.4	Train OBs Networks on effective advocacy, policy engagement and lobbying (advocacy planning, implementation and, monitoring & evaluation)	PAS &CDOs	3 training events; 3 regional ROBs Networks trained													1	1	1	1
3.1.2.5	Support Regional OBs networks identify specific advocacy issues and develop advocacy plans to address them	PAS &CDOs	3 ROB networks advocacy plans developed													1	1	1	
3.1.2.6	Support Regional OBs networks to implement their advocacy plans(carry out policy advocacy and engagements to address specific advocacy issues identified at the local and regional levels)	PAS &CDOs	3 ROBs networks Advocacy plans implemented																
3.1.2.7	Mentorship visits of established Business/Cooperative Associations to share experience with OBs & FBOs networks	PAS &CDOs	3 events organized													1	1	1	
3.1.2.8	Continue to monitor and support Zonal OBs networks	PAS																	
3.1.2.9	Support OBs & FBOs networks create awareness among themselves and their communities about women access to productive farm land	PAS, GS, &CDOs														2	2	2	

																Regional Targets			
	Activity	Responsible	Targets	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Tamale	Bolga	Wa	Sunyani
3.1.3	Development and Promotion of District Agricultural Investment Plans		Increased private & public investment in agric in the district																
3.1.3.1	Support MMDAs to complete the last batch of District Agricultural Investment Profiles (DAIPs)	PAS	10 DAIPs developed														5	5	
3.1.3.2	Support MMDAs print and disseminate DAIPs both in hard and soft copies (including publishing them on MMDAs websites, GIPC website, etc.)	PAS &CDOs	1200 copies printed; 100 copies/ DAIP														600 copies	600 copies	
3.1.3.3	Train MMDAs (the DAIPs development Committees & others) on investment promotion skills in collaboration with Ghana Investment Promotion Council (GIPC)	PAS	2 training events; held for 12 MMDAs														6 MMDA s	6 MMDAs	
3.1.3.4	Facilitate the exhibition of DAIPs by MMDAs in major events including Annual Pre-season and Pre-harvest events	PAS &CDOs	3 exhibitions per DAIP; 36 exhibitions events held														18	18	
3.1.3.5	Collaborate with beneficiary MMDAs to monitor and document the outcomes and lessons from their agribusiness investment promotion activities	PAS &CDOs	2 visits per DAIP; Total 24 visits														12	12	
3.2	Strengthen local institutions to implement inclusive value chain development and become eligible for USAID funding																		
3.2.1	Build capacity of selected local institutions																		

																Regional Targets			
	Activity	Responsible	Targets	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Tamale	Bolga	Wa	Sunyani
3.2.1.1	Follow up with organizations trained to manage USAID funding	Grants Manager	Follow up program of capacity building to be able to manage USAID funds																
3.2.1.2																			
3.3	Capacity development for program implementation																		
3.3.1	Expand Numeracy training	GS/CDO	11,000 # of individuals trained													4,950	2,750	3,300	
3.3.1.1	Identify and assess local institutions to conduct ToT	GS/CDO	3 institutions assessed																
3.3.1.2	Identify potential beneficiaries using the database (mostly targetting women)	CDO/M&E																	
3.3.1.3	Identify potential trainers based on location	CDO																	
3.3.1.4	Organize Training of Trainers		Numbers depend on languages and # of districts																
3.3.1.5	Organize trainings at community level for SHF	CDO	11,000													4,950	2,750	3,300	
3.3.1.6	Monitor and Evaluate training activities	CDO/M&E																	
3.3.2	Expand Farming as a Business training	GS/CDOs	13,000 # of individuals trained																

																Regional Targets			
	Activity	Responsible	Targets	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Tamale	Bolga	Wa	Sunyani
			;# of members of producer orgs receiving assistance																
3.3.2.1	Revise FaaB material and program																		
3.3.2.2	Identify potential beneficiaries using the database																		
3.3.2.3	Identify potential trainers based on location																		
3.3.2.4	Organize Training of Trainers																		
3.3.2.5	Train OGs on FaaB		13,000													4,550	2,860	3,250	2,340
3.3.2.6	Monitor and Evaluate training activities																		
3.4	Capacity development for FBEs (upgrade from FBOs)																		
3.2.7.1	Classify FBOs into categories (ADVANCE SOUTH)	TL CB	30 FBOs																20
3.2.7.2	Collective sale-linkages to end markets through Trade Missions	TL CB/TL T&M	45 FBOs													16	10	15	4
3.2.7.3	Linkages to OBM training	CDO/BSO	45 FBOs													16	10	15	4
3.2.7.4	FBOs to establish group farms/demos	CDO	20 group farms established													7	4	5	4
3.2.7.5	Facilitate FBEs to access SEG and LEQ grants	CDO	20 FBEs													7	4	5	4
3.2.7.6	Develop sustainability plans such as Business plans, Succession plans	CDO/BSO	20 FBEs													7	4	5	4

																Regional Targets			
	Activity	Responsible	Targets	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Tamale	Bolga	Wa	Sunyani
3.2.7.7	Linking beneficiary FBOs to service providers-mechanization services, Financial institutions	CDO/BSO	90 FBOs													30	20	23	17
4	Program Support - Gender Mainstreaming																		
4.1	Women engaged in increased agricultural productivity in targeted commodities																		
4.1.1	Promote an increase of established women as Nucleus farmer (NF) and Lead Farmer	GS/APO/BSO	7 additional women as NF or associate NFs													2	1	2	2
4.1.2	Encourage women NFs, associate NFs and lead farmers to host environmentally friendly technology demonstration	GS/APOs/ SAPOs	Inclusion																
4.1.3	Recognize relevant technology for women	Ag TL/APOs/TD	2																
4.1.4	Link women farmers to equipment demonstrations trainings with vendors/local fabricators	APO/GS	4000 women farmers													1,400	880	1,000	720
4.1.5	Link women farmers and women groups to OBs to access technologies, enhancing services and training.	APO/BSO/ GS	Inclusion																
4.1.6	Work with the grant team to provide in-kind grants with flexible leverage requirement to women depending on vulnerability	GS/Team	30 applications													11	6	7	6
4.1.7	Support women rice transplanting groups. Facilitate training of "transplanting gangs" and link them to rice Obs and FBOs to service farms	GS/APO/ES	Inclusion													3	2	3	-

																Regional Targets			
	Activity	Responsible	Targets	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Tamale	Bolga	Wa	Sunyani
4.1.8	Support ES in campaigns against women pesticide application and encourage them to access commercial service providers	GS/ES/APOs	Inclusion																
4.1.9	Actively engage women in capacity building through various capacity building programs such as FaaB and Numeracy	GS/CDO	10,000 women trained in Numeracy and FaaB													3,800	2,400	2,800	1,000
4.1.10	Support women to invest in their livelihood. Establish Village Savings and Loan groups for women and men, and link these groups to access agro-inputs and market opportunities	GS/CDO/BSO/TMO	40% of Men																
4.1.11	Raise awareness of land rights and land ownership/larger land size for women to farm through organizing informal meetings in communities; promoting success stories	GS/PS/APO	Inclusion																
4.1.12	Facilitate women's access to land : Use the existing NF-outgrower structures; traditional authorities and other donor partners to help leverage land so it is more readily available for productive women	GS/APO/PS	1000													350	220	250	180
4.1.13	Ensure women have access to information: Promote appropriate technologies such as use of mobile devices and listenership clubs targeted to women's specific needs	GS/ICT	Inclusion																
4.1.14	Expand Numeracy training facilitated by local organizations	CDO	10,000 women trained in Numeracy													4,500	2,500	3,000	-
4.2	Increase women market access and trade of targeted commodities																		

																Regional Targets			
	Activity	Responsible	Targets	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Tamale	Bolga	Wa	Sunyani
4.2.1	Build capacity of women to access markets: provide training in business, financial and IT skills to women business owners and group members	GS/BSO/ICT	Inclusion 40%																
4.2.2	Introduce market linkages; link women farmers and women's groups to formal markets and put in place structures to help them maintain control over their income	GS/TMO/ CDO																	
4.2.3	Build women's leadership capacity; conduct skills and leadership training for women at different levels of the value chain (producer/marketing groups, associations and business managers)	GS/CDO	500 women trained in leadership													175	110	125	90
4.3	Nutrition Sensitive Agriculture																		
4.3.1	Promote the production of high yielding protein maize varieties by women farmers through demonstraions and in community promotions	GS/APOs/ SAPOs																	
4.3.2	Collaborate with other projects and WIAD to build capacity of women FBO groups, Female OBs, and farmers on soy and cereal nutrition formulation that benefits value chain actors Households	GS/SPRING/RING/WIAD	4000													1,800	1,000	1,200	-
4.3.3	Link women's group to ICT firms (Esoko, Radio stations) for dissemination of nutrition messages on soy, rice and maize formulations	GS/ICT	4000 women													1,800	1,000	1,200	-
5	SUB-PURPOSE 5:PROGRAM SUPPORT - ENVIRONMENT																		
5.1	General environmental compliance																		
5.1.1	Update PERSUAP for USAID approval.	ES	PERSUAP Updated																
5.1.2	Conduct environmental compliance training for Regional staff, actors and beneficiaries	ES	4 trainings													1	1	1	1

																Regional Targets			
	Activity	Responsible	Targets	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Tamale	Bolga	Wa	Sunyani
5.1.3	Ensure sub-grant activities are in the scope of the Initial Environmental Examination.	ES/GS	Environmental review reports completed																
5.1.4	Compile reports for pesticide use monitoring in demos	ES	Report completed																
5.2	Improving agrochemical management																		
5.2.1	Conduct safety training for agrochemical dealers in UW and NR based on safety gaps identified	ES	2 trainings													1		1	
5.2.2	Monitor and report on the impact of existing SSPs.	ES/APOs	Report completed																
5.2.3	Support training for new SSPs on safe pesticide handling and application	ES/MoFA	30 SSPs formed and equipped													11	7	8	5
5.2.4	Set up container management centers with selected input dealers based on location of SSPs.	ES/GAIDA	12 input dealers supported													3	4	4	1
5.3	Climate smart agriculture																		
5.3.1	Support set-up of cover crop demonstration plots	APOs/ES	Cover crop protocols revised. Cover crop seed obtained													3	3	3	2
5.3.2	Work closely with production team to expand area under minimum tillage by facilitating ripping for interested OBs	APOs/ES	1,300 acres ripped													455	286	325	234
5.3.3	Facilitate implementation of agroforestry systems with selected farmers.	ES/ICT	6 farmers assisted													2	-	2	2

Annex 3: Targets for 2017

Indicator/Disaggregation	Baseline	FY17 targets	Achievements so far	LOP targets
Number of direct project beneficiaries		80,000	95,005	113,000
Male		*44,000*	*50,807*	*62,150*
Female		*36,000*	*44,198*	*50,850*
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	688	600
Number of individuals who have received USG supported short-term agricultural sector productivity or food security trainings		80,000	81,418	100,000
Male		*44,000*	*41,058*	*55,000*
Female		*36,000*	*40,360*	*45,000*
Value of agricultural and rural loans		$ 1,000,000	$ 2,299,948	$ 4,300,000
Value of new private sector investment in agricultural sector or value chain (US$)		$ 800,000	$ 1,420,049	$ 4,000,000
Gross margins per hectare for selected crops US Dollar under marketing arrangements fostered by the activity (USD/ha)				
Maize		**$ 750**	**$ 615**	**$ 800**
Male	*$ 276.34*	$ 720	$ 828	$ 790
Female	*$ 288.84*	$ 810	$ 559	$ 840
Rice		**$ 1,250**	**$ 1,118**	**$ 1,350**
Male	*$ 258.58*	$ 1,300	$ 1,179	$ 1,400
Female	*$ 249.17*	$ 1,150	$ 1,009	$ 1,250
Soy		**$ 600**	**$ 513**	**$ 650**
Male	*$ 315.02*	$ 650	$ 540	$ 700
Female	*$ 212.18*	$ 550	$ 476	$ 600
Number of hectares under improved technologies or management practices as a result of USG assistance		70,200	76,603	281,600
Male		38,610		157,505
Female		31,590		124,095
Number of farmers and others who have applied new technologies or management practices as a result of USG assistance	91.16%*	70,200	52,577	101,700
Male	*90.41%**	*38,610*	*29,287*	*55,935*
Female	*99.28%**	*31,590*	*23,290*	*45,765*

Indicator/Disaggregation	Baseline	FY17 targets	Achievements so far	LOP targets
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	483	450
Value of incremental sales (collected at farm-level) attributed to FTF implementation		**$ 16,940,000**	**$ 11,426,774**	**$ 63,680,000**
Maize	*$ 258.83***	$ 14,570,000		$ 40,470,000
Quantity sold (MT)		$ 119,876		$ 334,964
Total sales		**$ 27,811,163**		**$ 81,029,081**
Adjusted baseline		$ 13,241,163		$ 40,559,081
Rice	*$ 433.93***	$ 1,780,000		$ 16,040,000
Quantity sold (MT)		**$ 32,169**		**$ 136,567**
Total sales		$ 7,720,581		$ 33,056,742
Adjusted baseline		$ 5,940,581		$ 17,016,742
Soy	*$ 301.36***	**$ 590,000**		**$ 7,170,000**
Quantity sold (MT)		$ 14,011		$ 57,830
Total sales		$ 4,553,587		$ 21,359,469
Adjusted baseline		**$ 3,963,587**		**$ 14,189,469**
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	28	100
Number of organizations/ enterprises identified as high potential for future awards		5	-	7
Number of organizations/ enterprises receiving capacity building support against key milestones		40	6	50
Number of awards made directly to local organizations by USAID		4	-	5
Number of value chain actors accessing finance		225	45	300

** % of farmers and other that applied one or more technology*
*** Average sales per farmer*