

REACH-Uganda

2018 ANNUAL REPORT

April 2019



INTERNATIONAL FERTILIZER DEVELOPMENT CENTER
PO BOX 2040 | MUSCLE SHOALS, AL 35662 | USA

Table of Contents

Overview	1
Objective 1. To integrate market-oriented farmers and farmer-led agribusinesses into the commodity value chain using the pulling power of upstream lead firms or off takers	3
Outcome 1.1. Market-oriented farmers aggregate and sell to lead firms.....	3
Output 1.1	5
Output 1.2	5
Output 1.3	6
Outputs 1.4 and 1.5	6
Outcome 1.2 Lead firms/SMEs transfer primary processing, quality control activities, and employment down the chain in their business models.....	7
Output 1.6	11
Objective 2. To enhance productivity of market-oriented farmers in the commodity value chains.....	12
Outcome 2.1. Farmers increase their yields to at least 65% of optimal level (potato and rice)	12
Output 2.1	13
Outcome 2.2. Farmers adopt and use resilience strategies	16
Output 2.2	16
Output 2.3	16
Objective 3. To improve availability and uptake of public and private support services related to the core commodity value chains	17
Outcome 3.1: FGs and FBGs achieve financial objectives.....	19
Outputs 3.1 and 3.2	19
Outcome 3.2: Farmers, FGs, and FBGs make increased use of support services.....	20
Output 3.3	20
Output 3.4	21
Outputs 3.5 and 3.6	23
Output 3.7	23
Output 3.8	23
Cross-Cutting Issues	24
Lessons Learned.....	25

Acronyms

CCA	Community Change Agents
CSA	Climate-Smart Agriculture
DLG	District Local Government
FaaB	Farming as a Business
FBG	Farmer Business Group
FEW	Field Extension Worker
FG	Farmer Group
GAP	Good Agricultural Practice
IFDC	International Fertilizer Development Center
LSB	Local Seed Business
MELS	Monitoring, Evaluation, Learning, and Sharing
MIFA	Mengya Integrated Farmers Association
MoC	Memorandum of Cooperation
MoU	Memorandum of Understanding
MSD	Market Systems Development
MSMEs	Micro-, Small-, and Medium-sized Enterprises
REACH-Uganda	Resilient Efficient Agribusiness Chains in Uganda
SACCO	Savings and Credit Cooperative Organization
SSP	Spray Service Providers
VSLA	Village Savings and Loan Association

REACH-Uganda

2018 Annual Report

Overview

The Annual Report for the Resilient Efficient Agribusiness Chains in Uganda (REACH-Uganda) project covers a 12-month reporting period from January to December 2018.

2018 was a very important year for the REACH-Uganda project. It successfully fought to establish itself as a project promoting systemic change in its core value chains of rice and potatoes through a Market Systems Development (MSD) approach. During 2018 the project reached a milestone – working with 29,296 farmers, or 75% of its target population. Through an active scoping and screening process jointly implemented with Cardno EMG, the project has now identified and negotiated 19 partnership agreements. These agreements have been largely with market lead firms, such as SWT Tanners, Kibimba, Responsible Suppliers (rice), Psalms Confectionery and Namakwaland (potatoes). Partnership agreements have also been reached with smaller actors, such as SolarNow, Mengya Integrated Farmers Association (MIFA) and Kigezi Small Scale Agro Processors Association. A number of the partnerships were activated in 2018, leading to improvements in areas such as sourcing, branding, and marketing at the micro-, small, and medium-sized enterprise (MSME) level. This has led to 27% improvement in turnover at MSME level compared to 2017. This suggests that some of the partnerships are gaining a foothold and addressing key gaps in the market systems of rice and potato. Presently 3,500+ farmers are directly engaged and benefitting from MSMEs and agri-service providers supported by the project, while projections show that this will grow to 15,000+ farmers by the end of project in 2020 (please refer to “Table 2. Signed MoCs and Main Accomplishments”).

Significant public-private partnerships for co-investment in infrastructure were also signed. This included agreements for the rehabilitation of 44 kilometers (km) of roads with three District Local Governments (DLGs), namely Kween, Butalejja and Kanungu. The rehabilitation works are cost-shared with the DLGs on an approximate 50/50 basis. The objectives for rehabilitating these roads included improving market access and reducing transport and production costs for farmers producing the project’s target commodities. It is anticipated that the road rehabilitation will benefit a minimum of 76,988 persons in the road catchment area. In addition, partnerships were also signed for the rehabilitation and expansion of two gravity-fed irrigation schemes with farmer associations in Kapchorwa and Kween districts. These irrigation works expanded the total area covered to 36 acres per day. The irrigation works are intended to enhance community efforts to mitigate climate change as well as improve general economic performance of households in the irrigation catchment areas.

REACH-Uganda also made progress toward accomplishment of high-level outcome indicators. Notably, 71% of participating farmers are using three of the resilience measures promoted by the project while 38% have adopted all four resilience measures. Regarding productivity, 39% of farmers are now achieving the targeted optimal production targets of 2 mt/acre for rice and

5.5 mt/acre for potato. This represents a fourfold increase in the number of farmers achieving this target since the project baseline.

The REACH-Uganda project was never intended to work in isolation. During 2018, the project enjoyed a number of fruitful partnerships with other projects and actors. This included, a close working partnership with the Integrated Seed Sector Development Project for seed potato multiplication in eastern and south western Uganda. In the potato sector the project also partnered with the GIZ funded Promotion of Nutrition Sensitive Potato value chains in eastern Uganda on farmer training and seed potato availability. The REACH-Uganda project also worked with Roads for Water to train district local government staff on the opportunities for harnessing water run off from roads for agricultural activities. Additionally, the project has been partnering with the UNHABITAT implemented Global Land Tool Network activity in Uganda, looking at formal registration of land ownership and issuance of wetland use permits.

September 2018 marked the mid-point of the project. In line with the project's contribution agreement and best practices, REACH-Uganda underwent a Mid-Term Review. The review was conducted by Opportunities Unlimited during October 2018. The terms of reference focused on eight key questions:

1. Is the approach to MSD methodology currently employed by the project appropriate for the context?
2. Is the approach adopted by the project seeking to improve the availability and uptake of public and private support service relevant?
3. To what extent has the project team responded adequately to challenges that arose during implementation?
4. Does the team have good quality analysis, human capacity, and systems?
5. Is there a good quality results-focused Monitoring, Evaluation, Learning and Sharing (MELS) system, allowing for periodic reflection and adjustment of activities if needed?
6. What progress has been made at mid-point?
7. How successfully has the project incorporated elements of climate-smart agriculture, youth and gender into the implementation of its activities?
8. What are the prospects for sustainability of REACH-Uganda project results?

The review team (with some limited caveats) was largely positive about the project's progress/success and recognized that the project was on track in terms of its main targets (number of farmers reached, number of active partnerships). In areas in which the project could improve and/or achieve greater impact, the Opportunities Unlimited team provided detailed suggestions for IFDC and Cardno EMG on next steps for the project to consider. Emphasis was placed on the need for more programmatic work on the support functions within the market system, such as access to quality planting materials and agrochemicals. In addition, the project was recommended to undergo some improvements in the specificity and relevance of partnership agreements, integration of a Donor Committee for Enterprise Development (DCED) standard results monitoring system, and development of more in-depth market strategies.

See Annex 1 for the Mid-Term Review report.

Objective 1. To integrate market-oriented farmers and farmer-led agribusinesses into the commodity value chain using the pulling power of upstream lead firms or off takers

Table 1. Objective 1 Targets and Achievements

Indicator	Target (2018)	Achieved (2018)	Achieved (Cumulative)
Outcome 1.1. Market-oriented farmers aggregate and sell to lead firms			
Output 1.1. 700 farmer groups (FGs) identified, selected, and legally registered (potato 300, rice 400)			
# FGs registered with local authorities	700	848	848 registered with valid certificates. 1,454 FGs registered with the REACH project.
# FG members (disaggregated by gender and age category)	No target for 2018; project target 40,000 members (55% women and youth)	T: 29,296 - F: 17,738 - M: 11,558 - <35: 18,421 - ≥35: 10,875	T: 29,296 - F: 17,738 - M: 11,558 - <35: 18,421 - ≥35: 10,875
Output 1.2. 40 Lead firms/MSMEs screened and a minimum of 10 selected			
# MSMEs identified and screened through the MSD approach	40	22	35
# MSMEs that have signed an MoU with the project	10	14	19
Output 1.3. 1,500 FBGs and FGs gain skills in organization governance and business management			
# FBGs receiving training in group governance and business management	No target for 2018 (combined with FGs); project target 200	5	142
# FGs receiving training in group governance and business management	1,500	1,169	1,169

Indicator	Target (2018)	Achieved (2018)	Achieved (Cumulative)
Output 1.4. Develop and formalize business cases with action plans with 10 lead firms/MSMEs			
# action plans developed and activated with FBGs (between MSMEs and FBGs)	10	1	2
# action plans developed and activated with MSMEs	10	12	17
Output 1.5. Facilitation of 10 linkages between FBGs, intermediary agents, and lead firms			
# FBG profiles shared with MSMEs	10	18	26
# of business cases developed and formalized between MSMEs and FBGs	No target for 2018; project target 16	44	55
Outcome 1.2. Lead firms/SMEs transfer primary processing, quality control activities, and employment down the chain in their business models			
Output 1.6. 5 lead firms/MSMEs identify opportunities for primary processing and quality control			
# trainings conducted between MSMEs and FBGs	5	44	52
# investments made between MSMEs and FBGs	5	3	3
Output 1.7. 50 work placements created at FBGs and lead firms/SMEs			
# job placements with FBGs (for young graduates)	50	31 - F: 15 - M: 16	31 - F: 15 - M: 16

Outcome 1.1. Market-oriented farmers aggregate and sell to lead firms

Output 1.1

The REACH-Uganda project has continued to put sustained effort into the identification of existing farmer groups as potential participants. The project prefers where possible working towards strengthening existing groups rather than the creation of new groups. After a vetting process, the project identified 564 additional FGs consisting of 11,179 farmers. After capturing these farmers in the project's management information system, this brings the total number of farmers participating in the project to 29,296 of which 17,738 are female and 11,558 are male.



Figure 1. Farmers Registered with the REACH-Uganda Project

Output 1.2

By the end of 2018, a total of 35 micro-, small, and medium-sized enterprises (MSMEs) had been screened jointly by IFDC and Cardno EMG through the market systems approach, and 19 of these were selected. These 19 MSMEs signed Memorandums of Cooperation (MoCs) with the REACH project, with Cardno EMG as a witness. Of the 19 MSMEs, the following 14 were brought on board in 2018: Katiba Traders Ltd, Kigezi Small Scale Agro Processors Association, Mengya Integrated Farmers Association, SolarNow, Kibimba Rice, Kapchesombe Green Change Farmers Association, Rice Millers Council of Uganda, SWT Tanners Ltd, Upland Rice Millers, Uganda Breweries Ltd, Divine Masters, Agro Genetic Technologies, Pearl Rice and Croplife Uganda.

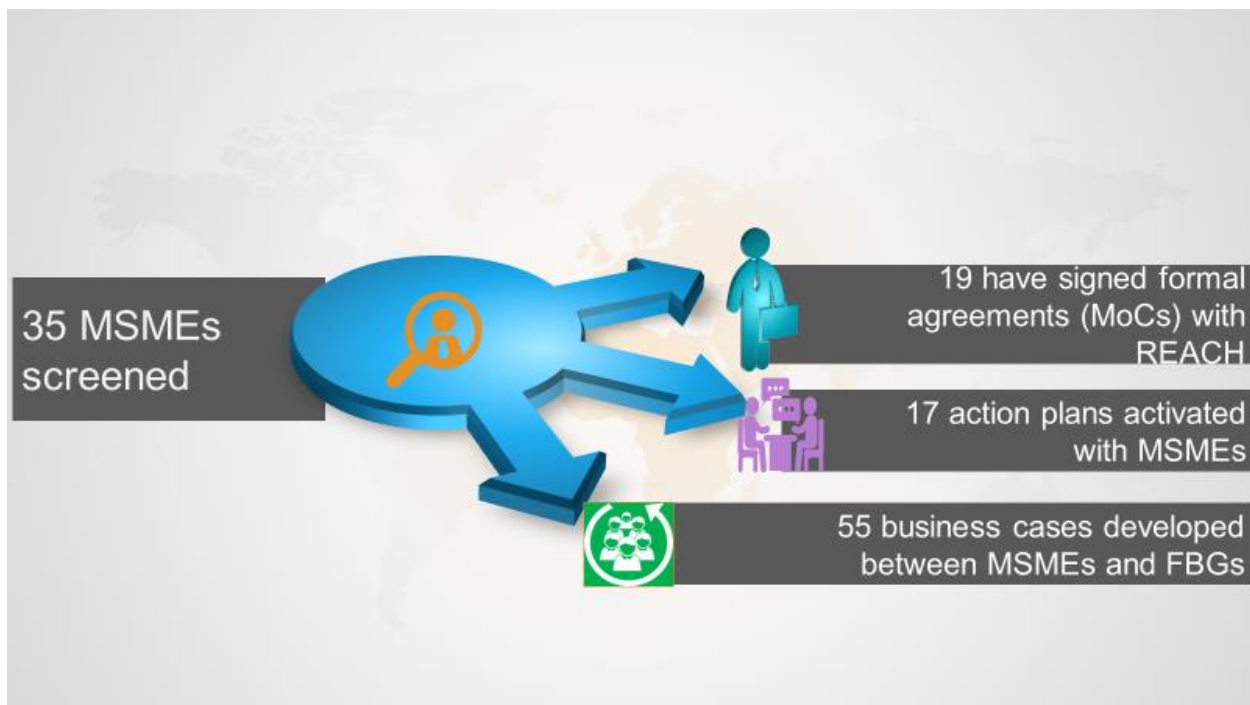


Figure 2. Market Systems Development

Output 1.3

Working with actors from community-based organizations and the private sector, the REACH-Uganda project extended training in organization governance and business management to a total of 15,575 farmers (F 9,614; M 5,961) from 1,306 FGs. Training farmers in these topics was underpinned with the creation of a training manual, which represents a refinement of the Bank of Uganda/GIZ supported manual. The training package consisted of several key areas of business management, which are critical to the development of business at the farm and farmer group level, leading to more effective engagement in the market system. These included business planning and business plan development, budgeting for a farm business, and recordkeeping.

Outputs 1.4 and 1.5

The level of activation of action plans created by IFDC, Cardno EMG and MSMEs varies. The more advanced MoCs have started to deliver tangible results in the form of improved business performance. Responsible Suppliers, MIFA and Psalms Food Industries Ltd experienced an average of 27% revenue growth from 2017 to 2018, some of which can be attributed to the activities co-implemented through the partnerships, such as improved sourcing, branding and marketing. The nature of these partnerships, what has been achieved, and the number of farmers reached is elaborated in **table 2 below**.



Figure 3. Crisp production at modern processing facility established by Psalms Food Industries Ltd (left); Muhammed Sekatawa, Co-Director of Responsible Suppliers in Mbale showing new Branding of “Diner’s Rice” (right)

Through the MoCs signed with business partners, a total of 12 additional action plans were developed and initiated as per the table below

Table 2. Signed MoCs and Main Accomplishments.

Partner	Sector	Title of Intervention	Status as of Dec 2018	# farmers reached	Planned # farmers/services provided etc. (2020)
MSME processors					
Responsible Suppliers/Diners Group Ltd (DGL)	Rice	Support Diner’s Group Limited to increase direct sourcing of paddy from farmers and farmer groups, improve logistics, market and access to finance.	DGL sourcing from 1,020 farmers (17 FBGs) 3 FBGs accessed loans through Microfinance support centre. (approx.. 90 million UGX)	1,020 farmers sold paddy rice	2,194 farmers

Partner	Sector	Title of Intervention	Status as of Dec 2018	# farmers reached	Planned # farmers/services provided etc. (2020)
Psalms Food Industries Ltd (PFIL).	Rice	Supporting in factory expansion, capacity building, quality control, market improvement and sourcing of potato for processing.	Business plan developed, staff trained, new brand developed and launched in the market.	960 farmers sold potato	2,400 farmers
SWT Tanners Ltd	Rice	Support SWT Ltd. To increase of local paddy for milling by facilitating investment in scheme development.	Local sourcing initiated Action plan developed, Feasibility study carried out on new farm development	240 farmers sold paddy rice (4 FBGs)	5,000 farmers as out growers on rice scheme
Kibimba Rice	Rice	Supporting Kibimba Ltd. To improve sourcing of paddy and develop rice seed business	Action plan developed.	101 farmers, trained/sensitized on quality standards from 13 FGs	2,500 farmers supplying paddy rice. 150 MT lowland rice (Wita 9) seed produced.
Uganda Breweries Ltd.	Barley	Capacity building and skilling of the barley/potato farmers in Kapchorwa district in Eastern Uganda	Developed GAP manual for Barley farmers. Trained 41 SSPs for Barley	400 farmers sold Barley	600 farmers
Support service providers					
High Grow Agri (Namakwaland Farm)	Potato	Commercial production and marketing of Dutch potato varieties in Uganda for both seed and ware potato.	Commercial production of 3 Dutch varieties Panamera, Sagita and Taurus. Taurus supplied to Psalms food for crisps production.	32 MT Taurus, 378 MT Sagitta produced and sold	270 MT Taurus seed produced

Partner	Sector	Title of Intervention	Status as of Dec 2018	# farmers reached	Planned # farmers/services provided etc. (2020)
Mengiya Integrated Farmers Association (MIFA)	Potato	Supporting MIFA to increase seed potato production by facilitating investment in screen house, diffused light store, irrigation infrastructure and market development.	Co-funded construction of water reservoir, irrigation distribution line.	120 MT clean seed produced	834 MT of clean seed produced
Kapchesombe Green Change Farmers Association (KGCFA)	Seed potato	Supporting KGCFA to increase seed potato production by facilitating investment irrigation infrastructure and market development	Action plan developed and drip irrigation demonstration installed.	Currently no seed production	184 MT of clean seed produced
CropLife Uganda.	Spray Service Provision	Capacity building of SSP through training and demonstration.	Training/equipping of 110 SSPs completed	937 farmers reached with crop protection applications	3,748 (1,874 per annum)
Solar Now	Irrigation equipment	Popularizing of solar powered irrigation through demonstrations and field days	5 demonstration set up for solar irrigation	150 farmers acquired knowledge from demos	600 farmers acquired knowledge from demos
Cycas International	Seed potato	Trial on True Potato Seed (TPS) in Uganda	TPS trials conducted at research stations	Trials completed (awaiting evaluation and release)	Dependent on release of TPS by NARO
Agro Genetic Technologies (AGT)	Seed potato	Supporting AGT in mini tuber production through training and exchange visit and market improvement.	Still determining the business model. AGT trained screen house 7 operators on minituber production from plantlet	7 operators trained	Supply of plantlets and minitubers (still to quantify)

Partner	Sector	Title of Intervention	Status as of Dec 2018	# farmers reached	Planned # farmers/services provided etc. (2020)
MoCs signed but not yet active					
Pearl Rice	Rice	Capacity building and market linkage between Pearl Rice Ltd. and farmers in Eastern Uganda	Detailed discussions still underway		
Upland Rice	Rice	Profiling rice FGs and FBGs in Eastern Uganda; capacity building and strengthening linkage with Upland Rice Millers	Detailed discussions still underway		
Divine Masters Ltd.	Rice	Capacity building of smallholder rice farmers and strengthening market access through private sector partner	Strategic planning workshop organized.		
Katiba Traders	Potato	Strengthening market access for smallholder potato farmers and small potato processors	Detailed discussions still underway		
Rice Millers Council Uganda	Rice	Rice sector review and capacity building of council	Couldn't agree on mode of partnership		
Kigezi Small Scale Agro Processor Association (KSSAPA)	Potato	Improving small scale processing of potatoes	Detailed discussions still to take place		
Kapchorwa Trinity Radio	Potato	Community sensitization and education through radio for improved production and marketing of potato in Sebei region	Detailed discussions still to take place		

Furthermore, this has led to the creation of five additional high-paid full-time positions within these MSMEs. At the same time, based on the recommendations of the Mid-Term Review, the IFDC and Cardno EMG recognizes that all MoCs/partnership agreements need to be specific and

tailor-made and clearly identify next steps with the specifications/activities required. This will be key to ensuring more clarity and responsibility in partnerships going forward.

Through these partnerships over 3,500 farmers have sold produce directly to MSMEs through jointly developed sourcing plans. Furthermore, this is anticipated to increase 15,000+ farmers supplying to MSMEs by the end of the project. At the support service level some key market constraints are being addressed through partnerships with seed producers, Spray Service Providers, and irrigation equipment providers **as per Table 2 above**.

As private sector actors have increased their confidence both in the REACH-Uganda project and in participating farmers, their appetite to engage with organized farmer entities¹ has grown. Taking the lead in this are firms such as SWT, Kibimba and Responsible Suppliers working the rice sector, which has very competitive local supply chains. So far, field agents as well as senior staff members from these firms are meeting with the leadership of farmer business groups (FBGs) and discussing issues, such as price and terms of delivery. A total of 44 linkages were made between MSME partners and organized farmer entities. This has encouraged farmer-based entities to become more organized in their supply systems. Collectively, the members of the FBGs marketed 5,119 mt of rice and 7,351 mt of potatoes through the higher-level FBGs.

Similarly, Psalms Food Industries Ltd, which works in the processed potato sector, also sought to deanonymize their supply chain by establishing more direct supply agreements with FBGs in southwestern Uganda. These working examples will be used to show other partners the positive business outcomes offered by direct interaction with organized farmer entities.

Outcome 1.2. Lead firms/SMEs transfer primary processing, quality control activities, and employment down the chain in their business models

Output 1.6

Much of the activities conducted by the private sector under Output 1.5 has been focused on transference of responsibility to FBGs for primary processing. Primary processing and simple value addition activities include cleaning, grading and sorting agricultural produce. During 2018, 6.5% of FBGs reported that they engaged in primary processing and value addition. These efforts were supported by four private sector partners.

Output 1.7

Graduate and youth unemployment and under-employment remain a significant challenge in Uganda, where those under 30 years old comprise over 70% of the population. Despite a higher overall level of education, university graduates face many of the same problems and challenges that “Senior Six” school leavers face. Many lack practical workplace skills and experience.

¹ Consists of a range of farmer-based structures, including farmer groups, farmers associations, farmer business groups and cooperatives.

REACH-Uganda’s approach has been to generate six-month work placements with MSMEs, cooperatives and farmer associations.

The graduates were selected through an open application system, which combined written applications and oral interviews by a panel. The graduates often came from an agribusiness/agro-engineering background. They were placed with organizations or companies that had an identified gap that matched the graduates’ skills. The project staff ensured the graduates received extra mentorship both from IFDC and their assigned work placement.

During 2018, IFDC inducted 31 interns (F 15; M 16) into the project. Both parties (the interns and placement organizations) have expressed their satisfaction with this arrangement. Upon completion of their work placement, a number of the interns received formal job offers. The offers came from both their work placements and also other employers, such as district local governments and private sector players. (More information is available through the following link: <https://ifdc.org/2018/12/19/ifdc-ugandas-industry-focused-internship-program-a-gateway-to-a-rewarding-career/>). As the project works with more private sector partners, it is anticipated that more potential opportunities for internships will be identified.

Objective 2. To enhance productivity of market-oriented farmers in the commodity value chains

Table 3. Objective 2 Targets and Achievements

Change/Indicator	Target (2018)	Achieved (2018)	Achieved (cumulative)
Outcome 2.1: Farmers increase their yield (potato and rice) to at least 65% of optimal level			
Output 2.1: Farmers are trained in Farming as a Business (FaaB) and Good Agricultural Practices (GAPs)			
# farmers trained in FaaB (disaggregated by gender and age)	8,000	T: 23,122 - F: 14,188 - M: 8,934 - <35: 8,568 - ≥35: 14,544	T: 27,457 - F: 16,689 - M: 10,768 - <35: 10,203 - ≥35: 17,254
# farmers trained in GAPs (disaggregated by gender and age)	8,000	T: 23,122 - F: 14,188 - M: 8,934 - <35: 8,568 - ≥35: 14,544	T: 26,972 - F: 16,393 - M: 10,579 - <35: 10,068 - ≥35: 16,904

Change/Indicator	Target (2018)	Achieved (2018)	Achieved (cumulative)
Outcome 2.2: Farmers adopt and use resilience strategies			
Output 2.2: Farmers are trained in resilience strategies			
# farmers trained in income diversification	8,000	T: 23,122 - F: 14,188 - M: 8,934 - <35: 8,568 - ≥35: 14,544	T: 24,994 - F: 14,277 - M: 10,717 - <35: 9,226 - ≥35: 15,768
# farmers trained in access to finance	No target for 2018; project target 36,000	T: 16,548	T: 16,548 - F: 8,439 - M: 8,109 - <35: 6,454 - ≥35: 10,094
# farmers trained in joint decision-making	8,000	T: 20,253 - F: 11,903 - M: 8,350 - <35: 12,447 - ≥35: 7,806	T: 20,520 - F: 12,093 - M: 8,427 - <35: 12,505 - ≥35: 8,015
# farmers trained in relevant climate-smart agriculture practices/techniques (all disaggregated by gender and age category)	8,000	T: 9,566 - F: 5,612 - M: 3,954 - <35: 3,657 - ≥35: 5,909	T: 26,595 - F: 16,165 - M: 10,430 - <35: 9,923 - ≥35: 16,672
Output 2.3: FGs and FBGs supported to develop business plans			
# FBGs trained in business plans	No target for 2018; project target 200	0	118
# FGs trained in business plans	1,500	1,284	1,284
# FBGs using business plans	No target for 2018	32	32
# FGs using business plans	No target for 2018	262	262

Outcome 2.1. Farmers increase their yields to at least 65% of optimal level (potato and rice)

Output 2.1

During 2018, over 23,000 farmers were trained in Farming as a Business (FaaS) and Good Agricultural Practices (GAPs). Of these, 12,755 were rice farmers and 10,457 were potato farmers. Women comprised 61% of farmers trained (a 3% increase from 2017), and 37% were youth.

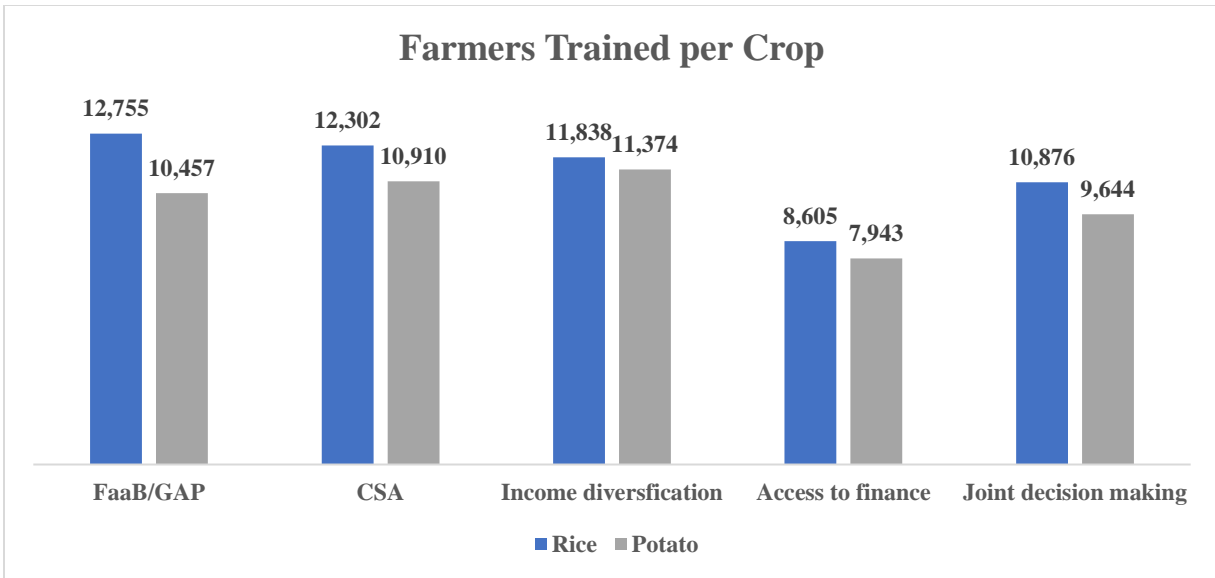


Figure 4. Number of Farmers Trained Per Crop



Figure 5. Member of MIFA Appreciating Potato Crop Productivity in Sebei Sub-Region, Eastern Uganda

The training was delivered through 122 individual field extension workers (FEWs) who were embedded in the local communities. This proved a more efficient and effective method of training delivery compared to working through Implementing Partners (as the project had done in 2017). The average attendance at each training session was high at 16 farmers per session (or 80%). The improved participation could be attributed to the revised approach to training (with greater use of roleplay and practical demonstrations) and the more integrated training content in which key FaaB, GAP, and climate-smart agriculture (CSA) messages were woven into the crop cycle calendar

rather than treated as separate components. The cumulative total number of farmers trained on FaaB and GAPs by REACH-Uganda is now in excess of 27,000² against the overall project target of 36,000. Over 79% of farmers are now adopting at least four out of nine GAPs. Furthermore, it is apparent that knowledge received through training and the adoption of GAPs are starting to have

² Total figure trained is 27,457 on FaaB and 26,972 on GAPs. Some farmers trained in 2017 were trained again in 2018 on the revised manual but they are only counted once in the project's Management Information System.

a positive effect on farmer productivity. In 2017 (baseline), average yields for rice were 0.6 mt/acre, and this rose to 0.97 mt/acre by 2018. For potato, the yield increased from 3.07 mt/acre at baseline to 4.75 mt/acre in 2018, which is a significant improvement.

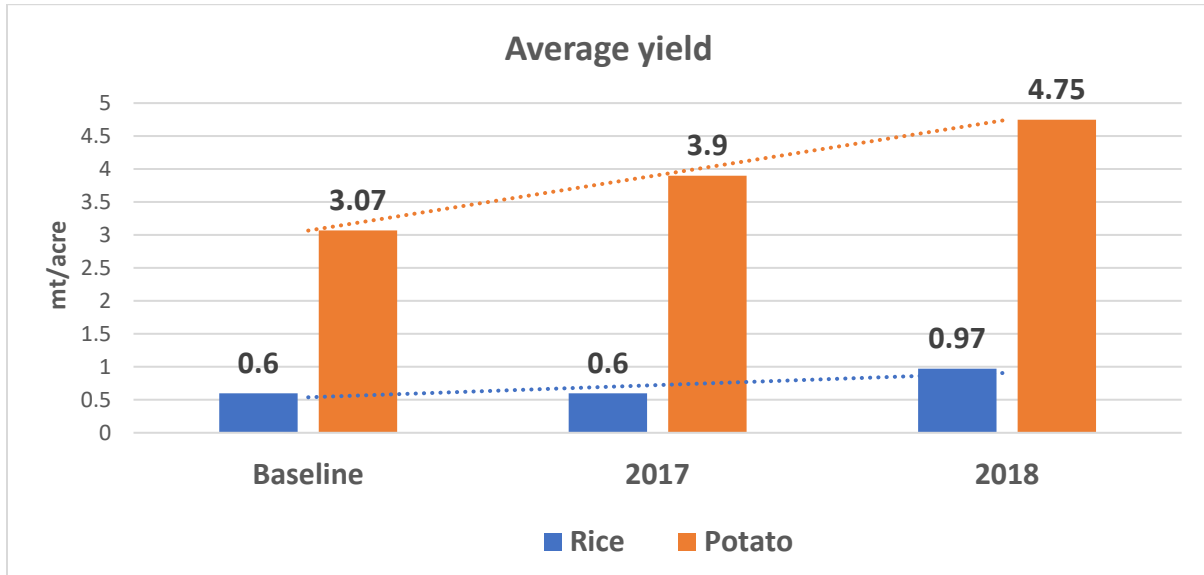


Figure 6. Average Rice and Potato Yields Compared to Baseline

In terms of performance against optimal yields (2 mt/acre for rice and 5.5 mt/acre for potato), 39% of project farmers are now reaching an optimal productivity level, which is an increase of 29% from the baseline figure of 10%. This is a significant leap forward for the project in 2018 and would suggest that REACH is on track to reach the overall project target of 50%. Interestingly, potato farmers (44%) are performing slightly better than rice farmers (35%), which could be attributed to the challenge of water management and limited use of improved seed by rice farmers.³

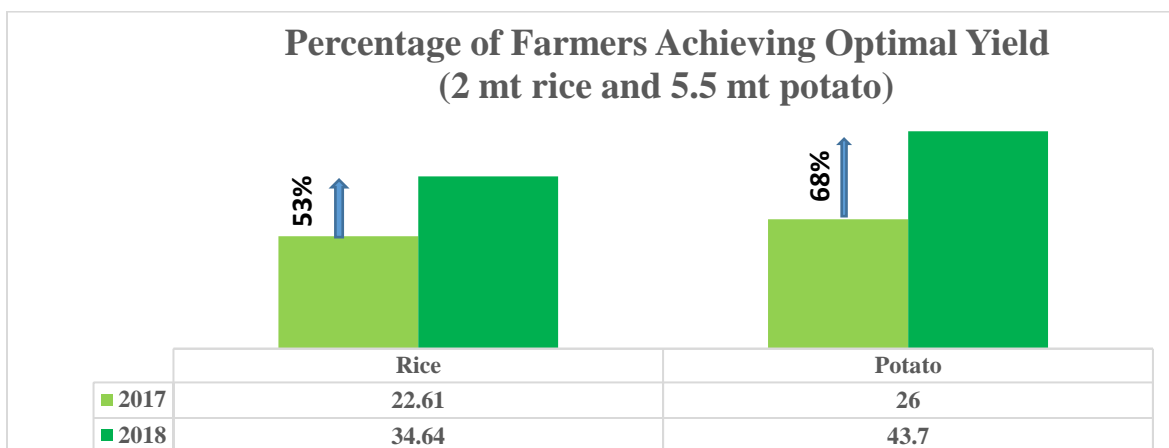


Figure 7. Percentage of Farmers Achieving Optimal Yield of Rice and Potato

³ Findings from “Crop Yield Survey Report,” IFDC, 2018.

Outcome 2.2. Farmers adopt and use resilience strategies

Output 2.2

The project is improving resilience at the household level by targeting four key components of household resilience: income diversification, access to finance, joint decision-making, and CSA.

In 2018, CSA and income diversification were integrated into the holistic farmer training package discussed under Output 2.1. Gender mainstreaming training activities were ramped up in 2018 with a total of 20,253 farmers trained in joint decision making. The training was delivered through a combination of FEWs and Community Change Agents (CCAs). The fourth pillar of the project's resilience approach was access to finance; a total of 16,548 farmers from 1,284 FGs were trained in financial literacy (see Output 2.3 for more details).

The project defines resilience as “the ability of people and systems to resist, absorb, and transform in response to shocks and setbacks.” Although this is difficult to measure until a shock or setback occurs (such as a climatic event), the four components of resilience that the project measures are proxy indicators of households' capacity to resist and absorb shocks. At the outcome level, there are some signs of adoption of these strategies; 71% of farmers are currently practicing at least three of the four resilience components versus the project target of 50%.

In gender, 52% of female rice farmers and 68% of female potato farmers now have input in most or all of the (farming) decisions made at household level, which is in line with the project target of 60% for both crops. Income diversification, which is a strategy to manage risk, 99% of farmers have diversified sources of income, mainly in the form of ancillary crops or livestock production. In CSA, 99% of farmers are using one or more climate mitigation or adaptation techniques versus a baseline of 70%. The fourth component of access to finance has only seen a slight improvement, with 29% of farmers reporting having access to finance versus 27% at the baseline. Access to, affordability and relevance of credit packages from financial institutions are still inhibiting factors for farmers. This points to the need to strengthen locally available options (Village Savings and Loan Associations [VSLAs], Savings and Credit Cooperative Organizations [SACCOs]) as well as formal financial mechanisms.

Output 2.3

During the project period, a total of 1,284 FGs were trained in business plan development, which was one of the modules under Financial Literacy and Business Skills (also see Output 1.3). The main components covered were key principles in business management, the importance of business planning for farmers and identifying the components of a business plan. The FGs were mentored on the development of business plans, with a total of 262 groups actively using their business plans in key areas such as financial access, group marketing and input purchase, etc.

Objective 3. To improve availability and uptake of public and private support services related to the core commodity value chains

Table 4. Objective 3 Targets and Achievements

Indicator	Target (2018)	Achieved (2018)	Achieved (cumulative)
Outcome 3.1. FGs and FBGs achieve financial objectives			
Output 3.1. FGs, FBGs, and agro-dealers received financial literacy training			
# FBGs receiving finance training	No target for 2018; project target 180	9	162
# FGs receiving finance training	800	1,305	1,305
# agro-dealers receiving finance training	20	11	11
# VSLAs established and trained	1,500	904	904
Output 3.2. FGs, FBGs, support services, and agro-dealers linked to financial service providers			
# FBGs accessing loans	No target for 2018; project target 100	17	33
# FGs accessing loans	No target for 2018; project target 1,000	71	102
% farmers accessing loans	No target for 2018; project target 30%	37%	37%
# spray service providers accessing loans	No target for 2018; project target 30	0	0
# equipment providers accessing loans	No target for 2018; project target 2	0	0
# agro-input dealers accessing loans	No target for 2018; project target 20	0	0
# MoUs between financial institutions and the project	2	0	1
Outcome 3.2. Farmers, FGs, and FBGs make increased use of support services			
Output 3.3. Investments made in public infrastructure through match funding with DLG and the private sector			
Amount invested in public infrastructure (roads, irrigation, storage)	€1.0 m	€0.34 m	€0.34 m
# km of roads constructed and rehabilitated between farmers and markets	44 km	44 km opened	44 km opened

Indicator	Target (2018)	Achieved (2018)	Achieved (cumulative)
Output 3.4. Private sector is supported to produce clean potato seed and supply the Ugandan market			
# new Dutch potato varieties registered	No target for 2018. Project target 15	16 currently under trials	9 approved
# businesses introducing Dutch potato varieties to Ugandan market	2	5	6
# seed multipliers linked to Dutch businesses	No target for 2018; project target 10	1	1
# mt of clean seed potato produced and supplied per year	2,000 mt	668 mt	831 mt
Output 3.5. FBGs invest in mechanization packages			
# FBGs that have received loans to invest in rice mechanization	No target for 2018; project target 40	0	2
Output 3.6. MSMEs provide private extension services			
# trainings provided to MSME extension workers on GAPs	No target for 2018; project target 16	0	10
# extension agents employed by lead firms	No target for 2018; project target 50	2	5
% farmers accessing extension services provided	No target for 2018; project target 20%	10%	N/A
Output 3.7. Youth entrepreneurs supported to be spray service providers (SSPs)			
# youth spray service providers trained	60	83	110
# youth sprays service providers operating a functioning business	No target for 2018; overall target 50	28	28
Output 3.8. Identification and development of bylaws and ordinances for rice and potato			
# bylaws and ordinances identified and put forward for development	No target for 2018; project target 5 ordinances and 10 bylaws	1	3

The project is supporting several key service functions within the market system that are essential for improved access to and uptake of sustainable services for market-oriented farmers and MSMEs. These are financial services, infrastructure, agro-input provision/services (seed potato, spray services), mechanization (rice), and extension services.

Outcome 3.1: FGs and FBGs achieve financial objectives

Outputs 3.1 and 3.2

REACH is working to improve financial literacy and financial access for market-oriented farmers, agro-dealers, and spray service providers (SSPs) in partnership with key financial institutions. In 2018, the Financial Literacy and Business Skills training targeted FGs; a total of 1,305 FGs and 16,548 farmers were trained on financial literacy. The training covered several key areas of financial literacy, including personal financial management, savings and loans, investment, and financial service providers.



Figure 8. *Meeting of Idudi Cooperative VSLA in Budaka District. VSLAs have been strengthened/ established in all FGs to promote social cohesion and a savings culture under the Financial Literacy*

At the group level, the VSLAs are critical to ensuring the cohesion of FGs and the creation of a savings culture among farmers. Over 904 VSLAs were

established within FGs, and approximately 80% of these were actively saving by the end of 2018.

The training package provided gives farmers a better understanding of their financing options and how to attain them. At present, 37% of project farmers are able to access loans, of which 14% are from commercial and microfinance institutions and 23% are from SACCOs. Some of this can be attributed to opportunistic relationships formed during the project, for example, the tripartite partnership between DGL (business partner), IFDC and the Micro Finance Support Center in Eastern Uganda. The project has not necessarily formalized such partnerships in 2018 (as they are working well on an informal basis on a small scale) but will focus on scaling these up in 2019 where the financial institution is active on the ground. At the group level, 102 FGs accessed loans, which is an increase from 2017 but below the project target. This suggests that farmers are accessing loans through local financial institutions such as SACCOs on an individual basis rather than the formalized group-based lending that has been the model promoted by most formal financial institutions.

Outcome 3.2: Farmers, FGs, and FBGs make increased use of support services

Output 3.3

The project is seeking to improve public infrastructure through co-investments with the public sector. After the initial selection process in 2017, partnership agreements were signed in 2018 with three District Local Governments for the construction/rehabilitation of 44 km of rural feeder roads in the districts of Butaleja, Kanungu and Kween.

District	Road	Kilometers	Population reached	Cost estimate (UGX)
Butaleja	Doho 1 rice scheme	10.15	32,895	568,713,443
Kanungu	Rutenga to Kirimbe TC	7.85	30,515	1,157,143,069
Kween	Cheminy to Atar	26.13	13,578	458,024,671
		44.13	76,988	2,183,881,183

Table 5. Locations, Population, and Costs of Roads

Work started on the three roads in June 2018 and by December 44 km of roads had been opened and shaped, with drainage and gravelling work ongoing. A total of €341,000 has been co-invested between the project and the DLGs; of the total, the district contribution has been €203,000. This has been in the form of road equipment, personnel and materials. The work has been implemented hand in hand with the DLG rather than through the traditional approach of bringing in a contractor. Although this has led to some time delays, it is expected to be a more cost effective and ultimately sustainable approach to rural road development in the future.

In addition, toward the end of 2018, a feasibility study was conducted in Rubanda district on an 18-km road. This will increase the number of kilometers of road constructed by the project to 62 km, which is significantly higher than the original target of 25 km. Furthermore, the project co-invested in two irrigation schemes with farmer associations in the Sebei region with the twofold aim of demonstrating different irrigation technologies and improving seed potato production. Both of these schemes will be completed and operational in the first half of 2019.



Figure 9.a *Breaking Rock on Cheminy-Atar Road in Kween District, where Major Rocky Sections*



Figure 9.b *Groundbreaking ceremony by EKN and Kween District Local Government.*

Output 3.4

The project seeks to improve access to clean seed potato available through two routes: varietal testing and marketing of Dutch varieties and multiplication of local varieties through the screen house/local seed business (LSB) system.

For Dutch potato varieties, National Varietal Performance Trials for 16 Dutch varieties were established and conducted for two agricultural seasons. These are being conducted in partnerships with five Dutch seed companies and in conjunction with the National Agricultural Research Organisation.

Regarding the entry of Dutch varieties into the local market, Namakwaland/High Grow Agro, with a 300-hectare farm in Central Uganda, began the multiplication of three Dutch potato varieties in 2018. So far, the company has produced 32mt of Taurus variety and has sold it to the crisp processor PFIL. The seed companies have so far been unwilling to invest in the further entry of Dutch seed potato into the Ugandan market, and the project seeks the support of the EKN in engaging the companies in the next steps toward market entry.

At the local variety level, improvements in the development of early generation seed have continued. A system of minituber production within screenhouses, multiplication through three stages to the eventual production of quality declared seed, is now operational in southwestern Uganda. This has been done through a total of seven screenhouse owners, 15 individuals/groups of seed producers and 36 LSBs in partnership with the Integrated Seed Sector Development project. So far, a total of 668 mt of clean seed has been produced and sold. Although seed demand is very high, this represents a functional system that can be scaled up through increased synergies and further investment.



Figure 10. Screenhouse Owner in Fedilis Karugaba, Rubanda District Preparing mini tubers for planting.

Although seed demand is very high, this represents a functional system that can be scaled up through increased synergies and further investment.

To further support the production of quality seed, in collaboration with ISSD, and the GIZ-PNSP project, a total of 55 seed multipliers were equipped with the knowledge and skills necessary for successful seed potato production. Key topics included seed potato agronomy, quality control systems, harvest and post-harvest handling and the seed business. A further training was organized by ISSD in collaboration with REACH, GIZ-PNSP, and MAAIF on the seed potato quality assurance with guidelines developed for decentralized seed inspection. It is anticipated that both these initiatives, with additional support from the collaborators in 2019, will lead to a strengthening of the production and quality assurance systems for seed potato in the two regions.

Outputs 3.5 and 3.6

Under extension services, two of the project's business partners have been active in employing extension teams. PFIL and DGL have recognized the need to provide some outreach extension to farmers, albeit on a limited basis so far. At present, 10% of farmers have some access to extension services, of which 25% is private and 75% is from the public sector.

Output 3.7

The project continued to partner with CropLife Uganda to further strengthen and promote the Spray Service Provider (SSP) model. An additional 83 SSPs participated in a five-day training on the key areas of agro-chemical application and safe use, including identification of pesticides and diseases, responsible use of pesticides and application of pesticides.

In total, 110 SSPs have now been trained by the REACH project across eight districts, which exceeds the project target of 100 SSPs. A total of 81 are youth. Currently, 28 of the SSPs that were trained earlier (in Kapchorwa and Mbale districts) are now active in business (i.e., we are selling their services to farmers). The majority of newly trained SSPs in the other districts will need to be assessed over a couple of seasons to determine their level of business. On average, SSPs are earning UGX 165,472 per season from spray services provided to farmers in their sub-counties and average UGX 16,750 per application (per acre). In several districts, the SSPs have formed SSP associations, which enable them to collectively facilitate demand for their services, purchase personal protective equipment and/or application equipment, establish demonstration plots, etc. As such, these associations potentially perform a key service function in the market system, which will be built on further by the project going forward.

Output 3.8

One bylaw was identified in 2018 in Kabale district on sustainable land use and management. Several meetings were held on the formation of this bylaw in the sub-county of Buhara. A committee was set up to draft the bylaw, which will be presented to the council for review, then to the district and back to the council for approval in 2019.



Figure 11. Dr. John Daniel of Kibimba Rice hold a meeting with farmers to discuss rice quality and terms of delivery with interested farmers.

Cross-Cutting Issues

Gender and CSA are cross-cutting themes that are mainstreamed into the project. In gender, the focus in 2018 has been on the household-level component of the gender strategy developed in 2017, through the promotion meaningful involvement of women and youth in economic decision-making at household and group levels. This involves a number of aspects such as the rationale for gender and youth mainstreaming for agricultural communities; household vision and planning, and joint decision-making; and the involvement of men, women and youth.

These aspects are communicated through trainings and community dialogues, either through FEWs or the Community Change Agents (CCAs). So far, the project has trained 72 CCAs who have reached 340 farmers through dialogues on joint decision making at household and farmer group level.

Under CSA, REACH recognizes the importance of climate change future-proofing of project interventions. At the farmer level, this is covered under the resilience component; however, there are a number of other initiatives and synergies that have been created in 2018 that further strengthen the farmer-level training.

- At the agro-ecological level, a third landscape mapping exercise was conducted in Kanungu district. Clear action points were developed, including the implementation of the ordinance on Sustainable Land Management in the main potato production areas of Rutenga, Kinaba and Mpungu sub-counties.
- In the wetlands of Eastern Uganda, REACH collaborated with UNHABITAT- GLTN and its partners on the issue of legal access to wetlands. The legal process has started for the issuance of wetland use permits for FGs in six wetlands in Butaleja district.
- Two irrigation systems were established in the Sebei sub-region through partnerships with MIFA and Kapchesombe Farmers Associations. The aim of this initiative is to pilot different irrigation technologies at the farmer level (drip, sprinkler) and also to establish the cost-benefit analysis of investing in irrigation. A segmentation and Cost Benefit Analysis study is being conducted in collaboration with the International Institute of Tropical Agriculture to determine the optimal farmer type and actual economic returns through yield improvement from all year-round potato production.
- The project collaborated with MetaMeta ‘roads for water’ initiative on the management of excess water from the roads as a result of the ongoing road rehabilitation projects. The aim was to improve awareness of water management and potential conservation techniques that could be adopted at farmer level such as infiltration ditches, and stabilization ponds. A total of 59 DLG staff and farmers from Kween and Kanungu were trained on water conservation techniques and formed committees for further sensitization at sub county level. It was

CCA Model

The CCA model is an innovative approach to gender transformation in which the project works through influential partners or individuals within the community to re-enforce positive social change. This is based on the belief that “farmers are not just recipients but active participants who effect their change.” These may be youth, female or couples from the FGs that can influence others for positive change.

acknowledged that some of these techniques would need to be physically demonstrated in selected locations, which would be determined by the areas in greatest risk of increased runoff.

Lessons Learned

- The transition from traditional hand-out projects to market system development projects is a gradual process within ‘thin,’ (meaning few higher-level value chain actors) yet dynamic markets. It requires constant explanation and sensitization at both farmer and business level before any meaningful partnership engagement can take place.
- Partnerships in thin markets are quite challenging and need deep analysis to identify feasible interventions.
- Farmers need to be actively engaged in market system development; e.g., understanding what market demands are for it to be effective.
- Participatory approaches in championing development efforts through community actors, such as the CCA model, expedite adoption of innovations.
- VSLAs are sustainable platforms for development efforts and promote social cohesion well beyond the immediate training program. Social cohesion/capital is an often important, but overlooked component of resilience.
- Better understanding of resilience by farmers helps households to cope with shocks. Having risk mitigation strategies based on crop diversification and non-cash assets helps farmer households to sustain businesses in case of shocks.
- The integrated FaaB, GAPs and CSA training package woven into the cropping calendar has stimulated farmers’ interest compared to the compartmentalized approach used in 2017. At the same time, the use of community-based FEWs has resulted in higher attendance and transfer of knowledge compared to the conventional implementing partner approach.
- The rehabilitation of rural feeder roads in partnership with the DLG requires an adaptive management approach to be employed. The demands and contribution of the DLG to the partnership are constantly shifting and require quick learning/decision making to ensure work progress is maintained. Although the approach shows signs of cost effectiveness this will be more firmly established upon completion of all works.