

GRAD

Graduation with Resilience to Achieve Sustainable Development

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Final Narrative Report

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ACRONYMS/ABBREVIATIONS

AMDe	Agriculture Market Development
ASE	Agri Service Ethiopia
ATA	Agricultural Transformation Agency
BPBL	Better Potato for Better Life
CCA	Climate Change Adaptation
CM	Crisis Modifier
CRS	Catholic Relief Service
DFAP	Development Food Aid Program
DLS	Diffuse Light Storage
EM	Effective Microorganism
ENGINE	Empowering New Generations to Improve Nutrition and Economic Opportunity
ETB	Ethiopian Birr
FEMA	Farmers' Economic and Marketing Association
FTF	Feed the Future
FSF	Food Sufficiency for Farmers
GOE	Government of Ethiopia
GRAD	Graduation with Resilience to Achieve Sustainable Development
HABP	Household Asset Building Program
HH	Household
iDE	International Development Enterprise
IGA	Income Generating Activities
IP	Implementing Partner
IR	Intermediate Result
LGF	Loan guarantee fund
LMD	Livestock Market Development
MFI	Micro-Finance Institution
MoA	Ministry of Agriculture
MSP	Multi-stakeholder Platform
ORDA	Organization for Rehabilitation and Development in Amhara
PSNP	Productive Safety Net Programme
REST	Relief Society of Tigray
RuSACCO	Rural Saving and Credit Cooperative
SNNPR	Southern Nations, Nationalities and People's Region
SNV	Netherlands Development Organization
SPM	Selection, Planning, and Management
VC	Value Chain
VESA	Village Economic and Social Association

EXECUTIVE SUMMARY

Graduation with Resilient to Achieve Sustainable Development (GRAD) sought to graduate at least 50,000 chronically food insecure households (HH) from PSNP food support in the 16 targeted woredas, in part by increasing households (HHs) annual income by at least \$365 by the end of the project period. Three inter-related results through which the project would achieve this were: a) enhanced livelihood options of chronically food insecure HHs in highland areas; b) improved community and household resilience; and c) strengthened enabling environment to promote scale and sustainability

To improve economic performance of households, the project combined “push” and “pull” elements into a complete and integrated package of interventions for on-farm and off-farm opportunity creation, access to financial products, and demand-oriented extension services. This range of strategies were found to be effective in increasing the income level of households as well as diversifying income sources of households. The final Intermediate Result assessment conducted in 2016 revealed that the average annual income of households increased by \$367 USD over the life of the project. Households have become more resilient to income shocks as they diversified their income sources. The same study showed that 78% of the sampled households have adopted two or more new non-farm income-generating activities, and that 37.3% of them engage in two or more value chains.

In order to engage households in diversified livelihood activities, GRAD facilitated access to loans through formal and informal means. Through a Loan Guarantee Fund scheme, 80% households accessed loans from Micro-finance Institution (MFIs). In addition, households to use (Village Economic and Social Association) VESA loans engage in small business activities (more than 70% of households). The other key factor for success of improving households’ economic performance is provision of demand driven extension services. GRAD contributed to a larger national effort to transform services away from an entirely production orientation in order to better respond to the needs of chronically food insecure households.

GRAD focused on improving households’ resilience through gender equality and women’s empowerment, improved nutritional practices, and climate change adaptation (CCA). The project also sought to build the aspiration of households in order that they might be motivated to self-graduate from the Productive Safety Net Program (PSNP). The project promoted gender dialogues to bring attitudinal changes around gender roles, practices contributing to women inequality, and their vulnerability for food insecurity. As result of such discussions, for example, 68% of households are sharing household chores equitably between male and female household members¹. The assessment further found that more than 90% of women in surveyed households are actively participating in decision making. In terms of women’s empowerment in leadership, the assessment revealed that 42% women held positions of leadership in their VESAs.

GRAD implemented nutrition as a crosscutting theme, focusing on raising awareness and creating behavioral change for appropriate nutrition practices as well as improving access to and utilization

¹ 2016 IR assessment report

of nutrition-rich food. VESA sessions and access for information on nutrition and diet have improved their nutritional practices. Improved nutritional behavior was especially noted in feeding practices of children 6-23 months. The proportion of such children minimum acceptable diet increased from 6.6% at baseline to 54% in 2016. In addition, GRAD effort to improve households' access to nutrient-rich food through promoting perma-gardening and small scale chicken production was successful, as 52% of households started producing and consuming these nutrient-rich foods.

In the effort to build household and community resilience, GRAD focused on addressing climate change challenges through awareness raising, introducing improved technologies, and supporting community-based climate change strategies. Households' awareness on climate change and adaptation improved, as result 64% of surveyed households had adapted at least one climate change adaptation mechanism by 2016².

Aspiration is one of the critical pathways to graduation and resilience. The project promoted dialogues on aspiration to graduation to inspire and strengthen households' commitment to graduate out of the PSNP. Various factors, primarily a severe drought in 2015-16, negatively impacted the graduation process. Nevertheless, 39,306 GRAD households graduated from PSNP, including 2,632 self-graduating households (i.e. those that left the program of their own accord).

GRAD's Result 3 was committed to effective coordination with various stakeholders at all levels to ensure collaboration, improved learning and sharing, and replication. GRAD, throughout its life span, partnered or collaborated with many projects and government programs to maximize and multiply impacts. GRAD contributed to the design of the PSNP4 and the group approach, derived from the GRAD VESA model, is key element of the PSNP4 livelihoods strategy.

² 2016 IR assessment

1. PROJECT BACKGROUND

The GRAD cooperative agreement was signed effective December 2011. The project ended in December 2016. The total project budget was \$26,444,466 USD, which supports up to 65,000 Productive Safety Net Program Households (PSNP HHs). Catholic Relief Service (CRS), Organization for Rehabilitation and Development in Amhara (ORDA), Relief Society of Tigray (REST), Agri Service Ethiopia (ASE) and CARE Ethiopia implement field activities with technical support from SNV for value chain and extension services.

GRAD works in 16 PSNP *woredas* of four regions distributed among the five implementing partners (IP), as listed below:

1. REST – four *woredas* (Ofla, Alamata, Endamehoni and Raya Azebo)
2. ORDA – two *woredas* (Libo Kemkem and Lay Gayint)
3. CRS, Oromia – four *woredas* (Arsi Negelle, Zeway Dugda, Shalla and Adami Tulu)
4. CARE, SNNPR (Sidama) – four *woredas* (Loka Abaya, Hawila Tula, Hawassa Zuria and Shebedino)
5. Agri Service Ethiopia, SNNPR (Guraghe) – two *woredas* (Meskan and Mareko)

CARE leads the consortium and provides technical assistance to field implementers on micro-finance, gender, nutrition, climate change, off-farm income generation and aspiration to graduation.

1.1 PROJECT GOALS, OBJECTIVES AND RESULTS

The goal of GRAD was to contribute significantly to sustained food security for chronically and transitory food insecure households in rural Ethiopia. The program intends to reach 65,000 PSNP HHs directly with the strategic objective of graduating at least 50,000 chronically food insecure HHs from PSNP food support in the 16 targeted *woredas*, in part by increasing HH annual income by at least \$365 USD by the end of the project period.

The project had three interrelated results:

Result 1 — combine “push” and “pull” elements into a complete and integrated package of interventions for on-farm and off-farm opportunity creation, access to financial products, and demand-oriented extension services. In order to address some of the key underlying causes of vulnerability, thereby increasing resiliency at household and community levels:

Result 2 — implement a range of strategies designed to increase gender equality, improve nutrition, enhance climate change adaptation and stimulate graduation aspirations among PSNP HHs; and

Result 3 — inform national food security programming with evidence of proven and scalable models and through joint research and learning, thereby enhancing sustainability and the potential of indirect impact outside of the GRAD operational.

2. GRAD'S MAJOR ACCOMPLISHMENTS

As mentioned above, GRAD worked to achieve its overarching objective of graduating 50,000 chronically food insecure HHs from PSNP by pursuing the following three core results:

1. Enhanced livelihood options of chronically food insecure households in highland areas;
2. Improved community and household resilience; and
3. Strengthened enabling environment to promote scale-up and sustainability.

The following sections highlight major accomplishments of the project and associated achievements under each key result area.

Result 1: Enhanced livelihood options of chronically food insecure households

Under Result 1, GRAD sought to improve the economic performance of targeted HHs, through the following key strategies: organize HHs into Village Economic and Social Associations (VESAs) and build their productive capacity; expand on-farm and off-farm employment opportunities for households; improve household access to financial service from formal and informal institutions; and transform the extension service into demand- and market-driven services to address an array of household needs and capacity gaps. Key achievements of the project under this result are as follows:

Organizing households in VESAs and building their capacity

GRAD used VESAs as a platform to give targeted households a range of services in a more coordinated and efficient manner. Accordingly, the project organized more than 62,000 households (39% female headed) into 2,861 VESAs. To ensure their functionality and sustainability, a range of capacity-building trainings were provided. While some trainings, such as group governance, were for strengthening VESAs as a group, the rest, such as



Figure 1. VESA meeting, SNNPR

IGA-SPM, business management and financial literacy, aimed to build the capacity of VESA members. The project used VESAs as an entry point to instill financial literacy, link households to output and input markets, and to create links with formal financial services. In addition, the project used the VESAs as a platform for information-sharing and discussion on various issues (e.g. gender, nutrition) to bring awareness and behavioral changes to member households.

Expanding on-farm livelihood employment through value chain scheme

GRAD, informed by value chain analyses, introduced five value chains (livestock fattening, honey, vegetables, pulses and malt barley) as profitable and appropriate to PSNP HHs. The project succeeded in engaging 80% of target households³ in at least one of the selected value chain activities. The table below illustrates engagement of GRAD households in various profitable value chain activities.

³ 2016 Intermediate Result Assessment Report

Table 1: Household engagement in various value chain activities

Types of Value chain	Female		Male		Total
	#	%	#	%	
Livestock	17,499	42.0	24,190	58.0	41,689
Honey	256	27.5	675	72.5	931
Pulses	1,640	26.4	4,561	73.6	6,201
Vegetables	2,144	30.5	4,885	69.5	7,029
Malt barley	587	19.7	2,389	80.3	2,976

Note that an individual household may have engaged in more than one value chain activity.

Capacity building and linkage with appropriate inputs and technology. To improve the productivity of value chain participants, the project provided various capacity-building trainings focusing on production, agricultural input application, pre- and post-harvest handling, pest and disease control, and other agronomic practices. Accordingly, 42,337 individuals (38% female) were trained in one or more of the topics. In addition, the project explored relevant technologies from research and vocational institutes and introduced these to value chain participants. Throughout its span, the project partnered with institutes to support the adoption of improved practice or technologies. Table 2 lists the key institutions that the project worked with and the technologies that each supplied.

Table 2 Sample institutions that supplied technologies or modern techniques

S/N	Institution	Technology supplied
1	Holeta Apiculture Research Center	Construction, use and management of transitional hives
2	Alamata Research Center	Improved animal feed preparation and preservation
3	National Fertilizer Co.	Organic fertilizer named ORGA
4	Adami Tulu Agriculture Research Center	Low-cost alternative technology for shoat body weight estimation
5	International Potato Center	Diffuse light-store technology for potato seed
6	iDE Ethiopia	Rope and washer pump

The project also worked to facilitate sustained access to affordable inputs by PSNP households. To this end, the project implemented various approaches. To create sustained access to inputs like improved seed, GRAD supported seed multiplication cooperatives or unions and linked them with households. Both financial support, which allowed the cooperatives to build storage facilities and to provide marketing, and technical support, which involved training on seed multiplication and preservation, was provided. In addition, the project supported model farmers to engage them in seed multiplication as an income activity and to complement the seed supply system of cooperatives/unions. However, the input supply system through cooperatives/unions was found insufficient to respond to the household demand for diversified inputs at affordable prices. To address this gap, the project implemented an agro-dealer scheme introducing new private sector actors to the supply system. The project provided financial and technical support to 32 agro-dealers and engaged them in input supply systems. Agro-dealers proved instrumental in providing diversified inputs at the local level. In order to ensure sustained supply of inputs, the project linked

agro-dealers with eight private input manufacturing companies or importers. Over the life of the project, 49,533 HHs accessed a wide range of inputs with affordable pricing through this system.

Agro-dealership scheme

The inaccessibility, unaffordability and poor use of agricultural inputs led the project to introduce private agro-dealerships. The project provided technical and financial support to 32 agro-dealers and engaged them to supply localized inputs to both GRAD and non-GRAD households at fair market prices. The technical support aimed to improve the skill and knowledge of agro-dealers in business management, financial management and the use and handling of inputs. The project, through a private sector development fund, granted financial support for renovating or improving facilities. In addition, the project facilitated various events, such as agri-business fairs/exhibitions, promotion events at the VESA level, and so on to promote agro-dealers services.

Performance of agro-dealers

- Agro-dealers supplied inputs for more than 63,000 GRAD and non-GRAD HHs.
- Average sales of each agro-dealer reached \$ 2,352 USD per month.
- More than 85% of agro-dealers operated above breakeven point and started earning profits between \$175 and \$325 USD. This profit margin encouraged them to stay in business and ensured the sustained supply of inputs beyond project phase-out

Observed changes

- **Access to small quantity.** Agro-dealers allowed HHs to access inputs affordably in quantity. PSNP HHs were forced to buy inputs in large packages but did not have the financial capacity to do so. The agro-dealers were able to repackage inputs in smaller amounts to meet PSNP households' needs.
- **Expanding advisory service.** GRAD introduced agro-dealers not only to supply inputs, but also to embed technical assistance/advisory service on the use of inputs. A sizeable proportion of HHs (24% of those surveyed based on 2016 IR assessment) received advisory.
- **Buy-in support from government body.** Meeting the requirement for certification of agro-dealers to distribute diversified inputs required special support from regional and zonal level regulatory bodies. These groups enabled agro-dealers to receive work permits to sell diversified inputs.
- **Wide choices.** New products reached farmers more rapidly than usual through agro-dealers. After seeing them displayed in agro-dealer shops and receiving advice on usage, households bought products that they had not purchased before.
- **Expanding business partnership.** Agro-dealers have expanded their business horizon through new partnerships with major input suppliers. This allows agro-dealers to access diversified inputs with fair prices. Some inputs suppliers had offered a business partnership that allowed agro-dealers to be a sole dealer of their product

The project worked to create awareness and foster behavioral change in the use of modern technologies and inputs, concurrently with improved accessibility of technologies and inputs. Therefore, the project facilitated numerous demonstrations and field days, in addition to informational workshops with model farmers.

Creating access to output market. GRAD implemented a collective marketing approach to create reliable market outlets for value chain participants, as well as enhancing their bargaining power on marketing price. To facilitate a collective marketing system, the project implemented multiple strategies/models depending on factors on the ground. In some operational areas, the project organized participants of the same value chain into a Farmers' Economic and Marketing Associations (FEMA), which were sometimes formalized into marketing cooperatives. In other areas, the project linked participants to existing cooperatives to sell their products. To enhance collective marketing effectiveness, the project provided technical and financial support to the cooperatives. While technical support focused on improving marketing, business skills and financial management capacity, the financial support helped establish facilities such as product collection and storage centers. Additionally, cooperatives received technical support and facilities (collection centers, storage facilities, etc). Besides working to expand market outlets for cooperatives by linking them with strong cooperative unions, the project facilitated business-to-business relationships between unions and big private processing and export companies to widen market windows. As indicated in Table 3, the project succeeded in fostering business relationships between unions and big companies.

Table 3: Companies that GRAD helped establish business partnerships with cooperatives unions

S/N	Name of Companies	Purpose of partnership
1	ACOS	Partnered with Ras Gayint & Sidama Elto Unions for purchasing pulses
2	Gondar Malt Factory	Partnered with Ras Gayint Union to purchase malt barley
3	APINEC	Made an agreement with Zembaba Union for buying honey
4	Luna Export Slaughter	Partnered with Ras Gayint Union for supply of live animals (shoats)
5	Allana	Partnered with seven cooperatives (one from Oromia and six from SNNPR) for supply of live animals
6	Et.Fruits	Made an agreement with Timret Union for purchasing vegetables

Overall, the project established 147 FEMAs and supported 29 primary cooperatives and cooperatives unions. Through FEMA/cooperatives-unions-private company linkages, the project helped 44,204 HHs gain access to new output market and facilitated \$4,522,288 USD in transactions.

Multi-stakeholders platforms (MSP). MSPs played a pivotal role in the success of the value chain development by addressing sector-specific challenges, serving as a showcase for introducing new technologies/practices and promoting information sharing. GRAD facilitated the formation of one MSP for each selected value chain commodity (livestock, pulses, honey, vegetables and malt barley) per region. Overall, GRAD facilitated either formation or revitalization of 16 MSPs. These MSPs held their regular meetings at the regional level and provided a platform for each value chain actor (private input supplier, processor, trader, cooperative/union, and farmer, as well as relevant government sectors) to come together to find solutions for problems and to share experiences and

information on the market, new technologies, etc. These MSPs were instrumental in creating an enabling environment for the value chain participants.

Diversifying household income through income-generating activities (IGA)

GRAD also promoted IGAs as a means to diversify HHs income and to help improve resilience. Although these were primarily the choice of the household, the project, informed by economic mapping and market analysis of potential on-farm/off-farm IGAs, selected three IGAs (micro-franchise, small-scale poultry, and vegetable gardening) for focused support. Before engaging households in IGAs, the project offered capacity building on IGA-SPM, business management and financial literacy. These capacity-building trainings helped households select and manage profitable IGAs.

Overall, GRAD succeeded in engaging the vast majority (90%) of beneficiaries in at least one new non-farm/off-farm IGA⁴. Households used VESA loans or share-outs to invest in diverse small business activities. The most commonly adopted IGA was poultry production (70%), followed by petty trade⁵.

Micro-franchise initiative (MFI)

Realizing the existence of limited off-farm opportunities, GRAD introduced a micro-franchise initiative (MFI) as an alternative form of income generation. The initiative engaged rural unemployed women in door-to-door sales of fast-moving consumer goods in rural areas. It generated sustainable sources of income for the women, while serving low-income households in rural areas often beyond the reach of a traditional commercial distribution network.

- **Saleswomen** earn an average of nearly \$12 in profit every month, often for only a six-eight hour work week. The best performers can earn more than \$70 per month.
- **Wholesalers** have added new products and new customers. Their increased earnings have averaged about \$600 per month from participating in the micro-franchise initiative.
- **Private sector partners** have penetrated new markets and increased clientele and revenues. Overall, more than 50,000 customers have purchased products from the initiative's saleswomen. During a recent 12 month period, new revenues exceeded \$215,000.
- **The project**, its donors, and other stakeholders have a new tool to promote to safety net households, particularly female members, to help them increase incomes and attain food security.

Observed changes and successes

Engaging beneficiaries in profitable value chains. The project succeeded in increasing the income of target households by engaging them in profitable value chain activities. The latest Intermediate Result Assessment conducted in 2016 showed that more than 59% of respondents

⁴ 2016 Intermediate Result assessment

⁵ 2016 Intermediate Result assessment

reported that they had completed more than one cycle of value chain production since joining GRAD. A value chain cycle refers to a term/period covering from production to marketing of a product. Engagement in a particular value chain for more than one cycle indicated the households' commitment to the particular value chain, the sustainability of the activity, and its perceived economic viability.

Diversification of beneficiaries' income sources. GRAD promoted income diversification as a strategy to build resilient capacity. There was more success in this regard. The latest study, conducted in 2016, showed that 78% of the sampled households are engaged in two or more non-farm income-generating activities, and that 37.3% of them engage in two or more value chains.

Increased income of target households. Overall, the project succeeded in increasing the income level of beneficiaries from diversified sources. The latest study showed that the average annual household income increased by \$367 USD by the end of the project.

Increasing access to financial service. The project supported both formal and informal institutions to extend financial services to the target group.

1. Financial service through VESA. In addition to serving as an entry point for financial literacy, exposure to agricultural technologies and information, learning, etc., VESAs provided a safe platform for household members to save and to access loans. Routine data collection and VESA performance analysis revealed that \$1,288,159 USD was mobilized by VESA members and that \$3,159,141⁶ USD in internal loans were disbursed to members through the end of the project. Periodic assessments conducted by the project showed that VESAs had been the main source of loans for the majority of households (accessed by more than 70% of total HHs)⁷. The VESA loans provided the main source of investment to engage in small business activities.

2. Financial service through formal institutions. In addition to VESAs, the project facilitated linkages with formal institutions to expand loan access for value chain participants. The project helped value chain participants to develop business plans and linked them with MFIs to apply for loans. However, as most of these MFIs lacked adequate capital to accommodate a large number of new clients and are cautious about loaning to seemingly high risk clients. MFIs' fear of loan default was also a barrier. GRAD provided each institution a Loan Guarantee Fund (LGF) to mitigate perceived risks, contribute to financial capital for large-scale credit provision, and leverage greater contributions from the institutions. Using this strategy, GRAD transferred \$3,516,402 USD to MFIs and facilitated the loan disbursement of \$12,552,353 USD to 51,975 HHs. Table 4 summarizes the LGF transfer and loan disbursements by financial institutions.

⁶ The cumulative amount of loans provided for VESA members from internal sources of funding is well above the amount of savings mobilized from the groups as it is revolved over the years and the loan fund has also grown from accumulated interest and fines.

⁷ 2016 Intermediate Result Assessment

Table 4. LGF and MFIs loan disbursement summary (monetary values are in USA)

Region	MFI/RuSACCO	LGF transferred	# of HHs served	Amount disbursed
Tigray	DECSI	1,054,909	19,000	6,075,927
Amhara	ACSI	174,141	6,039	1,893,778
	Lidet Union	426,043	3,407	743,616
	Rib Union	226,705	1,301	471,041
	Ras Gayint	42,378	3,239	109,136
Oromia	OCSSCO	151,448	4,249	756,389
	Metemamen	332,245	3,712	515,102
	Bussagonefa	199,008	3,815	536,951
SNNPR	SMFI	617,024	4,593	912,764
	OMO MFI	125,000	1,190	233,200
	Meklit	167,500	1,430	304,450
Total		3,516,402	51,975	12,552,353

Observed changes and successes

MFIs have built confidence and provided more loans for households. Observing high loan repayment (more than 80%), MFIs acquired confidence in the loan repayment capacity of households and started considering them regular clients. As a result, 21% of households that accessed a first cycle loan, also accessed additional loan cycles. This positive attitude from financial institutions is critical to sustainability because it ensures that the target group will have access to loans after the project ends.

Improved saving and loan repayment culture. GRAD succeeded in fostering a savings culture among target households. This became evident by the increased average savings to \$21 per HHs from \$13 per HHs from the outset of the project⁸. This improved saving culture will lead to the accumulation of savings and build the resilience of households. And as stated above, 80% repayment provided a clear indication of behavioral change in repaying loans. This improved loan repayment performance will foster sustained linkage between MFIs and clients.

Enhancing demand-driven extension service

GRAD helped the agricultural extension system to become more demand-driven and provide market-oriented services to rural, particularly, PSNP HHs. To promote demand-drive extension services, the project implemented a range of activities, starting from developing a demand-driven extension training curriculum to providing training to government experts and promoting adopting the approach at the federal level. Key accomplishments and achievements of the project are presented as follows:

Demand-driven training manual development. Informed by an assessment on opportunities and by gaps in the existing extension services, GRAD prepared training curriculum that transformed the extension service to demand-drive. The curriculum was prepared in collaboration with Agricultural Transformation Agency (ATA) and Household Asset Building Program (HABP), and was

⁸ Baseline and 2016 Intermediate result assessment report

instrumental in filling the skill gap of extension staff in business, communication and facilitation, all of which are essential when providing demand-driven extension service.

Training on demand-driven extension and on-going efforts. GRAD provided extensive demand-driven training for government extension staff. The purpose of these capacity-building trainings was to fill the skill gap of extension staff in analyzing market information and providing advice on marketing decisions for households, and for providing advisory services on value chain and business development. Throughout the project, 1,002 government extension workers and experts (22% female) were trained in the demand-driven extension approach. In addition to formal training, GRAD frontline staff provided ongoing coaching to extension agents to ensure that the new approach was thoroughly internalized.

Use of model farmers. To complement the extension staff effort, GRAD adopted farmer-to-farmer extension services using model farmers. The project selected 1,984 such farmers, based on their success in the use of appropriate technologies and techniques, and trained them in communication skills to build their capacity to communicate their experiences and to influence target households. These role models were instrumental in promoting the use of modern inputs and technologies among GRAD households. They used VESA meetings, and home-to-home visits together with frontline GRAD staffers to communicate their message.

Video-based extension service approach. In addition to the conventional means of delivering extension service, GRAD piloted video-based extension service in partnership with Digital Green. Pilot videos were prepared to promote the use of selected technologies and practices (urea treatment of animal feed, post-harvest handling of red pepper, use of PICS bags for grain storage, and improved shoat marketing) and tested in eight *woredas* of Oromia where GRAD and Digital Green activities overlapped. Collectively, the videos were screened 188 times at 47 VESAs in the eight *kebeles*, reaching a total of 1,111 farmers (23% women). Farmers and government frontline staffers gave positive feedback on the approach. Screening the videos at VESA meetings created an opportunity for discussions that led to changes in attitude and helped participants internalize the screened technologies and practices.

Observed changes and successes

GRAD succeeded in delivering demand- and market-oriented extension services through development agents. Field-level monitoring and periodic assessments revealed that households received advice on marketing and business plan preparation. The following examples show how GRAD transformed the existing extension service into a demand-driven one:

- 66% of HHs reported that they obtained market information before taking their products to market. Development agents stationed in *kebeles* were reported as leading sources of market information.⁹
- About 80% of GRAD HHs engaged in value chains received training on their specific value chain.¹⁰
- GRAD strengthened a pluralistic extension system and upgraded extension services. The project fostered the system to respond to VESA and FEMA needs.

⁹ 2016 Intermediate Result Assessment

¹⁰ 2016 Intermediate Result Assessment

Result 2: Improved households and community resilience

Given PSNP HHs' vulnerability to a range of distinctive economic, environmental and health related shocks, GRAD focused on improving households' resilience particularly through gender equality and women's empowerment, improved nutritional practices, and climate change adaptation (CCA). The project also sought to build the aspiration of households in order that they might be motivated to self-graduate from the PSNP.

Gender equality and women empowerment

As part of improving households' resilience, GRAD gave special attention to women's empowerment in the context of prevailing gender inequalities, particularly those related to sharing household tasks/responsibilities, decision making, and access to agricultural inputs, and services. These factors collectively undermine women's access to productive resources and reduce community and household resilience and food security. To tackle underlying cause of gender inequality, the project implemented an array of strategies and activities.

The project promoted household gender dialogues to change attitudes towards women's household roles and women's resource-related decision roles. In VESA meetings, households discuss, explore and take action on different social issues and practices related to resource management, power relations, gender-based violence, harmful traditional practices, etc. These discussions allowed VESA members to understand the negative consequence of some harmful tradition practices and beliefs and take action against them. In the gender discussions, 681 male role models shared their experience on promoting gender equality at their households in order to sensitize and influence other VESA members. In order to strength the effort of changing attitudes, the project hosted numerous learning and sharing events among VESAs that focused on addressing attitudes and beliefs that contribute to gender inequality, GRAD trained 1,159 women in leadership to empower them to take leadership role in formal and informal institutions.

Observed changes and successes

The gender outcome mapping conducted towards end of the project revealed positive changes in terms of creating a culture of savings, diversifying income generating activities, increasing workload sharing, improving women's decision-making at the household level, and increasing communication between husbands and wives. The 2016 Intermediate Result Assessment reflected similar findings. Key achievements of the project in terms of addressing gender gaps and promoting women empowerment are summarized as follows:

GRAD improved women's accesses to information, resources and opportunities. GRAD implemented all its activities with a gender lens to ensure that gender gaps are addressed, which led to concrete successes. The latest IR assessment (2016), found that a large proportion of women had access to resources such as agriculture production inputs (91%), market information (81%) and market outlet to sell their products (86%). In terms of women's empowerment in leadership roles, the final evaluation revealed that 42% of women played a leadership role in their VESAs. The study also found that among the executive leaders in VESAs, 51% were women.

GRAD improved intra-household relationships and women's decision power in the home. The participation of both husband and wife in VESA gender discussions has created a situation conducive to creating change in gender relationships. For example, the quantitative assessment

revealed that 68% of households are sharing household chores equitably between women and men household members in most of households¹¹. The assessment further found that more than 90% of women in surveyed households have actively participated in economic decision-making.

Improving households' nutritional practices

GRAD implemented nutrition as a crosscutting theme, focusing on raising awareness and creating behavioral change for appropriate nutrition practices as well as improving access to and utilization of nutrition-rich food. As the primary strategy, GRAD disseminated information and promoted dialogue on nutrition and related practices through regular VESA meetings. In all VESAs, nutrition was one of the discussion topics. In addition, to ensure sustained access to nutrition extension messages—especially for households with pregnant and lactating women and/or children under two—the project linked 33,002 households with mothers support groups and the health development army. Besides behavioural changes, the project promoted the production and consumption of nutrition-rich commodities through small-scale chicken production and perma-gardening.

Observed changes and successes

Improved access to nutrition-rich foods. Adoption of perma-gardening and small-scale chicken production not only improved household access to and consumption of nutrient-rich foods such as eggs, orange-fleshed sweet potato, etc., but also served as a source of income for households, income that is usually controlled by women. Orange-fleshed sweet potato was introduced in some districts as a pilot and became a regular part of the household diet in those areas. The 2016 IR Assessment revealed that 52% of households have started producing and consuming nutrient-rich foods.

Improved nutrition practice. Household dialogues and VESA sessions on nutrition topics brought about change in household nutritional practices. This transformation on nutrition behavior was especially marked in feeding practices of children 6-23 months. The proportion of children 6-23 months with a minimum acceptable diet increased from 6.6% at baseline to 54% by 2016.¹²

Climate change adaptation (CCA)

In the effort to build household and community resilience, GRAD focused on addressing climate change challenges through awareness raising, introducing improved technologies, and supporting community-based climate change strategies. At VESA meetings, the project promoted dialogue on various climate related issues in order to improve households' awareness of change and promote adaptation mechanisms. Climate change and related topic were one discussion topic across all VESAs. The project, informed by Climate Vulnerability and Capacity Assessment, promoted CCA mechanisms such as diversifying livelihood options, modifying farming practices, applying adaptation technologies, and improved social capital through VESA membership.

Observed changes and successes

¹¹ 2016 IR assessment report

¹² 2016 IR assessment report

Improved awareness on climate change and adaptation mechanisms. Based on 2016 IR assessment, 78% of household respondent knew about climate change and were able to identify the impacts of climate change in their locality.

Climate change adaptation widely practiced. 64% of surveyed households adopted at least one climate change adaptation mechanism by 2016.¹³

Aspiration to graduation

Aspiration is one of the critical pathways to graduation and resilience. The project promoted dialogue on aspiration to graduation to inspire and strengthen households' commitment to graduate out of the PSNP. As a strategy, the project used role models to share their experiences and motivate households. A total of 1,113 role models who showed significant progress towards graduation were used to motivate households in all 2,861 VESAs.

Observed changes and successes

Various factors like severe drought at the end of the project and government administrative decisions negatively impacted the graduation process. Nevertheless, 39,306 GRAD households graduated from PSNP, including 2,632 self-graduating households (i.e. those that left the program of their own accord).

Drought Response

Resilience is also dependent on supporting institutions providing prompt assistance in times of acute need. As such, the GRAD Cooperative Agreement was modified to allow Crisis Modifier (CM) interventions in seven woredas of Tigray and SNNPR and additional drought mitigation and recovery interventions in nine woredas (Tigray, SNNPR, Oromia and Amhara). The overall objective of GRAD's interventions were to protect development gains from acute economic and social shocks of the El Nino-triggered drought that would have led to decreased productivity of livestock and value chain crops and loss of productive assets of affected households.

Identification of households who were severely affected by the shock were targeted the identification process was done in consultation with local community leaders, development agents and GRAD field staff. The targets were those households who were severely affected by the shocks and whose livelihoods were under threat. Following the targeting, training was provided in coordination with local level government stakeholders in order to enhance the skills and awareness of beneficiaries in using the inputs. The training was also intended to raise awareness on how the drought could further affect their lives, the use and application of emergency seeds and animal feed, and providing information on the timing and required agronomic practices to get the most out of those seeds. Specific interventions were as follows:

Livestock feed provision helped households to maintain their livestock assets, strengthen their coping capacities and avoid further decrease of livestock productivity. The project through both interventions (CM and drought mitigation) distributed supplementary livestock feed to 21,523 HHs. Details in feed distribution are summarized below.

¹³ 2016 IR Assessment

Table 5. Emergency livestock feed distribution

Type of feed	Total
concentrated feed (Quintal)	9,155
EM (Lit)	7,844
Molasses (lit.)	6,592
UMB (no.)	767
hay/straw (bales)	14,226
Elephant grass (pcs)	665,000
Densho (pcs)	46,000
# of HHs who received livestock feed support	21,523

Emergency seed distribution. As the affected households have depleted their seed supplies and are less able to buy seed due to the drought effect, GRAD assisted them by providing short season and drought resistance crop seeds. The project used a mix of direct delivery and a market-based voucher system to distribute seed to affected HHs. As summarized below in Table 6, a total of 33,223 HHs received 771 metric tons of various seeds.

Seed Type	Quantity (metric ton)
Haricot Bean	125
Wheat	368
Maize	35.6
Potato	103
Teff	26.05
Sorghum	114
Total	771
# of HHs who received seed support	33,223

Animal restocking. As part of emergency recovery intervention, GRAD has implemented livestock restocking to address the damage of livelihood as result of drought and subsequent floods. Restocking was very helpful and restored their asset base. Accordingly, 3,714 who lost their livestock were supported with different breeds.

Observed changes and successes

The intervention was found to have achieved its overriding objectives of protecting livelihoods of GRAD beneficiaries as well as protected the project investments¹⁴.

Result 3: Strengthened enabling environment to promote scale-up and sustainability

GRAD partnered with Feed the Future projects, other organizations and initiatives, and government programs such as the PSNP to maximize efficiency and multiply impacts. Details of productive collaboration with different projects are highlighted below.

¹⁴ Crisis Modifier and Emergency Recovery Activities Post Intervention Assessment Report, 2016

- **Empowering New Generations to Improve Nutrition and Economic Opportunities (ENGINE):** worked in joint woredas to promote enhanced approaches and strategies and measuring change under intensive nutrition-livelihoods actions.
- **Better Potato for Better Life (BPBL)** managed by the International Potato Center (CIP): contributed technical support on the production and storage of potatoes to improve success of the potato value chain. The partnership introduced production of orange flesh sweet potato as nutrient-rich crop, suitable for drought stressed areas.
- **Livestock Market Development Project (LMD):** improved access to livestock feed supply and market linkages through joint implementation of MSPs, sharing of information, and joint field visits.
- **Development Food Aid Program (DFAP)** implemented nutrition activities in Lay Gayint (Amhara), complementing GRAD efforts
- **Tropical Legumes III** funded by the Gates Foundation and management by ICRISAT: organized and facilitated haricot bean value chain MSPs in Oromia, SNNPR and Amhara.
- **Digital Green:** piloted video-based extension approach in the Oromia Region
- **Agribusiness and Market Development Project (AMDe):** established sustainable market linkages in the honey value chain and supported MSPs in three target regions (Amhara, Tigray and SNNPR).
- **Household Asset Building Program (HABP):** GRAD worked with the HABP to update the extension service curriculum with a focus on a demand-driven extension approach. In addition, the partnership promoted joint learning which contributed to the livelihoods strategies of the PSNP4.
- **International Development Enterprise (iDE):** promoted the use of small-scale irrigation technologies such as rope and washer pumps.
- **Africa Research in Sustainable Intensification for the Next Generation (Africa Rising)** managed by ILRI: promoted new technologies and agricultural research findings in GRAD woredas in Tigray.
- **ACDI-VOCA FEED II project:** provided capacity building of DAs and cooperatives in GRAD areas on improved feed technology.

Replication and scale-up of GRAD approaches and strategies

Frequent external visits and open sharing of learning has promoted replication of GRAD in many ways and in many locations. The project's monitoring system was not designed to track external replication but many cases have been observed, including the following:

- GRAD's VESA model has been copied in neighboring communities and has been adopted for implementation by many other project initiatives. The PSNP4 based its livelihoods group model on VESA and intends to create groups throughout its operational areas.
- Communities adjoining GRAD's operational areas are adopting technical approaches (e.g. utilization of concentrated feed for livestock fattening, construction of DLS), purchasing from GRAD agro-dealers, and selling products through market channels developed by the project.

- Agro-dealers supported by GRAD are opening shops in neighboring communities. SNV is expanding the model through complementary funding.
- Food Sufficiency for Farmers and other CARE projects have adopted the micro-franchise initiative as a source of off-farm income for women in PSNP HHs.
- The MSP model is being copied by, for instance, the African Union Inter-African Bureau of Animal Resources (AU-IBAR) which established the Africa Apiculture Platform in Uganda following the SNV-GRAD model.
- GRAD's principles of gender equality and women's empowerment are spilling over into other segments of society.

GRAD contribution for national program and strategies

GRAD learning and its tested approaches and strategies have influenced the design of PSNP4 in several ways. In addition to the group approach mentioned above, a village savings and loan approach is highly appreciated and adopted in PSNP4 livelihood strategies. GRAD has also shared ideas or materials on financial literacy, gender, and social accountability. In addition, GRAD's demand-driven extension approach has influenced the national extension strategy under development by the ATA in collaboration with MoA. This new strategy has a much greater market orientation, unlike the previous strategy which was production-oriented.

3. LESSONS LEARNED

GRAD generated a wealth of learning for each of its interventions. Much of that learning is summarized in learning or innovation briefs, attached to this report. Below are additional specific lessons:

- The most important learning from the project is that the model, if applied correctly, is successful in helping households improve their status and graduate from the PSNP. In many cases, the gains were dramatic, far exceeding, for instance, an increment in annual household income of \$365. An assessment conducted during the recent drought found GRAD households to be coping much better than their neighbors who did not participate in the project.
- The linkage of VESAs with RuSACCOs is an acceptable and effective approach. It can improve the savings culture of the community and provide an additional option for credit access for business engagement. This linkage, along with VESA-based loans from MFIs, has worked in multiple GRAD areas.
- Livestock collection centers to promote collective marketing can serve as a source of off-farm income, especially for landless/jobless youth and women, thereby creating rural employment opportunities. The positive experience from Genet Raya and Fisum Birhan livestock marketing cooperatives in Tigray is an example that can be replicated in Oromia and SNNPR where there is greater market access to export abattoirs.
- Additionally, livestock collection centers have proven successful in promoting modern livestock marketing, enhancing the participation of poor households in sustainable markets,

and adding value along the chain. For example, livestock marketing cooperatives using collection centers in SNNPR and Oromia are getting on average 160 birr more income per shoat compared to cases where households sell directly to live animal traders. Effective use of such facilities, however, is not easy and requires access to finance and market demand. The recent establishment of the Allana export abattoir near Arsi Negelle, which is buying from GRAD cooperatives, contributed significantly to improving the cost-effectiveness of GRAD collection centers in Oromia and SNNPR. The collection centers in Oromia and SNNPR have still not met the full demand of Allana, meaning greater production can be accommodated.

- The dual investments of CM and GRAD's disaster mitigation and early recovery amendment provided timely and well-received support to households at risk. The emergency seed and livestock feed provided not only helped households cope with shocks, but also were an avenue to further promote improved methods for livestock fattening (i.e. the use of concentrated feed with additives such as EM and molasses). The idea of a market-based approach to input distribution – in this case, using vouchers and GRAD's agro-dealer network – also proved to be an effective approach, further linking the emergency interventions to longer-term development objectives.
- The experience with drought, along with study on resilient markets, has expanded GRAD's view of what resilience means and how a project can promote it. While households are diversifying and adapting to the changing conditions, many of the institutions that GRAD supports are passive and inflexible. Agro-dealers, for instance, did not change their products, prices, or services during the drought. MFIs have not considered loan rescheduling or other measures and often just stopped offering credit. These practices can make a bad situation worse.

4. RECOMMENDATIONS FOR FUTURE FOLLOW-ON ACTIVITIES

- Agro-dealers improved households' access to improved seed, animal feed/supplements, and tools at affordable prices. GRAD used its innovation fund to provide agro-dealers with financial support for material such as shelves and weighing scales to help improve their businesses. However, agro-dealers had limited access to loans to expand their business and reach more clients. Start-up costs might also be financed via loans rather than project grants. Future activities should put more emphasis on linking agro-dealers with financial institutions.
- GRAD, in collaboration with Digital Green, piloted video-based extension services in eight selected kebeles of Arsi Negelle woreda. There was positive feedback from farmers, extensions workers, and government experts. This should be scaled up in the future programming and be integrated into regular extension delivery mechanisms.
- Micro-franchising was an excellent innovation introduced as an IGA within GRAD's project woredas, and it has proved an effective and successful IGA for GRAD households. Future programs should link saleswomen with financial institutions to create access to larger loans than the VESA can provide. This would allow saleswomen to hold large stock, minimize buying trips, and reduce transaction cost, thus increasing their profit margin.

- Due to sharia law, Muslims are forbidden to participate in financial services that involve interest. Thus, the MFIs and VESA interest-based loans services marginalized Muslim households' access to finance. In future programs, VESAs and MFIs should research alternative mechanisms to deliver financial services for Muslim households.
- GRAD's approach to rural livelihood diversification was successful in increasing households' income. Thus, future programs should take into account both off-farm and on-farm employment opportunities and be sure to consider the importance of women in diversifying income sources.
- A crisis modifier-type fund should be considered in future programs in shock prone areas. In addition, a CM would be more effective if more closely coordinated with GOE emergency efforts in support of chronically food-insecure households in times of crisis

5. EXPENDITURE SUMMARY

As of March 2017, GRAD's overall cumulative expenditure was US\$25,324,789.05, which represents 99% of the total obligated project budget of US\$25,587,132.93

6. ANNEXES

GRAD Learning Briefs

- Annex 1: Learning Brief #1 Outstanding Loans
- Annex 2: Learning Brief #2 Climate Change Adaptation: Awareness to Action
- Annex 3: Learning Brief #3 Village Economic and Social Associations
- Annex 4: Learning #4 Loan Guarantee Funds
- Annex 5: Learning Brief #5 Multi-stakeholder Platforms
- Annex 6: Learning Brief #6 Gender Outcome Mapping
- Annex 7: Learning Brief #7 Micro-finance Loan Terms and Conditions

GRAD Innovation Briefs

- Annex 8: Innovation Brief #1 Diffused Light Storage
- Annex 9: Innovation Brief #2 Agro-dealers
- Annex 10: Innovation Brief #3 Orange Fleshed Sweet Potato
- Annex 11: Innovation Brief #4 Micro franchise Initiative

Links to additional GRAD resources

<http://www.care.org.et/sites/default/files/The Graduate April 2016 2.pdf>

<http://www.care.org.et/pdf/The Graduate Issue 9.pdf>

<http://www.care.org.et/pdf/The Graduate Issue 8.pdf>