



Resilience Assessment for the Graduation with Resilience to Achieve Sustainable Development (GRAD) Project

May 2016



Acknowledgements

The resilience assessment team would like to thank the GRAD project staff and many other individuals and organizations for their support of this assignment. These include first and foremost members of the GRAD Consortium Coordination Office- John Meyer, Freweni Berhane (who helped us get a very intensive trip organized), Tadele Taye (who helped get the background documents) and the drivers (Yousaf and Tegne) who helped get us around to many, often nearly inaccessible places. We would also like to thank colleagues from the implementing partners, especially all the staff who accompanied us during the field trips, organized the focus group discussions, translated, and provided very helpful insights. Finally, we wish to acknowledge the generosity and hospitality of the communities and the households that opened their homes to our team, took the time to explain their lives to us, patiently responded to question after question, and participated in very long discussions. It is our sincere hope that this report will help GRAD in its effort to create improved livelihoods.

Thank you!

Aynie Habtamu, Gender Specialist

Negusu Aklilu, Environmental Specialist

Ahmed Jamal Khan, Team Leader and Livelihood Specialist

Glossary:

Kebele: Village cluster, lowest level of government administration; geographic unit of livelihood zone boundaries.

Woreda: Composed of multiple kebeles, middle level of government administration; akin to district

Zone: Composed of multiple woredas, higher level of government administration.

Regional State: Composed of several zones, penultimate level of government administration under the Federal State.

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Acronyms and Terminology

CARE	(legal name Cooperative for Assistance and Relief Everywhere)
CCA	Climate Change Adaptation
CCU	Consortium Coordination Unit
CRS	Catholic Relief Services (an NGO)
DECSI	Dedebit Saving and Credit Institution (an MFI)
ENGINE	Empowering New Generations to Improve Nutrition and Economic Opportunities (a USAID-funded Project implemented by Save the Children International)
ETB	Ethiopian Birr (approximately 20 ETB = \$US)
GFDRE	Government of the Federal Democratic Republic of Ethiopia
GRAD	Graduation with Resilience to Achieve Sustainable Development (a USAID- funded Feed the Future Project implemented by a consortium led by CARE)
HHs	Households
IGA	Income Generating Activity
IP	Implementing Partner
MFI	Micro-Finance Institution
ORDA	Organization for Rehabilitation and Development in Amhara (an NGO)
PPT	Participatory Performance Tracking
PSNP	Productive Safety Net Program (a GFDRE safety net program)
REST	Relief Society of Tigray (an NGO)
Shoat	Sheep or Goat
SNNPR	Southern Nations, Nationalities and Peoples' Region
VESA	Village Economic and Social Association

Executive Summary

Ethiopia is in the midst of an extreme drought that is said to be the worst in the region in nearly six decades. On the heels of two consecutive seasons of failed rains in 2015, GRAD participants are at risk of losing gains made as a result of the project. GRAD has supported project participants with intensive development support over the past four years in complex, challenging, and evolving contexts, and though the full impact of the drought continues to unfold, the GRAD team is looking for durable solutions that promote the resilience of households, communities and institutions.

The overall purpose of this analysis is to provide insights into the resilience of GRAD households and communities affected by drought. It is also intended to identify future vulnerabilities if the drought continues into 2016 and provide guidance on GRAD interventions that would allow all affected participants to recover quickly. We view recovery as a major component of resilience, but are not assuming it to mean return to state prior to the drought. Recovery in this case is understood to be when all GRAD participants are able to build new, resilient livelihood systems with altered, more responsive institutions and processes that support the original GRAD objectives.

The analysis undertook a qualitative assessment in five woredas across the four regions in which GRAD works to understand the extent of the drought's impact and assess ongoing relief and recovery efforts by GRAD and its participants. The team reviewed GRAD reports and documents, held discussions with GRAD and non-GRAD groups, held in-depth conversations with all GRAD implementing partners and interviewed key informants at the woreda and kebele level to gather perceptions regarding the adverse effects of the drought along with absorptive, adaptive and transformative capacities that have been built through GRAD.

Overall, the analysis found that GRAD participants were better prepared and less vulnerable to the effects of the drought than similar households in the same regions. Key to this success has been the empowerment of individuals and communities, and the amelioration of longstanding practices related to dietary practices, animal husbandry techniques, and access to financial facilities and institutions. The trainings and knowledge shared at the VESA level can be utilized for years to come and the VESA group platform has also allowed members to make informed and proactive choices about the types of income generating activities to maximize available opportunities. The comprehensive suite of core GRAD activities, drought related relief activities and the additional income generating activities taken on by GRAD participants has allowed them to better maintain incomes and overall well-being when compared with non-GRAD households.

However, the drought period has also caused significant asset loss across the sampled portion of the GRAD participants and exposed certain weaknesses in the resilience of the value chain options chosen at the onset of the project. In the current context with two failed rainy seasons, a large proportion of the sampled households have been unable to engage in either selected value chains with the greatest potential and are engaging in non-guided, short-term or potentially environmentally destructive activities such as charcoal making.

Overall, the report finds that despite the visible gains achieved by GRAD over the last four years, the extraordinary nature of the current drought could threaten GRAD's objective of sustainably graduating 50,000 HHs. Even as a normal belg season is underway and positive projections of a meher season have been made, additional actions should be pursued towards a resilient recovery, including investments in emergency animal feed, seed for crops, and access to finance. Longer-term efforts such as water conservation/flood water capture, further diversification of livelihood streams, and enhanced disaster risk management would further build resilience.

Overview, assessment rationale and methodology

The GRAD project works in the Ethiopian highlands covering 16 woredas in Tigray (4), Amhara (2), Oromia (4), and the Southern Nations, Nationalities and Peoples' Regions (SNNPR)(6). It has the mandate to work with 65,000 households participating in the Government of Ethiopia's (GFDRE) Productive Safety Net Programme (PSNP) and ensure that at least 50,000 these households graduate from the PSNP, becoming food secure and ultimately economically self-reliant. The idea behind GRAD is to empower communities, promote development priorities that improve resilience to the shocks they face, enhance their capacity to engage in productive livelihoods, and eventually to reduce the reliance of GRAD communities on external support.

Over its four years thus far, GRAD has had an impressive track record having successfully engaged close to 65,000 households, facilitated almost \$13 million in micro-finance loans to participants, formed 2,861 VESA group with combined savings over \$1 million, engaged over 50,000 HHs in value chains and contributed to an average HH income increase of over \$300 over the life of the project. Besides these significant financial gains, while working with GRAD, all participants have benefited from trainings on gender relations, IGA training, nutrition, climate change, financial literacy, increased social capital, and created stronger links within villages.

Despite these unique successes in a very complex and challenging context, with less than a year left of GRAD, a combination of severe drought and associated shocks threatens to undermine project achievements. With over 12,000 GRAD HHs receiving emergency support through a Crisis Modifier, and over 16,000 HHs receiving humanitarian aid and other sources of support, asset depletion at the household and community level is a concern that has promoted the GRAD CCU to undertake this analysis of HH resilience and adaptive responses.^{1 2}

Assessment Rationale

Resilience and Climate Change are concepts very relevant in GRAD communities. A literature review of GRAD and CARE Ethiopia documents shows a high awareness that drought, flooding and other hazards regularly effect households in GRAD working areas. With GRAD ending in 2016, it is important that these shocks do not cause households to return to extreme poverty after graduating. This assessment was conducted to understand differences in resilience between GRAD served households who have received development assistance including access to finance, input distribution, agricultural training, nutrition training and livelihood strengthening, compared with non-GRAD households that have not.

Key evaluation questions to assess household resilience:

- What has been the impact of the drought on GRAD served households?
- Are households participating in GRAD activities better able to cope with the drought than households that are not?
- What impact has GRAD had on building resilience of GRAD households? Are they better equipped with social and physical infrastructure that mitigates the shock of the drought?

Resilience Definition

Considerable research has gone into defining the properties, principles, and processes that strengthen resilience at the individual, household, community, institutional and ecosystem levels. As a result of this research, and ongoing programming experience, many definitions of 'resilience' have been developed. Broadly speaking, resilience is: the measure of a system's ability to withstand stresses and

¹ Many of the same HHs have received both Crisis modifier and Humanitarian support.

² GRAD Qtr 5 (2015) Narrative report and Cost extension proposal

shocks, that is, its ability to persist in an uncertain world. It can be defined as the ability to anticipate, resist, absorb and recover from stresses or shocks in ways that preserve integrity and do not deepen vulnerability. This includes the abilities to withstand threats and to adapt if necessary to new options during crises. When households, communities and networks for goods and services are resilient, people realize positive livelihood outcomes, sufficient income, food security, safety, proper nutrition, good health and ecosystems are preserved and protected

Given that GRAD is a resilience program in that its focus is preparing for and responding to shocks from addressing immediate needs to enhance capacities to meet longer-term development objectives in the face of shocks and stresses, for this analysis, we will be applying GRAD’s understanding of resilience which aligns closely with USAID’s definition of resilience³:

‘Reducing vulnerability of households and communities to climate related shocks and strengthened capacity to cope with (absorb) and recover from economic shocks (income and market related), food and production shocks and health related shocks.’

The present analysis sought to understand resilience in Amharic from a local perspective. In any context analysis, local terms for resilience need to be established. That was done at the start of the consultations held in Addis Ababa and then with local communities. The words agreed and used are listed in the box below:⁴

“Rasen Maschal” is the most appropriate word in Amharic for resilience. It means strength, and is widely applied for people, animals and systems. In communities where Amhaaric is the local language, “Rasen Maschal, Akemen Masadeg” is the closest fit for the definition of resilience this assessment uses: the ability to absorb, adapt and transform in the face of a shock.

Methodology

The assessments resilience framework (see Figure 1, below) builds on a number of sustainable livelihoods frameworks and existing disaster resilience and climate change adaptation frameworks.⁵



The three resilience components for the purpose of our assessment are:

Absorptive Capacity is the ability to minimize exposure to a shock and recover quickly when exposed. Development strategies applied by GRAD improve the capacity supported households to reduce and manage risk throughout the project support cycle.

³ USAID defines resilience as the ability of people, households, communities, countries and systems to mitigate, adapt to and recover from shocks and stresses in a manner that reduces chronic vulnerability and facilitates inclusive growth.

⁴ Resilience in other languages across the GRAD area: Oromiffaa-“Dan Da’ani Dhaabbachu”, Tigrigna- “Tsa warayenet”, Sidamigna-“Gagawa Gatatee” and Marekigna (Guragigna)-“Gege Tenima”

⁵ “Resilience: New Utopia or New Tyranny? Reflection about the potentials and limits of the concept of resilience in relation to vulnerability reduction programmes,” Béné, C. et al. 2012

Adaptive Capacity is the ability to quickly and effectively respond to changing conditions. Development activities which GRAD implemented to improve the capacity of households and communities to respond and adjust to variable climate and market conditions.

Transformative Capacity is the ability to move beyond chronic poverty and insecurity through systematic changes that promote resilience. Development strategies implemented by GRAD to improve support structures and create an enabling environment for supported household and communities.

Using this conceptual framework, the assessment used a qualitative approach and where possible compared responses with GRAD M&E data for related components across the project regions. The qualitative component offers descriptive information about what GRAD households considered to be the impacts of the drought and GRADs support build resilience capacities as well as suggested steps to strengthen resilience. This framework is applied throughout the assessment process. However, it must be considered as a starting point. The contribution to resilience GRAD strategies aim to deliver must be tested, measured against, and revised as knowledge and experience is gained.

Main Findings

The assessment sought to assess the impact of the drought on randomly selected communities in the GRAD impact area, in the context of various droughts over the past fifteen years. Overall, the 2014-16 (ongoing) drought and associated food/water shortage was perceived by respondents as the most severe drought faced by the GRAD community. Surprisingly, despite the severity of previous droughts, the current drought was agreed by community members and other stakeholders to be worse than the 1984-86 drought/famine even though they recalled larger livestock/crop losses, human disease/death and conflict during previous droughts. In comparison with the 84-86 drought, they reported that the current dry spell had gone on longer and natural resources are scarcer and more degraded because of increased population. The current drought is also aggravated by unprecedented high living cost (previously, 'everyone had firewood and didn't need to buy it') and lower average landholding size.

The assessment was carried out across all GRAD regions and though magnitude of the drought varied from village to village, on average all HHs met classified the drought as severe. The differences in the drought's severity were noticed across the GRAD regions, with variations within kebeles given their geographical/environmental surroundings, logistics infrastructure and proximity to markets and towns.

Drought-related impacts reported by participants included:

- The poor rains have resulted in reduced access to drinking water as wells, water ponds and community managed water reservoirs for both human and livestock drinking water have failed.
- Impact on education: the drought led to more children 'dropping out' of school as their families were no longer able to cover costs such as uniform, school books, and old children needing to work to supplement household income.
- Impact on nutrition: rain failure and poor harvests have resulted in an increase in malnutrition, especially in young children. This is worse among non-GRAD participants.
- Impact on wage rates and employment: As a result of the poor spring Belg and summer Meher cropping seasons, seasonal employment opportunities were reduced to irrigable farms. As seasonal employment declines, daily wage rates have declined considerably. For this reason, an increasing number of young people (both male and female) were migrating to urban areas

like Woldia and Addis Ababa. Participants also reported that many young adults have migrated to the Middle East.

Resilience Pathways for GRAD Households

This section describes some of the impacts of the failed spring Belg and erratic Meher rains on GRAD households and communities. The assessment is based on visits to communities in April 2016, the focus group discussions including both women and men, conversations with Implementing partner (IPs) staff and key informant interviews with agro-dealers and government staff.

These discussions examined the extent to which GRAD has built the resilience of HHs and how it supported them to respond more adaptively to the drought than non-GRAD HHs. To this end, the assessment identified household absorptive capacities, adaptive capacities and transformative capacities. We analyzed the drought's effects and GRAD's impact on HH resilience and livelihood decisions in order to examine which GRAD mechanisms contribute to resilience and enabled participants to protect their livelihoods and well-being in this drought and future shocks. In this section, the assessment focuses on such measures of resilience as maintenance of income, assets, food security, savings, social capital and gender relations. Collectively these measure provide material, technical and social resources and mediate both resilience to drought and livelihood productivity.

Resilience Capacities of GRAD Supported HHs

GRAD HHs across the visited regions faced moderate to severe drought exposure. The assessment compared the decisions made and outcomes attained by households who participate in GRAD and those who do not. It was evident from group discussions that the non-GRAD HHs were economically better off than GRAD HHs prior to the drought. Despite these pre-existing differences, GRAD HHs exhibited greater capacities as compared with non-GRAD HHs, likely as a result of GRAD support with productive activities, technical assistance and nutritional support interventions from 2012 onwards.

In Tigray for example, HHs who were supported with livestock interventions by GRAD had increased their stocks intensively and obtained better outcomes through the marketing support of GRAD. The households who were supported with agricultural activities reported using improved seeds and improved application of fertilizer, and demonstrated greater knowledge of land use and marketing when compared with non-participating HHs. All GRAD HHs in VESAs reported increased savings and financial access than non-participating HHs, who had seen a depletion of savings and assets over the period of the drought. This finding was robust across the regions and it was evident that GRAD had contributed to building up their improved absorptive capacity and contributed to improved resilience in the face of the drought.

Based on interviews and FGDs with the HHs and local stakeholders, the assessment found that both GRAD and non-GRAD HHs considered knowledge about new agricultural production inputs/techniques and VESA savings to be a very valuable contributions made by GRAD. The improvement in knowledge and absorptive capacity of GRAD HHs came also through building the skills of local extension service providers who work closely with GRAD but also work with farmers who are not GRAD participants. The assessment also indicated that because of the GRAD training on climate change, there was a high degree of awareness of the threats of climate change, and the recognition that there needs to be better adoption of natural resources management practices, which are critical for building on-farm resilience to both droughts and floods.

Another important difference observed was that between HHs who were brought into the project early on (2012-early 2014) and HHs who came on in late 2014-2015. These two groups reported different coping capacities with the latter failing to meet the highest expected levels of income because of the drought. Though both groups saw income declines during the drought, the earlier groups were able to maintain higher savings and diversify their incomes. For example, the GRAD HHs visited in

Alamata had all been engaging in the honey, cattle, shoat (sheep), and the vegetable value chain with most of them having already completed more than one cycle of their adopted value chain activities prior to the drought onset.

Though there was variation among assets and productive capacity of GRAD HHs, improved coping capacities enabled GRAD HHs to accumulate higher levels of assets and savings than they did prior to GRAD and, from testimonies in the field, appear to have created a buffer from the worst effects of the drought. Therefore, despite the lack of obvious economic gains even the latter group was observed to be more resilient than non-GRAD HHs and many reported at least having improved technical and financial knowledge, improved social/gender relations and aspiration to “get on with it soon” as the worst of the drought was over. Following is a summary of the resilient capabilities that GRAD has enabled.

Income Level: Overall, all HHs experienced losses in income, though differences were apparent between male and female headed households and between new and old VESA groups. The mature VESA group members reported having sustained increases in their income, both before and during the drought. Many agro-dealers had actually increased their incomes during the crisis period, though this was often attributable to procurements made linked to the crisis modifier. While all of the women groups met during the assessment reported diminishing incomes during the drought; this was often attributable to the migration of an adult family member. All the women reported having better financial management and entrepreneurial skills, which assisted them in diversifying their incomes streams during the drought.

Suggested GRAD indicator- Income/expenditure per HH

Savings and Debt: GRAD HHs had stronger savings and debt management skills than non-GRAD HHs. While the drought affected the incomes of all HHs, the participants reported a declining income and reduced borrowing from micro-finance institutions (MFI), yet a steady savings pattern through the VESA groups. They described that they often invested any additional cash into the VESA and took on a loan to take advantage of any income generating opportunity. In comparison, non-GRAD HHs had depleted their savings during the drought and had added to their debt burdens by borrowing from MFIs and relatives. Before the drought, they reported having had little to no debt and seen it rise over time owing to the difference in their savings and debt management skill as compared with GRAD HHs.

This commitment to saving money is evidenced by the women groups in Oromia who increased their savings over time even as incomes fluctuated during the drought. Only a few VESA members reported reducing their savings because of increasing debt burden and reduced incomes. Cohorts which joined GRAD late struggled more than participants who had built up stronger savings, but showed a commitment to having more savings as the drought eases. This is evidence of GRAD’s contribution to HH coping capacity, especially given that the drought had depleted their incomes significantly.

Suggested GRAD indicator - Average annualized savings per HH, Value of agricultural and rural loan

Food Security: Nearly all GRAD HHs reported eating three meals per day throughout the drought period and though they reported a change in the type of foods they eat (e.g. there is a change of diet from beans, peas, and chickpea into haricot bean), they did not see the same decline in meal quality as non-GRAD HHs. All the women groups attributed this improvement in nutrition quality and behavior to GRAD/ENGINE and highlighted the trainings that had allowed to them maintain the health of their children despite the shortage of preferred grains and vegetables.

Suggested GRAD indicator- % of HH with moderate or severe hunger, # of HHs trained in dietary diversity practices, # of PMAs (committees) monitoring the progress of food security of their membership on annual basis.

PPT Indicator- Mothers and children are eating diversified food types, I am sustainable food secure

Livestock: As expected, both GRAD and non-GRAD HHs reported a high reliance on livestock. GRAD interventions had allowed most participants to add to their livestock assets prior to the drought and with GRAD's technical and marketing support, most HHs reported getting higher returns for livestock than they did prior to GRAD. Many HHs mentioned switching from cattle rearing to goat rearing and fattening during the drought and selling off small and medium sized animals to reduce the number of animals. These are all adaptive ways to cope with the drought's impact on livestock, reducing overall livestock mortality while maintaining viable herds from which to rebuild. Non-GRAD HHs reported greater losses to livestock, especially cattle and it was not uncommon to hear reports of dozens of cattle dying. GRAD HHs also made more attempts to diversify the types of animals because of the advice received from local Development Agents (DAs) and IP staff. Livestock investment therefore remained a likely source of secondary income or savings strategy despite the drought, especially for women participants who mentioned the financial security and supplementary income that came with owning livestock. The impact of livestock ownership was especially evident for participants who had benefitted from several cycles of rearing who reported better knowledge about livestock rearing and management from a business perspective.

Suggested GRAD indicator- Gross margin per animal

Support Networks and Social Capital: It was evident that GRAD HHs were supporting and relying on each other during the drought. All participants were part of a VESA group, and these were observed to be critical to managing the shock of the drought through acting as a safety net and support network. The VESAs contributed to more resilient HHs as they function as an organized group savings and loan system. In comparison, non-GRAD HHs reported reliance on informal and unorganized networks which weren't able to plan towards sustainable and longer term outcomes. The assessment found some variability in the strength of the VESA groups, owing to their age, but positive impact as reported by participants was universal. GRAD HHs demonstrated high levels of mutual support, and many women reported this as the time they were able to count on their collective agency for support. Most participants reported the usefulness of participating in VESA activities and trainings even if they weren't able to contribute higher savings to the group fund. In comparison with non-GRAD HHs, VESA members reported that their sense of community solidarity increased because of the drought, since if they had a financial emergency they could rely upon the VESA's financial and social support.

Suggested GRAD indicator- PPT Group Indicators

Relationship with Spouse: Gender relations within GRAD HHs were observed to be more positive than within non-GRAD HHs, with many of the participating HHs mentioning improved relationships with their spouse as an important factor in their ability to deal with the drought. Most women participants reported increased respect, decision making authority and collaboration with their husbands since the GRAD trainings.

"I'm 55 years old. The culture I inherited forces women to carry her child at the back, and fuelwood on her head, and at night wash her husband's feet regardless of her exhaustion from all days' work. I used to do the same to my wife for long time before I joined VESA and started to get the training. I also had more than 50,000 (birr) about 20 years ago, which I eventually lost due to lack of proper training. Thanks to the GRAD project, we now share mutual respect and help as husband and wife." Farmer Sisay Ejigu, the most elderly participant in his VESA Group

With the set of opportunities that GRAD created for women, their spouses felt that they were a stronger partner in financially difficult periods and had a better sense of what was needed for the

whole family. In comparison, the non-GRAD HHs reported no sense of the improvements that could occur for them financially if they had a more equal relationship with their spouse.

Suggested indicator- Women's (assets, credit, and income or employment, % of women leading VESAs, PMAs, RUSACCOs or other local institutions, % of men and women reporting meaningful participation of women in decision making regarding productive resources and income.

PPT indicator- Wife and husband have more balanced household decisions making role, Husband and boy sharing household chores.

Aspirations for a Better Life: Most GRAD participants, with the exception of a few younger men in Tigray (who had lost all their livestock), reported being more confident about their ability to bounce back once the drought ends. It was evident that GRAD HHs were more positive about planning for a post-drought future than non-participants, who felt disempowered, lacked motivation and were hoping for external assistance or divine intervention. This resilient attitude was clear when in group discussions, people who had lost much during the drought could articulate a vision for a life beyond the drought and steps needed to realize that vision. For people who had lost all their crops, securing necessary inputs on time in order to plant crops was a high priority, whereas others talked about their entrepreneurial aspirations and the income generating activities they had started and wanted to expand. Even with the drought still in effect and many struggling to meet immediate needs, it was obvious that GRAD HHs were prepared to look beyond the crisis.

Suggested GRAD indicator- % of GRAD participants showing readiness and commitment to graduate within an expressed timeframe.

GRAD Specific Influences on Resilience-Related Outcomes

In this section we analyze the main mechanisms which contribute to resilience for GRAD-supported HHs. We focus on GRAD influences such as the VESA groups, support networks and knowledge creation. VESA group membership and the suite of trainings appear to have been the most powerful GRAD mechanisms in helping HHs weather the worst of the drought. The knowledge of GRAD HHs and the supportive relationships forged with the MFIs, DAs and market actors are also of ongoing value through the recovery period.

VESA Groups: The resiliency related outcomes of VESA groups varied between newer groups and those formed early on in the project. Despite the drought, several VESA groups reported increases in savings, group investments in IGAs and income growth for their members. The newer groups while still encouraging savings and serving as a solidarity platform, were at the lower end in terms of improved development outcomes for their members. Through a review of income levels and savings as well as group discussion, there was a clear difference between the outcomes for different VESA groups. The members of a mature group in Sidama spoke of their continued commitment to the savings function, loans for different IGAs, and monitoring of member well-being as evidence of their successes in the pre-drought period. They overwhelmingly affirmed the value of the VESA groups in helping to reduce the hardships imposed by drought and expressed tremendous appreciation for GRAD.

The VESA's effects on resilience can also be gleaned from discussions of how participants use the groups' loan facility. Participants in the most severely affected areas of Alamata and Oromia cited the loans' importance in preventing the sale of major assets. They mentioned that the loans helped them to keep their animals, which they would otherwise have had to sell in order to repay loans and buy food, and helped them to not have to borrow money at high interest rates from MFIs. Other participants reported using the VESA loans to repay MFI loans, buy food and animals and invest in petty trading.

The assessment also observed that the VESA groups are also improving the use of credit for participants, with many participants commenting that VESA membership gives them the confidence to take MFI loans to invest in new livelihoods activities because they have the skills to make better use of the credit and can use VESA funds to repay loans if needed. Most participants also agreed that the VESA loans are easy to obtain for all members, and the difficulty with obtaining MFI credit is that they are afraid that they may not be able to repay the loan (for example, in the case of a drought), and they are not willing to take MFI loans if they are not confident that they can repay.

Some participants mentioned that the VESA group savings and loan facility helped to limit migration among GRAD HHs in comparison with non-GRAD HHs. While the assessment did not collect quantitative data on migration, migration was reported to be an important mechanism for coping with drought in all 5 regions. Many GRAD participants reported that they used to leave their homes during previous droughts because there was not enough food and no local option to earn an income. While young people were still migrating in search of employment, their return was more common among GRAD HHs than non-GRAD HHs, and this was attributable to VESA savings and loan facility allowing them to engage in local income generating options.

Market Development and Support Networks: The networks cultivated by GRAD in the area of micro-finance, market development, and agriculture extension have transformed the relationships of participant HHs within these networks. The innovative use of a loan guarantee fund with the MFIs along with the development of participant financial skills has allowed the GRAD HHs access to previously inaccessible capital. Combined with VESA groups' support, MFI loans were cited by several HHs as making them more resilient to the drought. While GRAD is still gleaning insights about loan repayment and financial services, many HHs reported relying on MFI loans for expanding their businesses. Older VESA groups in particular were able to benefit from the additional credit available through the MFIs and reported diversifying their livelihood options. These participants also considered timely loan repayment critical for continued access to MFI funding.

Interviews with Ms. Gadisse Sime, Arsi Negelle Branch Manager of Metemamen Microfinance, and Ato Haile Berhan, Bulbulla Branch Manager of Busa Gonofa Microfinance

Both MFIs started collaboration with GRAD/CRS four years ago.

Impact of drought: Drought has impacted loan repayment in both MFIs. There has been a reported 15% and 50% reduction in loan return due mainly to the drought for Metemamen and Busa Gonofa respectively. Busa Gonofa surmises that the recent political unrest in some parts of the Oromia Region might also have affected the loan repayment. Besides, some farmers are reportedly citing uncollected debts from last year as an excuse for defaulting this year. As a result, the willingness to lend by Busa Gonofa is being negatively affected. They offered to grant additional loans to drought-affected farmers, who, against all the odds, showed willingness to pay their arrears in full. This has been very helpful because farmers generally tend to avoid loans in times of drought. Busa Gonofa is also exercising some flexibility taking the drought into account by issuing additional loans for farmers who are able to return loans even with some delay. The current drought, notwithstanding, Metemamen outlined some key factors for successful loan collection during the pre-drought years. These include:

- Regular follow-up [on a monthly basis] of farmers, which would be more frequent in case of difficult cases.
- Sending reminders to farmers 2-3 months before the loan maturity date.
- Offering advice and training to farmers before and during business planning.
- Given that the GRAD beneficiaries live in more remote places, all services including training, loan disbursement and collection have been conducted at the kebele level so that the farmers would save time and resource.

Looking forward:

While there is a possibility of farmers using the drought as a pretext for their unwillingness to return loans as stated by the area manager of GRAD, farmers and local government have a different opinion. Most GRAD farmers have borrowed from MFIs, which has been spent on seed purchases during the rainy season and shoat rearing during the dry season. However, the impact of the drought on both livestock and crops has severely constrained them from paying back loans. They stressed that they are in need of additional loan from MFIs so that they would survive the drought and keep their precious assets. For instance, in a group consisting of 15 individuals who accessed group loan from Busa Gonofa MFI, 13 people paid back while two were unable to pay back due to the drought, which resulted in denial of additional loan

by the creditor to all group members. While not denying the group liability, the non-defaulting members stressed that they are currently incapable to make contributions toward paying back the group loan because they are more financially constrained than ever. Given that the farmers have a commendable culture of using and returning MFI loans, most of them taking three times and some up to five times, they are disappointed that the MFIs are not treating them fairly [for failing to pay back in time this time around] while they have always been loyal customers.

Officials at the Bureau of Agriculture underlined that GRAD HHs appear to be more resilient because of their access to finance from MFIs. However, two challenges surfaced this year, i.e., failure on the part of the farmers to pay back loans in time, and increasing reluctance on the part of MFIs to issue additional loans. The MFIs, according to the officials, have failed to show flexibility in light of the drought that persistently affected farmers for two continuous years. Given the good track record of farmers in loan repayment, the local government thinks MFIs should have been more flexible. The willingness of Metemamen to continue providing loans and the lack of flexibility in OCSSCO were respectively cited as positive and negative experiences by the officials. All in all, the MFIs underlined the need for support from the IP in order to get better results in terms of loan repayment.

Rescheduling

Rescheduling is beyond the mandate of the branch office and some negotiation needs to be made at the HQ level. Therefore, negotiations should happen at the HQ level of the MFIs with the CCU and the IPs so as to reach a mutually agreeable deal.

The assessment also found that the marketing activities in support of the value chain activities were highly recognized by GRAD HHs as enabling them to increase their incomes and considered one of most substantive benefits of GRAD. Even though the drought had adversely affected all the value chains and returns from them were much lower than expected, many of the participants mentioned that they are better connected with market actors. Support for export products such as livestock, as well as technical assistance and capacity building for the production of their crops and the further marketing of their products was reported as making a great contribution to income potential and knowledge. Most participants reported that the potential for future recovery and improvement of livelihoods lies in being better connected with markets. This opinion was especially strong and prevalent in GRAD areas closer to major markets. The assessment did find a need for some improvements in the management of the market related activities, especially for newly established enterprises such as the agro-dealers. One common observation was a lack of business planning at the agro-dealer level and the lack of follow up support activities hindered sustainability. Also of concern to them and other participants was their ability to access different market actors, and their collective ability in mediating disputes and changing the terms of engagement.

All GRAD participants reported improved relationships with the local DAs and that they learned about new agricultural inputs and practices from them. DAs, who were interviewed by the assessment also mentioned GRADs support in increasing their knowledge through the demand driven extension trainings. The DAs and IP staff work closely together, and participants generally perceived them as being part of the larger GRAD efforts. GRAD trainings at the group level also reinforce the DAs message that participants should be increasing their productivity by adopting new varieties of seeds and new cultivation methods. Their improved knowledge enables them to serve both GRAD and non-GRAD HHs and improves overall rural productivity. All GRAD HHs mentioned more intensive contact with the DAs than prior to GRAD.

Knowledge Creation: In conversations with GRAD HHs across the 5 regions, the assessment found that the technical/financial, nutrition and gender trainings were among the main benefits of GRAD. The knowledge and skills that GRAD imparts can be best summarized from the quote of one participants “We are now aware of how to live our life even if there is no GRAD,” expressing that they have learnt the culture of savings, benefits of credit, livelihood skills, and have the skills to make their own decisions. Similarly, a participant in a women’s group said that “GRAD has encouraged us to think for ourselves and for the men to behave differently towards us, we are now partners in development, and don’t think of waiting on the husband or on PSNP support.”

Another dimension of the new knowledge, and the one that participants often reported, is knowledge about new agricultural inputs, cultivation, livestock rearing and marketing practices, such as

improved seeds, fertilizer usage, using irrigation, fattening of shoats and cattle instead of just rearing them, collective marketing and group production. The participants mentioned that this learning has enabled them to change production practices and increased their ability to negotiate better prices.

A significantly higher proportion of GRAD participants reported having invested in and adopted positive agricultural technology than non-participants, and participants expressed a high degree of knowledge about cultivation of appropriate crops, application of inputs and land management practices. However, limitations associated with cultivating crops because of the drought and fear of another crop failure had for the time being resulted in more participants reporting an adaptation strategy based on diversification of incomes through shoat rearing and income generating activities. Also, GRAD participants reported plans to adopt positive agricultural changes in the future at a higher rate than non-participants and mentioned plans to increase production through techniques such as using new inputs in the future or investing in irrigation. This suggests that agricultural based interventions, particularly training, led to the acquisition of confidence and skills which has a significant positive impact for added resilience.

The awareness and understanding of climate change and its impacts on the livelihoods of households was also found to be well understood. Many GRAD households mentioned that it is possible to adapt their crop to climate change and mentioned strategies that can be classified as adaptation to climate change, such as crop diversification and use of more resistant crops. A few households also mentioned that they would look for a new job as a means to adapt to these adverse circumstances, i.e., diversification of income sources.

The assessment observed some difference of opinion among participants and stakeholders about the selection of the crop value chains at the onset of the project. While the IPs maintained that these were discussed with the participants, many farmers mentioned that they had little involvement in the selection of the crops promoted. This may be attributable to the losses suffered across these value chains over the drought period since many other participants said that the decisions were collective and the best choice given local soil, weather and market conditions. The assessment cannot establish whether the value chains selected were indeed the most appropriate or not, however, what we do know is that all participants reported improvements in their knowledge regarding agriculture production, bee keeping, livestock rearing and associated marketing needs. Based on the assessment, GRAD has especially improved the knowledge of female heads of household, who reported cultivating vegetable gardens, and engaging in entrepreneurial activities and a range of other income generating activities. Some of the men joked that they thought women were the main beneficiaries of GRAD.

Concluding Suggestions

In general, the assessment found that GRAD has been highly effective in terms of addressing the real need of the participating households and has contributed significantly to building their resilience through a range of capacities. However, despite positive gains, given the complex nature of the drought there is the need to continue GRAD activities in order to realize its potential impact. In addition, some activities already undertaken need consolidation and support to ensure they generate the maximum possible benefits for participants. In sum, the assessment findings indicate a need for continuation of the project while considering the suggestions mentioned hereunder.

Drought Response Approach and Practice: Drought response planning may be overshadowed by other activities especially as the project enters its exit phase and project staff tend to focus on interventions aimed at meeting deliverables. Therefore, it would be beneficial to do rapid participatory assessments on the impact of the drought and then carry out specific measures to inform the exit strategy through 2016 and beyond. Additionally, it is recommended to give attention building the capacity of VESA members to effectively lead the assessment process so the community owns the process and makes use of it and share with other local stakeholders.

There is also a need for strengthening regular coordination meetings to discuss drought related activities and jointly track external and internal monitoring data. The current set of GRAD qualitative and quantitative indicators should be reviewed at these meetings; and IPs should take lead role in using them to track HH progress.

Value Chains Activities: Market and value chain development activities could be better linked to the resilience pillars of the project, which would imply that participants are involved in planning, prioritizing and regulating the interventions beyond GRAD. The MSPs can also play a major role to lay the cornerstone for these initiatives. Also, given the challenge of drought, it is recommended to conduct a detailed assessment of how much of livestock survived, status of the agriculture value chains as well as their potential contribution for building back livelihoods. In order to enhance information sharing for beneficiaries it would be advisable to support collection and kebele level posting of market information for prices in major neighboring markets. It is also suggested to closely work with the local DAs to collect market information which they can share with served communities.

Natural Resources Management: The current GRAD activities promoting climate sensitive agriculture and resource management should be enhanced, especially in areas where the impact of flooding has increased vulnerability. The natural resource base across GRAD regions are very degraded and may not fully support the current livelihood strategies in the long-term unless improved soil and water conservation practices are applied.

Strengthening of Weaker VESAs: The VESA groups are one of strongest features of GRAD and have contributed to financial security and development of social capital. Hence, the assessment recommends that the weaker VESA groups be supported to increase their capacity to serve members. There was also a strong demand for VESA groups among non-GRAD HHs, hence, GRAD should consider replicating the initiative to other communities where possible.

Livelihood Diversification: The current capacity of natural resource base, especially the lack of water has led to decreased returns from livestock and agricultural productivity to the extent envisioned. As noted in other sections, the relative importance of alternative livelihood options is increasing for GRAD HHs. Hence, it is recommended to enhance livelihood diversification interventions as well as support the one that have already been started to complement the livelihoods promoted by GRAD. Close follow-up by the IPs is required to regularly support HHs until they adapt to the new livelihood systems.

Financial Services: It is suggested to work closely with the VESAs especially in areas of book keeping, loan repayment and leadership; GRAD should also closely support them until they secure settlement of outstanding member loans. The current drought has affected the loan repayment rates and GRAD should look for ways to make the participants credit worthy as early as possible.

Measuring Resilience: It is suggested that GRAD monitors overall impact on household resilience, possibly using a composite index or a set of proxy indicators. It also must be able to routinely assess and monitor resilience indicators at both household and outcome levels, rather than at group and output levels. GRAD must be able to monitor medium- to long-term changes in resilience rather than short-term changes in household consumption and to understand resilience as a dynamic process.

Documentation and sharing of lessons: Documentation by IPs needs strengthening and should include participatory learning engaging stakeholders at the community level. Findings can be used as evidence for resource mobilization, as well as to inform the re-design and or scaling up of proven activities. Increased sharing of project learning within and amongst IPs and GRAD staff in real time can also support adaptive management approaches to ensure that interventions remain relevant in a quickly-changing context.

Annexes

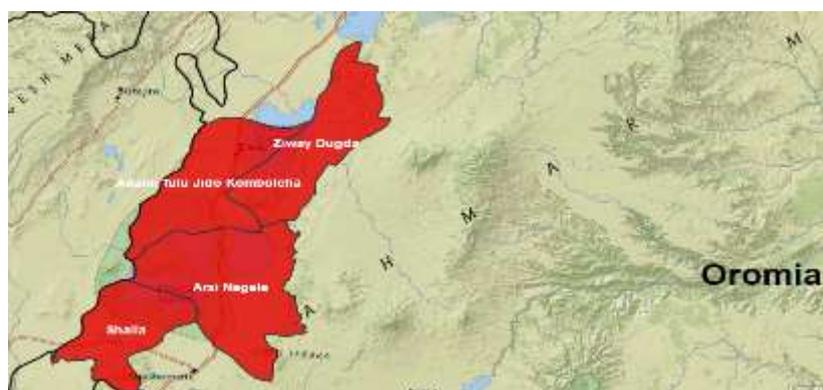
Annex I

Regional Overview

Adami Tulu Jiddo Kombolcha Woreda, Oromia National Regional State

GRAD operates in four woredas in Oromia National Regional State (Arsi Negele, Zeway Dugda, Shalla, and Adami Tulu Jiddo Kombolcha). This assessment is based on visits to two kebeles in Adami Tulu Jiddo Kombolcha Woreda. Adami Tulu Woreda is located in the central Rift Valley area of East Shewa Zone. The Woreda is sub-divided into 43 rural and 4 urban kebeles, with a total surface area of 142,295.32 hectares.

The Woreda is mainly lowland with bimodal rainfall condition, which is often erratic and unreliable. Its distribution pattern is variable and the areas remain dry for most months of the year. The climate



is sub-tropical and the average annual temperature is 15-20°C, and average rainfall is 800 mm. Agriculture is the mainstay of the economy, where livestock, crops and forest products are the main sources of income for farmers. Maize, haricot bean, teff, wheat, barley and sorghum are the major crops that are grown under rain-fed condition by farmers. Some farmers along Lake Ziway also

generate income from fishing and horticultural crop production. Average farmland holding per household in the district ranges from 0.75 to 3 hectare. Private commercial farming of cut flowers grapes, and vegetables are also expanding in the area.

Though the Woreda is suitable for crop production, livestock rearing and fishery development, large proportion of the population is food insecure due to drought and shortage of rainfall.

Adaptive Capacities:



Overall, the GRAD households met in Oromia – Adami Tulu Jiddo Komolcha Woreda exhibited greater adaptive capacities as compared with non-GRAD hhs since GRAD started supporting them with productive activities, technical assistance and nutritional support interventions from 2012 onwards. For the GRAD HH's visited in Adami Tulu, we found that all of the respondents have been engaged in the value chains involving shoat fattening, red pepper and pulses. All the participants met had joined the VESA groups and most reported taking loans amounting to ETB 3000-5000 at least once. GRAD beneficiaries in the Woreda are engaged in different IGA's such as donkey cart, micro-franchise, small-scale poultry, and vegetable.

Disturbances and Shocks:

According to the discussion with focus groups in two kebeles, namely, Katafa-Waransa and Hurufa Lole, the 2014-2015 drought stands out in terms of the unprecedented crop failures. This was



confirmed by officials in the neighboring Arsi Negelle Woreda Bureau of Agriculture, who characterized the current drought as severe with unprecedented scope of impact that surpassed the most vulnerable Kolla areas and affected both the Woina Dega and Dega agro-ecological zones (AEZs). As such, out of the 43 kebeles in the Woreda, 26 have been severely affected, which encompass all the 21 kolla kebeles and five kebeles from the other two AEZs. Some woina dega kebeles are reportedly shifting in character to kolla-type. They also flagged that the number of PSNP kebeles that used to be only 11, has now grown to 18, including all the 10 GRAD-covered kebeles.

Impact of the Drought:

FGD participants in the Karafta Waransa Kebele testified that rainfall has been scarce, inconsistent and variable during the last three years. There was only five days of rainfall last year (2014/15). Flood incidents are also increasing from time to time. The current drought is further exacerbated by the large increase in population size, and the loss of the forest cover in the area.

Large crop failure has been reported in both kebeles due to the drought in 2015 and increasing flood incidents. All respondents in Katafa Waransa and most in Hurufa Lole reported heavy crop losses so much so that many farmers don't currently have enough crop to feed on and plant in the coming season. This includes both staple food crops and value chain crops. The staple food crops severely affected by the drought include maize, wheat, and millet. Haricot bean and red pepper have also been considerably affected. The project office of CRS/MCS confirmed that the pulse and livestock value chains were the most affected by the drought.

According to CRS/MCS, about 4000 shoats died due to the drought in 45 kebeles, which resulted in the loss of assets for many HHs. The quality of the shoats also plummeted to such an extent that they failed to meet the requirements of Luna Abbatoir, one of the big buyers for the farmers. In our FGDs, about two-third of the respondents underlined that the shortage of feed resulted in the deaths of their cattle, namely, horses, donkeys, cows, oxen, and calves. Respondents also stressed that surviving cattle have become less productive in that they became too weak to walk long distances, carry stuff, and plough the farmland.

Other Impacts reported by participants:

Impact on drinking water: The drought has also affected access to water for humans and livestock. In the Katafa Waransa Kebele, ground water is not available, and hence local government supplies water through pipes (*xuffa*) to the community. However, the pipe water provided by government is available only at Katafa, and is hardly accessible to Waransa HHs. Therefore, the Waransa inhabitants have had to travel a long distance to fetch water. In these villages, women need to travel at least two hours to get to the water source and spend more time on the queue in Katafa village or the neighboring Tora town. The Hurufa Lole kebele respondents underscored that River Bulbulla has completely gone dry due reportedly to upstream abstraction by small and large-scale farms including flower farms. The community buys water from government and private vendors. While better off farmers are able to buy water from these vendors, many people have to manually dig up to 4-10m deep wells on the riverbed to get water during times of stress.

One woman from Hurufa Lole Kebele testified, now that River Bulbulla has gone dry since 2015, their alternative water source is Langano Lake, which is too salty to drink, and makes the livestock sick.

But, under times of water shortage, this is an unavoidable choice. It takes about two hours to travel to and from the Lake. The woman further reported that this has become too hard on the livestock because they feel very much exhausted from such travels.

Impact on education and nutrition: Averagely half of the respondents in both kebeles have experienced children dropping out of elementary and junior high schools since last year (2014/15) due to food and water constraints. In the Katafa Waransa Kebele, it was reported that the school in Katafa was temporarily closed when teachers left the area in search of water. School has resumed since then, and school feeding has also begun to encourage school participation. According to one woman respondent, “we have become very vulnerable, sometimes unable to give food for our children. We buy some food from the market but it is not enough. We used to drink coffee 3-4 times a day but now we only drink once or sometimes we don’t drink at all”.



Responses to Drought - Coping and Adaptive Strategies

The study also examined coping mechanisms and adaptive strategies adopted by the two kebeles. There was some variation between the two kebeles in this regard because unlike the Katafa Waransa Kebele, the Hurufa Lole Kebele was not eligible for government emergency assistance owing to its better economic status and graduation of its members. While reliance on VESA and MFI loans and diversification of income through IGAs figure prominently in both kebeles, the Katafa Waransa Kebele has been forced to resort to more negative coping strategies.

VESA savings have continued regardless of the drought in both kebeles although there have been reported fluctuations in the amount of savings in Katafa Waransa Kebele, ETB 5 under bad circumstances (between June 2015 and March 2016), and ETB 10 under better circumstances. Almost all farmers have taken loans in both kebeles spending the money on purchase of seeds and fertilizers, and shoa rearing. Loan repayment in VESA groups has always been almost 100%.

Most farmers from both kebeles also accessed MFI loans, which they invested in livestock and pulse value-chains, both severely affected by the drought. Were it not for the group collateral, which has held many groups hostage, most of them have paid back their loans in time.

The most common IGAs in the Katafa Waransa Kebele were donkey-driven carts to transport people and commodities to and from Bulbulla Town, and running basic shops in villages. Some have also invested in water pipes diverted from the major pipe and selling water to local communities. Most of the negative coping strategies have been reported largely from the more distant and worse-off Katafa Waransa Kebele. The most commonly mentioned are outlined hereunder.

Liquidation of assets: All participants reported sale of shoats, forced by the drought-induced economic difficulties. Besides, almost all respondents reported that they leased out averagely half of their farmland to other contractors for two years at a rate of ETB 1200-1400 per hectare per year. The money has then been spent on buying food for the household. Only six out of 18 respondents contracted out land in Hurufa Lole Woreda, and yet the average figure is around 30% of their landholding per person.

Food aid: All respondents in Katafa Waransa Kebele are currently receiving food aid (wheat and cooking oil). There has also been some provision of hay to the cattle by local government. Local government also supplies water on trucks when there is scarcity for humans and livestock. However, the community feels that the water is not enough.

Given that the area is known for its *Acacia* vegetation, charcoal making and selling has been a common coping strategy. Most farmers in both kebeles argue, however, that tree felling is more for agricultural expansion than charcoal making. A local administrator in Katafa Waransa Kebele admitted that most

of the people cut the trees for survival. Nowadays, though, the destruction of the forest has made it increasingly difficult for them to opt for this coping strategy.

Moreover, school dropouts have been another coping strategy in both kebeles, migration of young adults is slowly increasing in search of employment. The migration from Katafa Waransa Kebele is more permanent than Hurufa Lole Kebele, because in the case of the latter farmers go back and forth to towns to get additional incomes for their families.

Adaptive Strategies:

There has been a clear shift from traditional agricultural and animal husbandry practices to more value chain oriented agricultural practices although these have been heavily impacted by the drought, notably livestock fattening, haricot bean and red peppers. Diversification of income by adopting few more IGAs such as carts, petty trade, and selling water have been more successful in helping the community under the difficult circumstances.

Priority Emergency Assistance Interventions:

Until the next harvest, therefore, GRAD HH’s will remain increasingly dependent on the sale of livestock, off-farm employment, loans, remittances and food aid. Participants prioritized short and medium-term interventions as listed in the table below.

Short-Term Priorities	Medium-Term Priorities
Negotiation with MFIs for more flexibility in financial transactions	Rehabilitating the road between Bulbulla and Tora
Drinking water supply with more focus on distant kebeles	Construction of new ponds in worst affected areas
Supply of OFSP	Promoting crop insurance schemes
Distributing seeds (maize, haricot bean, and teff in the kolla kebeles and wheat in the dega kebeles)	
Providing food assistance	
Distributing plastic sheets for water storage in GRAD kebeles worst affected by the drought	

Interview with Agro-dealer: Dr Asrat, Bulbulla Town, Adami Tulu Jiddo Kombolcha Woreda

He has his main shop in Ziway, and he was requested by CRS/MCS to expand to Bulbulla to serve GRAD households. According to Dr Asrat, the major impact of drought has been the shift of farmers from agriculture to cattle and shoat fattening and poultry farming. He stated that his shop is rightly responding to this shift by increasingly providing molasses, forage, feed, and EM. Besides, he sells vegetable seeds and other materials. He doesn’t seem to be worried about the phasing out of GRAD because he already has an established business, which is slowly expanding in the region. This might present a good model for a GRAD II agrodealer, which doesn’t need thorough market linkage efforts, and can stand on its own under difficult circumstances.

Interviews with Ms. Gadisse Sime, Arsi Negelle Branch Manager of Metemamen Microfinance, and Ato Haile Berhan, Bulbulla Branch Manager of Busa Gonofa Microfinance

Both MFIs started with GRAD/CRS four years ago.
 Impact of drought: Drought has impacted loan repayment in both MFIs. There has been a reported 15% and 50% reduction in loan return due mainly to the drought for Metemamen and Busa Gonofa respectively. Busa Gonofa surmises that the recent political unrest in some parts of the Oromia Region might also have affected the loan repayment. Besides, some farmers are

reportedly citing uncollected debts from last year as an excuse for defaulting this year. As a result, the willingness to lend by Busa Gonofa is being negatively affected. They offered to grant additional loans to drought-affected farmers, who, against all the odds, showed willingness to pay their arrears in full. This has been very helpful because farmers generally tend to avoid loans in times of drought. Busa Gonofa is also exercising some flexibility taking the drought into account by issuing additional loans for farmers who are able to return loans even with some delay.

The current drought, notwithstanding, Metemamen outlined some key factors for successful loan collection during the pre-drought years. These include:

- Regular follow-up [on a monthly basis] of farmers, which would be more frequent in case of difficult cases.
- Sending reminders to farmers 2-3 months before the loan maturity date.
- Offering advice and training to farmers before and during business planning.
- Given that the GRAD beneficiaries live in more remote places, all services including training, loan disbursement and collection have been conducted at the kebele level so that the farmers would save time and resource.

Looking forward:

While there is a possibility of farmers using the drought as a pretext for their unwillingness to return loans as stated by the area manager of GRAD, farmers and local government have a different opinion. Most GRAD farmers have borrowed from MFIs, which has been spent on seed purchases during the rainy season and shoat rearing during the dry season. However, the impact of the drought on both livestock and crops has severely constrained them from paying back loans. They stressed that they are in need of additional loan from MFIs so that they would survive the drought and keep their precious assets. For instance, in a group consisting of 15 individuals who accessed group loan from Busa Gonofa MFI, 13 people paid back while two were unable to pay back due to the drought, which resulted in denial of additional loan by the creditor to all group members. While not denying the group liability, the non-defaulting members stressed that they are currently incapable to make contributions toward paying back the group loan because they are more financially constrained than ever. Given that the farmers have a commendable culture of using and returning MFI loans, most of them taking three times and some up to five times, they are disappointed that the MFIs are not treating them fairly [for failing to pay back in time this time around] while they have always been loyal customers.

Officials at the Bureau of Agriculture underlined that GRAD HHs appear to be more resilient because of their access to finance from MFIs. However, two challenges surfaced this year, i.e., failure on the part of the farmers to pay back loans in time, and increasing reluctance on the part of MFIs to issue additional loans. The MFIs, according to the officials, have failed to show flexibility in light of the drought that persistently affected farmers for two continuous years. Given the good track record of farmers in loan repayment, the local government thinks MFIs should have been more flexible. The willingness of Metemamen to continue providing loans and the lack of flexibility in OCSSCO were respectively cited as positive and negative experiences by the officials. All in all, the MFIs underlined the need for support from the IP in order to get better results in terms of loan repayment. Rescheduling

Rescheduling is beyond the mandate of the branch office and some negotiation needs to be made at the HQ level. Therefore, negotiations should happen at the HQ level of the MFIs with the CCU and the IPs so as to reach a mutually agreeable deal.

Annex II

Regional Overview

Mareko Woreda, Guraghe Zone, SNNPR

ASE/GRAD operates in the Meskan and Mareko woredas, which are located in the Guraghe Zone of the SNNP Regional State. Koshe, the Woreda Town for Mareko is situated about 20 km away from Butajira, the Woreda Town of Meskan. The assessment focused on Mareko Woreda that has an altitudinal range of 1850-2000m asl, and receives an annual rainfall of 850-1556mm and average temperature of 16-18°C. The dominant crops in the Woreda are red pepper, maize and wheat. Livestock fattening and rearing is also practiced in the area, which includes shoats and cattle. The analysis is based on visits to GRAD communities of two kebeles, i.e., Semen Koshe and Shirinto 03, and the use of focus group discussions (women and men), conversations with implementing partner staff and key informant interviews with agro-dealers, MFIs, and government agency staff.



Key stakeholders in the area became aware of the drought in April 2015. According to ASE senior staff, Mareko Woreda is the most severely affected, and GRAD is currently serving 20 kebeles in this Woreda. FGDs were, thus, conducted with three groups in Mareko Woreda, one located in Semen Koshe Kebele, close to Koshe (the Woreda town), and another in Shirinto 03 Kebele, about 15 km off the main road from Koshe. The group in Semen Koshe was a mixed group whereas

those of Shirinto 03 were two groups (one male and another female). The road to Shirinto Kebele was in a bad shape in some places due to gullies formed as a result of heavy rains during the preceding week. Although average landholding size of Shirinto 03 kebele (1 ha) is significantly better than that of Semen Koshe (0.5 ha), the former experiences more severe water shortage in the absence of permanent water structures in the vicinity. Therefore, Shirinto 03 Kebele is solely dependent on rain-fed agriculture. GRAD entered this Kebele relatively late, in May 2014. Besides, its being situated at a longer distance from Koshe has affected the market access for the farmers.

Adaptive Capacity:

Overall, the GRAD households met in Mareko Woreda exhibited greater adaptive capacities as compared with non-GRAD hhs since GRAD started supporting them with productive activities, technical assistance and nutritional support interventions from 2012 onwards. For the GRAD HH's visited in Mareko, we found that respondents have been engaged in different VC's such as red pepper, shoat fattening and vegetable (onion). The households mentioned some of the positive adaptive capacity they mentioned was VESA loan, limiting their cattle and shoats, using early mature crops. The participants in the women FGD, said: "... we take loan from VESA and use it for any purpose. We can be engaged in business as well to buy what we need for the household like food, oil, salt, etc." Similarly, one female head of a HH shared her experience saying, "... we have social fund In VESA and when my son was sick I took the social fund and used it for hospital expense. We used to sell our asset to go to the hospital but now we can use our social fund ... before GRAD we never had saving experience."



FIGURE 6: WAQUUA BUTTE KURE WAS BROKEN BY FLOOD

Disturbances and Shocks: The community underlined that the current drought is worse than that of 1984/5 because its duration has been much longer; it led to an unprecedented livestock disease outbreak⁶; and is accompanied by a growing flood incident especially in the Shirinto 03 Kebele. A notable and shocking case is last week's flood incident that has over-flooded and broke a pretty old check dam called Waaqaa Butte Kure, which has reportedly served the community for more than 100 years.

the disappearance of, among others, trees that used to provide edible seeds and leaves, and high population pressure.

The drought has been reportedly exacerbated by the loss of vegetation cover in the area, which resulted in

Impact of the Drought:

While water is not a serious problem for Semen Koshe Kebele, the Shirinto 03 Kebele has suffered from shortage of water for household and farming purposes. All ponds in Shirinto 03 Kebele have reportedly dried up due to the drought.

Crop failed repeatedly due to lack of rain and unexpected excessive rain in both kebeles. Crops affected include wheat, maize, red pepper, and teff. In the worst affected Shirinto 03 Kebele, the erratic and inconsistent rain has destroyed not only conventional vegetables and crops such as onion, wheat, and maize, but also seeds that were provided to the community through the crisis modifier support, which include red pepper, potato, haricot bean, and teff. Farmers also regret the loss of chemical fertilizers applied on the farm. The heavy rain that continuously fell on April 12-14 has, not only broken an old check dam, but also resulted in flood damage that has inundated a large expanse of farms destroying the crops and rendering the land temporarily unusable. Community members testified that they have never encountered such type of flood in the past.

Livestock wasting and death was reported from both kebeles owing to shortage of feed in Semen Koshe and of feed and water in Shirinto 03. While three respondents attributed the death of their cattle to the drought in Semen Koshe, nine people in Shirinto 03 Kebele reported the death of mainly sheep and goats, and some horses due to drought.

The youth in the area demonstrate great disenchantment and impatience due mainly to the drought. Some have already left the area for bigger towns like Torra, Butajira, and Addis Ababa. As most of them are young husbands with children, the responsibility to take care of their family now falls on women and old grandparents. Those youth remaining in the locality seem very frustrated and are increasingly considering movement to urban centers as an alternative coping strategy. Some who came back from Butajira following the news of rainfall regretted their decision because the flood completely destroyed their crops and damaged their farmland.

Other Impacts reported by participants:

Livestock disease outbreak: the cattle are currently confronted with 'new outbreak related to the drought.' Farmers suspect that this is a new type of disease. In response to the outbreak, vaccination was provided to the cattle by the local government and the community was advised to refrain from watering their cattle in rivers. Since then, the outbreak has subsided. Farmers also relate this unprecedented outbreak with the growing inability of the livestock to withstand diseases. It still needs to be confirmed whether this is a new disease or not. ASE/GRAD hold two hypotheses: either this is a new disease outbreak or there was a delay in providing the vaccine for anthrax. On the other hand, a senior official at ASE Butajira Office also confirmed that the symptoms on the cattle show some discrepancy with anthrax.

⁶ The symptoms are similar to those of the Semen Koshe Kebele.

Responses to Drought - Coping and Adaptive Strategies

Savings and access to finance through the VESAs have been the primary coping modalities for both kebeles. All members have maintained saving practices through their VESAs regardless of the severity of the drought. Loans from VESAs were used toward the purchase of short season crops such as haricot bean and maize; shoat fattening; and micro-franchising. A few farmers spent the loan on medication while some others started IGA activities that include petty businesses of sugarcane, malt, and grains; irrigated farming of spinach; and red pepper. Women, through micro-franchises, are selling products like salt, sugar, soap, and coffee. Nonetheless, since the market demand for Shirinto 03 is very limited, women in the micro-franchise business are forced to take turns in selling products. A good case in point substantiating the use of VESA loans is a woman in Semen Koshe Kebele, who took ETB 500 from her VESA, bought some goats, fattened them with concentrate feed for 15 days, and sold them making a net profit of ETB 130. She then bought more goats, applied the same technique, and currently she owns 10 goats and ETB 3000 in savings. The relative proximity of the Semen Koshe Kebele to Koshe Town has been key to help farmers diversify incomes through creating better access to the market.

A spirit of cooperation, entrepreneurship, and optimism is growing in the Semen Koshe community, which paved the way for better access to financial services. Respondents attribute these changes to the trainings offered through the VESA groups. As articulated by one of the farmers, 'a single tree standing on large field is not appealing to the eyes.'

Most members took loans from MFIs such as Omo and Meklit. However, they couldn't pay back loans due supposedly to the drought. There are indications, though, that there is a deeply embedded culture of reluctance to return loans borrowed from MFIs. One farmer testified that even if his goat fattening business went well and he made some profits, he was not willing to pay back the loan due to 'fear of the future.' He asked: what if the drought just lingers on? They also cited the bureaucracy in Omo Microfinance, as a result of which they were not able to effect payment although they went there in person. One farmer even blamed some staff members of the Omo Microfinance, who allegedly lulled farmers to pay bribes so that their loans would be annulled. According to this informant, one of these 'villains' is reportedly arrested, and the other fled the country.

The distribution of selected and [chemically] treated red pepper seeds accompanied by trainings in proper agronomy practices has enabled the community to cope with the drought through effectively tackling some prominent fungal diseases. Coupled with the drought, the disease could have caused more damage in the community. Another advice offered to the community is intercropping of haricot bean with maize, which has been instrumental in improving the moisture content of the soil and preventing damages from avian pests.

The Story of Edget Besira Group

Inspired by the success of VESA groups, a group of five farmers led by Ato Woleye Shemsu set up a separate saving group, 'Edget Besira,' and initially managed to save ETB 1600 per person. Then they prepared a business plan for poultry farming.



They invested ETB 32,000, a loan that they got from Omo Microfinance and invested it in the business. They made a profit of about ETB 30,000 in a matter of three months. Since then they have expanded the business, and the local Farmers' Technology Center has offered them a space for the poultry farming. Other VESA members buy chicken from Edget Besira group to sell them in the local market with some profits. Having witnessed the successes of Edget Besira group, some other individuals modeled on this group to form their own groups. Ato Woleye reflects: 'In the past, we used to walk long distances in search of money, but now we realized that money is right underneath our eyebrows.'

Emergency food and drinking water assistance was also helpful for the communities to cope better. We have witnessed the distribution of water on trucks in a rural village close to Koshe Town. The team informed us that they are distributing water to more distant kebeles as well. The Shirinto 03 Kebele respondents confirmed the existence of such efforts although they felt that the amount is not adequate.

Although there are signs of cooperation in terms of the VESA schemes, Shirinto 03 Kebele community



FIGURE 1. GOVERNMENT DISTRIBUTING WATER

has also witnessed conflict between families that own cattle and otherwise, for a priority of access to the water distributed by the local government, which has then escalated until elders and local administration managed to resolve the conflict.

Adaptive Strategies:

There have been some evidences that GRAD communities have adopted some practices that helped them in adapting to the changing climate and its impacts. The adoption of early maturing and drought resistant crops such as haricot bean has been very pivotal to withstand the shocks better. The introduction of IGAs such as poultry farming, petty trade and micro-franchising has contributed a great deal to support the household economy under these difficult circumstances. Some farmers used

chemically treated red pepper seeds that produced better yields than otherwise. The introduction of intercropping techniques involving haricot bean and maize has been instrumental in improving crop yields and income.

Priority Emergency Assistance Interventions:

ASE introduced the crisis modifier support a few months ago and supplied early maturing crops such as haricot bean, teff, forage and animal feed. Haricot bean and teff were distributed for 1660 HHs, water tankers distributed to 15 kebeles. The differences in challenges encountered by different communities granted, emergency assistance efforts need to take these differences into account. Overall, though, one of the key development challenges in the Mareko Woreda has been the dependency syndrome that has constrained also GRAD communities from paying back loans in time.

Short-Term Priorities	Medium-Term Priorities
Supplying early maturing drought resistant seeds of haricot bean, sweet potato and maize Promoting poultry farming Supplying red pepper seeds Providing deep well water particularly for the Shirinto 03 Kebele Promote permagarden technology	Undertaking both demand side and supply side capacity building on financial literacy to bring about a change in mindset on the part of local communities and promote effective loan repayment schemes on the part of MFIs

Interview with Ato Chemere, Agrodealer, Koshe Town, Mareko Woreda

He started with GRAD seven months ago. The shop sells EM, concentrate feed, molasses, forage, chicken feed, vegetable seeds (carrot, beetroot, onion, lettuce, cabbage, etc.), livestock medications (anti-helminthes). Most of their customers are GRAD HHs owing to the promotion undertaken and market linkage created by ASE. However, the market is slowly but surely expanding to non-GRAD farmers. The agrodealer has diversified the types of feed sold in the shop as a strategy to attract markets from all parts of rural community. Since the owner is trained in animal production, he also offers trainings to farmers to build his business.

Impact of drought:

The market has been affected by the drought in that farmers reduced amounts of products they buy. In response to this, the agrodealer has repackaged his products in smaller quantities so that farmers would be able to continue as customers.

Looking forward:

In response to his preparedness for the phasing out of GRAD I, he replied that he would capitalize on the market networks already created, which already brought him a large number of customers. He is also working with the Woreda Agriculture Bureau, and has expanded his business to adjacent kebeles in Oromia. He also offers photocopy service in his shop. He has already established good linkages with the input suppliers, and hence, he can have transactions quite easily. He also understands the competition from other shops and is working on diversifying his business and improving the quality of his products so as to outcompete them. He is also planning to invest some resources for promotional billboard that profiles the story of one of his successful shoat-fattening customers.

He is in consultation with ASE to put in place some agents in GRAD-assisted kebeles so that he may provide his service more easily to local communities. He is also developing a business plan to introduce a mobile crushing machine that would provide a low-cost service to farmers in crushing maize stalks, which would make them better palatable and more efficient feed to the cattle.

Interview with Ato Worku Aberra, Meklit Microfinance, Butajira Branch Office Manager

Meklit started with GRAD in March 2014. This is one of the 12 branches in the country and the closest other branches are located in Wolkite and Emdibir towns of Gurage Zone. It currently serves 1358 farmers. Meklit provides seven products, of which the ASE/GRAD loan scheme is one. He admitted that the ASE/GRAD scheme is the most difficult with the lowest rate of average loan repayment, estimated at around 40%.

Impact of drought:

The ASE/GRAD product, however, was very much affected whereby the loan repayment decreased from 95% in December 2014 to 15% in June 2015 and went up to 27% in December 2016. The slight improvement between June and December was reportedly due to the close follow-up carried out in the meantime. Therefore, drought must have played some part in reducing the loan repayment rate by the communities.

Another factor cited for the poor loan return performance was Omo Microfinance setting a negative precedent, owing allegedly to its poor follow-up mechanisms. This is confirmed with the FGDs with local communities. One farmer admitted that there is a deep-rooted notion in the community that taking loans shouldn't be worrying because 'either the creditor or the debtor may pass away.'

In contrast, Meklit has invested ETB 74,000 for monitoring and follow-up between July and December 2015. Some more money is invested since January 2016 for the same purpose. As a result, we have taken 263 people to court in Mareko as compared with about 20 people in Meskan. Loan repayment would have been worse were it not for these measures. Farmers sometimes challenge us: Why do you treat us harshly as opposed to Omo?

Misconceptions spread by some community members have also contributed to the poor performance. The rumor spread was that the loan repayment period is four years as opposed to one year as stipulated in the contract agreement.

He also cited the difference in culture of the two woredas, namely, Meskan and Mareko. He stated the loan return rates for the two woredas as 70% and 26% respectively, which he explained was due to the deeply entrenched dependency syndrome in Mareko Woreda although drought has undeniably had some impacts. He further classifies the Mareko defaulters as 75% capable but not willing to pay; 15% facing moderate difficulties; and 10% absolutely destitute defaulters. He then underlines that the major hurdle is lack of willingness, not necessarily lack of financial capacity.

The responses by Meklit were not necessarily addressing the drought, though, rather improving the loan repayment at any cost. As such, Meklit took the following measures:

- In response to the difficulty in communication for creditors from different VESAs, Meklit adopted a change of strategy to rather serve individuals belonging to the same VESA group.
- Meklit shortened the repayment period from one year to six months to avert risks.
- Meklit was forced to stop the service in January-February 2016 and sounded out an alarm, which led to a high-level dialogue involving all key stakeholders, namely, GRAD CCU, Meklit HQ, and ASE. Following the discussion, the service resumed. In light of the severity of the drought, though, the degree of flexibility seems to be very low.

Looking forward:

We need support from ASE in improving the loan repayment. He stressed that unlike Omo, which is a public enterprise, Meklit, as private entity, can't afford to take losses due to poor loan return performance. Therefore, it desperately wants to recollect the loan.

Annex III

Regional Overview

Raya Alamata Woreda, Tigray National Regional State

Tigray is the northern-most region of Ethiopia, covering an area of approximately 53,000 km² that mostly lies in mountain plateaus between 1,500 - 2,300 meters. Annual rainfall ranges from 350 mm to 1500 mm, falling mostly during the period June to September. In the study area, the dominant crops are teff and sorghum, covering more than 75% of the total crop fields in the Woreda. Livestock



production (sheep, cattle, camels) also serves as major source of income, particularly during periods of crop failure, when large numbers of livestock, particularly cattle, are typically sold.

This section describes some of the impacts of the failed spring belg, erratic and Meher rains on GRAD households and communities in Alamata. GRAD works with 5200 household in Tigray, who have been organized in 203 VESA groups. The analysis is based on visits to communities in April 2016, and the use of focus group discussions both women and men, conversations with Implementing partner

staff and key informant interviews with agro-dealers and government staff.

Adaptive Capacities:

Overall, the GRAD households met in Tigray exhibited greater adaptive capacities as compared with non-GRAD hhs since GRAD started supporting them with productive activities, technical assistance and nutritional support interventions from 2012 onwards. For the GRAD HH's visited in Alamata, we found that all the of respondents had been engaging in the honey, cattle, shoat, and the vegetable value chain with most of them having already completed more than one cycle of their adopted value chain activity prior to the drought onset.

FGDs with GRAD HH's identified a number of adaptive responses that were carried out by GRAD to adjust to changes (both climate and non-climate). Some important adaptive practices have achieved large-scale adoption, such as the savings at the VESA group level (20 birr per month), access to micro-finance (loans of 8000-12000 birr) for all 5200 HHs, diversification of livelihoods, market linkages and adoption of improved agricultural practices. Though there was variation of assets and productive capacity of GRAD HH's met, adaptive capacities enabled GRAD HH's to have higher level of assets and savings than they did prior to GRAD and from testimonies in the field, appear to have created a buffer from the worst effects of the drought.

FGDs and KII's also revealed that because of the GRAD training on climate change, there was a high degree of awareness of the threats of climate change, however there was also the recognition that there has been limited adoption of natural resources management practices, which are critical for building on-farm resilience to both droughts and floods.

Disturbances and Shocks:

Discussions with focus groups commenced with asking them about their exposure to various shocks over the past years. Not surprisingly, given the regular occurrence of droughts in Ethiopia, the elders in the focus groups mentioned the occurrence of multi-year droughts in the 70's, and 80's. They recollected that though these drought were severe in that there were acute food shortages, grain stores were depleted, and in the absence of any external support, people resorted to foraging for wild foods. However, the current drought which started almost three years ago, the most severe in terms of the length of the drought years and severity of water shortage. The current drought is also aggravated by unprecedented high living cost ('everyone had firewood and didn't need to buy it), lower average landholding size, loss of the natural forest, and high population pressure.



Impact of the Drought:

Rainfall in South Tigray is bimodal with both *belg* (January to March) and Meher (June to September) rains in normal years. However, 2014 saw the Meher rains fail and in 2015 the *belg* rains were poor and the Meher rains erratic, with the result that the majority of the participants interviewed reported widespread losses to major crops in both *belg* and meher cropping seasons, relative to the last good year of production, and 2015. These estimates were confirmed by conversations with Woreda Government officials who indicated that losses for teff, sorghum, chickpea and maize crops were as high as 85 per cent in the most severely drought-affected woredas of south Tigray. The REST staff reported that 10 out of the 15 GRAD kebeles are affected and though traditional crops have suffered major losses, the green pepper, potato and onion value chains are less affected because the households have access to irrigation in those kebeles.

The drought has also severely impacted the livestock value chain- the shortage of green fodder, livestock feed and lack of water has resulted in poor growth rates and affected both production and prices. Poorer livestock production has led to a decline in the availability of milk, and lower prices resulted in reduced household purchasing power. Livestock in Raya Almata and Raya Azebo are the most affected with informants reporting that the drought has accelerated the spread of an insect pest that infests cactus plant which is a major source of dry season livestock feed in the area. The price of livestock feed has increased and in late November and early December the price of a kilogram of teff straw was trading at the same price of a kilogram of maize. In contrast, cattle prices in all markets in the study area were reduced by around 30 per cent for oxen and 50 per cent for cows in November 2015.⁷ Reasons for these low prices included poor livestock body condition due to poor pasture and feed availability, and a substantial increase in the numbers of livestock being presented at market as households are forced to sell, even if prices were low, as they urgently needed cash to purchase food.

Amongst non-Grad participants, the increasing numbers of plough oxen sales is of particular concern, as without access to oxen, they need to hire oxen from neighbors. This both delays planting - the owners will use the oxen on their plots first - and requires a payment for hire in the form of a substantial portion of

the harvest. Household members of poorer households and unemployed young people are partly dependent on seasonal employment - land preparation, planting, weeding and harvesting - on larger and more productive farms. Also, the increasing rate of livestock sales represents a depletion of the main financial asset in many households.

Other Impacts reported by participants:

- The poor rains have resulted in reduced access to drinking water as wells, water ponds and horayes community managed water reservoirs for both human and livestock drinking water - have failed.

- Impact on education: the drought also led to more children 'dropping out' of school as their families were no longer able to cover costs such as uniform, school books, etc.

- Impact on nutrition: rain failure and poor harvests have resulted in an increase in malnutrition, especially in young children. This is particularly worse among non-Grad participants.

- Impact on wage rates and employment: However the result of the poor spring belg and summer meher cropping seasons, seasonal employment opportunities were reduced to irrigable farms. As seasonal employment declines, daily wage rates have declined considerably. For this reason, an increasing number of young people (both male and female) were migrating to urban areas like Woldia and Addis Ababa. Participants also reported that many young adults have migrated to the Middle East.

"The drought is bad in our area and we have no hope here. We just sit around and starve." – Non-Grad young woman

Responses to Drought- Coping and Adaptive Strategies

The study examined the range of coping mechanism and adaptive strategies by asking questions about responding to the impact of the drought and about changes that the HH's had made. There were only a few coping strategies mentioned by the respondents. The most commonly mentioned were:

- Changes in diet: GRAD HH's reported a change in the quality and quantity of food they eat. For instance, there is a change of diet from beans, peas, and chickpea into haricot bean. Non - GRAD households mentioned eating "kulkwal" which is not their staple food, and only an option when there is no food available. Both GRAD and non-GRAD HH's mentioned receiving food aid from government in the form of wheat, oil, and haricot bean. They are also receiving water bought in from nearby areas trucked in by the Government. The IP REST also trucked in water and supported the construction of artificial ponds.

- Reliance on VESA Savings: GRAD HH's continued to contribute towards saving for financial security, consumption, investment in risk reduction through income generating activities. The loans provided through the VESAs have been instrumental in helping the local communities cope better. Women participants reported being engaged in petty trade activities with some of them selling a local cosmetic plant (Ensosila), and local alcoholic drink (Tella).

An old participant said: 'We will never go hungry for GRAD is with us.

- Reliance on Crisis Modifier: GRAD HH's reported employing less negative coping strategies because of the crisis modifier which provided concentrate feed, hay and seed inputs in 3 of the GRAD woredas.

Together, these measures made GRAD beneficiaries less likely to sell land (an irreversible strategy), livestock, or to send an adult away temporarily, are more hopeful and taking collective actions to avoid the worst effects of the drought as compared with non-participants.

Adaptive Strategies:

We examined adaptive strategies by asking questions about changes that households had made in agriculture and IGAs, and the reasons why they made these changes. A large proportion reported

shifting to shoat fattening from cattle rearing. A significantly higher proportion of GRAD participants reported having adopted positive agricultural technology investments than non-participants and expressed a high degree of knowledge about application of appropriate crops and land management practices. However, limitations associated with cultivating crops because of the drought and fear of another crop failure had for the time being resulted in more participants reporting an adaptation strategy based on diversification of incomes through shoat rearing and income generating activities.

GRAD participants were also more likely to report plans to adopt positive agricultural changes in the future as compared to non-participants and mentioned plans to increase production through techniques such as using new inputs for the future or adding irrigation. This suggests that agricultural based interventions, particularly training, led to the acquisition of confidence and skills which has a significant positive impact for added resilience.

Priority Emergency Assistance Interventions:

Until the next harvest therefore, GRAD HH’s will remain increasingly dependent on the sale of livestock, off-farm employment, loans, remittances and food aid. Participants prioritized short and medium/ long-term interventions as listed in the table below

Short-Term Priorities	Medium-Term Priorities
Supplementary Livestock Feed Drought tolerant early maturing Teff, Sorghum, Chick Pea seeds Drinking water supply	Spring and pond repair/improved water harvesting Rehabilitating boreholes and drilling new boreholes

Interview with Agro-dealer: Iyassu Misgane, Raya Alamata Woreda

He started this shop only about a month ago unlike the Cooperative that started more than a year ago⁷. Inside this shop, he vends vegetable seeds and [packed] chemicals (herbicides, fungicides, etc.). He has recently recruited a plant protection specialist on a part time basis to provide advice to customers. His business license requires him to have such specialist on board. He also displays some animal feed, which he distributes through another shop.

Impact of drought: He admitted that the drought has affected the business because it has reduced the purchasing capacity of the farmers. Moreover, the animal feed supplied, as an emergency response to GRAD beneficiaries, by REST was bought from a cooperative. According to the rules, REST announced the bid at a regional level and executed the purchase from the headquarters, which was then distributed to affected woredas. Only feed cooperatives can bid to supply hay and concentrate feed. This has further affected local markets for agro-dealers. Moreover, as the demand for fertilizers went down due to the drought, it has affected the flow of supply from the importers, who became reluctant to sell chemicals to him.

Looking forward:

- Working to establish connections and build a good customer base for his products before GRAD phases out. He is optimistic because the Woreda has an irrigation potential of 55,000 ha.
- He would like GRAD to support him in building strong relations with the importer-distributors in Addis Ababa.

⁷ According to Ato Zelalem, the GRAD Raya Alamata Woreda Coordinator, there are one private agro dealer, and one cooperative in town working with REST. The Cooperative sells seeds and urea-molasses block. They are not allowed to sell chemicals, though.

Interview with MFI (DECSSI): Hailu Tekola (Branch Manager, Raya Alamata)

He described a very productive relation with GRAD and mentioned that they prefer working with GRAD because of the VESA groups. They have 5200 customers from GRAD of which 40% are women. They prefer to give for women because they find them to be more careful with the business planning and pay the loan on time. The loan has most been used for shoat fattening and rearing, cattle fattening, poultry, honey and vegetables.

Impact of drought: The loan repayment rate has dropped from 90% to 85% since the onset of the drought with 520 HH's currently behind on their payments. This is still much better than the loan repayment rate for non-GRAD HH's, which is only 45%, because the IP and VESA's work closely with the customers on businesses planning and loan repayment. He understood that the price of livestock had depreciated considerably and crop losses had impeded the ability of HH's to pay back on time.

Looking forward

- Developing an action plan to disburse second round loans for HH's who are unable to pay back.
- Desires to see GRAD HH's taking on loans up to 20,000 birr to be returned over 3-4 years to support them expand their income generating activities.

Annex IV

Regional Overview

Loka Abaya Woreda, Sidama Zone, SNNPR

Sidama zone is found in SNNP regional state. The four GRAD intervention areas of Sidama zone are Hawassa Zuria, Hawilla Tula, Shebe Dina and Loka Abaya. The study area Loka – Abaya Woreda, which is located 60 km from Hawassa is found has an altitude of 1675m. Loka Abaya is one of the largest woredas in the Sidama Zone. There are three major agro-ecologies, namely, Kolla, Woina Dega and Dega. Coffee and enset are the dominant crops in the study area. An annual average temperature of 23°C has been recorded for Loka Abaya where the maximum is 35°C. Annual rainfall for Loka Abaya ranges between 670-1050mm.



The Woreda Town, Hantate, is found about 17 km off the main road. Four, women and men FGD were conducted in the woreda. The FGDs were undertaken in Muticha Gorbe Kebele, located around 4 km from Hantate Town, and involved two GRAD beneficiary groups (1 women and 1 men) and the two non-GRAD groups (1 women and 1 men). The non-GRAD groups are also non-PSNP groups that were considered to be better off than the GRAD farmers. The nearest

market for this community is Hantate Town while they also occasionally travel to another small town, Derara, and a bigger town, Yirgalem, which are located around 15 and 25 km from the Kebele.

Adaptive Capacity:

The GRAD HH met in Sidama, Loka Abaya demonstrated good adaptive capacity as compared with non-GRAD households. Since GRAD started supporting them with productive activities, technical assistance and nutritional support interventions from 2012 onwards. Some households introduced permagarden technologies, and some women are involved in micro-franchises, earning some benefits from the interventions.

GRAD households in the study area are involved in VCs such as honey, livestock fattening, and haricot bean. Almost 90% of the targeted households accessed loan from microfinance for their VCs. All Households are also involved in one or more IGA's. All the FGD participants said that VESA saving has been their safety net for any accidental issues because they can easily access the money at any time.

Disturbances and Shocks:

According to the CARE Sidama Field Office, the drought started around April 2015 and the situational analysis conducted by the local government confirmed that almost 40% of the GRAD households are affected by the drought. However, HHs who have been engaged in one or two value chain and IGAs, and those who adopted early maturing crops were less affected. On the contrary, women have been more affected than men because men migrated from the area to look for a job leaving women alone taking care of children and elderly. Of the total targeted HHs, 10% of the HHs who joined VESAs in March 2015 had very little time to prepare for the drought.

GRAD beneficiary farmers discussed the worst droughts during the last 50 years and singled out three big drought events that occurred in 1971/72; 1984/5; and 2015/2016 respectively. The current drought, according to respondents, is comparable to the 1984/5 drought in terms of severity of

impact. They argue, though, that the current drought is exacerbated by factors such as population pressure. On the contrary, they cited better knowledge on coping mechanisms during the current drought has been very helpful for survival. For non-GRAD famers, though, the current drought may be worse than the 1984/85 one because cattle are reportedly dying in the lowlands and feed shortage is really severe. Moreover, yields from coffee trees have dwindled substantially.

Impact of the Drought:

GRAD and non-GRAD farmers alike reported repeated failures of crops such as maize, haricot bean, enset, and sweet potato. This was confirmed by the Head of the Loka Abaya Woreda Agriculture Bureau, who stated that the drought decimated 511 ha of maize; resulted in a 50% reduction in the yield as compared with the previous years; and eventually led to food crisis. When the kiremt rains failed, we were able to cover only about 20% of the planned 2800 ha with teff, and productivity of the teff crop declined by almost 50%. The number of people targeted for emergency assistance was then raised to 14850, which again grew to 22427 in Tir (January).

Shortage of animal feed: All households are affected by the drought in terms of livestock losing weight and the death and a few families reported the deaths of cattle.

Dry water bodies: All water bodies including 24 traditional ponds in Muticha Gorbe Kebele have dried up.

Responses to Drought - Coping and Adaptive Strategies

The coping strategies employed by the GRAD beneficiaries have been mostly positive as opposed to the non-GRAD farmers, who exclusively adopted negative strategies. The top three coping mechanisms for the GRAD farmers were the sweet potato, IGAs, and use of loans for food.

The pilot-level promotion of OFSPs by CARE through the collaboration with the ENGINE Project and the Center for Potato Research (CIP) has been highly appreciated by the farmers. OFSP reportedly served as a major source of nourishment during the drought.

Savings in and loans from VESAs gave the GRAD beneficiaries the opportunity to engage in IGAs such as shoaat fattening, selling maize flours, and petty trade. Non-GRAD farmers felt that they were disadvantaged as compared to GRAD beneficiaries because they did not have the VESA type of cooperation, and hence had little access to finance during times of dire need.

There has not been any drought-induced conflict in the kebele so far. They have rather shared resources and cooperated. For example, some better-off farmers have been sharing enset shoots with HHs in the neighborhood whose cattle are more seriously affected by feed shortage.

Some HHs were involved in permagardens while some have been in the honey farming business.



Figure 4: Different types of hives in one GRAD household

However, yield has dramatically declined because the bees have absconded due to the drought and farmers are worried that if the drought lingers, the honeybees might never come back. Otherwise, GRAD farmers also reported government food aid, selling livestock to buy food, and migration of youth as complementary coping strategies. Migration of some youth to nearby towns and Addis Ababa in search of job is reportedly on the rise. Farmers reported that drought-induced migration has been common in the area for several decades. In former times, farmers used to migrate to the nearby Dalle Woreda to fetch drinking water and feed their cattle, but always came back when the rain returned. In general, there appears to be a change in the migration pattern from localized and temporary type to longer distance and more permanent one.

For the non-PSNP non-GRAD farmers, life has become more challenging partly because they are not entitled to food aid. Besides, they reportedly suffer from very little access to financial services because, unlike GRAD HHs, they are required to come up with a guarantor (must be civil servant). Furthermore, they are not engaged in other IGAs. Therefore, most of their coping mechanisms have been negative. These included liquidation of assets, mainly livestock, to pay for food and feed. All respondents have sold livestock, one person sold two bulls, and another sold a donkey. They have also adopted a change in feeding patterns. All have reported that they have now reduced the quality and quantity of food consumed by the household. Some even reported that they have started to eat enset shoot to survive the drought.

Adaptive Strategies:

Borrowing from VESAs and eventually engaging in IGAs such as shoat fattening, selling maize flours, petty trade principally constitute the change in mindset and livelihood strategy in the GRAD community. The calculated shift to sweet potato, which is drought resistant, has been very instrumental for the community to survive the drought. The adoption of fast maturing garden vegetables has also been very encouraging. The conscious migration of some farmers to other nearby towns and Addis Ababa to fetch additional income for the family is also another adaptation strategy adopted by some members of the GRAD community.

Lilako Wolkisa, a female head of household from Sidama shared her experience: - “Before I joined GRAD, I was very poor when I compare myself with my neighbors. Sometimes, I didn’t even have something to eat at my home. But now, I have livestock in my home, I took loan from microfinance, engaged in shoat fattening, and returned my loan on time. I have enset in my backyard and I have been engaged in IGA, *i.e.*, selling firewood to my neighbors. Now I am richer and am hopeful of my future. Even my neighbors are wondering what has happened to me. I am very happy and better than before.”

Priority Emergency Assistance Interventions:

The crisis modifier support has been very useful in helping the GRAD beneficiaries cope better. The support has been implemented since more than a month ago involving the supply of haricot bean and maize seeds, and potato. It was reported that the support was very timely and consistent with the late onset of the belg rains. Provision of feed will also start soon. Based on experiences in the past, the following interventions are highly recommended in the immediate and medium term so as to protect the gains from GRAD’s interventions:

Short-Term Priorities	Medium-Term Priorities
<ul style="list-style-type: none"> Supply of improved seeds of potato in some intervention areas Promotion of early maturing crops like haricot bean, teff in the lowland areas Supply of barley and wheat seeds in the highland intervention areas Promoting permagardens in many HHs Strengthen the promotion of drought tolerant OFSPs in collaboration with CIP Promoting RWH technologies such as plastic sheets 	<ul style="list-style-type: none"> Work on market linkage so that farmers would be able to sell their products with better price Undertaking both demand side and supply side capacity building on financial literacy to bring about a change in mindset on the part of local communities and promote effective loan repayment schemes on the part of MFIs

Interview with Ato Desta Legde (Agrodealer)

'I started as agrodealer in April 2014. I used to be a poor farmer with an enterprising spirit, and one day I got the chance to participate in a training offered by ADCI/VOCA on modern animal feed. While most other trainees discarded the forage seedlings, which the NGO provided to us at the end of the training, I took it home and planted it in my backyard. After a while, when CARE wanted to buy forage seedlings, I was able to sell a quantity that amounted ETB 16500, which was a game changer in my life. Thereafter, the GRAD Program not only offered me intensive trainings but also opened the doors for me through creating market linkages. I wouldn't have reached this stage without the strategic support provided by GRAD.'

He sells a diversity of products including vegetable seeds, processed animal feed, animal forage seedlings, and recently expanded to haricot bean seeds, maize seeds, and fertilizers. The shop has now gradually grown to a one-stop service provider to local farmers. His clients include both GRAD and non-GRAD farmers, the former take the lion's share because of the raised awareness through GRAD's consistent interventions. CARE also invited him to all meetings organized for the VESAs so that he may use the opportunity for promoting his business. This always led to word-of-mouth promotion by the farmers, which has contributed to the rapid increase in sales.

Impacts of drought: The first year was spent on promoting the business, which never yielded profits, but laid a good foundation for the following year. During the second year business picked up greatly and the drought has hardly affected his business. Two reasons were cited for this: the diversification of the products for sale, and the growing emphasis on products that are designed to tackle the drought [within the crisis modifier scheme]. The only concern he got is that he has a large stockpile [worth ETB 100,000] of animal feed, the sales of which declined due to the drought that has incapacitated the farmers.

Looking forward:
In light of the severity of the current drought, CARE should keep on creating market linkages for us so that we can stay in business. Moreover, another coping strategy could be to sell the products to other better-off neighboring towns, for which additional capital might be necessary.



FIGURE 5: AGRODEALER DESTA

Interview with Ato Aberra Yubato, Sidama Microfinance

SMFI Started serving GRAD HHs in September 2015 and gives priority to GRAD farmers because they are better organized, more financially literate, and CARE has always helped in delivering trainings and monitoring repayments through the VESAs. For non-GRAD HHs, though, loans are provided only when there is a guarantor (must be civil servant). Apparently, GRAD HHs have a better access to loans than non-GRAD HHs.

Impacts of the drought:

The drought is seriously affecting repayment rates. Loan repayment between Hidar (November) and Tir (January) has decreased by 40% from earlier rates, and since then people have stopped repaying loans. Due to limited human power and transport facilities, we couldn't do proper monitoring and follow up. However, drought has not yet affected the willingness of SMFI to hand out loans.

Looking forward:

Hoping the weather will improve in the near future we will work hard with CARE and other actors to improve loan repayment. We will also be more cautious with providing more loans in the time to come. We are also planning to open branch offices in kebeles because we recognize that distance is a limiting factor for effective loan return.

The Case of Almaz

Almaz is engaged in micro-franchise in Loka Abaya. Asked how the current drought affected her business, Almaz said: I didn't stop my business because of the drought and I still sell my products to the community. Some products are not going as before but business is good. The community used to buy iodized salt and now they are not taking it, they are buying the ordinary one because it is cheaper. The same is true for Solar soap, because it is a bit expensive than other soaps. Apart from the two products, business is going well with the rest of my products.

Currently my life is much better. I also took a loan from MFI and opened a shop in front of my house and my husband is working there. We have some savings in a bank, which we can use for bad times. We send our children to school and all is good. On her future plan, she stated that she will continue selling because most households still need my products. I would also like to go far places and work more days although that will be a bit tiresome. I am not worried about money because I can take loan from my VESA and can bring in more products.

Annex V

Regional Overview

Lay Gayint Woreda, Amhara National Regional State

GRAD works on two woredas of Amhara, Libo Kemkem and Lay Gayint Woreda. This study focuses on Lay Gayint woreda, which is more affected by the current drought. Lay Gayint is located 175 km northward from the regional capital, Bahir Dar. The altitude of the Woreda ranges from 1300-3500m asl. It receives an annual average rainfall of 600-1100mm and mean minimum and maximum temperatures of 9°C and 19°C respectively. The Woreda is characterized by ecological features such as drought, severe soil erosion, poor soil fertility, frost and shortage of arable land, crop disease and pest hail damage, landslide and feed shortage.

In the study area, the dominant crops are wheat, barely, teff, lentil and potato. In the highland areas, where potato is produced, farmers depend on consuming potato as the crop reaches earlier in June and later in July depending on the planting period. However, in the lowland, farmers sell their animals mainly shoats and buy grains.



This section describes some of the impacts of the failed spring belg, erratic and Meher rains on GRAD households and communities in Amhara, Lay Gayint. The analysis is based on visits to communities in April 2016, and the use of focus group discussions (women and men), conversations with implementing partner staff and key informant interviews with

agro-dealers and government agencies.

Adaptive Capacity:

Overall, the GRAD households we met in Amhara exhibited greater adaptive capacities as compared with non-GRAD hhs since GRAD started supporting them with productive activities, technical assistance and nutritional support interventions from 2012 onwards. For the GRAD HH's visited in Lay Gayint Woreda we found that respondents had been engaging in honey, haricot bean, vegetable (onion and potato) and malt barely value chains.

FGDs with GRAD HH's identified a number of adaptive responses that were carried out by GRAD. VESA savings and loans have been the best strategy to cope with the drought. They took loans from the VESA and used the loan to purchase early maturing crops/seeds, animal feed and got engaged in different additional IGAs such as selling "Tela," a local beer, and vegetable petty trade. According to the IR Assessment Report (2015), new IGAs have been adopted by ORDA since the start of GRAD, the major ones being petty trade, vegetables, poultry, livestock (rearing and trading), retail trade & Services, and handicrafts & trade. These activities have been pivotal in building the adaptive capacity of GRAD participants. Female FGD participants underscored that the intervention on gender also gave them confidence to engage in social and public life much better, and exchange market and other related information quite easier.

Disturbances and Shocks:

Separate FGDs were conducted with male and female farmers in two kebeles of Lay Gayint Woreda, i.e., Kebele 01 and Kebele 19, which are moderately affected by the drought. Kebele 01 is located in the Dega agroecological zone while Kebele 19 is situated in the Kolla agroecological zone, which has resulted in differentiated impacts of the drought. In both places, though, the current drought is reported to be more severe than earlier ones on the grounds that it resulted in unprecedented shortage of water for humans and animals, huge dearth of animal feed, steadily growing human and animal diseases, and increasingly erratic and unpredictable rainfall. Out of the 29 kebeles in Lay Gayint

Woreda, 16 have been affected by the drought, with three worst affected. GRAD works in 20 of the 29 kebeles, of which nine are affected, with three most severely affected.

Impact of the Drought:

While severe water scarcity of unprecedented scale is reported from both kebeles, the dega kebele fares a lot better because they are, at least, provided with some water through a pipe put in place by government. For the kolla kebele, though, for the first time in the history of the Kebele, almost all local rivers and water bodies have completely dried up also including the big check-dam, which the community calls 'Gedeb pond'.

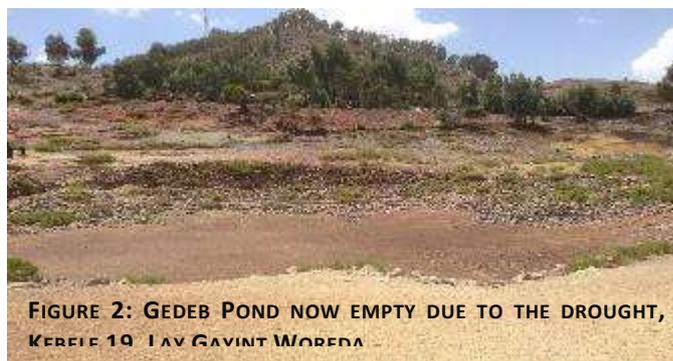


FIGURE 2: GEDEB POND NOW EMPTY DUE TO THE DROUGHT, KEBELE 19 TACH NEGELA WORED

The community stressed that these water bodies had not dried up even during the catastrophic 1984/5 drought. As a result of the severe water shortage, the Kebele 19 community witnessed an aggravation of conflicts among community members, whereby unusual clashes between women has been happening repeatedly. Currently it takes more than an hour to fill a single 25-liter container and women spend most of the daytime in the water point largely queuing. No effort by the local government has been observed to supply water for the Kebele community.

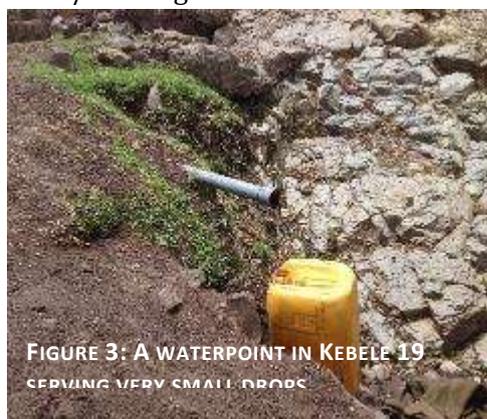


FIGURE 3: A WATERPOINT IN KEBELE 19 SERVING VERY SMALL DROPS

Crop failures reported in this Woreda include those owing largely to lack of enough moisture in the kolla kebele, and unexpected heavy rains destroying harvests on the field in the dega kebele. The crops affected include barley, wheat, forage crops, beans, peas, teff, and sorghum.

A lot of livestock are wasting particularly in the kolla kebele with some reports of drought-induced deaths of sheep since last year. Animal feed has become extremely scarce following the drought years.



Figure 4: A GRAD beneficiary showing the remains of a dead sheep, and another weak one

The kolla kebele we visited was categorized as moderately affected, with the worst affected kolla kebeles experiencing much more difficulties. As per a conversation with GRAD senior staff and a senior health expert in the Woreda, in some non-GRAD communities in Tach Negela Kebele, certain drought-related human diseases are intensifying, which include severe influenza, diarrhea, and scabies.

Other Impacts reported by participants:

Impact on education: School dropouts particularly in the kolla kebele have been very severe. Eight out of the nine respondents have reported that at least one of their family members has dropped out of elementary or high school due to the drought.

Impact on value chains: Two value chain commodities in this woreda, namely, haricot bean and livestock, have been severely affected by the drought. The haricot bean crop failed repeatedly due to the drought and, of late, suffered price shocks due to declining price at the global level. According to farmers, the sales price of haricot bean to Ras Gayint Union has decreased from ETB 1600-1800 in 2014/15 to around ETB 500 at the beginning of 2016. The Union is, nowadays, unwilling to buy this product from farmers even with this low price. This has resulted in loss of confidence on the part of the farmers. The low-lying kebeles being the most affected in the Woreda, the value chains for these kebeles seem to have totally failed due to the failure of the market. The acute shortage of water for the sheep has resulted in wasting, disease, and sometimes the death of the sheep.

Responses to Drought - Coping and Adaptive Strategies

The assessment revealed that impacts of the drought vary from kebele to kebele, and hence differences in coping strategies. The coping mechanisms employed by the kolla kebele were more of asset depleting while for the dega community they were largely positive strategies.

Across the board, VESA savings and loans have been the best strategy to cope with the drought. Owing to this factor, respondents in Kebele 01 confirmed that they are much better in coping with the drought than the non-GRAD farmers, who were originally considered as the better-off ones. One farmer remarked: "First we followed them, then we caught up, and finally we overtook them." Respondents in the other Kebele (19) shared this opinion and attributed the better performance to the training in technical matters and other family and financial management issues offered through the VESA groups. Of course, improved access to micro-finance credits through the VESA structure has also been key in ensuring survival for the farmers.

A woman FGD participant from Kebele 01 responded, *when asked if they are registered in the new PSNP 4: "We used to wait for PSNP support all the time but now we didn't even know that there is a new PSNP 4 selection. We totally forgot about it". We are engaged in petty trade like tea shop and "Tela" (local drink) selling. We are a better off now".*

The three best coping mechanisms, according to the farmers in the dega kebele, were fast maturing crops (malt barley and potato), IGAs, and access to finance through the VESAs. They also stored some animal feed, which they donated to worst affected kebeles. Loans from VESA savings were used to buy fertilizers, improved seeds, chicken, goat, etc. All participants have borrowed from VESAs and MFIs, and paid back in time and in full. IGAs created through GRAD interventions included poultry farming, sheep fattening, petty trade, etc. All respondents in the dega kebele are engaged in at least one IGA activity. Still a few others were engaged in vegetable gardening during the rainy season that mainly involved cabbage, garlic, and spinach.

For the kolla kebele, all participants are currently receiving food and cash support through government emergency assistance program. They are also having fewer meals of smaller portions and poorer qualities. Most respondents confirmed that they have switched from beans and peas to haricot bean especially following last year's meher failure.

Students leaving schools and young adults migrating in search of employment to nearby and distant towns have been major features of the kolla kebele. Major destinations have been Bahir Dar, Woldia, and Addis Ababa.

Adaptive Strategies:

It was noted that a large proportion of the farmers have been engaged in off-farm IGAs such as poultry farming, sheep fattening, vegetable gardens, and petty trade in the dega kebele. The rate of adoption has been higher in the dega kebele due mainly to less severity of the constraining factors. The adoption of fast maturing crops such as malt barley and potato in the dega kebele has been very much

encouraging. For the kolla kebele, though, migration of young adults to other towns has become increasingly common.

Priority Emergency Assistance Interventions:

Urgent attention should be given to the kolla kebeles under GRAD for they are bearing the brunt of the impact.

Short-Term Priorities	Medium-Term Priorities
<p>Emergency food and drinking water assistance (for humans and livestock) in the worst affected beneficiaries of the kolla kebeles</p> <p>Supply of forage for the livestock in the kolla kebeles</p> <p>Distributing seeds in both the the dega and kolla kebeles</p> <p>Digging shallow and deep wells especially for the kolla kebeles</p> <p>Negotiating loan repayment with Ledet Union especially for the kolla kebeles</p>	<p>Promote poultry farming</p> <p>Promote rainwater harvesting and irrigation practices in the dega kebele</p> <p>Promote animal forage crops in both kebeles</p> <p>Introduce apple value chain in the dega kebele</p> <p>Invest in local market linkages for the value chain products</p>

Interview with Meseret Fasil, Iyasu and Friends Agrodealer, Nefas Mewcha Town, Lay Gayint Woreda

They started in October 2014, closed briefly for three months in June due to legal issues, reopened in September 2015. The shop sells everything except chemicals. This includes animal feed, vegetable seeds, and agricultural tools, EM. Their clients are mostly GRAD households largely due to the promotion undertaken by the GRAD project. Gradually the client base is expanding to non-GRAD households due to word-of-mouth promotion by the GRAD households.

Impacts of drought: The market is not yet negatively affected by the drought. In fact, the market has soared during the drought season because of the emergency support to affected woredas that included seeds and feed, which they were able to supply. On the other hand, there was a difficulty when government handed out some agricultural support to affected farmers and some recipients sold it to local farmers, which has crippled our markets a little bit. They expressed some concern in case of a prolonged drought in the time to come for fear that it eats their market.

Looking forward:

The agro-dealer is more concerned about the end of the GRAD project than the drought because of the hitherto positive impacts of the market linkage, educational, and promotional activities undertaken by the GRAD project. There doesn't seem to be any preparation in the event of a prolonged drought, though.

Interview with Ledet Savings Association and Union, Nefas Mewcha Town, Lay Gayint Woreda

Ledet started operations in 2007, and joined with GRAD in 2013. Since then they served almost 3000 GRAD HHs. They also serve about 200,000 members of other cooperatives. They started loan insurance, though not mandatory, since March 2014. Around 1000 GRAD beneficiaries have joined this insurance.

Impact of drought: It is reported that only two GRAD kebeles are currently considered to be risky and yet the loans granted have not matured. Given that the loan repayment rate exceeds 99% for the GRAD households, we asked them what kinds of strategies they have put in place to that effect. They pinpointed the following factors:

- They conduct regular monitoring visits and when they discover that clients are spending the money for a different purpose, they forced an automatic return of the loan. Such actions reportedly send a strong signal to other beneficiaries.
- Transport challenges to conduct regular monitoring have been resolved with the in-kind (motorbikes) support from ORDA and Terrafina (a Dutch microfinance program) by virtue of the good loan performance of the Union. The Union also coordinates very well with ORDA and uses their transport for monitoring purposes.

- The union allocated 1% of the interest rate for collected loans with the nine VESAs, which so far amounted to around ETB 367,000 so that the VESAs would do some monitoring on Ledet's behalf.
- Originally, there was a challenge in terms of reaching men clients in their villages because they usually stay outdoors during working days. Therefore, Ledet introduced a change in strategy to focus on women in the households because they are much more accessible and able to provide better information on the status of the project being implemented with the loan.

Looking forward:

Regarding these severely affected households, Ledet is currently negotiating with the GRAD Project on how to resolve the situation. They promised that they are not going to force the farmers to continue to pay at this point in time. This makes sense because of the expressed concerns of almost all respondents in the kolla kebele that they might not be able to pay back loans in time because they lost the values of their livestock due to the drought.

Asked if they have any strategy to work with GRAD beneficiaries when GRAD phases out, Ledet confirmed that they are asking farmers to join the cooperatives so they would continue to be eligible for loan issuance.

Bibliography

1. Béné, C., Wood, R.G., Newsham, A., and M. Davies. 2012. Resilience: New Utopia or New Tyranny? <https://www.ids.ac.uk/files/dmfile/Wp405.pdf>
2. Christian Science Monitor. Why Climate Change Could leave the Horn of Africa Parched. <http://www.csmonitor.com/Science/2015/1010/Why-climate-change-could-leave-the-Horn-of-Africa-parched>
3. DFID. 2012. The Economics of Early Response and Disaster Resilience: Lessons from Kenya and Ethiopia. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/67330/Econ-Ear-Rec-Res-Full-Report_20.pdf
4. DFID. 2011. Defining Disaster Resilience: A DFID Approach Paper. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/186874/defining-disaster-resilience-approach-paper.pdf
5. FAO. Adapting to climate change through land and water management in Eastern Africa Results of pilot projects in Ethiopia, Kenya and Tanzania. <http://www.fao.org/3/a-i3781e.pdf>
6. Food Security Outlook Update. <http://www.fews.net/east-africa/ethiopia/food-security-outlook-update/april-2016>
7. Mercy Corps. 2013. Principles of Resilience. June 2013. <http://www.mercycorps.org/sites/default/files/Mercy%20Corps%20Resilience%20Principles%20April%202013.pdf>
8. USAID and DFID. Enhancing Resilience to Food Security Shocks in Africa. http://www.fsa.usda.gov/Internet/FSA_File/2012_frankenberger_note.pdf
9. USAID. The Resilience Agenda. Measuring Resilience in USAID. https://www.usaid.gov/sites/default/files/documents/1866/Technical%20Note_Measuring%20Resilience%20in%20USAID_June%202013.pdf
10. USAID. 2011. Enhancing resilience in the Horn of Africa: An evidence-based workshop on strategies for success. www.alnap.org/pool/files/cp-hornofafrica.pdf
11. USAID, "Building Resilience in Recurrent Crises." December 2012. Ibnouf, Fatma. "The Role of Women in Providing and Improving Household Food Security in Sudan: Implications for Reducing Hunger and Malnutrition." <http://www.bridgew.edu/soas/jiws/May09/SudanFoodSecurity.pdf>
12. USAID. Market Systems for Resilience. <http://activoca.org/sites/default/files/attach/2015/02/LEO-Market-Systems-for-Resilience.pdf>
13. Care International. Resilience and Market Systems. <http://insights.careinternational.org.uk/development-blog/private-sector-engagement/resilience-and-market-systems-what-we-can-learn-from-resilient-markets-in-ethiopia>
14. Care International. Water Smart Agriculture in East Africa. <http://www.care.org/sites/default/files/documents/WaSA%20Sourcebook.pdf>
12. Care International. Midterm Evaluation Report. 16 October 2014 Care International. GRAD Narrative Reports (Years 1-5)

Terms of Reference

Assessing Resilience Outcomes for GRAD Households and GRAD Cost Extension Scenarios

Consultants: Jamal Khan, Aynie Habtamu, and Negusu Aklilu

Location: Ethiopia

Dates: April 4 - April 29, 2016 (approx.)

Reporting to: John Meyer, GRAD Chief of Party, CARE Ethiopia

Background

CARE Ethiopia along with our partners have collaborated over the past four years to make significant contributions to sustained food security for chronically and transitory food insecure households in rural Ethiopia. Through the USAID-financed Graduation with Resilience to Achieve Sustainable Development or GRAD project, the partners have worked to graduate 50,000 chronically food insecure households from Productive Safety Net Project (PSNP) support. Targeting 16 woredas across the country, GRAD has also worked to increase each HH's income by at least \$365 per year. GRAD applies a push-pull model, through which households are provided with skills and opportunities to engage in value chains and new income generating activities. The project also seeks to make households more resilient through both economic progress and a range of cross-cutting outcomes, i.e. women's empowerment, improved nutritional behaviors, climate change adaptation. In frank terms, while the project understands and can measure success for its economic objectives, resilience is not well-understood and has not been measured by the project in a satisfying way.

In addition, most GRAD HHs have been negatively affected by the worst drought in decades, with the effects expected to continue for many months. If the project ends during a crisis period, there will be an opportunity lost to assist in recovery. In addition, the final evaluation of the project would probably find that GRAD had minimal impact and may falsely conclude that the model does not work. USAID and CARE both hope to avoid such outcomes.

Objectives

1. As the project transitions into the final year of implementation, the gains have been significant and the consortium has exceeded the number of target households reached. Questions remain, however, about the degree to which participating households have increased their resilience, in particular their ability to withstand and recover from environmental shocks that negatively impact agricultural productivity and associated livelihoods. In order to address these questions, the consortium seeks a research partner to conduct a one-time assessment of GRAD participant household resilience.
2. Determine the prospects for continued drought impacts and/or recovery through the current end-date of GRAD (October 2016) and, if prospects seem poor, propose interventions and modalities for a potential six-month extension period

Task - 1

Key Research Questions

CARE's expectation for this study is that it will apply various emergent or existing models for measuring resilience to GRAD households and generate conclusions about (in general terms) whether GRAD households are more resilient and why. Specific questions might include:

1. Among GRAD-participant households that have been exposed to an environmental shock in the past 12 months, what changes in their livelihoods systems or status did GRAD bring about that limited the effects of the shock on the household?
2. Among GRAD-participant households that have been affected by an environmental shock in the past 12 months, what steps have they taken to mitigate the effects of that event? Which of these response options were unavailable to them prior to participation in GRAD?
3. Looking ahead, to what degree are GRAD-participant households positioned to withstand a major drought or other environmental shock? What factors (livelihood activities, environmental safeguards, social networks, etc.) contribute to this capacity? Specific attention should be given to GRAD outcomes, such as membership in VESAs and the different interventions implemented through the VESA platform.
4. Based on both their recent past and projected future resilience levels, when compared with non-GRAD-participant PSNP households, are GRAD-participant households more or less resilient to major drought or other environmental shocks?
5. For all questions above, how do the findings differ across regions and between male- and female-headed households?

The consultant should also propose or suggest appropriate indicators for measuring resilience within the project M&E system. Besides other criteria for good indicators, those proposed should be feasible and measurable within the skills and budget typical of such projects.

Research Approach/Methods

The study will draw on all existing GRAD data and materials and also include primary qualitative data collection as required. The precise study design should be suggested by research candidates based on a comprehensive understanding of the GRAD project objectives and in consideration of resources available.

Task (Output) - 2

Scope of Work

Service Provider shall perform the following duties and complete the following work, as requested by CARE pursuant to the terms hereof: To gather and analyze information and data from GRAD experiences and context to provide raw material for potential cost extension proposal. End result of the work should include consensus as to what should be retained, rejected and/or modified from the current GRAD model during the extension period. The Service Provider will conduct an assessment in drought affected GRAD woredas to identify the current situation of project beneficiaries and likely scenarios through October 2016. The specific tasks and deliverables of the writer will include:

Proposed Methodology for Assessment:

1. Conduct primary review and analysis of project documentation and situation reports on the drought and predictions for 2016.
2. Consult with key informants both within GRAD/CARE Ethiopia, and external regarding the same themes.
3. Visit communities in each of GRAD's operational areas and assess current conditions (related to food security and livelihoods) and probable scenarios through the rest of the year.

4. Evaluate what to expect in terms of household losses from asset depletion/income loss; what impact current drought response activities are having; where the most critical needs are; what types of results could be achieved, what types of activities are most critical; and whether/where an extension should go forward.
5. Suggest likely scenarios for household recovery and the need for a GRAD extension beyond its current end date.
6. Propose a set of priority interventions if an extension is considered necessary.

Existing GRAD sources include:

1. GRAD design documents
2. Baseline data and study comprised household wellbeing information from sub-set of households across GRAD operating areas
3. Quarterly and annual reports including tabulations of activity and output figures
4. Annual Intermediate Result (outcome-level) assessment data comprised of livelihoods-related factors from a representative sample of GRAD participating households across all operating areas
5. Qualitative externally-conducted mid-term review report and background documents

The researchers should collect data in each of GRAD's five operational areas (up to 3-4 communities per area) and from diverse focus groups and key informants. While a quantitative survey is not planned for, the study should be sufficient in scope and scale to produce findings that are reliable and representative.

Deliverables (contributions made by :

1. Two draft reports for review by CARE Ethiopia senior management
2. Debriefing of CARE Ethiopia senior management
3. Final reports (approximately 20-25 pages for Task 1 and 10-15 pages for Task 2).