



# GRADUATION WITH RESILIENCE TO ACHIEVE SUSTAINABLE DEVELOPMENT

**BASELINE REPORT**  
August 2013



## **Acknowledgments**

The GRAD Project “Graduation with Resilience to Achieve Sustainable Development” is being funded by the United States Agency for International Development (USAID). The Program is led by CARE, and implemented by CARE, Catholic Relief Services (CRS) and partners Meki Catholic Secretariat (MCS), the Organization for Rehabilitation and Development in Amhara (ORDA) and the Relief Society of Tigray (REST). Technical partners include the Netherlands Development Organization (SNV) and the Feinstein International Center, Tufts University. This report presents the findings of a baseline assessment for an impact study of the GRAD project. The content of this report is derived from this baseline that was carried out by CARE with support from the Feinstein International Center, Tufts University and funded by USAID under the GRAD project. The authors would like to acknowledge the contributions of the field research team of Hailu Gudeta, Tesfaye Disasa, Getahun Feyisa, Yeshimebet Milkesb Abua, Abdisa Hatawu, Kasaye Belay, Haband Sinan Olani, Girmay Gebreyesus, Eyerusalem Yihdego, Abiy Tsegaye, Wondimu Dirara and Berhane. We would like to thank Yetnayyet Girma and Teferra Mekonen from CARE Ethiopia for supporting this study.

Special thanks also goes to the CARE Sidama office, in particular we would like to thank Demeke Eshete, Sisay Oljira and Tigist Abegaz for their hospitality and providing administrative support. We are also grateful to Dula Abebe, Sintayehu Tosha, Abera Yohannis, Efrem Kelemework and Abreham Abate from CARE Sidama for their support in mobilizing participants and facilitating the assessment. Special thanks also go to CARE Sidama office for providing administrative support during the assessment in Zeway Dugda. In particular we would like to thank Demeke Eshete and Sisay Oljira. We would like to acknowledge CARE Bahir Dar, in particular Haile Tekleab for his transport services and administrative support. Without his effort this study would not have been possible.

We would like to thank MCS office in Meki; in particular we would like to thank Bedaso Endale, Abiyu and Senbeto Bonsa for supporting the assessment. We are also grateful to MCS community facilitators: Dembel Megerso, Tewabech Lebgese, Habib Kedir, Jemal Benki, Tahir Aliyi, Abduljebar Kasim, Kasim Desu, Kedir Duresa, Hussin Feyiso, Hashim Husein, Wariyo Gelgelu, Niguse Beriso, Kursamu Tuse, Tahir Hashim, Nebi Gemechu and Kedir Weya.

We are also grateful to the Relief Society of Tigray (REST) office in Maichew for their hospitality and supporting the assessment. In particular, we would like to thank Alem Gidena and Hafti Kahsay. We are also grateful to REST community facilitators: Hagos Abayu, Fanaye Kiros, Moges Gebru and Zinet Adam.

We would also like to thank ORDA Lay Gayint office for supporting the assessment. In particular, we would like to acknowledge Girma Zewde and Melkamu Gelaye. We are also grateful to ORDA community facilitators: Bahiru Biazin, Fente Fisseha, Anchinesh Gizachew, Amare Shibabaw, Getasew Mekuriam and Manne Taye. We would also like to give additional thanks to Tefera Mekonen from CARE Ethiopia for leading the fieldwork in Lay Gayint. Finally, we would like to thank the assessment participants for their hospitality, time and valuable contributions without which the study would not have been possible.

## **Disclaimer**

This report and the associated study were made possible through the generous support of the American people through the United States Agency for International Development (USAID). The contents are the responsibility of CARE and its GRAD partners and do not necessarily reflect the views of USAID or the United States Government. The report was prepared and edited by John Burns and Solomon Bogale of the Feinstein International Center. The GRAD consortium partners have not endorsed the contents of this report nor do they necessarily reflect the views of these organizations.

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## *Acronyms and Abbreviations*

Ag Inputs	Agriculture/Farming Inputs
CARE	Cooperative for Assistance Everywhere
CRS	Catholic Relief Services
ETB	Ethiopian Birr
FANTA	Food and Nutrition Technical Assistance
FSP	Food Security Program
FtF	Feed the Future
GRAD	Graduation with Resilience to Achieve Sustainable Development
Ha	Hectare
HABP	Household Asset Building Program
HDDS	Household Dietary Diversity Score
HH	Household
HHS	Household Hunger Scale
HI	Home Improvement (maintenance)
IGA	Income Generating Activity
IPTT	Indicator Performance Tracking Table
Kg	Kilogram
M. Beehive	Modern Beehive
MCS	Meki Catholic Secretariat
M&E	Monitoring and Evaluation
MFI	Microfinance Institute
MoARD	Ministry of Agriculture and Rural Development
MoFED	Ministry of Finance and Economic Development
NFI	Non Food Item
NGO	Non Governmental Organization
ORDA	Organization for Rehabilitation and Development in Amhara
PAT	Poverty Assessment Tool
PMP	Performance Monitoring Plan
PSNP	Productive Safety Net Program
Qty	Quantity
REST	Relief Society of Tigray
RUSACCO	Rural Saving and Credit Cooperative
SNNPR	Southern Nations, Nationalities, and People's Regional (State)
SNV	Netherlands Development Organization
Social Ob	Social Obligations
USAID	United States Agency for International Development
VESA	Village Economic and Social Association
VSLA	Village Saving and Lending Association

## EXECUTIVE SUMMARY

This report presents the results of a baseline assessment of the GRAD project that is being implemented in sixteen *woredas* of Ethiopia in the Tigray, Amhara, Oromia and Southern Nations, Nationalities and Peoples (SNNPR) regions. The project was launched in 2012 under the leadership of CARE Ethiopia and is being implemented by CARE, Catholic Relief Services (CRS) in partnership with Meki Catholic Secretariat (MCS), the Relief Society of Tigray (REST) the Organization for Rehabilitation and Development in Amhara (ORDA), and Agri-Service Ethiopia (ASE). SNV provides technical support, primarily to value chain activities.

The goal of the project is to sustainably graduate at least 50,000 households from the Government of Ethiopia's Productive Safety Net Program (PSNP) and out of chronic food insecurity by strengthening resilience to income and food related shocks. The project aims to improve people's overall productivity, increase on-and off-farm income and create new income and livelihoods opportunities, ultimately hoping to increase household annual income by at least \$US 365 over the five-year project cycle. In achieving these objectives, it is anticipated that participating households will experience an increase in assets and improvements in their nutritional status. The project is built upon a causal model proposing a push-pull dynamic resulting in an incremental progression from chronic food insecurity to food security with associated improvements in PSNP graduation.

In order to test the GRAD causal model an internal impact study was included as one component of the projects Performance Monitoring Plan (PMP). The study approach involves using a pre-post test design to collect panel data at three points (baseline, midterm and final) in four of the sixteen GRAD intervention *woredas*. This report presents the findings from the baseline assessment that was carried out between October and December 2012. The assessments were carried out in Endamehoni *woreda* in Tigray, Zeway Dugda in Oromia, Lay Gayint in Amhara and Hawassa Zuria in SNNPR.

The baseline included a household survey and fifty focus group discussions. The survey component was designed to collect information relating to several themes in the causal model including food security and nutrition, income and expenditure, credit and savings, productive assets, resiliency and women's empowerment. The baseline also collected information on recent livelihoods shocks, the impact of these shocks and the strategies people used to overcome these. The assessment used a variety of tools and methods including quantitative methods and standardized participatory methods as well as some selected standardized monitoring and evaluation tools. A number of focus group discussions were included in the study to collect qualitative contextual data and additional data to assist in the design and analysis of the midterm and final assessments. Some of the focus group findings are presented in this report but a more detailed report on the focus group component has been prepared separately.

The sampling frame for the household component included GRAD participants enrolled in the project in 2012 and the samples were stratified by gender. A control sample was included in each study area but this was limited to four of the impact areas being assessed.

The results will primarily be used as a baseline against which to track changes over time with a view to measuring project impact both at the mid-term and final assessments. Some of the data will also be used for routine performance monitoring and reporting purposes. Two sets of analysis are presented in this report. The first set of analysis presents the overall findings with comparisons against the control sample against the applicable indicators. These findings essentially form the baseline data set against which impact will be measured and these are presented in this report.

The second set of analysis involves comparisons between male and female-headed households in the treatment (or intervention sample). The objective of this second set of analysis is to test whether the interventions and strategies proposed by GRAD are as effective in addressing the needs of female-headed households who are typically considered more vulnerable and have fewer resources than their

male counterparts. These baseline results are also presented and confirm that female-headed households are significantly less resilient than male-headed households in terms of income, asset holdings and food security. Key findings from the baseline study are as follows:

#### Livelihoods Assets and Activities

1. The mean number of income sources for project participants was estimated at 4.6 and ranged from 3.9-5.2 for female and male-headed households respectively. Estimated (mean) expenditure on key items that will be used as a proxy baseline measure for income ranged from 6,105 Ethiopian *birr* for female participants and 8,084 Ethiopian *birr* for male participants, or 7,231 *birr* for all treatment households combined. There was no significant difference in total (mean) expenditure between the treatment and control sample and this probably represents the most useful indicator against which to assess attribution during the midterm and final impact studies. Having said this, the treatment sample appear be more resilient than the control against most of the other indicators measured suggesting that the control is not all that reliable.
2. The results show that male-headed households have significantly more income sources and significantly higher expenditure (*income*) than female-headed households in 2012. The most important expenditure for project participants in 2012 was grain purchases followed by clothes purchases and investments in agricultural inputs.
3. The results show no major differences in land holdings between male and female-headed households or between the treatment and control. However, male headed-households had significantly more livestock holdings and productive assets than their female counterparts. More specifically, male-headed households had more draft animals and plow sets than female headed-households, these being key resiliency indicators and community defined benchmarks for graduation. The results also show male-headed households having more furniture, flashlights and blankets than female-headed households. Nonetheless, although asset levels are considered important benchmarks for PSNP graduation, the results suggest that female-headed households are at least, if not more willing to graduate than their male counterparts.
4. The mean value of loans accessed in 2012 was estimated at 592 Ethiopian *birr* for female-headed households and 598 Ethiopian *birr* for male-headed households with no significant difference between these two groups. The majority of these loans were sourced through private credit providers and Microfinance Institutes and 39% and 44% of female and male-headed households respectively, took out loans in 2012. At the time of the assessment between 57-58% of participants had repaid these loans with the interest.
5. These loans were utilized in a variety of ways. Male headed-households spent more on food and livestock purchases and investments in income generating activities than female-headed households. Female-headed households spent more on land (renting) and agricultural inputs than their male counterparts although food purchases were the second most important use of loans for both groups.
6. The results show that 92% of all GRAD study households (treatment, female and male-headed) had savings at the time of the assessment. However, the results show that female headed-households had significantly more savings than male-headed-households with mean household savings being estimated at 357 Ethiopian *birr* and 187 *birr* for female and male participants respectively.

#### Resilience and Gender Equality

7. The results show that on average, male-headed households experienced nine months of food security between October 2011-September 2012 whereas female-headed households only experienced eight months food security during the same period. Consistent with this, fewer male-headed households reported experiencing hunger during the month prior to the assessment than

female-headed households. Overall the results indicate that male-headed households are more food secure than their female counterparts although female-headed households appear to have a slightly more diverse diet than male-headed households.

8. Participants (all treatment households) in all four-study areas experienced a variety of livelihoods shocks in 2012. The most frequently reported shock was weather related crop loss with 87% of participants being affected. The results also show an estimated 45% of participants experiencing disease or pest related crop loss in 2012.
9. Other livelihoods shocks included idiosyncratic shocks such as human illness or the death of a household member with 45% of study households experiencing one of these two types of shock in 2012. Only 27% of households experienced livestock disease or mortality during the same period.
10. Over 85% of participants (all treatment households) experienced crop and income loss as a result of different types of shocks in 2012. The results show that 79% of participants experienced food shortages and a similar proportion of households reduced both the size and frequency of meals to cope with these shortages.
11. The results show that 50% of study households (treatment) sold livestock and other productive assets to cope with food and income losses in 2012. Over one third of participants reported employing other coping strategies such as borrowing money and engaging in labor activities.
12. Across all study areas women were generally perceived to have a medium to a considerable amount of influence over financial and household decisions. However, 40% of participants from this exercise indicated that women had little to no influence over decisions relating to crop production and farming inputs. Similarly, 36% of participants suggested that women had little to no influence over livestock sales and 34% felt the same about decisions pertaining to business and income generating activities. It should be noted that these results do not reflect the views of female-headed households.
13. Based on food security duration, or the number of months household food needs met without the need for external assistance, the results suggest that less than 2% of study households (treatment) belong to the food secure category described in the projects causal model and less than 8% could be classified as food sufficient. In comparing household-heads, the results show that 61% of female headed households fall into the chronically food insecure and ultra poor categories as opposed to 45% of male headed households. Again, these results support the notion that female-headed households are less resilient than male-headed households.

## 1. Introduction

### 1.1 Food Insecurity and Resiliency in Rural Ethiopia

In recent years considerable progress has been made in addressing food insecurity and the risk of repeated crisis in Ethiopia. Coupled with an average economic growth rate of eleven percent per annum, improved agricultural productivity, and reduced levels of poverty (MoFED, 2010), much of this can be attributed to the Government of Ethiopia's Food Security Program which was launched in 2005. In particular, the Productive Safety Net Program has had a significant impact on smoothing consumption, and protecting the assets of the chronically food insecure since it was launched in 2005 (Sharp et al. 2006, Devereux and Sabates-Wheeler 2006). In spite of these developments, food insecurity remains a defining feature of Ethiopia's rural economy with an estimated eight million people living in chronic food insecurity (Gilligan *et al*, 2009) and ever-increasing numbers of people who are unable to meet their basic consumption requirements.

The majority of these chronically food insecure households are located in rural areas, are dependent on rain-fed agriculture, and exposed to persistent shocks such as floods and drought, with associated losses in crop and livestock production. Recent evidence from research on the impact of climate change in Ethiopia also suggests that extreme weather events such as extended dry spells, hail and torrential rain have become more frequent and intense in recent years (Troger *et al*, 2011). There is also a growing body of evidence to suggest that rainfall patterns are becoming more unpredictable in terms of distribution and timing, even where mean rainfall appears to be more or less the same (Troger *et al*, 2011). The evidence also suggests that there is a correlation between crop pests and livestock disease and the changing weather patterns associated with climate change (Burns *et al*, 2010, Troger *et al*, 2011).

These exogenous events can and do have a devastating impact on food production, but what is often overlooked is people's vulnerability to these shocks in terms of their exposure and ability to cope. The Ministry of Agriculture and Rural Development (MoARD, 2009) summarizes these vulnerabilities as follows: Limited household assets, low levels of farm technology, lack of employment opportunities, population pressure and land degradation – exacerbated by low levels of education and high prevalence of disease. Other documented constraints to food production and availability include, shortage of land and grazing, land and soil quality, shortage of household labor and productive capacity, and a shortage of draught animals for land preparation (Burns *et al*, 2011). The absence of extension and animal health services also translates into significant income and production losses as a result of crop pests and livestock disease. With smallholder farmers, accounting for more than ninety percent of agricultural production in rural Ethiopia (Sharp *et al*, 2003) and the majority of their household income being derived from crop and livestock sales, these constraints to production are also directly linked to people's access to food.

Income from crop production is limited in terms of quantity and quality, with few high value cash crops being produced. As discussed, there are limited off-farm economic opportunities and purchasing power is limited not just by income deficits but also by high inflation, increasing food prices and seasonal variations in food prices (Burns *et al*, 2010; Sabates-Wheeler & Devereux, 2010; World Bank, 2011). Furthermore, widespread inefficiencies in food utilization can be attributed to high levels of poverty in general and more specifically to the high prevalence of disease and lack of services and facilities such as health, sanitation and water. Compounding these factors is a lack of awareness and education with regards to food preparation and infant care and feeding practices. Given these underlying vulnerabilities to food insecurity, it is hardly surprising that an estimated 60-75% of rural households face food shortages between June and October each year (EDAC, 2011).

For many rural households, agricultural production can range from modest surplus to complete failure, one year to the next. This undermines the capacity of poor households to manage the range of covariate and idiosyncratic risks they face: from drought or flood, to crop pests and livestock disease, to the illness or death of a household member. Distress sales of livelihoods assets such as tools and livestock are common during lean periods, and seed stocks are often consumed severely limiting the household's capacity to recoup let alone productively invest, accumulate assets and graduate out of food insecurity. In support of the Government of Ethiopia's Food Security Program (FSP) the USAID funded Graduation with Resiliency to Achieve Sustainable Graduation (GRAD) Project is designed to address many of these challenges. The project is built upon the principle that improved access to financial services and improved agricultural extension and marketing, along with the requisite information dissemination, training and capacity building will build the more diverse and resilient livelihoods, necessary to ensure sustainable graduation from food insecurity.

## 1.2 GRAD Project Overview

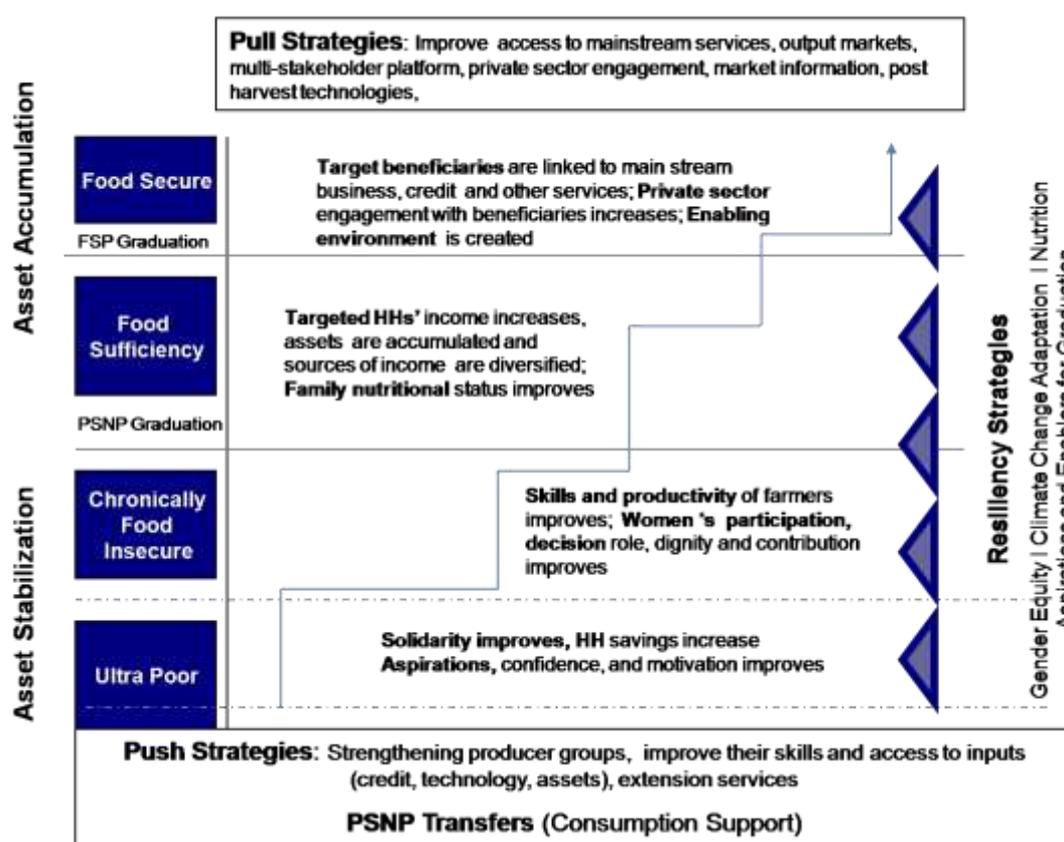
The GRAD project was launched in 2012 and includes a consortium of national and international organizations led by prime awardee CARE Ethiopia. The project is being implemented by ASE and CARE in the SNNPR, REST in Tigray, ORDA in Amhara, and CRS/MCS in Oromia. The consortium also includes technical partners, the Netherlands Development Organization (SNV) on

value chains, and the Feinstein International Center, Tufts University on Monitoring and Evaluation (M&E) and impact assessment.

The goal of GRAD is to sustainably graduate at least 50,000 households from the Productive Safety Net Program (PSNP). By definition, graduation from the PSNP implies that a household can cope with modest income and food related shocks and still meet its food needs for twelve months of the year (MoARD, 2007). Consistent with this, the project aims to graduate the targeted households from chronic food insecurity and strengthen their resiliency to cope with income and food related shocks. The project aims to improve people’s overall productivity, increase on-and off-farm income and create new income and livelihoods opportunities. In achieving these objectives, it is anticipated that participating households will experience an increase in assets and improvements in their nutritional status.

In line with USAID’s Feed the Future (FtF) strategy and M&E policy, the project is underpinned by a clearly articulated causal model and implementation strategies for each result. The causal model (Figure 1) proposes a push pull dynamic resulting in an incremental progression from chronic food insecurity to food security with associated improvements in PSNP graduation<sup>1</sup>. Households along this continuum are classified into four categories viz. ultra poor, chronically food insecure, food sufficient and food secure.

**Figure 1 GRAD Causal Model**



Source CARE 2011

<sup>1</sup>Push Pull factors essentially define the project activities and interventions that translate into positive livelihoods outcomes. These do not necessarily exclude external factors – for example PSNP transfers are considered push factors and the overall project design acknowledges that GRAD is one component of a broader development strategy within the framework of the Governments Household Asset Building Program (HABP) and Food Security Program

### 1.2.1 GRAD Impact Study Overview

In order to test the GRAD causal model an internal impact study was included as one component of the project's Performance Monitoring Plan (PMP). The study approach involves using a pre-post test design to collect panel data at three points (baseline, midterm, and final) in four of the sixteen GRAD intervention *woredas* with the same respondents being involved in each stage of the study. In compliance with donor requirements, another feature of the study approach is the inclusion of a control sample. In order to test the causal model over the full project time span, the decision was made to select baseline study participants from GRAD participants enrolled during the first year of the project. The baseline study included a household survey to collect mostly quantitative data and consistent with the project objectives and targeting criteria, the household is also the primary unit of analysis. A number of focus group discussions were included in the baseline to collect more in depth qualitative data that will be used to inform the design of the mid-term assessment and to allow for additional impact analysis. Some of the key findings from these exercises are presented in this report but more detailed findings will be documented in separate report. The baseline was also designed to collect additional indicators, many of them standard USAID and FtF indicators specified in the project document. A team of data collectors hired by CARE Ethiopia carried out the baseline assessment with technical support provided by Tufts University. GRAD consortium partners with support from Tufts developed the overall approach, including research themes, indicators and the sampling approach for the study during an impact assessment design workshop in Addis Ababa in May 2012.

## 2. ASSESSMENT METHODOLOGY

### Aim

To test the GRAD causal model and address gaps in the project's Performance Monitoring Plan, this includes measuring impact against specific USAID/FtF indicators that correspond with the same or similar impact themes reflected in the causal model.

### Hypothesis

Positive changes in key food security nutrition and livelihoods indicators will take place over time as a result of GRAD project interventions ultimately translating into improvements in PSNP graduation rates.

### 2.1 Research Questions

The research and learning questions for the impact evaluation were defined during the impact assessment design workshop. This was done by deconstructing and analyzing the projects causal model to identify impact themes and indicators. Food security arguably represents the key impact indicator in the GRAD causal model. However, the causal model also frames food security in terms of asset stabilization and accumulation as well as graduation (which is typically defined in terms of assets in the context of the FSP). The concept of resiliency also represents a key theme within the causal model, and resiliency is framed in terms of climate change adaptation, nutrition, gender equity, and aspirations for graduation. The concept of income and income diversification are also integral to the GRAD causal model (see Figure 1).

During the impact assessment design workshop, participants agreed that the evaluation should focus on four impact areas or themes viz. 1) Food Security and Nutrition 2) Income and Assets 3) Resiliency 4) Women's Empowerment. Under each theme, participants then identified and prioritized impact indicators (see Annex VI). These indicators were then used to develop the following set of research questions:

1. To what extent has GRAD contributed to improved food security and nutritional outcomes?
2. What changes in income and assets have occurred as a result of the GRAD project?
3. What contribution has the GRAD project had on participants' resiliency?
4. What changes in gender equity have occurred as a result of the project?

## 2.2 Sampling

The four study areas were purposively selected by individual GRAD implementing partners based on the agreement that the study sites would include one *woreda* per/region and implementing partner. The proposed study areas were also selected based on project rollout and caseload. For example, only an estimated 20% of project participants were to be enrolled in Year 1 and this was taken into account in selecting the study sites. Based on these criteria, Endamehoni, Lay Gayint, Zeway Dugda and Hawassa Zuria *woredas* were selected in Tigray, Amhara, Oromia and the SNNPR respectively.

The sampling frame for the intervention sample included all GRAD households registered in the project in year one (within each of the four selected *woredas*). Participants in the intervention sample were selected using simple random sampling. For the control sample, all PSNP households not included in GRAD were considered for the sampling frame. However, it was acknowledged that the desired sample size would not be achieved given the limited time and resources available for the impact study. It was therefore agreed that priority would be given to completing the treatment (intervention) sample, with the remaining days in each study area being allocated to the inclusion of a smaller, potentially non-representative control or 'comparison' sample. Control group participants were purposively selected based on their availability and willingness to participate. Given the time limitations for the controls, a target of 100 households was proposed for each study area allowing for a final sample of 70 households assuming 30% attrition. This sample of 70 households will allow for statistical comparisons to be made with the intervention samples. Table 1 provides a summary of the proposed and actual sample for each study area.

**Table 1: Proposed sampling frame and sample**

Study Area	Treatment			Control		
	Sampling Frame	Desired Sample	Actual Sample	Sampling Frame	Desired Sample	Actual Sample
EndaMohoni	998	396	401	1687	522	100
Lay Gayint	847	377	385	5484	598	100
Zeway Dugda	1626	443	452	1350	498	105
Hawassa Zuria	628	340	345	895	448	106
<b>Total</b>			<b>1583</b>			<b>411</b>

$n = \frac{P(1-P)}{A^2 + P(1-P)} \cdot \frac{N}{R}$	<p>n=desired sample size  N=Population size (sampling frame)  P=Estimated variance in population (0.5)  A= Precision desired (0.05)  Z=Standard normal deviation (1.96 for 95% Confidence Level)  R=Estimated Response rate (0.7 for intervention sample 0.6 for control)</p>
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(Watson, 2001)

A total of fifty focus group discussions were carried out, 17 in Zeway Dugda, 11 in Hawassa Zuria, 12 in Lay Gayint, and 10 in Endamehoni. Focus group participants were purposively selected based on their willingness to participate and included both male and female project and non-project participants. Focus groups varied in size from between 15 to 25 participants.

## 2.3 Data Collection Methods

The household survey component of the baseline assessment utilized a survey instrument combining both quantitative and standardized participatory tools. Some standardized USAID and FtF tools were also incorporated into the survey instrument. The household questionnaire (Annex IV) is divided into 12 sections (modules) and Table 2 provides a summary of each section and type of information collected.

Due to time and resource constraints, it was agreed that the control group component would be limited to four key impact areas; income diversification, expenditure, assets and women's empowerment captured through modules 4, 5, 8 and 10 above.

**Table 2: Summary of household questionnaire themes and methods**

Module		Type of information collected ( <i>method</i> )
1	Household Socio Demographics	Basic background information on household (HH) <ul style="list-style-type: none"> <li>• Composition, age, gender, relationships and literacy rates</li> </ul>
2	PSNP and GRAD (project) participation	<ul style="list-style-type: none"> <li>• Project and PSNP Participation</li> <li>• PSNP graduation</li> </ul>
3	Recent Livelihoods Shocks	<ul style="list-style-type: none"> <li>• Information on recent events that have had an impact on production and livelihoods</li> <li>• People's response to these shocks</li> </ul>
4	Household Expenditure	Information on HH Expenditure as a proxy for income. <ul style="list-style-type: none"> <li>• Actual expenditure on key items</li> <li>• Relative expenditure on all items (<i>participatory scoring</i>)</li> </ul>
5	Income Sources	<ul style="list-style-type: none"> <li>• Current sources of HH income</li> </ul>
6	Credit and Savings	<ul style="list-style-type: none"> <li>• Information on different loan sources</li> <li>• Household savings</li> <li>• Utilization of credit and loans</li> </ul>
7	Project Outcomes and Benefits	<ul style="list-style-type: none"> <li>• Production, consumption, income and sales from GRAD project value chains</li> <li>• Perceived benefits from training and extension services (<i>ranking &amp; scoring methods</i>)</li> </ul>
8	Assets	( <i>Asset inventory</i> ) to collect information on HH: <ul style="list-style-type: none"> <li>• Land holdings</li> <li>• Livestock holdings</li> <li>• Productive assets (tools)</li> <li>• Household durables</li> </ul>
9	Food Security and Nutrition	<ul style="list-style-type: none"> <li>• Number of months HH food availability (<i>food security calendar</i>)</li> <li>• HH cereal balance during hunger period</li> <li>• Frequency of missed meals over the past month (<i>Household Hunger Scale</i>)</li> <li>• Household Dietary Diversity (<i>HH Dietary Diversity Scale</i>)</li> </ul>
10	Women's Empowerment ( <i>Equity Index</i> )	Information on the influence women have over: <ul style="list-style-type: none"> <li>• Production and livelihoods decisions</li> <li>• Financial decisions</li> <li>• Household decisions</li> </ul>
11	Poverty Assessment Tool	Assesses the probability of a HH being below the poverty line (Ethiopia Poverty Assessment Tool)
12	Risk Reduction Practices	Information on risk reduction practices employed in agriculture, water, health and disaster risk management

The focus group component collected mostly qualitative data and some numerical data using standardized participatory tools. Semi-structured interviews were used to collect information on food security, resiliency, women's empowerment, and PSNP graduation. Information on project interventions, specifically on the perceived (anticipated) benefits, strengths and weaknesses of the different project value chains was also collected. The focus groups were also used to help define and categorize the community into groups based on their food security status, and assign these into the four categories proposed in the GRAD causal model based on indicators such as food security duration (number of months food needs met), cereal surplus (quantity & months) and livestock asset levels with the objective of being able to track progress along the causal model during the mid-term

and final assessments. The focus groups were also used to try and come up with community definitions and indicators for resiliency and graduation and participants were asked to identify factors and interventions that they believe will lead to PSNP graduation. The focus groups included a number of participatory tools including ranking and scoring exercises. The checklist for this component of the assessment can be found in Annex IV.

The baseline assessments were carried out between October and December 2012 by external data collectors hired by CARE with technical support being provided by the GRAD Learning, Design and Measurement Advisor and a Tufts researcher.

## 2.4 Data Entry and Analysis

This report presents two sets of analysis. The first set of analysis summarizes the results from the entire intervention sample and comparisons are made with the control sample for the modules on income diversification, expenditure, assets and women's empowerment. The second set of analysis includes a comparison of male and female-headed households from the treatment sample. Seeing as the information on household heads was not available prior to the assessment, the disaggregation involved filtering out household-heads from the baseline dataset. It should be noted that female household heads and male households without an adult female were excluded from the exercise on women's decision-making based on the assumption that in most cases female household heads would be the key decision maker in their household and that female minors would have little influence over household decisions and this would represent an unacceptable level of bias in the results.

The data on expenditure and assets was tested for normal distribution using the P-Plot function in SPSS version 18. The mean value for these results was then calculated at 95% confidence interval in SPSS. The mean number of income sources, the value of savings and loans was also calculated at 95% confidence interval using the same function. The focus group data on wealth ranking, wealth characteristics (assets) and food security duration was calculated at the median and the range using SPSS and agreement between informant groups was assessed using Kendall's coefficient of concordance (*W*). All the other results were summarized in excel using descriptive statistics as specified in the results tables.

## Guide to Interpreting the Results

Seeing as multiple comparisons are being presented in the results the results headers identify where these apply to the treatment sample only or the treatment sample versus control. These results (treatment only and control) are not disaggregated by gender. It should be noted that no controls were used in the analysis of male and female-headed households, in other words this sample only includes GRAD project participants. Where the abbreviations 'Male' and 'Female' are used this applies to male and female-headed households respectively.

## 3 RESULTS

### 3.1 Background

This section provides contextual information such as external non-project factors that have had a negative impact on livelihoods. This information was collected with the objective of framing any assessed impact. The section also includes some of the results from the focus group component which was collected to classify participants into the four food security categories identified in the projects causal model. The section also includes community-identified indicators of resiliency and benchmarks for graduation. These were collected with a view to understanding people's perceptions and aspirations for graduation.

### 3.1.1 Livelihoods shocks and responses

**Table 3: Recent livelihoods shocks (treatment only)**

Shock/Event (n= 1579)	# Of HHs	% Of HHs
Weather related crop loss (drought, rain failure, flood etc.)	1375	87%
Disease or pest related crop loss	715	45%
Livestock disease or mortality	434	27%
Other unexpected shock (human illness, death etc.)	710	45%

**Table 4: Impact of recent shocks (treatment only)**

Impact/Outcome (n=1579)	# Of HHs	% Of HHs
Crop loss	1401	89%
Income loss	1363	86%
Livestock loss (mortality & stress sale)	736	46%
Food shortage	1257	79%
Livestock feed shortage	238	15%
Labor loss/shortage	223	14%
Other	39	2%

**Table 5: Coping strategies employed in response to recent shocks (treatment only)**

Coping Strategies (n=1579)	# Of HHs,	% Of HHs,
Reduced the number of meals	1287	81%
Ate less (smaller portions)	1311	83%
Borrowed food or money	587	37%
Sold livestock or other productive assets	786	50%
Engaged in labor activities	518	33%
Collected/ sold firewood or charcoal	159	10%
Sent children to stay with relatives	40	3%
Withdrew children from school	92	6%
Sent children to work	32	2%
HH members migrated to find work	50	3%
Other	416	26%

#### Notes on Tables 3-5

The sample was restricted to male and female intervention households only. The reference time frame for shocks and events was the 12 months prior to the assessment

### 3.1.2 Wealth characteristics

**Table 6: Community wealth breakdown and wealth characteristics (focus groups)**

Wealth Indicator (n=50 FGD)	Median Score (range)			
	Food Secure	Food Sufficient	Chronically Food Insecure	Ultra Poor
Percentage of the Population (W=0.864, P<0.001)	3% (0-25)	19% (6-49)	50% (16-65)	27% (10-69)
Land holdings + Utilization (Ha) (W=0.048, P<0.001)	1.8 (1-4)	1.0 (0.5-4)	0.8 (0.1-2.5)	0.5 (0.1-1.5)
Cattle holdings (head) (W=0.966, P<0.001)	6 (2-10)	4 (1-10)	1 (0-4)	0 (0-2)

Small ruminant holdings (head) (W=0.888, P<0.001)	8 (1-12)	5 (2-10)	2 (1-7)	1 (0-4)
Equine holdings (head) (W=0.857, P<0.001)	1 (1-2)	1 (1-2)	0 (0-1)	0 (0-1)
W=Kendall's coefficient of concordance. Value of W varies from 0-1: the closer to 1 the higher the level of agreement (all results above 0.5 show agreement) P Value shows significance level (all values below 0.5 show agreement over 95% Confidence Interval)				

### Notes on Table 6

Table 6 presents a wealth breakdown of the community based on the four categories defined in the projects causal model. Focus group participants were asked to classify households in their community based on these four definitions and assign characteristics to each group in terms of land and livestock holdings. Food secure households were considered those that typically experienced a food surplus over and above 12 months. Food sufficient households were those that could cover their food needs for 12 months but had no surplus. The chronically food insecure and ultra poor were those that could not meet their food needs without external assistance for 12 months. Participants were asked to estimate how many months of food needs could be met from own production for these two poorer categories. Once consensus had been reached, participants were asked to estimate the proportion of their community that belonged to each group using proportional piling with 100 counters. The results were recorded once the majority of participants had reached a consensus.

Participants indicated that land utilization was a more useful indicator of wealth as better off households can not only utilize more of their land, but often rent land from poorer households as they have better access to labor, draft animals and inputs. The objective of this exercise was to collect information to assess progress along the causal model in future assessments. For example, land holdings/utilization or livestock holdings might be used to filter out chronically food insecure households from the baseline survey data and an increase in the number or percentage of households moving into the food sufficient category during the mid-term or final assessment would validate the projects causal model. The results show the median asset holdings from 50 focus groups and the range. Although the results show overall agreement, it should be noted that the range illustrates differences between focus groups and regions. For example, cattle holdings were on the higher end of the range in Zeway Dugda and Hawassa Zuria and land holdings/utilization were on the higher end of the range in Zeway Dugda. The variation and range in these results represent a considerable overlap in asset ownership making it difficult to filter out household survey participants by wealth group. However, the results on food security duration provide a more useful guide for categorizing households by wealth category as shown in Table 7.

**Table 7: Food security duration by wealth group (focus groups)**

Wealth Indicator (n=50 FGD)	Median Score (range)			
	Food Secure	Food Sufficient	Chronically Food Insecure	Ultra Poor
Number of months food security from own production	12 (12-20)	12 (NA)	6 (4-8)	3 (2-4)
Kendall's W = 0.974 P Value < 0.001				

### Proposed cut-offs

Food Secure = 12 months plus 3 months cereal surplus<sup>2</sup>

Food Sufficient = 12 months < 3 months surplus

Chronically Food Insecure = 6-8 Months

Ultra Poor = 5 months or less

<sup>2</sup> Three months surplus was estimated as 270 Kg (90 Kg/month). This assumes an average household of six members with each person requiring 0.5 Kg cereals/day and assumes that approximately 1,750 kcal of the 2,100 kcal daily requirements are being met through cereals.

For analysis purposes we propose including a fifth category to represent those that fall in between the food sufficient and chronically food insecure categories: Food Insecure = 9-11 months. Note that many households in this group could arguably be chronically food insecure and those in the food sufficient category are likely to face transient food insecurity from time to time. Nonetheless, in terms of testing the causal model, upward mobility from group to group should validate the model.

### 3.1.3 Resiliency and graduation indicators

**Table 8: Ranking of community resiliency and graduation indicators (focus groups)**

Resiliency Indicator (n=50 FGD)	Average Rank
Livestock Holdings (assets)	1 <sup>st</sup>
Land Holdings + Utilization	2 <sup>nd</sup>
Off Farm Income Sources	3 <sup>rd</sup>
Food Security Duration (12 months)	4 <sup>th</sup>
Diversity of Crops Grown	5 <sup>th</sup>
Savings	6 <sup>th</sup>

#### Notes on Table 8

Table 8 gives an average ranking of resiliency indicators from the 50 focus groups. Participants suggested that the same indicators for household resiliency should be used as criteria for PSNP graduation. The indicators were identified and then ranked (using simple ranking) in order of importance. Again land holdings were equated with utilization. Overall, livestock holdings were considered the most important indicator of resiliency followed by land holdings/utilization. However, in Hawassa Zuria, land holdings/utilization was ranked first and livestock assets third. In all the other areas Livestock holdings were ranked first and land holdings/utilization second. Therefore, although the results show agreement on the importance of these indicators, contextual and spatial variations occur.

## 3.2 Income and Expenditure

**Table 9: Number of income sources (treatment versus control)**

Sample	Mean Number of Income Sources (95% CI)
Treatment (n=1583)	4.6 (4.5, 4.7)
Control (n= 411)	3.9 (3.8, 4.1)

**Table 10: Number of income sources (male versus female-headed households)**

Sample	Mean Number of Income Sources (95% CI)
Female (n=464)	3.9 (3.7, 4.1)
Male (n= 830)	5.2 (5.0, 5.3)

#### Notes on Tables 9-10

The treatment sample has significantly more income sources than the control. Male-headed households have significantly more income sources than the female-headed households. It should be emphasized that each cash crop type was considered as an independent income source.

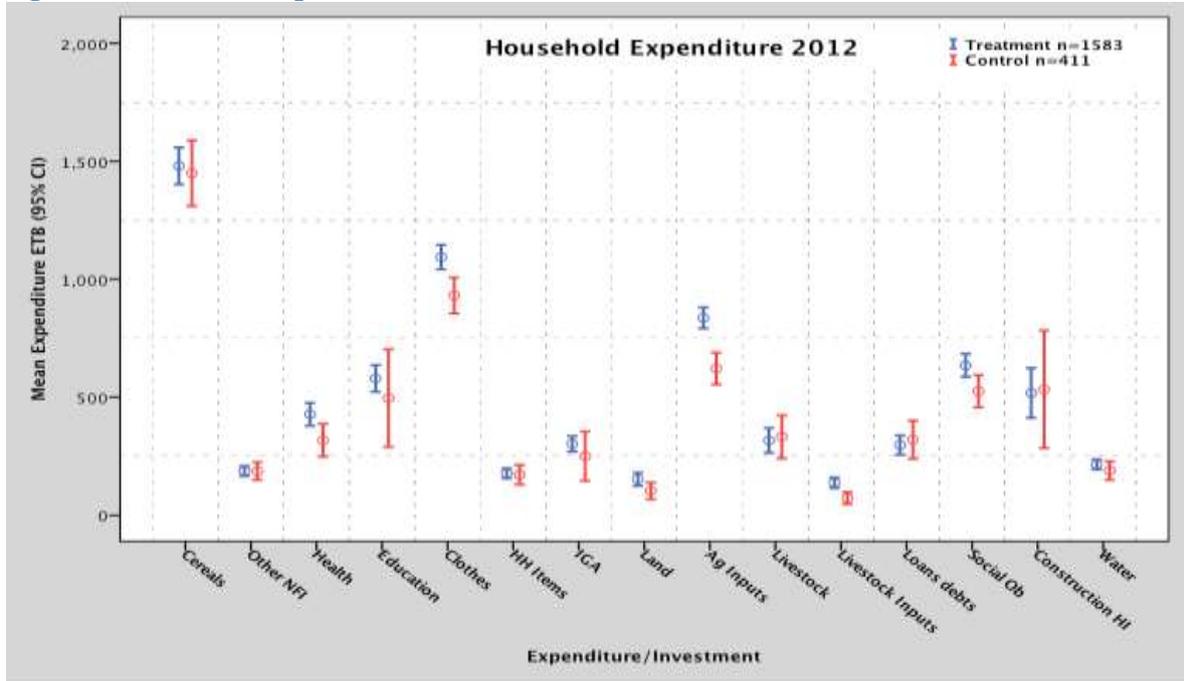
**Table 11: Relative importance of crop based income sources (treatment only)**

Intervention sample (n=1583)	Mean Number of Income Sources (95% CI)
Crop based income sources	1.1 (1.0, 1.2)
All other income sources	3.6 (3.5, 3.7)
Total number of income sources	4.7 (4.6, 4.8)

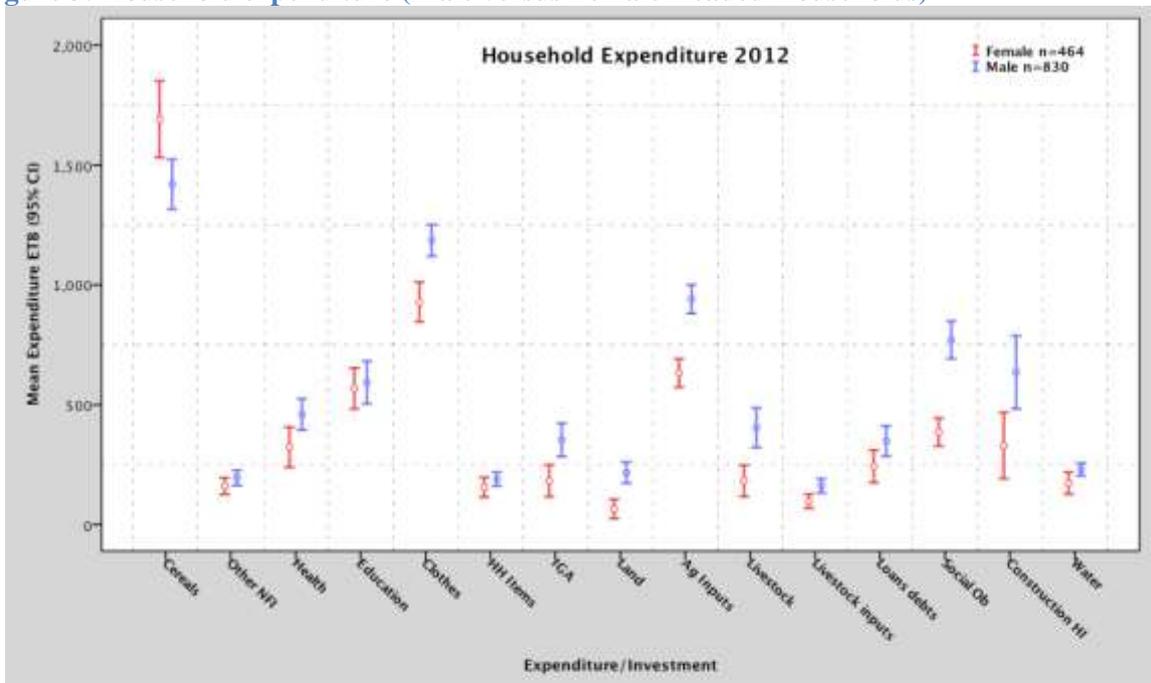
Notes on Table 11

Table 11 shows the mean number of income sources for the study (treatment) sample and is not limited to household heads. The table illustrates the proportion of different income sources derived from crop sales relative to all other income sources in 2012. An increase in the number of crop based income sources over time, could potentially represent a proxy indicator for GRAD value chain participation.

**Figure 2: Household expenditure (treatment versus control)**



**Figure 3: Household expenditure (Male versus Female Headed Households)**



Key Figures 2-3:

Ag Inputs = Farming Inputs  
 Items = Household Items  
 Land = Land Renting

Social Ob = Social Obligations such as weddings, funerals, contributions etc.  
 Construction HI = Construction and or Home Improvement HH  
 IGA = Income Generating Activities  
 Other NFI = Other Non Food Items

### Notes on Figures 2-3

Figures 2-3 show the relative proportion of key household expenditures in 2012. The results show the most important expenditures being grain purchases, clothes purchases and agricultural inputs. These expenditures do not include daily food purchases and other incidentals. These were not collected in order to minimize recall bias and so only key expenditures were collected as a baseline proxy for income. The results illustrate that the treatment sample spent significantly more on agricultural inputs and clothes than the control sample. The results also show that male-headed households spent significantly more on clothes, agricultural inputs, livestock, land, investments in income generating activities, construction or home improvement and social obligations than female-headed households. The only item that female-headed households spent significantly more on than their male counterparts was food (cereal) purchases suggesting that these households cover less of their food needs from own production.

**Table 12: Mean Expenditure (treatment versus control)**

Mean HH Expenditure ETB (95% CI)	
Treatment (n=1583)	7231 (6934, 7528)
Control (n=411)	6502 (5880, 7125)

**Table 13: Mean Expenditure (male versus female-headed households)**

Mean HH Expenditure ETB (95% CI)	
Female (n=464)	6104.7 (5700.9, 6508.5)
Male (n=830)	8084.1 (7630.4, 8537.9)

### Notes on Tables 12 & 13

The results show no significant difference in total expenditure between the treatment and control sample. However, male household heads have significantly higher expenditure (income) than female household heads

## 3.3 Value Chain Production Sales and Income

**Table 14: Value chain sales and income (treatment only)**

	N=1583	# HHs	Total #/Kg	Tons	Income	Income
	Livestock #	(Selling)	Sold	(MT)	ETB	USD
All Value Chains	Cattle	132	160	NA	643630	37247.1
	Goats	54	107	NA	70780	4096.1
	Sheep	88	182	NA	119795	6932.6
	<b>Subtotal Livestock</b>	-	<b>449</b>	<b>0</b>	<b>834205</b>	<b>48275.8</b>
	<b>Crops/Other Kg</b>	-	<b>Sold</b>	<b>Tons</b>	<b>ETB</b>	<b>USD</b>
	Honey	7	98	0.098	7960	460.6
	Malt Barley	6	900	0.9	6725	389.2
	Beans/pulses	265	35033	35.033	196566	11375.3
	Potatoes	110	48835	48.835	83778	4848.3
	Carrots	50	9895	9.895	28770	1664.9
	Cabbage	18	2840	2.84	18087	1046.7
	Tomatoes	8	2950	2.95	13600	787.0
	Onions	7	4550	4.55	33580	1943.3
	Peppers	92	15340	15.34	194651	11264.5
	Other	11	4722	4.722	28171	1630.3
	<b>Subtotal Crops</b>	-	<b>125163</b>	<b>125.163</b>	<b>611888</b>	<b>35410.2</b>
	<b>Total</b>	-	<b>NA</b>	<b>125.163</b>	<b>1446093</b>	<b>83685.9</b>

**Table 15: GRAD value chain sales and income (treatment only)**

<b>GRAD Value Chains Only</b>	N=1583	<b>Total #/Kg</b>	<b>Tons</b>	<b>Income</b>	<b>Income</b>
	<b>Livestock #</b>	<b>Sold</b>	<b>(MT)</b>	<b>ETB</b>	<b>USD</b>
	Cattle	40	NA	122720	7101.9
	Goats	67	NA	40060	2318.3
	Sheep	158	NA	118095	6834.2
	<b>Subtotal Livestock</b>	<b>265</b>	<b>0</b>	<b>280875</b>	<b>16254.3</b>
	<b>Crops/Other Kg</b>	<b>Sold</b>	<b>Tons</b>	<b>ETB</b>	<b>USD</b>
	Honey	98	0.098	7960	460.6
	Malt Barley	900	0.9	6725	389.2
	Beans/pulses	13204	13.204	69699	4033.5
	Potatoes	35791.3	35.7913	76528	4428.7
	Carrots	0	0	0	0.0
	Cabbage	0	0	0	0.0
	Tomatoes	2850	2.85	13350	772.6
	Onions	4550	4.55	33580	1943.3
	Peppers	15340	15.34	194651	11264.5
	Other	0	0	0	0.0
	<b>Subtotal crops</b>	<b>72733.3</b>	<b>72.7333</b>	<b>402493</b>	<b>23292.4</b>
	<b>Total</b>	<b>NA</b>	<b>72.7333</b>	<b>683368</b>	<b>39546.8</b>

**Table 16: Proportion of female-headed households selling value chain products (2012)**

Value Chain Product	Female n=464		
	Number Of HHs	Percentage Of HHs	Average Income/HH (ETB)
Cattle	18	4%	139.7
Sheep	33	7%	106.5
Goats	14	3%	48.9
Beans	73	16%	111.5
Red Peppers	53	11%	658.9
Potatoes	30	6%	60.2
Carrots	24	5%	51.7
Cabbages	14	3%	37
Malt Barley	1	0.2%	5.4
Honey	1	0.2%	1.8
Others	2	0.4%	3.8
<b>Sub total livestock sales</b>			<b>295</b>
<b>Sub total crop sales</b>			<b>930</b>

**Table 17: Proportion of male-headed households selling value chain products (2012)**

Value Chain Product	Male n=830		
	Number Of HHs	Percentage Of HHs	Average Income/HH (ETB)
Cattle	97	12%	599.7
Sheep	44	5%	81.7
Goats	32	4%	47.3
Beans	140	17%	127.7
Potatoes	63	8%	55.5
Red Peppers	31	4%	521.7
Carrots	19	2%	24.6
Onions	7	1%	84.8
Tomatoes	6	1%	21.1
Honey	5	1%	42.6
Malt Barley	5	1%	41.1
Cabbages	3	0.4%	30.3
Others	8	1%	29.4
<b>Sub total livestock</b>			<b>728</b>
<b>Sub total crops</b>			<b>978</b>

### Notes on Tables 14-17

Table 14 shows total sales and income from all crop and livestock value chains for GRAD study (treatment) participants in 2012. Table 15 shows the sales and income for the same group but limited to the value chains being promoted by the project. Tables 16-17 show the proportion of male and female-headed households who sold different types of value chain commodities in 2012 and the average income derived from these sales. The results show that on average female participants earned approximately 1,225 Ethiopian *birr* from cash crop and livestock sales and male participants earned 1,706 *birr*. However, the results suggest that very few project participants were benefiting from the sale of the value chain products being promoted by GRAD at the time of the assessment. This is to be expected given the timing of the study in relation to the project cycle.

## 3.5 Assets

**Table 18: Land holdings (treatment versus control)**

Type	Mean Land Holdings (95% CI)	
	Treatment (n=1583)	Control (n=411)
Land Owned (Ha)	0.7 (0.7, 0.8)	0.5 (0.5, 0.6)
Land Cultivated (Ha)	0.8 (0.7, 0.9)	0.5 (0.5, 0.6)

**Table 19: Land holdings (male versus female-headed households)**

Type	Mean Land Holdings (95% CI)	
	Female (n=464)	Male (n=830)
Land Owned (Ha)	0.6 (0.6, 0.7)	0.8 (0.7, 0.8)
Land Cultivated (Ha)	0.7 (0.4, 1.1)	0.8 (0.7, 0.9)

### Notes on Tables 18-19

The results show a significant difference in mean land holdings between the treatment sample and the control and in the amount of land actually cultivated with the treatment sample owning and cultivating more land than the control. However, there is no significant difference in land holdings between male and female household heads (treatment). End-line comparisons for this indicator could use pre-post comparisons against the corresponding control sample (male/female). However, this is probably not a useful indicator as land can neither be sold nor purchased. Therefore the amount of land utilized may be a more useful indicator using simple pre-post comparisons without controls.

Figure 4: Livestock holdings (treatment versus control)

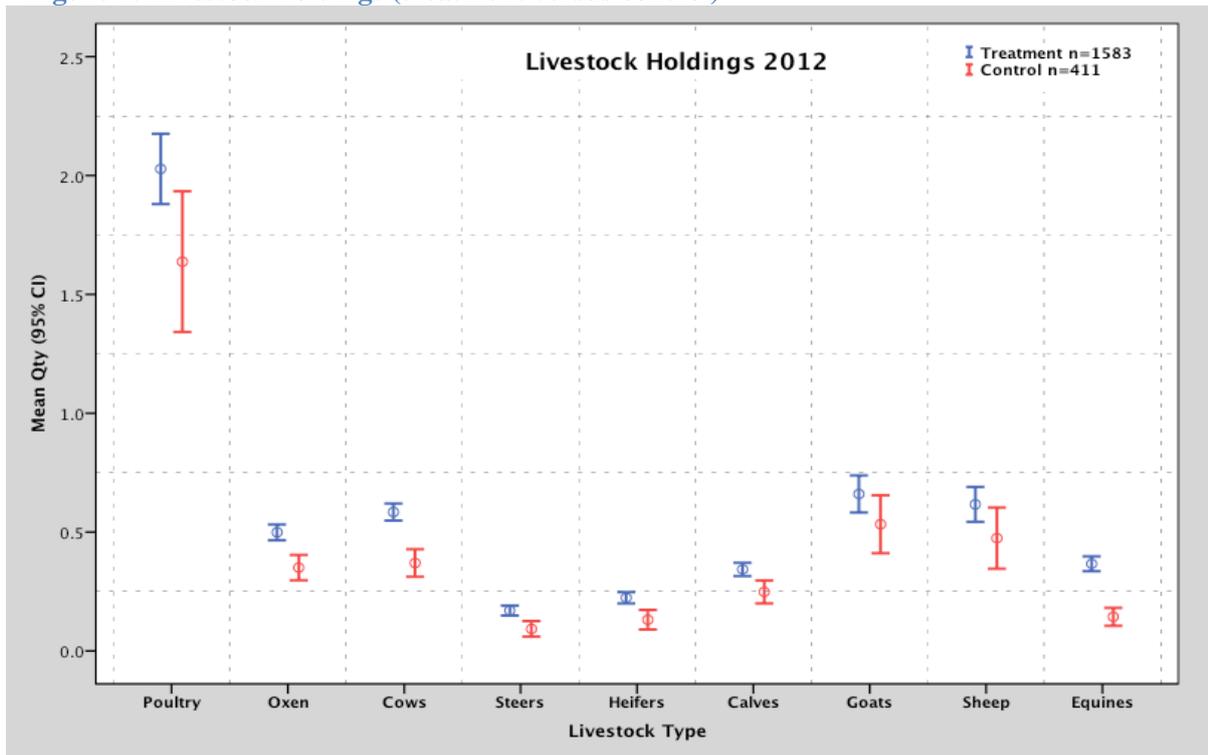
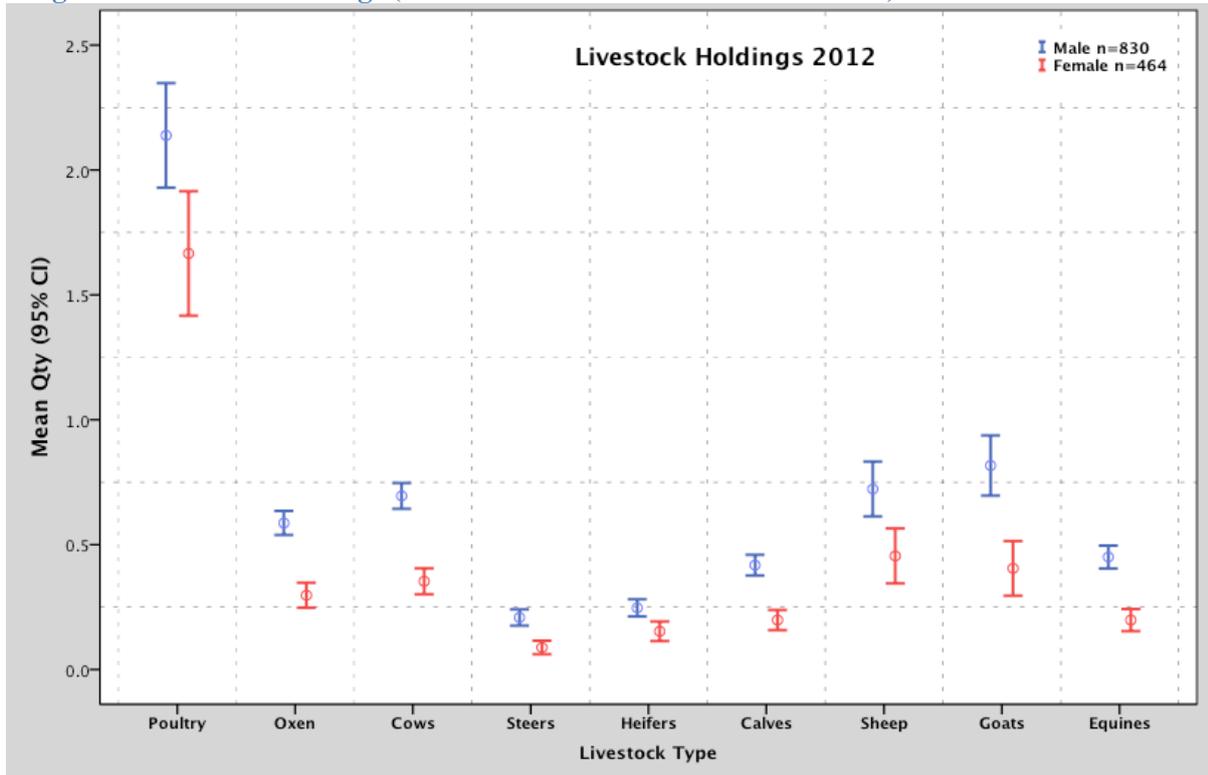


Figure 5: Livestock holdings (male versus female-headed households)



Key for Figures 4-5: Equines = Donkey, Mules and Horses

Figure 6: Productive assets (treatment versus control)

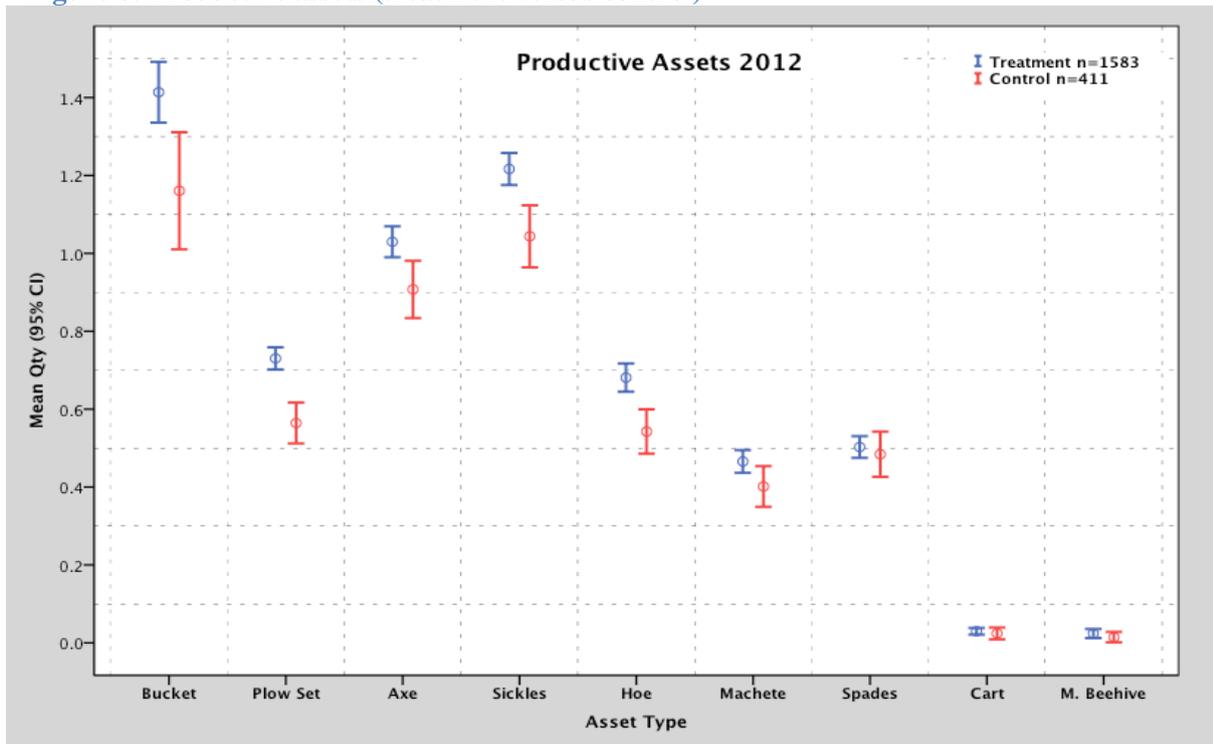
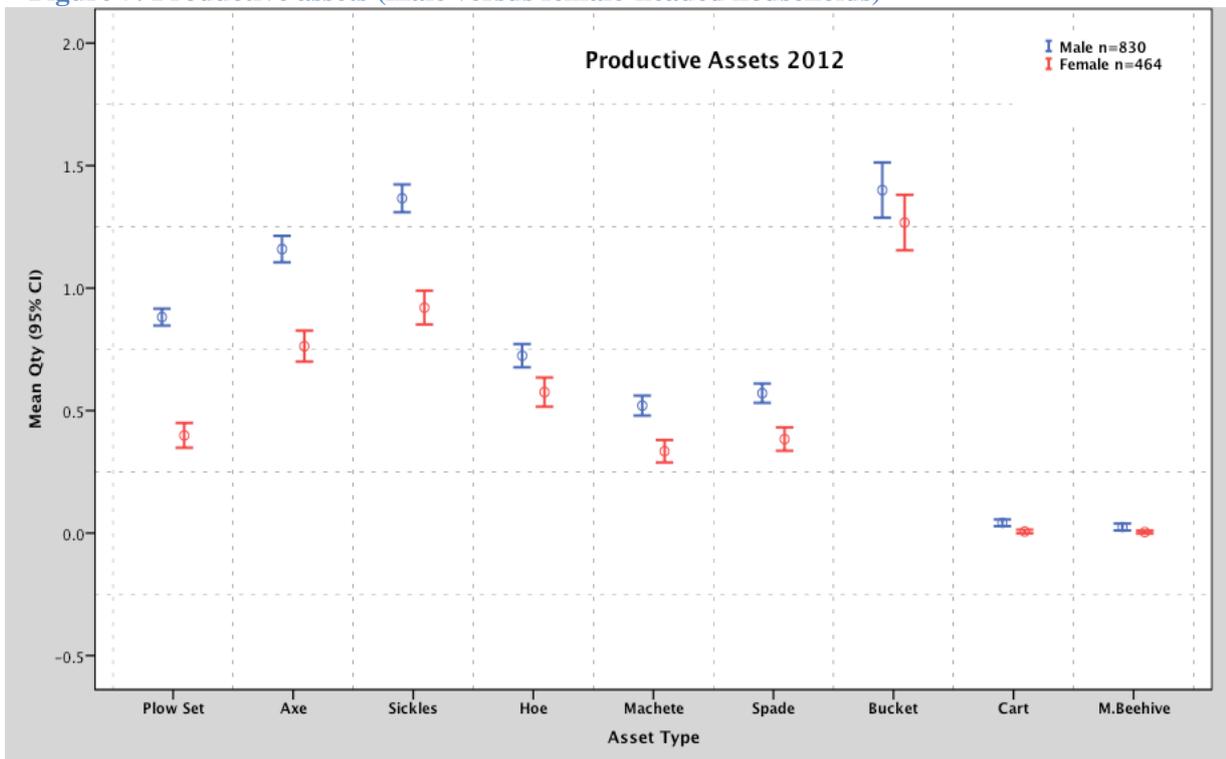


Figure 7: Productive assets (male versus female-headed households)



Key: Plow set = yoke beam and share & M.Beehive = Modern beehive

Figure 8: Household assets (treatment versus control)

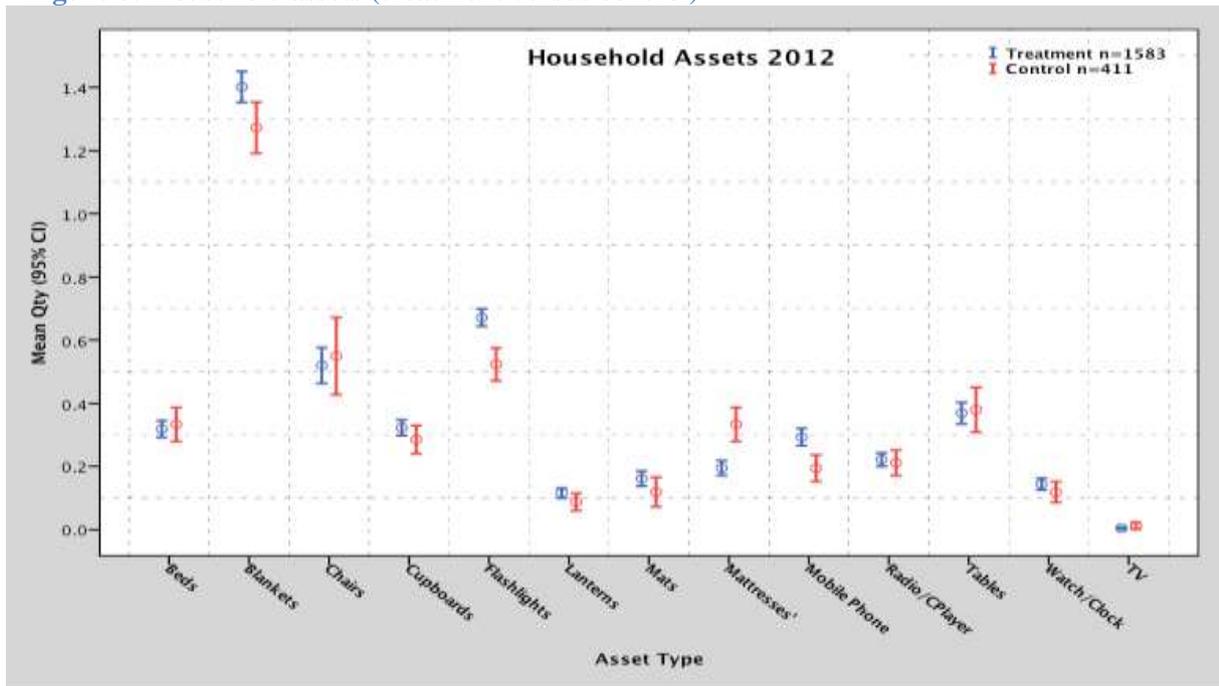
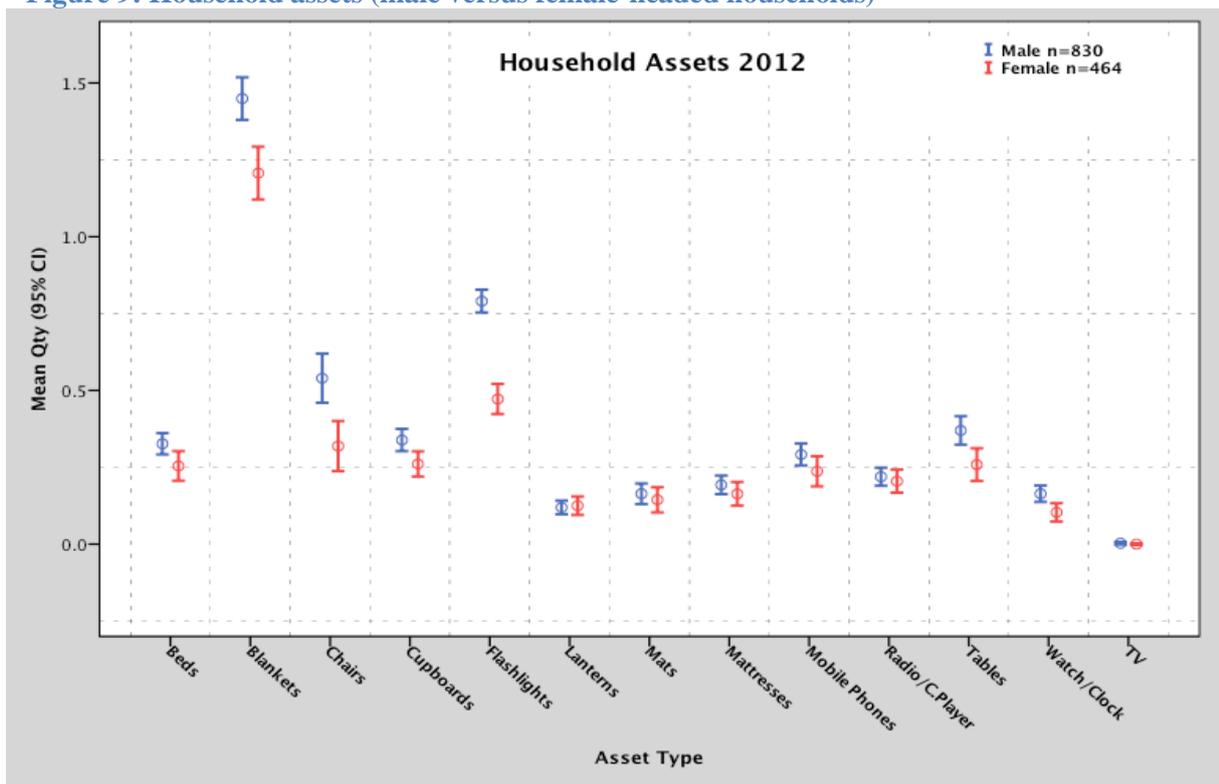


Figure 9: Household assets (male versus female-headed households)



Key for Figures 8-9: C/Player = Cassette Player

Notes on Figures 4-9 (Livestock, Productive and Household Assets)

The results indicate that the treatment sample has significantly more cattle and equines than the control sample. The treatment sample also has significantly more plow sets, sickles, axes, hoes and buckets than the control. There is no significant difference in household items (most types) between the treatment and control with the exception of flashlights and mobile phones and mattresses. The treatment sample has more mobile phones and flashlights and the control have

more mattresses. Male-headed households have significantly more livestock assets (all types) than female household heads. Male-headed households have significantly more productive assets than female-headed households (most types). Male-headed households have significantly more flashlights, blankets and furniture (certain types) than female household heads

### 3.6 Aspirations for Graduation

**Table 20: Willingness to graduate (treatment versus control)**

Sample	#	%	# Graduated
Treatment (n=1583)	494	31%	8
Control (411)	108	26%	0

**Table 21: Willingness to graduate (male versus female household heads)**

Sample	#	%	# Graduated
Female (n=464)	160	34%	0
Male (n=830)	246	30%	3

#### Notes on Tables 20-21

Tables 20-21 show the number and percentage of participants willing to graduate from the PSNP. One of the objectives of the project is to promote enablers for graduation through the implementation of activities that improve people's understanding of graduation and dispel the myths and fears surrounding the graduation process (CARE, 2011). Experience from other countries indicates that non-economic factors such as encouragement, motivation and recognition are important in accelerating and ensuring sustained graduation (ibid).

Willingness to graduate was defined as those households that expect to graduate within two years from the date of the assessment. Interestingly, although the results show significant differences in assets between male and female household-heads, and these assets are the key benchmarks for PSNP graduation, this appeared to have little influence on the willingness of participants from these two groups to graduate.

### 3.7 Food Security and Nutrition

**Table 22: Food Security Calendar 2011-212 (treatment only)**

Food Security Calendar Scoring (mean score)			n=1583									
0 = Not enough food (food insecure)												
1 = Just enough food (food sufficient)												
2 = Plenty of food/surplus (food secure)												
2011			2012									
Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	
1	2	2	1	1	1	1	1	0	0	0	1	
Total # Months food needs met (all months with a score of 1 or 2)											9	
Baseline Score											11/24	

**Table 23: Food Security Calendar 2011-212 (female headed households)**

Food Security Calendar Scoring (mean score)										n=464	
0 = Not enough food (food insecure) 1 = Just enough food (food sufficient) 2 = Plenty of food/surplus (food secure)											
2011			2012								
Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept
1	1	2	1	1	1	1	1	0	0	0	0
Total # Months food needs met (all months with a score of 1 or 2)										8	
Baseline Score										9/24	

**Table 24: Food Security Calendar 2011-212 (male headed households)**

Food Security Calendar Scoring (mean score)										n=829	
0 = Not enough food (food insecure) 1 = Just enough food (food sufficient) 2 = Plenty of food/surplus (food secure)											
2011			2012								
Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept
1	2	2	2	1	1	1	1	0	0	0	1
Total # Months food needs met (all months with a score of 1 or 2)										9	
Baseline Score										12/24	

**Table 25: Proportion of households falling into different food security categories**

Food Security Category	Treatment (n=1581)		Female (n=464)		Male (n=829)	
	#	%	#	%	#	%
<b>Food Secure</b>	29	1.8%	2	0.4%	18	2.2%
<b>Food Sufficient</b>	116	7.3%	31	6.7%	61	7.4%
<b>Food Insecure</b>	658	41.6%	148	31.9%	379	45.7%
<b>Chronically Food Insecure</b>	663	41.9%	226	48.7%	327	39.4%
<b>Ultra Poor</b>	117	7.4%	57	12.3%	44	5.3%

Estimates based on cut-off points proposed in Table 7

Notes on Table 25

The results suggest that almost none of the study sample would have qualified for PSNP graduation in 2012. The results also show a greater proportion of female-headed households in the food insecure categories

**Table 26: Household Dietary Diversity (treatment)**

Household Dietary Diversity Score (Average number of food groups) n=1583	3.8	
Low HH Dietary Diversity (3 or less food groups)	n=720	45.5%
Medium HH Dietary Diversity (4-5 food groups)	n=707	44.7%
High HH Dietary Diversity (6 or more food groups)	n=156	9.9%

**Table 27: Household Dietary Diversity (female-headed households)**

<b>Household Dietary Diversity Score</b> (Average number of food groups) n=464	<b>3.8</b>	
Low HH Dietary Diversity (3 or less food groups)	n=206	44.4%
Medium HH Dietary Diversity (4-5 food groups)	n=215	46.3%
High HH Dietary Diversity (6 or more food groups)	n=43	9.3%

**Table 28: Household Dietary Diversity (male-headed households)**

<b>Household Dietary Diversity Score</b> (Average number of food groups) n=829	<b>3.7</b>	
Low HH Dietary Diversity (3 or less food groups)	n=393	47%
Medium HH Dietary Diversity (4-5 food groups)	n=361	44%
High HH Dietary Diversity (6 or more food groups)	n=75	9%

**Table 29: Household Hunger Scale (treatment only n=1581)**

<b>Parameters</b>	<b>Never</b>	<b>Rarely</b>	<b>Sometimes</b>	<b>Often</b>
	<b>%</b>	<b>%</b>	<b>%</b>	<b>%</b>
In the past month, was there ever no food to eat of any kind in your house because of lack of resources to get food?	91%	3.6%	4.2%	1.2%
In the past month did you or any household member go to sleep at night hungry because there was not enough food?	90.8%	4.6%	4.3%	0.3%
In the past month did you or any household member go a whole day and night without eating anything at all because there was not enough food?	97%	2%	1%	0
<b>Household Hunger Scale (number &amp; percentage of households)</b>			<b>#</b>	<b>%</b>
Little to no hunger in the household			1465	92.6
Moderate hunger in the household			107	6.6
Severe hunger in the household			9	0.5

**Table 30: Household Hunger Scale (female n=464)**

<b>Parameters</b>	<b>Never</b>	<b>Rarely</b>	<b>Sometimes</b>	<b>Often</b>
	<b>%</b>	<b>%</b>	<b>%</b>	<b>%</b>
In the past month, was there ever no food to eat of any kind in your house because of lack of resources to get food?	83.2	6.7	7.5	2.6
In the past month did you or any household member go to sleep at night hungry because there was not enough food?	82.8	9.7	6.9	0.6
In the past month did you or any household member go a whole day and night without eating anything at all because there was not enough food?	94.8	3.4	1.1	0
<b>Household Hunger Scale (number &amp; percentage of households)</b>			<b>#</b>	<b>%</b>
Little to no hunger in the household			398	86
Moderate hunger in the household			60	13
Severe hunger in the household			6	1

**Table 31: Household Hunger Scale (male headed households n=829)**

<b>Parameters</b>	<b>Never</b>	<b>Rarely</b>	<b>Sometimes</b>	<b>Often</b>
	<b>%</b>	<b>%</b>	<b>%</b>	<b>%</b>
In the past month, was there ever no food to eat of any kind in your house because of lack of resources to get food?	94.1	2.3	2.9	0.7
In the past month did you or any household member go to sleep at night hungry because there was not enough food?	94	1.9	3.9	0.2
In the past month did you or any household member go a whole day and night without eating anything at all because there was not enough food?	98.6	0.8	0.6	0
<b>Household Hunger Scale (number &amp; percentage of households)</b>			<b>#</b>	<b>%</b>
Little to no hunger in the household			790	95.
Moderate hunger in the household			37	4.5
Severe hunger in the household			2	0.2

### Notes on Tables 22-31

Tables 22-24 show the duration of household food security from October 2001 to September 2012. Participants were asked to score each month on a scale of 0-2 based on the amount of food they had in the household during this period. The results show that the combined treatment sample experienced three months of food insecurity in 2012 (mean score) with a food security score of 11 out of a maximum possible score of 24. The results also show a mean ‘food security’ score of 12 and 9 for male and female-headed households respectively. The results show that female-headed households experienced 4 months (mean score) food insecurity while male-headed households experienced 3 months food insecurity during the reference period.

The results presented in Tables 26-31 were derived using the Household Dietary Diversity Scoring (HDDS) method and Household Hunger Scale (HHS) developed by FANTA. The results show over 40% of the treatment sample combined as well as male and female-headed households disaggregated falling into the low dietary diversity category. The results show that only 18% or fewer of the female-headed households experienced hunger in the month prior to the assessment and only 6% or fewer of male-headed households experienced hunger during this period. Less than 10% of the treatment sample combined experienced hunger during this period. While these results are encouraging it should be emphasized that the study took place following the harvest when food availability is at its peak and this temporal bias should be acknowledged.

### 3.8 Credit and Savings

**Table 32: Proportion of households saving and borrowing (treatment only n=1583)**

Summary	# Of HHs	% Of HHs
Took out loans in 2012	656	41%
Repaid loans by (Oct-Dec)	376	57%
HHs with savings	1454	92%

**Table 33: Proportion of households saving and borrowing (male versus female)**

Summary	Female n=464		Male n=830	
	# Of HHs	% Of HHs	# Of HHs	% Of HHs
Took out loans in 2012	182	39%	367	44%
Repaid loans by (Oct-Dec)	104	57%	214	58%
HHs with savings	429	92%	761	92%

**Table 34: Loan and savings values 2012**

Sample	Mean Value ETB (95% CI)	
	Loans Accessed in 2012	Savings (Oct-Dec) 2012
<b>Treatment only (n=1583)</b>	553 (496, 611)	245 (209, 281)
<b>Female (n=464)</b>	592.2 (480.4, 704.0)	356.6 (272.2, 441.1)
<b>Male (n= 830)</b>	598.3 (514.8, 681.8)	186.8 (151.0, 222.5)

### Notes on Tables 32-34

The results show no significant difference in the (mean) value of loans accessed in 2012 between male and female-headed households although a slightly greater proportion of male-headed households took out loans in 2012. Although the proportion of male and female headed-households with savings is more or less the same, female headed-households had significantly greater savings than male-headed households at the time of the assessment. It should be emphasized that these savings only represent a snapshot of household savings at the time of the assessment – they do not represent annual savings.

Figure 10: Loan sources (treatment only n=1583)

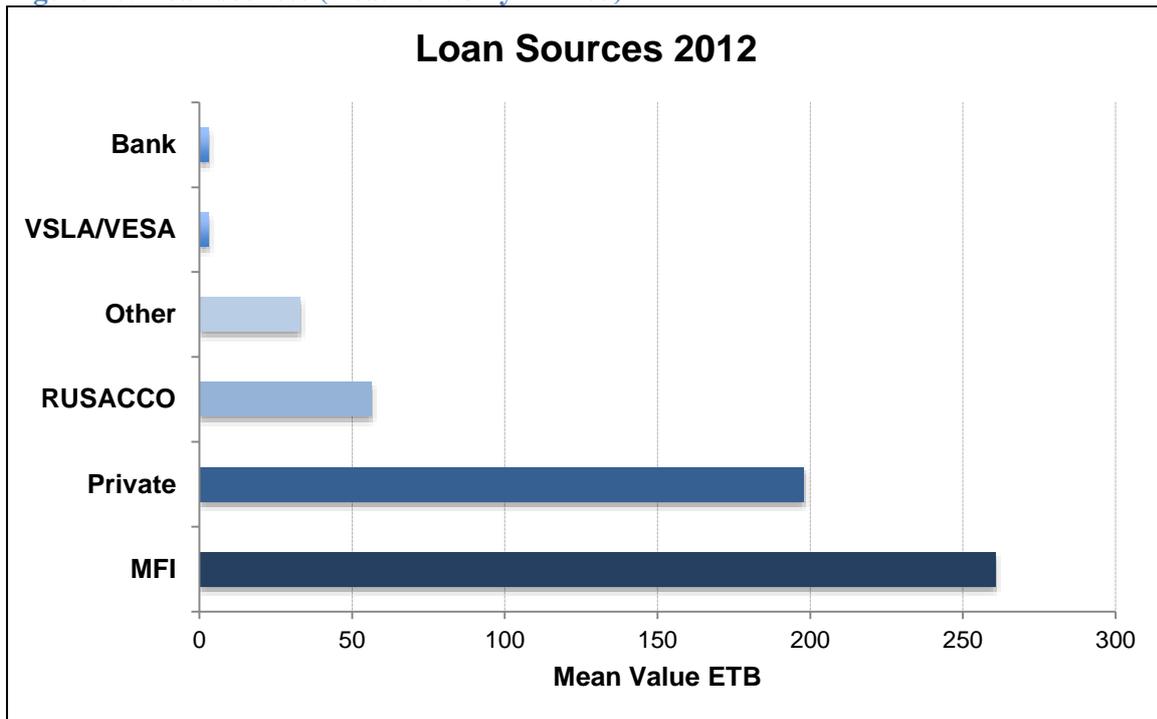


Figure 11: Loan sources (male versus female-headed households)

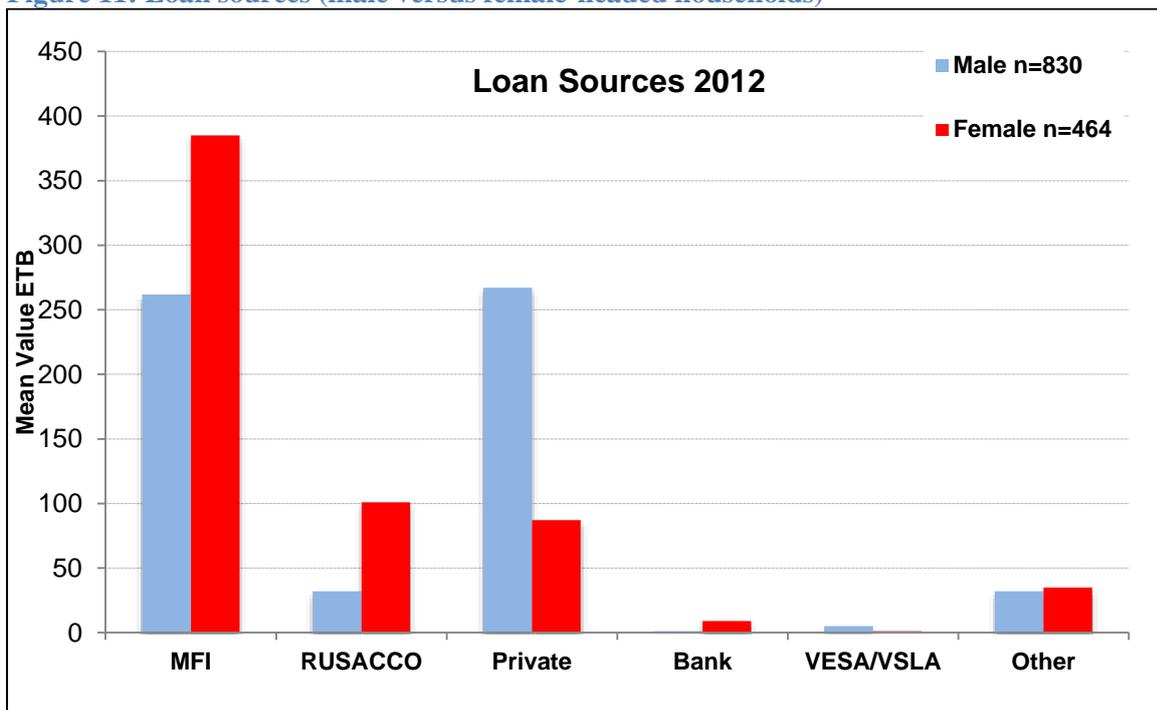


Figure 12: Source of savings (treatment only n=1583)

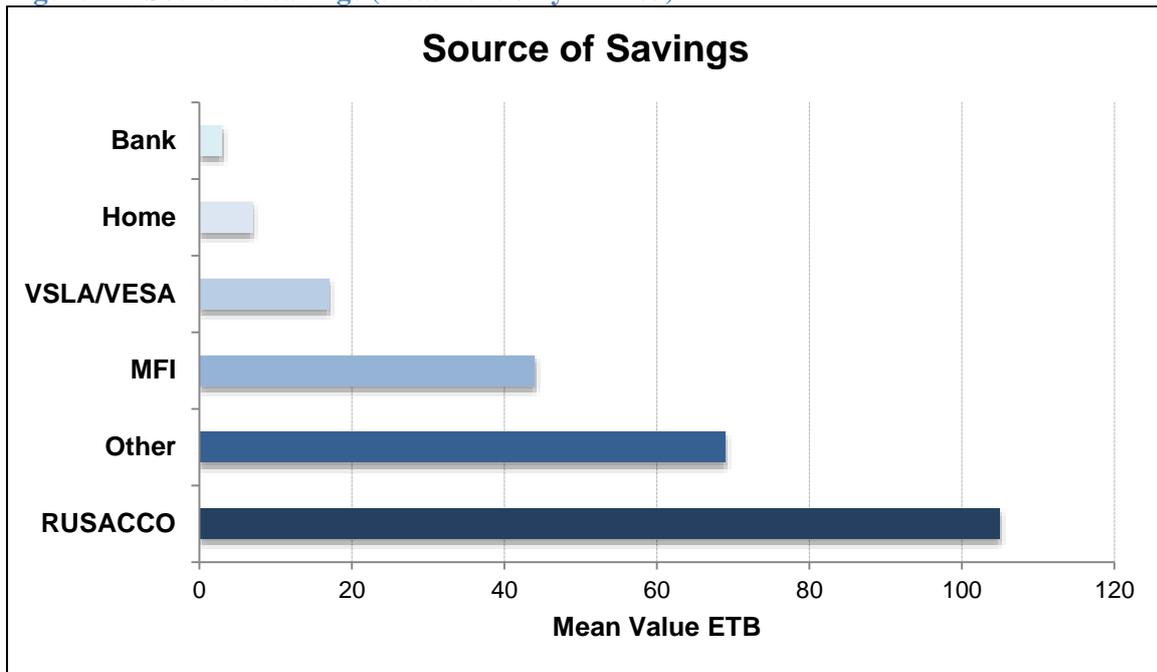
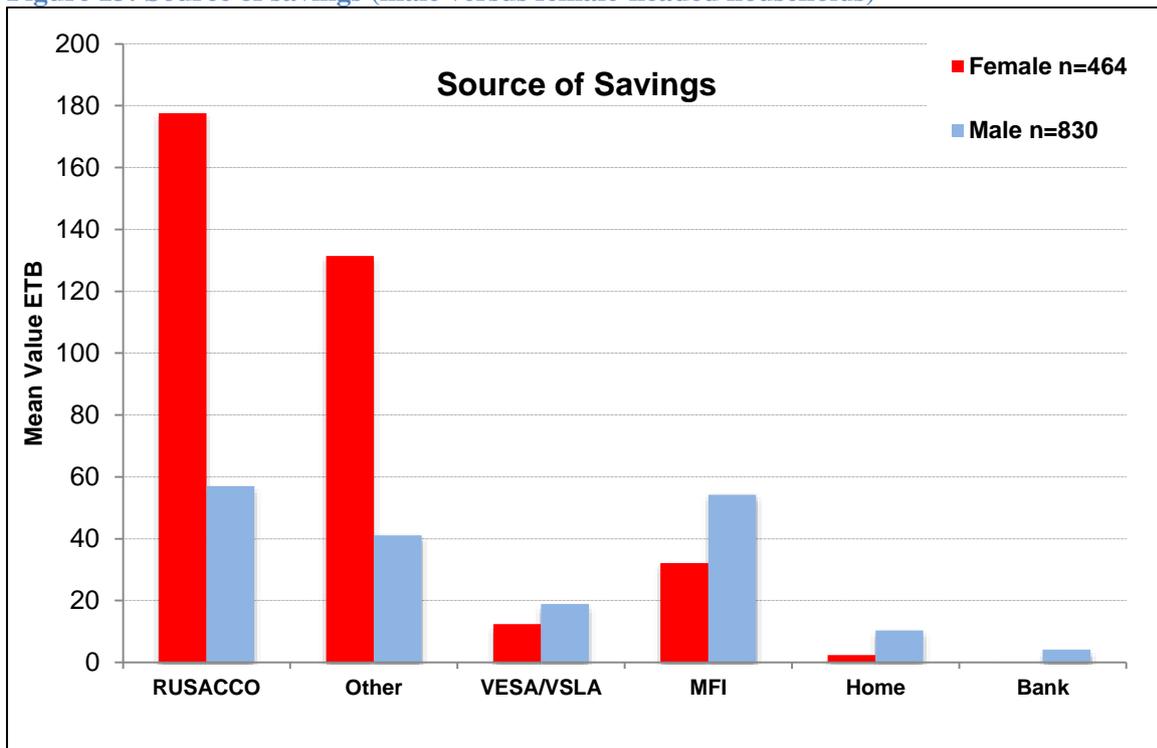


Figure 13: Source of savings (male versus female-headed households)



Key for Figures 12-13

VESA =(Village Economic and Social Association) VSLA = (Village Saving and Lending Association) MFI = (Microfinance Institute) Private = (neighbors/traders/money lenders)

Figure 14: Utilization of loans (treatment only n=1583)

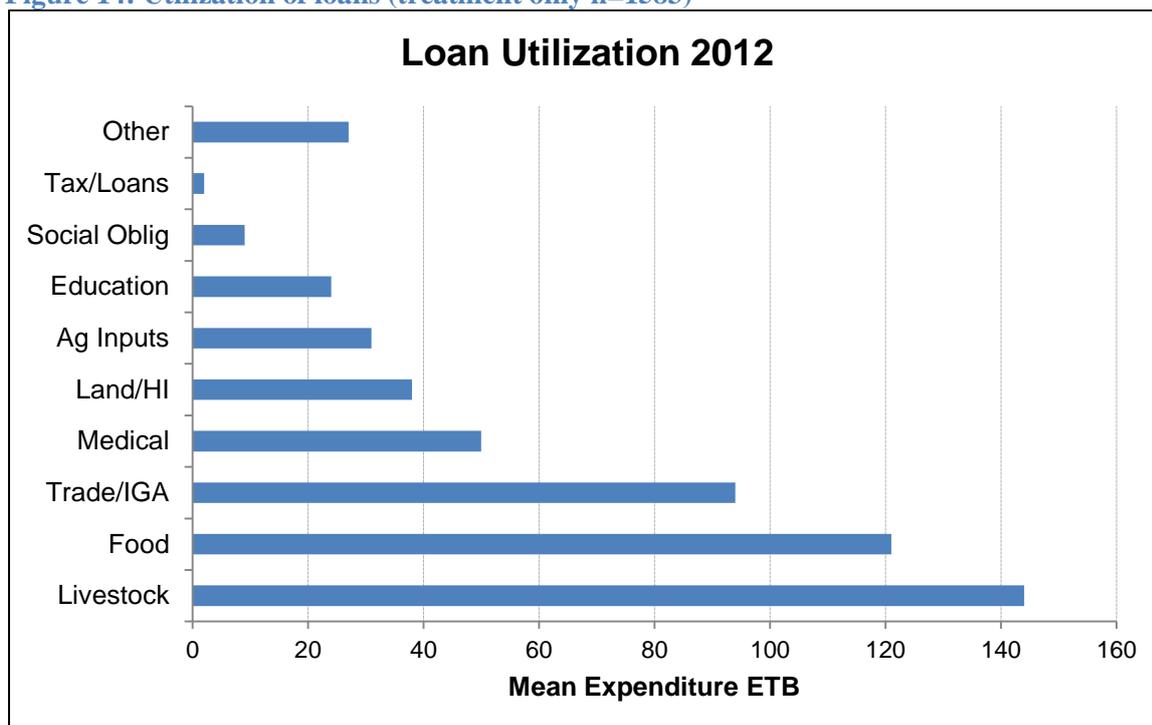
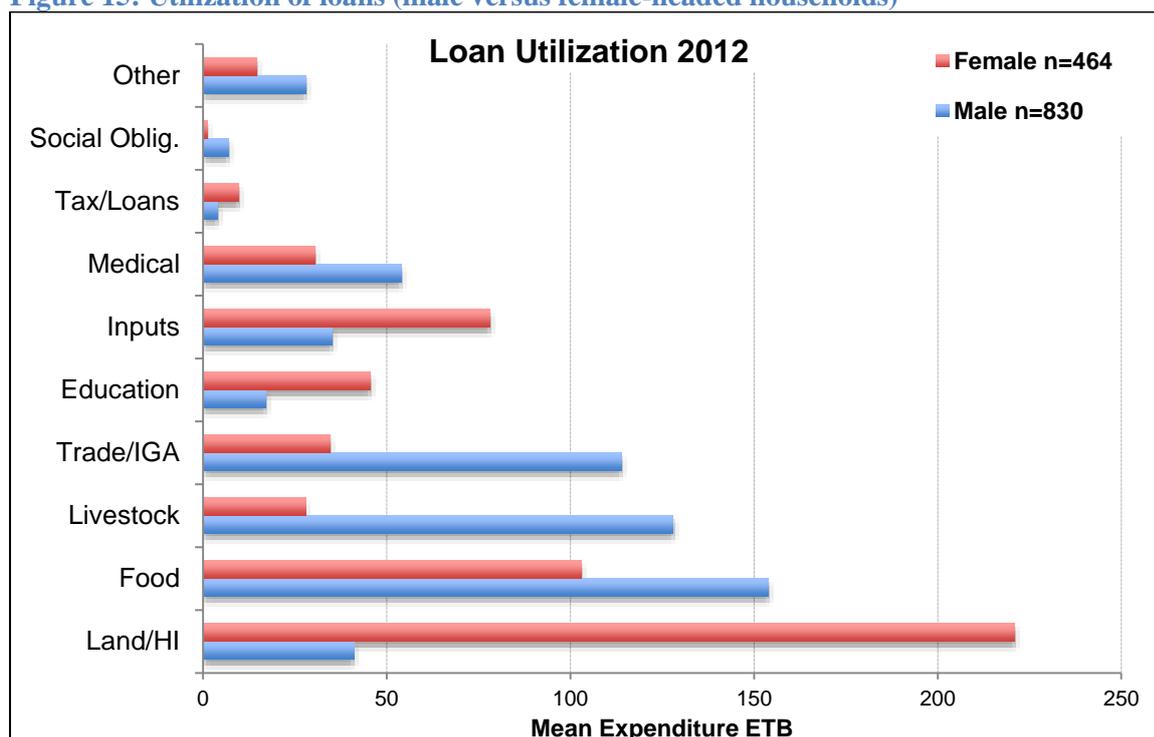


Figure 15: Utilization of loans (male versus female-headed households)



Key for Figures 14-15

Social Oblig. = Social Obligations (weddings/funerals/contributions)

Inputs = Farming inputs

Land/HI = land rent or home construction/improvement

IGA = Income Generating Activity

### 3.9 Training Extension and Adaptation

**Table 35: Training & extension services received in 2012 (treatment only)**

Training/Extension Type (n=1579)	# Received	% Received
Crop Management/Production	943	60%
Livestock Production (animal health/fattening)	712	45%
Financial Literacy	1297	82%
Health/Family Planning	920	58%
Climate change adaptation/conservation	506	32%
Business skills (income generating activities)	114	7%
Value Addition (Marketing)	123	8%
Health/Nutrition (dietary diversity)	147	9%
Poultry Production	33	2%

**Table 36: Training & extension services received in 2012 (male versus female)**

Training/Extension Type	Female n=464		Male n=830	
	# Received	% Received	# Received	% Received
Crop Management/Production	218	47%	541	65%
Livestock Production (animal health/fattening)	231	50%	326	39%
Financial Literacy	442	95%	621	75%
Health/Family Planning	253	55%	483	58%
Climate change adaptation/conservation	128	28%	268	32%
Business skills (income generating activities)	48	10%	48	6%
Value Addition (Marketing)	46	10%	52	6%
Nutrition (dietary diversity)	42	9%	74	9%
Poultry Production	18	4%	10	1%

Key:# = Number of People % = Percentage of study population

**Table 37: Risk reduction practices (treatment only)**

Type of practice applied in the past year (n=1579)	# Applied	% Applied
<b>Agriculture</b> – practices to increase predictability and or productivity of agriculture anticipating climate related variability or shocks	<b>1235</b>	<b>78%</b>
<b>Water</b> – practices or actions to improve water quality, supply and efficient use	<b>786</b>	<b>50%</b>
<b>Health</b> – practices or actions to prevent or control disease incidences and outcomes	<b>1087</b>	<b>69%</b>
<b>Disaster Risk Management</b> – practices or actions to reduce the negative impact of extreme events	<b>677</b>	<b>43%</b>

**Table 38: Risk reduction practices (female-headed-households)**

Type of practice applied in the past year (Female n=464)	# Applied	% Applied
<b>Agriculture</b> – practices to increase predictability and or productivity of agriculture anticipating climate related variability or shocks	<b>331</b>	<b>71%</b>
<b>Water</b> – practices or actions to improve water quality, supply and efficient use	<b>228</b>	<b>49%</b>
<b>Health</b> – practices or actions to prevent or control disease incidences and outcomes	<b>285</b>	<b>61%</b>
<b>Disaster Risk Management</b> – practices or actions to reduce the negative impact of extreme events	<b>187</b>	<b>40%</b>

**Table 39 Risk reduction practices (male-headed-households)**

Type of practice applied in the past year (Male n=830)	# Applied	% Applied
<b>Agriculture</b> – practices to increase predictability and or productivity of agriculture anticipating climate related variability or shocks	<b>690</b>	<b>83%</b>
<b>Water</b> – practices or actions to improve water quality, supply and efficient use	<b>432</b>	<b>52%</b>
<b>Health</b> – practices or actions to prevent or control disease incidences and outcomes	<b>597</b>	<b>72%</b>
<b>Disaster Risk Management</b> – practices or actions to reduce the negative impact of extreme events	<b>395</b>	<b>48%</b>

Notes on Tables 35-39

Table 35-36 shows the number and percentage GRAD study households (treatment) who received training or extension services in 2012 and actually applied this training. This data was collected as GRAD consortium members proposed the availability and quality of training and extension as indicators of resiliency. Tables 37-39 show similar results for the application of risk reduction practices. This exercise was included as the indicators are needed for donor reporting purposes but may also represent a proxy for resiliency.

**3.10 Women’s Empowerment**

**Table 40: Women’s influence over household decision-making**

Decision type		Intervention n=1093	Control n=301
Production Livelihoods	Crop production	60%	67%
	Farming inputs	60%	66%
	Crop sales	70%	78%
	Livestock production	73%	78%
	Livestock sales	64%	71%
	Business/IGA	66%	65%
Financial	Major HH expenditures	75%	80%
	Minor HH expenditures	89%	90%
	Borrowing money	71%	77%
	Lending money	68%	69%
Household	Food & meals	91%	96%
	Children's education	71%	88%
	House construction	83%	82%
	Family planning	84%	84%

Notes on Table 40

Female-headed households were excluded from this exercise, as were male participants in households without a female adult. This was done based on the assumption that female household heads would in most cases have considerable influence over household decisions and female minors would have little (see Annex IV). For each type of decision, participants were asked to give a score between 1-4 representing the amount of influence they perceive women in their household to have as follows:

1= No influence 2 = A little influence 3 = A medium amount of influence 4 = Considerable influence

The results show the proportion (%) of participants that scored the level of influence as medium to considerable (above 2) with the balance (%) representing those that scored the level of influence as little to none (2 or less). The objective of this exercise was to collect a baseline score or value on the influence women have over various decisions. Therefore an increase in the proportion (%) of participants that give a score above two could be considered a proxy for impact during future assessments.

**Table 41: Women’s role and status in the community (focus groups)**

Indicator	HawassaZuria (n=11 FGD)		ZewayDugda (n=17 FGD)		Lay Gayint (n=12 FGD)		EndaMohoni (n=10 FGD)	
	Average Score							
	Male	Female	Male	Female	Male	Female	Male	Female
<i>To what extent do women have a leadership role in the community?</i>	2.3	2.1	3	2.7	2.5	2.5	4.3	4.1
<i>To what extent are women involved in managing community groups or activities?</i>	2.3	2	3.1	2.7	2.5	2.3	4.2	4.3
<i>To what extent can women stand up and express their opinions in public meetings?</i>	2.2	2.1	3	2.6	2.8	2.5	4.3	4.5
<i>To what extent are women’s views/ideas/opinions listened to and acted upon</i>	2.1	1.8	3	2.6	2.8	2.5	4.4	4.5
<i>To what extent do women have control over community resources?</i>	1.9	1.7	2.5	2	2.5	1.6	4.2	4.1

**Scores: 0=none 1=a little 2=some 3=a fair amount 4=a lot 5= same or more than men**

#### Notes on Table 41

The results show perceptions on women’s roles and status in the community across regions. The data was collected from focus groups using simple scoring (see Annex IV). The results show average scores from all focus groups in each region. The regional disaggregation is deliberately presented here to illustrate spatial variations.

## 4. DISCUSSION

### 4.1 Methodological Limitations

There were a number of methodological limitations and constraints to the assessment. One of the major design challenges was trying to meet multiple objectives in terms of trying to test the causal model and collecting additional monitoring and evaluation (M&E) indicators required by the project. In order to do this a hybrid impact assessment design was developed whereby customized impact assessment tools were substituted with a number of standardized M&E tools. Therefore some standard M&E tools that to some extent captured indicators relevant to the impact assessment research questions were selected. These multiple objectives resulted in a trade-off in terms of effectively meeting the impact assessment and M&E objectives. Where resources are limited this approach might be acceptable but it is less than ideal and cannot really be considered good impact assessment practice.

Consistent with this approach, the baseline was used as a vehicle to collect additional M&E data with the understanding that this would be analyzed separately for M&E reporting purposes. One such example was the Poverty Assessment Tool (PAT), which was included in the baseline assessment. In order to accommodate the PAT, the research design team had to reconfigure the entire baseline survey tool in terms of sequencing and questions in order to avoid duplication of questions or what might have been perceived as a repetition of the same questions around similar themes. This proved technically challenging and the inclusion of these types of exercises also added to the length of time required to administer the questionnaire at the expense of excluding more appropriate impact assessment methods.

The results also show significant disparities between the treatment sample and the control for many of the indicators assessed. The classic scientific approach to measuring attribution involves the use of a control population of non-project participants. This approach involves comparing a control group with a “treatment” or “intervention” population to determine statistical difference between the two groups, the assumption being that the control group has similar characteristics as the intervention group (Catley *et al.*, 2008). In designing the research, CARE and the Tufts researchers were reluctant to propose the use of control groups for a variety of methodological and ethical reasons. However, in compliance with donor recommendations it was agreed to include control samples. When it comes to poverty or livelihoods research, the limitation with this approach is that it in no way captures the multiplicity of independent variables or characteristics that make two population groups similar or

indeed truly comparable. Certainly in some contexts fairly reliable controls can be identified and the approach can provide useful comparisons against very specific indicators or benchmarks. However in the context of GRAD, there is a high likelihood of the control group being contaminated over the five-year project period. Either control group participants will be incorporated into GRAD in year two and three or alternatively they will receive similar interventions under the Household Asset Building Program (HABP). For this reason alone, the time and resources allocated to the inclusion of control groups cannot be easily justified.

Secondly, the limited time and resources allocated to the baseline also meant that priority be given to completing the intervention samples in the allocated time. The control group interviews were then done in whatever remaining days were left. The control groups were therefore smaller than desired. The results show that these controls were not reliable for many of the indicators assessed and consideration should be given to dropping the controls from the mid-term and end-line data collection cycles of project assessments.

Resource limitations coupled with the quantity of different indicators being collected meant that a comprehensive consumption survey capturing seasonal expenditure patterns could not be carried out. The study therefore collected data on selected key expenditures in order to minimize recall bias. The results however should not be considered an accurate representation of absolute expenditure (module 4). The methodology did include a participatory tool to compare actual versus relative expenditure with a view to estimating total expenditure but this tool has not been validated and should be considered experimental (Table 3 Module 4 and see also Annex II & III).

## 4.2 Recent Livelihoods Shocks

The results show that almost ninety percent of the overall treatment sample (male and female combined) experienced weather related crop loss in 2012 (Table 3). To a lesser extent crop and livestock disease and idiosyncratic shocks also had an impact on livelihoods resulting in over eighty five percent of the respondents experiencing crop and income loss (Table 4). Over eighty percent of participants reportedly ate smaller meals or reduced the number of meals to cope with these shocks (Table 5). Participants also borrowed money and fifty percent of the participating households sold livestock and other productive assets (Table 5). Fortunately only a few participants employed more detrimental coping strategies such as withdrawing children from school or sending children to work.

## 4.3 Income and Expenditure

The number of income sources is often considered as a useful proxy for resiliency in poor agricultural based communities the assumption being that households with more income streams are typically more resilient than those with only a few sources of income. In the context of rural Ethiopia this makes sense, as a household with diverse income streams is better able to spread the risk of production failure. The results show the number of income sources (mean value) for the treatment and control samples, and for male and female-headed households in 2012 (Tables 9-10). In order to capture income diversification from crop value chains each cash crop type was considered as an independent income source. Over time one would expect an increase in the number of different types of cash crops being sold as a result of GRAD value chain interventions. In absolute terms, the mean number of income sources may be considered as a useful proxy for both resiliency and livelihoods diversification, hence an increase in the number of income sources against the baseline could potentially represent project impact against these indicators. The results indicate that the treatment sample has significantly more income sources than the control sample and that male-headed (treatment) households have significantly more income sources than female-headed households (Tables 9-10).

Consistent with this, the results show male-headed households having significantly higher expenditure than female-headed households in 2012 (Table 13). If we consider expenditure as a useful proxy for

income this would suggest that male-headed households have significantly greater income than female-headed households. Male-headed households also spent more on most items assessed than female-headed households (Figure 3). The results show cereal purchases as the most important expenditures for all categories (male, female, treatment, control) in 2012 followed by clothes purchases (Figures 2-3). Investments in agricultural inputs also represent important expenditures for all study households although the treatment (intervention) sample spent significantly more on these inputs than non-project participants (Figures 2-3). The results show no significant difference in overall expenditure (income) between the treatment sample and the control group (Table 12).

#### 4.4 Assets

The results show no significant differences in land holdings between male and female-headed households or between the treatment sample and the control (Tables 18-19). However, seeing as land can neither be sold nor purchased the utilization of land is probably a more useful indicator of productive capacity. Focus group participants suggested that utilization of land is a good indicator of resiliency as it represents productive capacity in terms of labor, access to draft animals and the ability to rent additional land (Table 8). However, they also mentioned that this would be determined by the size of a household. For example if a large household is cultivating more land than a small household it doesn't necessarily imply greater resiliency as they also have more mouths to feed. However, the results show no significant difference in the amount of land utilized in 2012 between male and female-headed households (Table 19) even though most of the other study indicators suggest that male-headed households are more resilient than their female counterparts.

Focus group participants also equated resiliency with the ownership of draft animals (Table 8) and the results show that male-headed households have significantly more plow oxen and plow sets than female-headed households (Figures 5&7). The results also show that male-headed households have significantly more of all livestock types than the female sample (Figure 5). Male-headed households also have significantly more productive assets than the female sample as well as certain types of household items such as flashlights, blankets and furniture (Figures 7&9). The results also show the treatment sample having significantly more cattle and equines than the control sample, as well as plow sets, most types of farm tools, mobile phones and flashlights (Figures 4, 6&8).

Focus group participants identified land utilization, livestock ownership (particularly draft animals) as key indicators for resiliency and as benchmarks for PSNP graduation (Table 8). Although, the results clearly show that male-headed households have more assets than female-headed households, a slightly greater proportion of female (treatment) participants showed a greater willingness to graduate from the PSNP than their male counterparts (Table 21).

#### 4.5 Food Security and Nutrition

The results show the temporal dimensions of food security for GRAD study participants during the last production year and indicate that both male-headed households and the overall treatment sample experienced three months of food insecurity from June to August 2012 (Tables 22&24). The results show that female-headed households experienced four months food insecurity from June to September 2012 (Table 23). Focus group participants suggested that the duration of food security was a good indication of resiliency and that households that are food secure for twelve months should graduate from the PSNP (Table 8). Although these results suggest that male-headed households are more resilient than female-headed households, interestingly, female households had a slightly higher dietary diversity score than male households although the difference is fairly negligible (Tables 27-28). On the other hand, male-headed households scored better on the household hunger scale with less than five percent experiencing severe to moderate hunger in the month prior to the assessment in contrast to fourteen percent of the female headed households (Tables 30-31).

## 4.6 Credit and Savings

The results show that project participants borrowed between 550- 600 Ethiopian *birr* in 2012 (mean value) with no significant difference between male and female-headed households (Table 34). The majority of these loans came from Microfinance Institutes (MFI) and private sources although a considerable portion also came from RUSACCOs, particularly for female-headed households (Figures 10&11).

Household utilization of cash derived from loans is summarized in Figures 14 and 15 and shows investments in livestock, income generating activities, land and farming inputs. Loans were also used for food purchases, medical expenses and investments in education. The most important use of loans for female headed households was for investments in land (renting) which may explain why the results show this group cultivating more land than they actually own (Figure 15 & Table 19). The second most important use of loans for female-headed households was for food purchases followed by investments in agricultural inputs (Figure 15). The most important loan usage for men was for food purchases followed by investments in livestock and trade or income generating activities (Figure 15). Female household heads also spent more on education than their male counterparts using these loans (Figure 15). The results show that 41% of the treatment sample took out loans in 2012 (Table 32). A slightly higher proportion (44%) of male-headed households took out loans in 2012 compared to female-headed households (39%) and almost sixty percent of all loans (treatment, male, female) had been repaid with interest at the time of the assessment (Tables 32-33).

At the time of the assessment, mean household savings were estimated at 245 Ethiopian *birr* for the treatment sample as a whole, 187 *birr* for male-headed households and 357 *birr* for female-headed households (Table 34). The largest portion of these savings was held in RUSACCOs for female-headed households and MFI's for male-headed households (Figure 13). The results show that ninety-two percent of GRAD study participants from all sample categories had household savings at the time of the assessment (Table 32).

## 4.7 Application of Training and Risk Reduction Practices

An estimated sixty-five percent of male-headed households received training in crop production and applied this training during the 12 months prior to the assessment as opposed to forty seven percent of female participants (Table 36). Conversely, fifty percent of female headed-households received and applied training in livestock production as opposed to thirty-nine percent of male-headed households (Table 36). Ninety-five percent of female participants and seventy-five percent of male participants received and applied training in financial literacy in the year preceding the assessment and only nine percent of all participants received and applied training in nutrition or dietary diversity (Table 36). The results also indicate that seventy-one percent of female-headed households and eighty-three percent of male-headed households received and applied training in agricultural risk reduction practices (Tables 38-39). Participants also received and applied training in health; water and disaster risk reduction practices although to a lesser extent (Tables 38-39).

## 4.8 Women's Empowerment

The results show that women were generally perceived to have a medium to a considerable amount of influence over financial and household decisions. However, forty percent of project participants indicated that women had little to no influence over decisions relating to crop production and farming inputs (Table 40). Similarly, thirty six percent of study participants suggested that women had little to no influence over livestock sales and thirty-four percent felt the same about decisions pertaining to business and income generating activities (Table 40). It should be noted that these results do not reflect the views of female-headed households. The results from focus group discussions also showed considerable spatial variations in women's influence and status against a different set of indicators.

For example, in Endamehoni, focus group participants gave a much higher score than other areas for all indicators assessed (Table 41). In most cases, male focus group participants typically perceived women to have more influence than the female participants felt they had. Again the exception to this was in Endamehoni where women felt they had more influence on three of the five indicators assessed than their male counterparts perceived them to have (Table 41). The research team speculated that these spatial differences might be attributed to the fact that there are more widows in Tigray as a result of the conflict, and the relative proportion of female headed-households has translated into greater influence for women than in other areas. This is partly supported by the fact that 83% of the original female treatment sample in Tigray was household-heads in comparison to 39%-64% in the other three regions.

## 5.CONCLUSIONS

The key findings from the baseline study are as follows:

14. Participants (all treatment households) in all four-study areas experienced a variety of livelihoods shocks in 2012. The most frequently reported shock was weather related crop loss with 87% of participants being affected. The results also show an estimated 45% of participants experiencing disease or pest related crop loss in 2012.
15. Other livelihoods shocks included idiosyncratic shocks such as human illness or the death of a household member with 45% of study households experiencing one of these two types of shock in 2012. Only 27% of households experienced livestock disease or mortality during the same period.
16. Over 85% of participants (all treatment households) experienced crop and income loss as a result of different types of shocks in 2012. The results show that 79% of participants experienced food shortages and a similar proportion of households reduced both the size and frequency of meals to cope with these shortages.
17. The results show that 50% of study households (treatment) sold livestock and other productive assets to cope with food and income losses in 2012. Over one third of participants reported employing other coping strategies such as borrowing money and engaging in labor activities.
18. The mean number of income sources for project participants was estimated at 4.6 and ranged from 3.9-5.2 for female and male-headed households respectively. Estimated (mean) expenditure on key items that will be used as a proxy baseline measure for income ranged from 6,105 Ethiopian *birr* for female participants and 8,084 Ethiopian *birr* for male participants, or 7,231 *birr* for all treatment households combined. There was no significant difference in total (mean) expenditure between the treatment and control sample and this probably represents the most useful indicator against which to assess attribution during the midterm and final impact studies. Having said this, the treatment sample appear be more resilient than the control against most of the other indicators measured suggesting that the control is not all that reliable.
19. The results show that male-headed households have significantly more income sources and significantly higher expenditure (*income*) than female-headed households in 2012. The most important expenditure for project participants in 2012 was grain purchases followed by clothes purchases and investments in agricultural inputs.
20. The results show no major differences in land holdings between male and female-headed households or between the treatment and control. However, male headed-households had significantly more livestock holdings and productive assets than their female counterparts. More specifically, male-headed households had more draft animals and plow sets than female headed-households, these being key resiliency indicators and community defined benchmarks for

graduation. The results also show male-headed households having more furniture, flashlights and blankets than female-headed households. Nonetheless, although asset levels are considered important benchmarks for PSNP graduation, the results suggest that female-headed households are at least, if not more willing to graduate than their male counterparts.

21. The results show that on average, male-headed households experienced nine months of food security between October 2011-September 2012 whereas female-headed households only experienced eight months food security during the same period. Consistent with this, fewer male-headed households reported experiencing hunger during the month prior to the assessment than female-headed households. Overall the results indicate that male-headed households are more food secure than their female counterparts although female-headed households appear to have a slightly more diverse diet than male-headed households.
22. The mean value of loans accessed in 2012 was estimated at 592 Ethiopian *birr* for female-headed households and 598 Ethiopian *birr* for male-headed households with no significant difference between these two groups. The majority of these loans were sourced through private credit providers and Microfinance Institutes and 39% and 44% of female and male-headed households respectively, took out loans in 2012. At the time of the assessment between 57-58% of participants had repaid these loans with the interest.
23. These loans were utilized in a variety of ways. Male headed-households spent more on food and livestock purchases and investments in income generating activities than female-headed households. Female-headed households spent more on land (renting) and agricultural inputs than their male counterparts although food purchases were the second most important use of loans for both groups.
24. The results show that 92% of all GRAD study households (treatment, female and male-headed) had savings at the time of the assessment. However, the results show that female headed-households had significantly more savings than male-headed-households with mean household savings being estimated at 357 Ethiopian *birr* and 187 *birr* for female and male participants respectively.
25. Across all study areas women were generally perceived to have a medium to a considerable amount of influence over financial and household decisions. However, 40% of participants from this exercise indicated that women had little to no influence over decisions relating to crop production and farming inputs. Similarly, 36% of participants suggested that women had little to no influence over livestock sales and 34% felt the same about decisions pertaining to business and income generating activities. It should be noted that these results do not reflect the views of female-headed households.
26. Based on food security duration, or the number of months household food needs met without the need for external assistance, the results suggest that less than 2% of study households (treatment) belong to the food secure category described in the projects causal model and less than 8% could be classified as food sufficient. In comparing household-heads, the results show that 61% of female headed households fall into the chronically food insecure and ultra poor categories as opposed to 45% of male headed households. Again, these results support the notion that female-headed households are less resilient than male-headed households.

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## Annex I Value Chain Production and Income

	N=1579	Endamohoni		HawassaZuria		Lay Gayint		ZewayDugda		Total #/Kg	Tons	Income	Income
		Kg/# Sold	Income ETB	Sold	(MT)	ETB	USD						
All Value Chains	<b>Livestock #</b>	# Sold	Income ETB										
	Cattle	40	122720	54	218860	26	94450	40	207600	160	NA	643630	37247.1
	Goats	27	14450	0	0	7	6550	33	19060	67	NA	40060	2318.3
	Sheep	77	56105	0	0	29	23800	52	38190	158	NA	118095	6834.2
	<b>Subtotal Livestock</b>									<b>385</b>	<b>0</b>	<b>801785</b>	<b>46399.6</b>
	<b>Crops/Other Kg</b>	<i>Kg Sold</i>	<i>Income ETB</i>	<i>Sold</i>	<i>Tons</i>	<i>ETB</i>	<i>USD</i>						
	Honey	872	7180	0	0	0	0	0	0	872	0.9	7180	415.5
	Malt Barley	0	0	0	0	900	6725	0	0	900	0.9	6725	389.2
	Beans/pulses	1030	11190	21829	126867	3984	17924	8190	40585	35033	35.0	196566	11375.3
	Potatoes	7810	30230	11375	24445	27950	21853	1700	7250	48835	48.8	83778	4848.3
	Carrots	13370	12201	5525	8750	0	0	0	0	18895	18.9	20951	1212.4
	Cabbage	11840	18087	0	0	0	0	0	0	11840	11.8	18087	1046.7
	Tomatoes	0	0	100	250	0	0	2850	13350	2950	3.0	13600	787.0
	Onions	0	0	490	3630	0	0	4060	29950	4550	4.6	33580	1943.3
	Peppers	0	0	15340	194651	0	0	0	0	15340	15.3	194651	11264.5
	Other	979	5090	0	0	813	8781	2930	14300	4722	4.7	28171	1630.3
<b>Subtotal Crops</b>									<b>143937</b>	<b>143.937</b>	<b>603289</b>	<b>34912.6</b>	
<b>Total</b>									<b>NA</b>	<b>143.937</b>	<b>1405074</b>	<b>81312.2</b>	

GRAD Value Chains Only	Livestock #	# Sold	Income ETB	Sold	Tons	ETB	USD						
	Cattle	40	122720	0	0	0	0	0	0	40	NA	122720	7101.9
	Goats	27	14450	0	0	7	6550	33	19060	67	NA	40060	2318.3

Sheep	77	56105	0	0	29	23800	52	38190	158	NA	118095	6834.2
<b>Subtotal Livestock</b>									<b>265</b>	<b>0</b>	<b>280875</b>	<b>16254.3</b>
<b>Crops/Other Kg</b>	<i>Kg Sold</i>	<i>Income ETB</i>	<i>Sold</i>	<i>Tons</i>	<i>ETB</i>	<i>USD</i>						
Honey	872	7180	0	0	0	0	0	0	872	0.9	7180	415.5
Malt Barley	0	0	0	0	900	6725	0	0	900	0.9	6725	389.2
Beans/pulses	1030	11190	0	0	3984	17924	8190	40585	13204	13.2	69699	4033.5
Potatoes	7810	30230	11375	24445	27950	21853	0	0	47135	47.1	76528	4428.7
Carrots	0	0	0	0	0	0	0	0	0	0.0	0	0.0
Cabbage	0	0	0	0	0	0	0	0	0	0.0	0	0.0
Tomatoes	0	0	0	0	0	0	2850	13350	2850	2.9	13350	772.6
Onions	0	0	490	3630	0	0	4060	29950	4550	4.6	33580	1943.3
Peppers	0	0	15340	194651	0	0	0	0	15340	15.3	194651	11264.5
Other	0	0	0	0	0	0	0	0	0	0.0	0	0
<b>Subtotal crops</b>									<b>84851</b>	<b>84.851</b>	<b>401713</b>	<b>23247.3</b>
<b>Total</b>									<b>NA</b>	<b>84.851</b>	<b>682588</b>	<b>39501.6</b>

### Annex II Relative Expenditure (mean score)

Study Area	Quantified															Estimated	
	Land	Farm Inputs	Livestock	Livestock Inputs	Investments IGA	Education	Health	Clothes	Home Impr	HH Items	Social Oblig	Water Transport	Loan Debt	Other Non Food	Cereals	Other Food	Other
Endamohoni n=401	1	11	3	3	1	7	3	14	2	4	6	3	4	4	18	13	2
HawassaZuria n=343	2	12	3	2	5	8	5	13	4	4	11	6	4	3	9	8	0
Lay Gayint n=383	0	9	2	2	2	6	5	15	2	3	10	1	6	5	18	13	0
ZewayDugda n=452	2	10	3	1	3	8	7	12	2	2	9	4	5	4	17	10	0

Method: Proportional Scoring using 100 counters

### Annex III Adjusted expenditure estimates based on a comparison of actual and relative expenditure

	Endamohoni		HawassaZuria		Lay Gayint		ZewayDugda	
	Female	Male	Female	Male	Female	Male	Female	Male
Actual expenditure (mean value ETB)	6870.3	7593.9	8998.4	11086.3	3731.2	4814.4	6650.6	8511.3
Estimated % of total expenditure	85%		92%		87%		90%	
Adjusted expenditure ETB	8082.7	8934.0	9780.9	12050.3	4288.7	5533.8	7389.6	9457.0
Estimated expenditure \$ US	467.7	517.0	566.0	697.4	248.2	320.2	427.6	547.3

### Annex IV: Aggregated results for specific indicators

Indicator	Treatment (n=1583)
Average number of income sources	4.6
Mean expenditure (ETB) on key items (2012)	7231 ETB
Mean expenditure (\$ US) on key items (2012)	418 \$ US
Average value (\$ US) of HH assets	858.2 \$ US
# of HHs willing to graduate in 2 years	494
% of HHs willing to graduate in 2 years	31%

### Annex V: Household Hunger Scale

Household Hunger Category	n=1581	Percentage
Little to no hunger in the household	1465	92.6%
Moderate hunger in the household	107	6.6%
Severe hunger in the household	9	0.5%

## Annex VI: Proposed themes and indicators for GRAD impact study

Theme	Indicators	Description	Type
Food Security & Nutrition	Food Availability/Duration	# months Household (HH) food needs met Grain surplus	GoE/HABP
	Nutritional Status	HH dietary diversity	USAID/FtF
	Food Security/Nutrition	HH Hunger scale	USAID/FtF
	PSNP Graduation	# HHs, graduated	GoE/PSNP
	Asset levels	Land/Livestock/Tools	GoE PSNP
	Income	Expenditure as a proxy for income	USAID/FtF
Income & Assets	Income	Expenditure as a proxy for income Actual project derived income	USAID/FtF GRAD
	Income diversification	# of different income sources	USAID/FtF
	Assets	Number/type & value of HH assets	GoE/PSNP
Resiliency	Food Availability	12 months food security + 3 months surplus	GoE
	HH savings	Amount of HH savings (annual)	USAID/FtF
	Ability to cope with shocks	Reduction in coping strategies during shock events Availability/utilization/quality of extension services	USAID/GRAD
	Participation in microfinance & Income Generating Activities	Increase in the # or % and size of loans accessed (average or mean) Utilization of credit/loans	USAID/GRAD
	Assets	Increase in HH assets	GoE/PSNP
Women's Empowerment	Decision making	On issues around livelihoods and agricultural production Financial decisions (expenditure/credit) HH decisions (food/education etc.)	USAID/FtF
Additional or Complementary	Poverty (scorecard)	% people living below poverty line	USAID
	HH Dependency ratio	Ratio of working adults to total HH size	CARE
	Risk Management Practices	# of stakeholders implementing risk reduction practices disaggregated by type (agriculture/health/water/DRM)	USAID/FtF

## Annex VII: Information type by study tool and indicator

Tool/Result	Indicator/Objective
<ul style="list-style-type: none"> <li>Recent livelihoods shocks</li> <li>Impact of recent shocks</li> <li>Coping strategies employed in response to recent shock</li> </ul>	<p>Data collected with the treatment sample only, the objective of contextualizing the GRAD project in terms of livelihoods shocks and the severity of these shocks. These exercises also collected data on the number of households selling productive assets as the project is required to report this FtF indicator</p>
<ul style="list-style-type: none"> <li>Community wealth breakdown and wealth characteristics</li> <li>Food security duration by wealth groups</li> <li>Resiliency and graduation indicators</li> </ul>	<p>Data collected from focus groups with a view to identifying characteristics of households belonging to the different food security categories defined in the causal model. The objective of these exercises is to be able to estimate the proportion of households belonging to each category in order to test upward mobility during future assessments. The exercises on graduation and resiliency were used to collect community defined indicators for resiliency and graduation which may provide useful impact indicators for future assessments</p>
<ul style="list-style-type: none"> <li>Number of income sources</li> <li>Relative importance of crop based income sources</li> </ul>	<p>This is a FtF indicator, with an increase in income sources representing livelihoods diversification and resilience. The relative importance of crop based income sources was done to capture an increase in cash crop income sources in anticipation that this will increase as a result of GRAD value chain interventions</p>
<ul style="list-style-type: none"> <li>Household expenditure</li> </ul>	<p>This is an FtF indicator – with household expenditure being a proxy for actual income. A significant increase in total expenditure would therefore represent a significant increase in income. The project aims to increase household income by at least \$ 365 so an increase in expenditure of \$ 365 would suggest that the project has achieved this objective</p>
<ul style="list-style-type: none"> <li>Value chain sales and income</li> </ul>	<p>This is a FtF indicator – the project needs to report on how many metric tons of each value chain product has been sold and the income from this in \$ US</p>
<ul style="list-style-type: none"> <li>Land holding</li> <li>Livestock holdings</li> <li>Productive assets</li> <li>Household assets</li> </ul>	<p>Asset holdings are used as benchmarks for PSNP graduation and are considered by many as a more reliable indicator of resiliency than income or expenditure (see Carter &amp; Barrett 2006). A significant change asset ownership would therefore represent impact and validate the causal model. Not only are assets a Government indicator but FtF also requires the project to report on the total value of assets</p>
<ul style="list-style-type: none"> <li>Number and percentage of households willing to graduate</li> </ul>	<p>This is a GRAD project indicator. One of the objectives of GRAD is to improve people’s aspirations to graduate from the PSNP. An increase in the proportion of households willing to graduate would represent achievement against this objective.</p>
<ul style="list-style-type: none"> <li>Food security calendar</li> <li>Number of people falling into different food security categories</li> </ul>	<p>The number of months food security is a Government (PSNP) indicator and a GRAD causal model indicator. Households that are food secure and can withstand mild shocks are considered food secure and are eligible to graduate from the PSNP. The government defines these as households that are food secure for 12 months and have a 3 months surplus of grains over and above the 12 months (15 months food security). Therefore, a significant increase in the number of people falling into this category is arguably the key impact indicator for GRAD. In concert with the focus group data, this information also allows for analysis that would categorize study participants into the different food security groups defined in the causal model which would allow for a more nuanced assessment of upward mobility against the causal model.</p>
<ul style="list-style-type: none"> <li>Household dietary diversity score</li> <li>Household hunger scale</li> </ul>	<p>These are USAID tools to collect indicators on food security and nutrition to complement the food security calendar. Positive changes against these indicators would further validate project impact on household food security and nutrition.</p>
<ul style="list-style-type: none"> <li>Loan sources</li> </ul>	<p>These are GRAD indicators. GRAD consortium members identified savings and loans as key indicators of resiliency. An increase in the</p>

<ul style="list-style-type: none"> <li>• Source of savings</li> <li>• Loan and savings values</li> <li>• Proportion of households saving and borrowing</li> <li>• Loan utilization</li> </ul>	<p>value of savings and loans or in the number/proportion of people taking out loans would therefore improved resiliency. The utilization of loans shows investments in livelihoods assets and is generally considered a more useful impact indicator than just the number of people taking out loans. Data on credit and savings sources could also demonstrate where the project is achieving its objectives of linking people to formal microfinance or RUSACCOs</p>
<ul style="list-style-type: none"> <li>• Training and extension services received</li> </ul>	<p>This is another GRAD indicator of resiliency identified by consortium members. It shows the number of people who received various types of training. For example, if the project aims to improve dietary diversity, you might expect an increase in the number of people who received training in nutrition or dietary diversity. This indicator would have a shelf life (midterm assessment) as training activities would be scaled back over time</p>
<ul style="list-style-type: none"> <li>• Risk reduction practices</li> </ul>	<p>This is aFtF indicator collected for project reporting purposes. The indicator could also be a proxy for resiliency</p>
<ul style="list-style-type: none"> <li>• Women's influence over household decision making</li> <li>• Women's role and status in the community (focus groups)</li> </ul>	<p>These are GRAD indicators. An increase in the number/proportion of people assigning a higher score to the influence women have over various decisions would represent an improvement in women's resiliency (GRAD proxy indicator)</p>

## Annex VIII: Project results indicators collected through the baseline

Indicator Title	Reference Table in the Report
<b>Strategic Objective: Chronically food insecure households graduate from food support</b>	
<b>Graduation:</b> # of GRAD Supported beneficiary graduating from PSNP.	Table 20: Number and percentage of households willing to graduate
<b>Income:</b> Income/expenditure per HH	Table 12: Mean Expenditure
<b>Poverty:</b> % of the target population living in poverty (i.e. less than 1.25 USD per day)	<i>Collected but analyzed by CARE</i>
<b>Equity:</b> % of men and women reporting meaningful participation of women in decision making regarding productive resources and income and increased access to productive resources.	Table 40: Women's influence over household decision- making
<b>Result 1: Enhanced livelihood options for chronically food insecure households</b>	
1.1 Average number of Income sources of vulnerable households receiving USG assistance	Table 9: Number of income sources
1.1.1 Value of incremental sales (collected at Farm level) attributed to GRAD implementation	Table 15: GRAD value chain sales and income
1.2.6 Average value of assets of GRAD supported households	Annex IV: Aggregated results for specific indicators
1.3.4 Number of individuals who have received USG supported short-term agricultural sector productivity or food security training	Table 35: Training & extension services received in 2012
<b>Result #2: Improved community and household resilience</b>	
2.1. % of HH with moderate or severe hunger	Table 29: Household hunger scale
2.2% Percent of USG supported PSNP households selling productive assets during periods of shock	Table 5: Coping strategies employed in response to recent shocks
2.1.1. # of HHs trained in dietary diversity practices	Table 35: Training & extension services received in 2012
2.1.3 <i>Number of people trained in child health and nutrition through USG- supported programs</i>	<i>Table 35: Training &amp; extension services received in 2012</i>
2.2.1 Number of stakeholders implementing risk-reducing practices/actions to improve resilience to climate change as a result of GRAD assistance	Table 37: Risk reduction practices
2.2.2 Number and type of climate change adaptation practices adopted and implemented.	Table 37: Risk reduction practices
2.3.1. % of women and men reporting increase in women's influence over HH decision making	Table 40: Women's influence over household decision making
2.4.1.# of GRAD participants showing readiness and commitment to graduate within an expressed timeframe	Table 20: Number and percentage of households willing to graduate

Note: Italicized indicators may only be partially collected and absolute numbers apply only to the study sample

## Annex IX BASELINE ASSESSMENT HOUSEHOLD SURVEY CHECKLIST – GRAD

Registered Name of Household (GRAD) \_\_\_\_\_ Questionnaire # \_\_\_\_\_

Name of Interviewer \_\_\_\_\_ Day: \_\_\_\_\_ Month: \_\_\_\_\_ Year 2012

<b>Region</b>	
<b>Woreda</b>	
<b>Peasant Association (Kebele)</b>	
<b>Village/Cluster</b>	

### 1. Household Socio Demographics

		<i>(Enter number or Circle Appropriate Box)</i>						
A	Respondents Name							
B	Gender ( <i>respondent</i> )	Female			Male			
C	Age ( <i>respondent</i> )	Yrs						
D	Marital Status ( <i>respondent</i> )	Never married	Currently married	Divorced	Separated	Widowed		
E	Literacy ( <i>Can s/he read &amp; write?</i> )					No	YES	
F	Number of Household (HH) members							
G	Number of literate HH members over the age of 16 ( <i>who can read &amp; write</i> )							
H	Respondents Relationship to HH head	Head	Spouse	Child	Parent	Grandchild	Grandparent	Other

*If the respondent is also the Head of the household skip to section 2*

I	Name of HH head						
J	Age and Gender of HH head	Female	Male	AgeYrs			
K	Marital Status HH head	Never married	Currently married	Divorced	Separated	Widowed	

### 2. PSNP and GRAD Participation

A	Number of (active) working adults in the HH	
B	Is your HH participating in the PSNP?	
C	How many years has your HH been participating in the PSNP?	
D	How many years do you expect it will take for you to graduate from the PSNP?	

E. Which of the following GRAD value chains is your HH registered/participating in?

*Circle all that apply (adapt to study area)*

Fattening( <i>specify</i> )	Pulses	Fruit
Honey	Cereals	Vegetables

### 3. Livelihoods Shocks

- a. In the past year, has your household experienced any food or income related shocks, and if so what type shock did you experience?

Shock/Event	(1=Yes 0=No)
Weather related crop loss (drought rain failure, flood etc.)	
Disease or pest related crop loss ( <i>specify</i> )	
Livestock disease or mortality	
Other unexpected shock (human illness, death etc.)	

b. If any shocks were experienced, ask the participant what impact these shocks had on their livelihoods?

Impact/Outcome	(1=Yes 0=No)
Crop Loss	
Income Loss	
Livestock Loss (mortality & stress sales)	
Food Shortage	
Livestock Feed Shortage	
Labor Loss/shortage	
Other ( <i>specify</i> )	

c. If applicable, ask the participant what strategies his or her household employed to cope with the impact of these shocks?

Coping Strategies	(1=Yes 0=No)	(1=Yes 0=No)	
Reduced the number of meals		Collected/sold firewood or charcoal	
Ate less (smaller portions)		Sent children to stay with relatives	
Borrowed food or money		Withdrew children from school	
Sold livestock or other productive assets		Sent children to work	
Engaged in labor activities		Household members migrated to find work	
Other ( <i>specify</i> )			

#### 4. Household Expenditure

a. In the past 12 months – how much did your Household(HH) spend on the following items? (*Indicators 1-15 only –if nothing put zero*)

	Major Expenditures	ETB
1	Land renting	
2	Farming inputs ( <i>seeds/fertilizers/pesticides/tools</i> )	
3	Livestock or poultry purchases	
4	Livestock inputs ( <i>livestock feed/water/vaccines/treatments etc.</i> )	
5	Investments in other production/income generating activities ( <i>eg beehives</i> )	
6	Education/schooling ( <i>fees/uniforms/rent/transport</i> )	
7	Health/medical expenditures	
8	Clothes ( <i>including shoes/blankets/gabis etc.</i> )	
9	Home improvements ( <i>construction</i> )	
10	Household Items ( <i>furniture/cooking utensils</i> )	
11	Social obligations/ceremonies ( <i>weddings/funerals/iddir –other contributions</i> )	
13	Water & Transportation	
14	Loan or debt repayment	

1	Other major non food expenses over 100 Birr (specify)	
5		
<b>TOTAL</b>		<b>ETB</b>

2 In the past 12 months – what proportion of your total HH expenditure was used on the following items? (1-18) Method: Proportional Piling using 100 counters

	<b>Major Expenditures</b>	<b>Score</b>
1	Land renting	
2	Farming inputs (seeds/fertilizers/pesticides/tools)	
3	Livestock or poultry purchases	
4	Livestock inputs (livestock feed/water/vaccines/treatments etc.)	
5	Investments in other production/income generating activities (eg beehives)	
6	Education/schooling (fees/uniforms/rent/transport)	
7	Health/medical expenditures	
8	Clothes (including shoes/blankets/gabis etc.)	
9	Home improvements (construction)	
10	Household Items (furniture/cooking utensils)	
11	Social obligations/ceremonies (weddings/funerals/iddir –other contributions)	
13	Water & Transportation	
14	Loan or debt repayment	
15	Other major non food expenses over 100 Birr (specify)	
16	Cereals for consumption (teff/sorghum/wheat/maize/barley/rice etc.)	
17	All other food items (meat/fruit/vegetables/oil/salt/sugar etc.)	
18	Other (specify)	
<b>TOTAL</b>		<b>100</b>

## 5. Income Sources

### 5.1 Crop Sales

Ask the respondent to list each type of crop that they produced and sold last year. Only include crops that were sold for cash income. List each crop mentioned in the table below and count the total number of different crops sold.

Total # of different crops sold		

### 5.2 Other Income Sources

2 Now ask the respondent if there any other activities carried out by household members that have generated cash Income. It is important to let the respondent take her time to think about it. Make a list of each income source that The respondent mentioned.

	<b>Income Source</b>
1	

2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	

Where possible try to summarize each of the income sources into the categories provided in the following table. If a corresponding income source has been mentioned, enter 1 into the appropriate column for that income source.

2. Now using the following table as a reference, ask the respondent if they or any other household member was involved in any of the following income generating activities last year. The objective of this exercise is to make sure they have not missed any income sources. Do not ask them about income sources that they have already mentioned and that you have entered into the table. Once you have completed the list, again ask them if they can think of any additional income sources that have not been mentioned.

<b>Livestock &amp; Livestock Products</b>	<i>1=Yes 0=No</i>	<b>Crafts/Small Industry</b>	<i>1=Yes 0=No</i>
Selling Fattened Shoats (meat)		Making baskets or mats	
Selling Fattened Cattle (meat)		Spinning or weaving cloth (cotton or wool)	
Rearing & selling 'un-fattened' animals (cattle, shoats, camels, donkeys etc.)		Making repairing clothes (embroidery, tailoring)	
Dairy sales (milk, cheese, yogurt)		Making traditional utensils or farm tools	
Selling animal skins/hides/dung		Pottery	
Poultry rearing and sales (chickens, eggs)		Blacksmithing/metal work or carpentry	
Beekeeping (selling honey, bees-wax, beehives or colonies)		Other craft/small industry ( <i>specify</i> )	
Renting Oxen for farming		<b>Services</b>	
Renting pack animals for transport		Water carrier, Porter	
Other livestock related income ( <i>specify</i> )		Barber or Hairdresser	
Renting land		Musician (drummer, singer, dancer)	
<b>Employment</b>		Traditional healer	
Salaried job ( <i>specify</i> )		Midwife or birth attendant	
Public works (PSNP cash for work)		Counselor (disputes, marriage)	
Agricultural/farming work		Other services ( <i>specify</i> )	
Non-agricultural work (e.g. construction)		<b>Food &amp; Drink Processing</b>	

Domestic work (e.g. house maid)		Selling tea, coffee or beverages (e.g.tejj)	
Military service		Selling cooked food	
Other employment ( <i>specify</i> )		<b>Other Income Sources</b>	
<b>Trading &amp; Retail</b>		<i>Specify</i>	
Trading in crops (grains, pulses, vegetables, chat, coffee)		<i>Specify</i>	
Trading in livestock and livestock products		<i>Specify</i>	
Trading in other commodities (not petty trading go to next row)		<i>Specify</i>	
Petty trading (selling cake, bread, soft drinks, candy, tobacco etc.)		<i>Specify</i>	
<b>Sale of Natural Products</b>		<i>Specify</i>	
Selling firewood or charcoal		<i>Specify</i>	
Selling water		<i>Specify</i>	
Selling grass or fodder (for livestock)		<i>Specify</i>	
Selling construction materials (poles, sand etc.)		<i>Specify</i>	
Selling wild fruits, bush meat etc.		<i>Specify</i>	
Selling other natural products ( <i>specify</i> )		<i>Specify</i>	
<b>TOTAL</b>			

## 2 Credit & Savings

- 2 In the past year have you or any member of your household taken out a loan? (*Ask the respondent to specify the Amount by source and whether they have managed to pay back the loan and interest*)

Loan Source	Amount ETB	Loan & Interest Repaid (YES=1 No = 0)
Microfinance Institution ( <i>e.g. OCCSCO</i> )		
Bank		
Rusacco		
Saving Group ( <i>VSLA</i> )		
Money Lender/Trader/Neighbor		
Other ( <i>specify</i> )		

How did your household use this loan?

Loan Utilization	Amount ETB
1 Food purchases	
2 Medical costs	
3 Education/schooling ( <i>fees/uniforms/rent</i> )	
4 Land rent/property or home improvements( <i>corrugated roofing etc.</i> )	
5 Purchase livestock or poultry	
6 Invested in petty trade/retail or other business	
7 Farming inputs ( <i>animal treatment/seeds/fertilizers/pesticides/tools</i> )	
8 Social obligations/ceremonies ( <i>weddings/funerals other contributions</i> )	
9 Pay taxes/debts/loans	
10 Other ( <i>specify</i> )	

c. Household Savings

Does the household (any member) currently have any savings?/(	<b>YES</b>		<b>NO (&gt;&gt;7)</b>	
If the answer is yes ask where the money is saved( <i>circle all that</i>	<b>Bank/MFI</b>	<b>Home</b>	<b>VSLA</b>	<b>Other</b>
Ask them how much money they have saved by source (ETB)				

**7. Project Outcomes and Benefits**

7.1 Value Chain Income

2 In the past year have you sold any fattened livestock? (*put zero if none were sold*)

<b>Livestock type (Oxen/shoats etc.)</b>	<b>Number Sold</b>	<b>Total Income ETB</b>

b. In the past year how what quantity of honey has your household produced, consumed and sold?

<b>Produced (Kg)</b>	<b>Consumed (Kg)</b>	<b>Sold (Kg)</b>	<b>Total Income ETB</b>

c. In the past year what quantity of the following crops has your household produced, consumed and sold?

<b>Crop Type</b>	<b>Produced (Kg)</b>	<b>Consumed (Kg)</b>	<b>Sold (Kg)</b>	<b>Total Income ETB</b>
<b>Red Beans</b>				
<b>Tomatoes</b>				
<b>Onions</b>				
<b>Other VC TBD</b>				
<b>Other VC TBD</b>				
<b>Other VC TBD</b>				

7.2. Extension Services& training

2 In the past year have you or any member of your household received advice or training from a development agent health extension worker, NGO or other expert in any of the following areas?

b. Specify the type of training given for example queen rearing/ fattening/animal health etc.

c. Who provided this training or advice (Government/NGO etc.)

d. Have you applied this training/techniques advice?

e. How useful has this knowledge been (rank or score on a scale of 0-5 (0 = Not at all 5 = Very useful)

<b>a. Training Type</b>	<i>1=Yes 0=No</i>	<b>b.Type</b> <i>(e.g. fattening)</i>	<b>c. Provider</b>	<b>d. Applied</b> <i>1=Yes 0=No</i>	<b>e. Score</b> 1-5
Crop Production					
Livestock Production					
Beekeeping					
Value Addition/Marketing					
Health Nutrition (Dietary Divers					
Financial Literacy					

Business Skills (IGA)					
Climate change adaptation *					
Other ( <i>specify</i> )					

\*Such as risk reducing practices/actions to improve resilience to climate change

## 8. Assets

a. Land Holdings	Local Unit	Hectares
How much land does your household (HH) currently own?*		
How much land did your HH cultivate last year (including rented)		

\*Include land they rent to others

### b. Asset Inventory<sup>3</sup>

Livestock	No	Productive Assets	No	Household Assets	No
Oxen/Bulls		Axes		Blankets/gabis	
Cows		Machete		Chairs	
Steers		Sickles		Tables	
Heifers		Spade		Cupboard	
Calves		Hoe		Mats	
Sheep		Bucket		Lantern	
Goats		Grainmill		Flashlight (torch)	
Donkeys		Plow yoke		Watch/clocks	
Poultry		Plow beam		Kerosene stove	
Mules		Plow share		Radio/cassette player	
Horses		Traditional beehive		Mobile phone	
Camels		Modern beehive		Bicycle	
<b>TOTAL</b>					

## 9. Food Security and Nutrition

- a. You will now ask the respondent to give an assessment of their household food security for the past production year.

Using the calendar as a visual aid – you will provide the respondent with 30 counters and ask her/him to score each month using the following criteria:

0 = Not enough food (food insecure) 1 = Just enough food (food sufficient) 2 = Plenty of food/surplus (food secure)											
2011			2012								
Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct
Total # Months food needs met ( <i>all months with a score of 1 or 2</i> )											

<sup>3</sup>Asset values will be collected separately through focus groups and key informant interviews

- b. If the HH met all 12 months of their food needs, ask them what quantity of cereals (kg) they had in storage right before the onset of the *Kremt* rains (reference month June). Then ask them to estimate how many months this would have lasted the household<sup>4</sup>. It may be useful here to refer back to the number of HH members (1.F) to ensure that the estimates make sense.

Quantity of cereals in storage	<b>Kg</b>
Number of months household food needs covered	<b>Months</b>
<i>Number of HH members (reference)</i>	

c. Household Dietary Diversity

1. Inform the respondent that you would like to ask about the types of food eaten in the household yesterday during the day and night. However, if the previous day was a fasting day ask them about the day before (or last non-fasting day)

2. Then read the following list of foods and place a **ONE** in the box if the food in question was eaten by a household-member or place a **ZERO** in the box if the food was not eaten by a household member.

List of Foods Consumed by Household Members Yesterday		(1=Yes 0=No)
A	Any local foods such as (Lafiso, Towlo, etc.), bread, rice noodles, biscuits, cookies or any other foods made from teff, millet, sorghum, maize, rice, wheat (or other locally available grain)?	
B	Any white potatoes, manioc, cassava, or any other foods made from roots and tubers?	
C	Any pumpkin, carrot, squash, or sweet potato that are yellow or orange inside?	
D	Any dark, green, leafy vegetables such as cassava leaves, bean leaves, kale, spinach, pepper leaves, taro leaves, and amaranth leaves?	
E	Any other vegetables?	
F	Any ripe mangoes, ripe papayas or any other locally available fruit rich in vitamin A (insert)?	
G	Any other fruits?	
H	Any beef, lamb, goat, chicken, duck, other birds, liver, kidney, heart or other organ meats?	
I	Any eggs?	
J	Any fresh or dried fish?	
K	Any foods made from beans, peas or lentils?	
L	Any cheese, yogurt, milk, or other milk products?	
M	Any foods made with oil, fat or butter?	
N	Any sugar or honey?	
O	Any processed foods such as chips, pastry, cakes, chocolates, sweets or candies, soda, fruit juices or drinks?	
P	Any other foods, such as condiments, coffee, tea?	

2 Household Hunger Scale

No	Question	Response	Response Code
1	In the past month, was there ever no food to eat of any kind in your house because of lack of resources to get food?		Yes = 1 2 = No (skip to 3)
2	How often did this happen in the past month?		1 = Rarely (1-2 times) 2 = Sometimes (3-10 times) 3 = Often (more than 10 times)
3	In the past month did you or any household member go to sleep at night hungry because there was not enough food?		Yes = 1 2 = No (skip to 5)

<sup>4</sup> It may be useful here to refer back to the number of HH members (1.F) to ensure that the estimates make sense. As a rough estimate each HH member would require 0.5 kg of cereal/day or family of 6 would need 3 kg/day or 90 Kg/month. This assumes that approximately 1,750 Kcal of the 2100 kcal daily energy requirements are being met through cereals.

4	How often did this happen in the past month?		1 = Rarely (1-2 times) 2 = Sometimes (3-10 times) 3 = Often (more than 10 times)
5	In the past month did you or any household member go a whole day and night without eating anything at all because there was not enough food?		Yes =1 2 = No (end of module)
6	How often did this happen?		1 = Rarely (1-2 times) 2 = Sometimes (3-10 times) 3 = Often (more than 10 times)

## 10. Women's Empowerment

### 10.1 Decision Making

If the respondent is female, ask her if she is the only adult female living in her household. If the answer is yes skip to the next exercise. Similarly if the respondent is male and there are no adult females in the household, skip to the next exercise and write NA in large letters next to the table below

On a scale of 1-4, ask the respondent how much influence the wife or main female in the household has over decisions on the following aspects of Household life.

1= No influence at all 2 = A little influence		3 = A medium amount of influence 4 = A lot of influence		<i>If the participant is more comfortable using proportional scoring to assess her influence over decisions you can use proportional piling with 4 counters but be sure to explain that more counters equals more influence.</i>
Production & Livelihoods Decisions				SCORE
1	What crops to grow			
2	What farming inputs to use or buy ( <i>fertilizer, improved seeds etc.</i> )			
3	What crops to take to the market to sell and when to sell them			
4	What livestock production activities to engage in ( <i>rearing/fattening/dairy etc.</i> )			
5	What livestock to purchase or sell			
6	What business or Income Generating Activities to engage in			
Financial Decisions				
7	Major household expenditures ( <i>such as clothes purchases, furniture etc.</i> )			
8	Minor household expenditures ( <i>such as food for daily consumption</i> )			
9	Borrowing money ( <i>loan amount/source and utilization</i> )			
10	Lending (loaning) money to relatives or friends			
Household Decisions				
8	Food and meals			
9	Children's education			
10	Household construction/maintenance			
11	Family planning			

## Supplementary PAT Module

### 1. Poverty Assessment Tool

		Number
1	How many rooms does your household's dwelling unit have?	
2	What is the main construction material of your dwelling's roof?	

	Corrugated iron sheet .....1 Thatch and grass .....2 Wood and mud .....3	Reed and bamboo .....4 Clay .....5 Other .....6	
<b>3</b>	<b>What is the main source of lighting for your dwelling?</b> Kerosene .....1 Electricity (private) .....2 Electricity (shared) .....3		Firewood .....4 Candle .....5 Other .....6
<b>4</b>	<b>What is the main source of cooking fuel for your dwelling?</b> Mainly collected firewood .....1 Mainly purchased firewood .....2 Charcoal .....3 Kerosene .....4 Butane gas .....5		Electricity .....6 Crop residue .....7 Don't use cooking fuel .....8 Other .....9
<b>5</b>	<b>What is your household's main source of drinking water in the rainy season?</b> Tap inside the house .....1 Tap in compound (private) .....2 Tap in compound (shared) .....3 Tap outside the compound (shared) .....4		Protected well/spring .....5 Unprotected well/spring .....6 Rain water .....7 River, lake, pond, etc. ....8

For questions 6 -11 refer back to the asset inventory to confirm whether the Household owns any cattle, axes or *gabis* and the number of these items they own – then enter this information in the following table.

		Number or Circle	
6	Does your household currently own cattle? (0=No 1=Yes)	0	1
7	How many cattle does your household own?		
8	Does your household currently own any axes (gejera)? (0=No 1=Yes)	0	1
9	How many axes does your household own?		
10	Does your household currently own any blankets (gabis)? (0=No 1=Yes)	0	1
11	How many blankets does your household own?		
12	Does your household own a radio (0 =No 1=Yes)	0	1
13	Does your household own a television(0 =No 1=Yes)	0	1
14	Does your household own a video deck(0 =No 1=Yes)	0	1

### 1. Climate Change Risk Reducing Practices

In the past year have you or your household employed any of the following risk reduction practices to improve your resiliency to climate change?

Type	1= Yes 0=No
<b>Agriculture</b> – practices to increase predictability and or productivity of agriculture anticipating Climate related variability or shocks	
<b>Water</b> – practices or actions to improve water quality, supply and efficient use	
<b>Health</b> – practices or actions to prevent or control disease incidences and outcomes	
<b>Disaster Risk Management</b> – practices or actions to reduce the negative impact of events	

## Annex VIII GRAD FOCUS GROUP CHECKLIST

### Section 1: Community Wealth Characteristics (*common indicator identification*)

- Using last year as a reference point (harvest to harvest), ask the participants to divide the community into groups: those that met their food needs for 12 months of the year (Category A) and those that did not (Category B):

Method Proportional Piling using 100 counters:

Category		Score
A	12 months food needs met	
B	Did not meet 12 months food needs	

- Now ask them to:

Divide category A into 2 groups as follows:

- Food Secure (*those that had a surplus of food*)
- Food Sufficient (*those that had enough food but no surplus*)

And:

Divide category B into 2 groups as follows:

- Chronically Food Insecure (*cannot meet 12 months food needs but has some HH labor and assets*)
- Ultra Poor (*little or no labor and assets e.g. female headed HHs,*)

Method PP using balance of counters from exercise 1

Category/group	Score
1 Food Secure	
2 Food Sufficient	
3 Chronically Food Insecure	
4 Ultra Poor	
	<b>100</b>

- Now ask the participants to assign a value/estimate on the number of livestock owned by each category and the HH labor capacity (# working adults)

Group	Cattle	Shoats	Labor
1 Food Secure			
2 Food Sufficient			
3 Chronically Food Insecure (CFI)			
4 Ultra Poor	0		

- Based on the understanding that groups 1 (Food Secure) and 2 (Food Sufficient) met 12 months of their food needs – ask the participants to estimate how many months food balance each group had before the onset of the *kremt* rains (*reference month June*) and roughly how many kg of cereals they had stored in their granary?

Group	# Months Food Surplus	Kg Cereals in Granary
1 Food Secure		
2 Food Sufficient		

5b. Now ask the participants to estimate how many months of food needs were met by groups 3 (CFI) and 4 (Ultra Poor) last year?

Group		# Months food needs met
3	Chronically Food Insecure	
4	Ultra Poor	

**Section 2. Resiliency** (methods semi structured interview)

1. This exercise will involve introducing the concept of resiliency as a group discussion topic. The objective of this exercise is to get an understanding of community definitions of resiliency and identify potential community indicators of resiliency that can be measured during the midterm and final assessments. Typically, resiliency is referred to as the ability of a community to cope with (or withstand) and recover from a shock. Using this broad definition as a starting point—ask group members what their understanding of resiliency is, particularly within a context of climate change and an increase in the frequency/intensity of weather related shocks. As participants discuss this topic try to listen to their views and only offering guidance when requested. As the participants discuss their views, take note of key words, themes, concepts and phrases that come up, and make a note of the ones that appear most important or are most frequently mentioned.

KEYWORDS/PHRASES etc.

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2. Once the participants have all had their say, using these keywords as a reference point ask them to try to come up with one or two sentences (definitions) that capture their understanding of resiliency.

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Now ask the participants if they can identify benchmarks of resiliency. To do this, ask them to classify a household (or individual) that is considered resilient versus a household that is not. Then ask them to identify specific indicators or characteristics of each household that might be easily measured. However, do not limit the indicators to just these as participants may have their own indicators which are more appropriate. If possible also try to identify indicators for community resiliency (as opposed to just HH).

Indicators/Characteristics	Resilient Household/Individual ( <i>sp</i> )	Non-Resilient Household/Individual ( <i>sp</i> )

Other Indicators (already defined/community etc.)
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3b. Now review all the indicators mentioned and ask the participants to identify and rank the 5 most important (resiliency) indicators:

Method: Simple Ranking

Indicators	Rank
	1
	2
	3
	4
	5

### Section 3: Women’s Empowerment/Gender Equity

1. Divide the focus group into male and female participants. Then ask each group to answer the following questions about women’s role and status in the community. For each question, ask the participants to assign a score between 0-5 with 5 being the most important.

<i>0=none at all 1=a little 2=some 3=a fair amount 4=a lot 5=same or more than men</i>		Score
1	To what extent do women have a leadership role in the community?	
2	To what extent are women involved in managing community groups or activities?	
3	To what extent can women stand up and express their opinions in public meetings?	
4	To what extent are women’s views/ideas/opinions listened to and acted upon?	
5	To what extent do women have control over community resources?	

2. Now ask the participants if overall there has been any change in terms of respect and recognition of women’s role and status in the community over the past 3 years. Ask the participants to ‘vote’ by raising one hand for the indicator that they feel best describes this change (1. Improved 2. Gotten worse 3. No change). Count the number of hands per indicator.

	Male Group N=	Female Group N =
Things have improved		
Things have gotten worse		
No change at all		

3. If things have improved, ask the participant what reasons or factors have contributed to this. Or alternatively, if there has been no change or things have gotten worse, ask the participants what they think can be done to improve the status of women.

Improved/reasons:	What can be done to improve women’s status?
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### Section 4: Graduation

1. This exercise will be similar to the inquiry on resiliency but will focus on Graduation. The objective will be to investigate what community perceptions of graduation are, and to identify indicators or benchmarks for graduation, as well as factors that promote graduation. Start by introducing the concept of graduation<sup>5</sup> to the group and ask them to explain what they understand by the meaning of graduation. Again keep a note of the words concepts/phrases etc. mentioned most frequently.

KEYWORDS/PHRASES etc.

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2. Now ask the participants if they can identify benchmarks for graduation by classifying a household that has graduated (or should graduate) versus a PSNP household, or one that has not graduated. Then ask them to identify specific indicators or characteristics of each household that might be easily measured.

Indicators/Characteristic	A. PSNP Household	B. Graduated Household

3. Now ask the participants what factors or interventions are needed in order for households in column A (PSNP) to permanently move into column B (Graduate)? Then ask them to rank these factors/interventions in order of importance.

	Factor/Intervention	Rank
1		
2		
3		
4		
5		

**Section 5: GRAD Interventions**

1. Ask the participants what impact or benefits they expect as a result of their participation in GRAD. Make a note of all the benefits they mention and then ask them to rank these in order of importance. (Note a benefit can be descriptive as in a sentence or a simple indicator for example: more income).

Benefit/Impact	Rank

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<sup>5</sup>You can help guide the discussion by mentioning PSNP graduation and PSNP benchmarks such as assets and asset values, but also the concept of graduating out of chronic food insecurity. However, do not influence the discussions too much.


2. SWOT analysis for each value chain intervention in the study area. Note for the baseline it will be too early to assess Strengths and Weaknesses. However try to ascertain the potential of each value chain or anticipated benefits impacts as well as threats and challenges.

(V. Chains: Honey/Fattening/Pulses/Fruit/Vegetables/Cereals)

Potential (anticipated impact/benefits)	Threats/Challenges

**Section 6:** To be collected at a Livestock Market or Woreda Center

Livestock Prices

Date \_\_\_\_\_

Exchange Rate ETB/\$US on reporting day \_\_\_\_\_

Type	Price (ETB) lowest	Price (ETB) highest
Oxen/Bulls		
Cows		
Steers		
Heifers		
Calves		
Sheep		
Goats		
Donkeys		
Poultry		
Mules		
Horses		
Camels		
Modern Beehive		

## Annex IX BASELINE ASSESSMENT CONTROL SURVEY CHECKLIST - GRAD

Name of Household \_\_\_\_\_ Questionnaire # \_\_\_\_\_

Name of Interviewer \_\_\_\_\_ Day: \_\_\_\_\_ Month: \_\_\_\_\_ Year 2012

<b>Region</b>	
<b>Woreda</b>	
<b>Peasant Association (Kebele)</b>	
<b>Village/Cluster</b>	

		(Enter number or Circle Appropriate Box)	
A	Respondents Name		
B	Gender (respondent)	Female	Male

B	Is your HH participating in the PSNP?	
C	How many years has your HH been participating in the PSNP?	
D	How many years do you expect it will take for you to graduate from the PSNP?	

### 6. Household Expenditure

- a. In the past 12 months - how much did you spend on the following items?(Indicators 1-15 only)
- b. In the past 12 months – what proportion of your total expenditure was used on the following items? (1-18)

Method: Proportional Piling using 100 counters

		3 a (1-15)	3 b (1-18)
<b>Major Expenditures</b>		<b>ETB</b>	<b>Score</b>
1	Land renting		
2	Farming inputs (seeds/fertilizers/pesticides/tools)		
3	Livestock or poultry purchases		
4	Livestock inputs (livestock feed/water/vaccines/treatments etc.)		
5	Investments in other production/income generating activities (eg beehives)		
6	Education/schooling (fees/uniforms/rent/transport)		
7	Health/medical expenditures		
8	Clothes (including shoes/blankets/gabis etc.)		
9	Home improvements (construction)		
10	Household Items (furniture/cooking utensils)		
11	Social obligations/ceremonies (weddings/funerals/iddir -other contributions)		
13	Water & Transportation		
14	Loan or debt repayment		
15	Other major non food expenses over 100 Birr (specify)		
16	Cereals for consumption (teff/sorghum/wheat/maize/barley/rice etc.)		
17	All other food items (meat/fruit/vegetables/oil/salt/sugar etc.)		
18	Other (specify)		
<b>TOTAL</b>		<b>ETB</b>	<b>100</b>

### 7. Income Sources

#### 2.1 Crop Sales

Ask the respondent to list each type of crop that they (HH) produced and sold last year. Only include crops that were sold for cash income. List each crop mentioned in the table below and count the total number of different crops sold.

Total # of different crops sold		

## 2.2 Other Income Sources

1. Now ask the respondent if there any other activities carried out by household members that have generated cash income. It is important to let the respondent take her time to think about it. Make a list of each income source that The respondent mentioned.

	Income Source
1	
2	
3	
4	
5	
6	
7	
8	

Where possible try to summarize each of the income sources into the categories provided in the following table. If a corresponding income source has been mentioned, enter 1 into the appropriate column for that income source.

2. Now using the following table as a reference, ask the respondent if they or any other household member was involved in any of the following income generating activities last year. The objective of this exercise is to make sure they have not missed any income sources. Do not ask them about income sources that they have already mentioned and that you have entered into the table. Once you have completed the list, again ask them if they can think of any additional income sources that have not been mentioned.

Livestock & Livestock Products	1=Yes 0=No	Crafts/Small Industry	1=Yes 0=No
Selling Fattened Shoats (meat)		Making baskets or mats	
Selling Fattened Cattle (meat)		Spinning or weaving cloth (cotton or wool)	
Rearing & selling 'un-fattened' animals (cattle, shoats, camels, donkeys etc.)		Making repairing clothes (embroidery, tailoring)	
Dairy sales (milk, cheese, yogurt)		Making traditional utensils or farm tools	
Selling animal skins/hides/dung		Pottery	
Poultry rearing and sales (chickens, eggs)		Blacksmithing/metal work or carpentry	
Beekeeping (selling honey, bees-wax, beehives or colonies)		Other craft/small industry ( <i>specify</i> )	

Renting Oxen for farming		<b>Services</b>	
Renting pack animals for transport		Water carrier, Porter	
Other livestock related income ( <i>specify</i> )		Barber or Hairdresser	
Renting land		Musician (drummer, singer, dancer)	
<b>Employment</b>		Traditional healer	
Salaried job ( <i>specify</i> )		Midwife or birth attendant	
Public works (PSNP cash for work)		Counselor (disputes, marriage)	
Agricultural/farming work		Other services ( <i>specify</i> )	
Non-agricultural work (e.g. construction)		<b>Food &amp; Drink Processing</b>	
Domestic work (e.g. house maid)		Selling tea, coffee or beverages (e.g.tejj)	
Military service		Selling cooked food	
Other employment ( <i>specify</i> )		<b>Other Income Sources</b>	
<b>Trading &amp; Retail</b>		<i>Specify</i>	
Trading in crops (grains, pulses, vegetables, chat, coffee)		<i>Specify</i>	
Trading in livestock and livestock products		<i>Specify</i>	
Trading in other commodities (not petty trading go to next row)		<i>Specify</i>	
Petty trading (selling cake, bread, soft drinks, candy, tobacco etc.)		<i>Specify</i>	
<b>Sale of Natural Products</b>		<i>Specify</i>	
Selling firewood or charcoal		<i>Specify</i>	
Selling water		<i>Specify</i>	
Selling grass or fodder (for livestock)		<i>Specify</i>	
Selling construction materials (poles, sand etc.)		<i>Specify</i>	
Selling wild fruits, bush meat etc.		<i>Specify</i>	
Selling other natural products ( <i>specify</i> )		<i>Specify</i>	
<b>TOTAL</b>			

## 8. Assets

<b>a. Land Holdings</b>	<b>Local Unit</b>	<b>Hectares</b>
How much land does your household (HH) currently own? *		
How much land did your HH cultivate last year (including rented)		

\*Include land they rent to others

### b. Asset Inventory<sup>6</sup>

<b>Livestock</b>	<b>No</b>
Oxen/Bulls	
Cows	
Steers	
Heifers	
Calves	
Sheep	
Goats	
Donkeys	

<b>Productive Assets</b>	<b>No</b>
Axes	
Machete	
Sickles	
Spade	
Hoe	
Bucket	
Grainmill	
Plow yoke	

<b>Household Assets</b>	<b>No</b>
Blankets/gabis	
Chairs	
Tables	
Cupboard	
Mats	
Lantern	
Flashlight (torch)	
Watch/clocks	

<sup>6</sup>Asset values will be collected separately through focus groups and key informant interviews

Poultry		Plow beam		Kerosene stove	
Mules		Plow share		Radio/cassette player	
Horses		Traditional beehive		Mobile phone	
Camels		Modern beehive		Bicycle	
<b>TOTAL</b>					

#### 4. Women's Empowerment

##### 10.1 Decision Making

If the respondent is female, ask her if she is the only adult female living in her household. If the answer is yes skip to the next exercise. Similarly if the respondent is male and there are no adult females in the household, skip to the next exercise and write NA in large letters next to the table below

On a scale of 1-4, ask the respondent how much influence the wife or main female in the household has over decisions on the following aspects of Household life.

1= No influence at all of influence		3 = A medium amount		<i>If the participant is more comfortable using proportional scoring to assess her influence over decisions you can use proportional piling with 4 counters but be sure to explain that more counters equals more influence.</i>
2 = A little influence		4 = A lot of influence		
Production & Livelihoods Decisions				SCORE
1	What crops to grow			
2	What farming inputs to use or buy ( <i>fertilizer, improved seeds etc.</i> )			
3	What crops to take to the market to sell and when to sell them			
4	What livestock production activities to engage in ( <i>rearing/fattening/dairy etc.</i> )			
5	What livestock to purchase or sell			
6	What business or Income Generating Activities to engage in			
Financial Decisions				
7	Major household expenditures ( <i>such as clothes purchases, furniture etc.</i> )			
8	Minor household expenditures ( <i>such as food for daily consumption</i> )			
9	Borrowing money ( <i>loan amount/source and utilization</i> )			
10	Lending (loaning) money to relatives or friends			
Household Decisions				
8	Food and meals			
9	Children's education			
10	Household construction/maintenance			
11	Family planning			

Note: Some minor modifications have been made to these checklists to accommodate for differences across the study areas

## Annex X: GRAD IPTT

### USAID Ethiopia - Indicator Performance Tracking Table (IPTT) of Feed the Future Supported Projects

Project Title: Graduation with Resilience to Achieve Sustainable Development (GRAD)

Project Life Time: FY'2012-2016

Implementing Partner: CARE Ethiopia

Indicator Title	Unit	Base-line Value	LOP			Year 1			Year 2			Year 3			Year 4			Year 5			F T F	Remark
			Target	Achieved	%Target Met	Target	Achieved	%Target Met	Target	Achieved	%Target Met	Target	Achieved	%Target Met	Target	Achieved	%Target Met	Target	Achieved	%Target Met		
<b>Strategic Objective: Chronically food insecure households graduate from food support.</b>																						
1. Graduation: # of GRAD Supported beneficiary graduating from PSNP.	# of HHs	0	50,000								10000			17000			23000			√		
2. Income: Average annual HH income	USD	418	783								528						783					
3. Poverty: % of the target population living in poverty (i.e. less than 1 USD per day)	% of population	51.5%	23%								40%						23%					
4. Equity: Statistical increase in the score assigned to the degree of influence women have over decisions pertaining to production and income (influence score)	Mean Value (95% CI)	16.3	Significant increase (indicative)								17.1						18.1				M (Equity Index)	
<b>Result # 1: Enhanced livelihood options of chronically food insecure households.</b>																						
1.1 Average number of income sources of vulnerable households receiving USG assistance	# of income source/ HH	4.6	10								6.4						10			√		
1.2 Average current household savings	USD	13.35	20.86								16.69						20.86					
1.3 Average annualized savings through VSLA activity (for VESA or RUSACCO member)	USD	0	14			6	4.24		8		10			12			14					

1.4 Value of new private sector investment in financial and agricultural sectors supported by GRAD	USD	0	13795149			1209000			4716270			4594559			2417320			858000			√	
1.5 Number of vulnerable household benefiting directly from GRAD assistance	# HHs	0	65,000			13000	12138		27300			25562									√	in year 3 & 4 the already targetd (65000) continue to be benefited
1.6 Perceived quality of training and extension services among target HHs	Mean Value (95% CI)	2.3	Significant increase (indicative)									2.5						2.8				M (Training Scoring Index)
<b>IR 1: On-and off-farm economic opportunities, inclusive value chains and market access for targeted HHs stimulated.</b>																						
1.1.1 Value of incremental sales (collected at Farm level) attributed to GRAD implementation	Value in USD	0	\$6,500,000						\$1,289,400			\$2,610,950			\$5,221,900			\$6,500,000			√	
1.1.2 Gross margin per unit of land or animal dedicated to value chains supported by GRAD	value in USD/ product ion area	TBD	35%						10%			20%			25%			35%			√	
1.1.3 Number of jobs attributed to FTF (GRAD) implementation	Number of jobs	0	81344			1844	1844		30000			30000			15000			4500			√	
1.1.4. # of GRAD HHs engaged in new, profitable IGAs	# of HHs	0	70%			0			20%			40%			60%			70%				
<b>IR 1.2: Access to a range of financial products and services expanded.</b>																						
1.2.1. # of MSMEs, including farmers, receiving GRAD assistance to access loan (s)	# of MSMEs	0	59000			5531	5531		20000			20000			10000			3469			√	
1.2.2. Value of agricultural and rural loan	Amount in USD	0	13,438,251			1,544,972	1209000		4,487,000			4,498,000			2,386,000			858,251			√	
1.2.3. # of VESA accessing formal credit through RUSACCOs and MFIs	#	0	2320			377	149		943			1000			228			0				

1.2.4 Number of food security private enterprises, women's groups or community based organization (e.g. VESA or FEMA) receiving GRAD assistance	# of CBOs	0	2638		1126	1079		1835		2591		2638		2638		√
1.2.5. # of financial products tailored to target HH demand	#	0	5		1	1		3		1		0		0		
1.2.6 Average value of assets of GRAD supported households	Amount in USD	858.2	1158					944		985		1030		1158		√
1.2.7 Number of MSMEs receiving business development services from GRAD assisted sources	#	0	59,000		5531	5531		20000		20000		10000		3469		√
<b>IR 1.3: Extension services upgraded</b>																
1.3.1. # of DAs trained on demand-driven approach to extension service provision to target GRAD HHs	# of DAs	0	900		0			400		500		0		0		
1.3.2 % of DAs actively applying demand-driven approach to extension service provision to target GRAD HHs	% of DAs	0	900		0			400		900		900		900		
1.3.3 Number of private enterprise, Producer organization women's group and community based organizations (VESA & FEMA) that applied new technologies or management practice as a result of GRAD assistance	#	0	2713		155			678		940		940		0		√
1.3.4 Number of farmers and others who have applied new technologies or management practices as a result of GRAD assistance	#	0	65,579		3882			13083		18614		20000		10000		√

1.3.5 Number of individuals who have received USG supported short-term agricultural sector productivity or food security training	#	0	47,627			5247			21206			10580			10594					√
1.3.6 # of GRAD HHs served by trained DAs	#	0	65000			0			29200			65000			65000					
<b>Result #2: Improved community and household resilience.</b>																				
2.1. % of HH with moderate or severe hunger	%	7.3%	23%									85%			58%				23%	
2.2% Percent of USG supported PSNP households selling productive assets during periods of shock	%	0%	30%									40%							30%	√
<b>IR 2.1. Nutritional status of infants, children and reproductive age women improved.</b>																				
2.1.1. # of HHs trained in dietary diversity practices	#	0	32973			120			8000			12000			12000				853	
2.1.2. # of HHs adopting home gardens with GRAD support	#	0	9863			1218			6000			2645								
2.1.3 Number of people trained in child health and nutrition through USG-supported programs	#	0	1661			140	140		380			761			380					√
2.1.4 Number of children under five reached by USG-supported nutrition programs (S)	#	0	11400			0			3800			3800			3800					√
2.3. % of mothers practicing exclusive breastfeeding of children < 6 months	%	TBD	80%									60%							80%	
Women's Dietary Diversity (WDD)	%	TBD	50% + change over baseline									TBD							TBD	
% of children 6-23 months with a minimally acceptable diet (MAD)	%	TBD	40% + change over baseline									TBD							TBD	
<b>IR 2.2: Impacts of climate change on households reduced.</b>																				

2.2.1 # of stakeholders implementing risk-reducing practices/actions to improve resilience to climate change as a result of GRAD assistance	#	0	26827			4455	4455	4474			8949			8949					√	
2.2.2 # of climate change adaptation practices adopted and implemented.	#	0	11			2	1	3			3			2					1	
<b>IR 2.3: Women's resilience and access to inputs, services and information increased [3]</b>																				
2.3.1. % of women and men reporting increase in women's influence over HH decision making against a baseline influence score of 16.3	%	0	100%								Men 75% Women 80%							Men 100% Women 100%		M (Equity Index)
2.3.2 % of institutions led by women.	%	0	50%			40%	40%	45%			50%			50%				50%		
2.3.3 Proportion of female participants in GRAD-assisted programs designed to increase access to productive economic resources (assets, credit, income or employment)	Ratio	0	0.5			0.35	0.43	0.45			0.48			0.5				0.5		√ N
<b>IR 2.4: Aspirations for graduation among targeted HHs promoted and enablers for graduation enhanced.</b>																				
2.4.1.% of GRAD participants showing readiness and commitment to graduate within an expressed timeframe	%	31	77%								30%			50%				77%		
2.4.2. % of VESA(committees) monitoring the progress of food security of their membership on annual basis	%	0	65%			0		30%			50%			60%				65%		
<b>Result #3: Strengthened enabling environment to promote scale-up and sustainability.</b>																				
3.1. Number and type of evidence-based documents generated and disseminated among key stakeholders	#	0	14			0		2			4			4				4		

3.3. # of alliances forged by GRAD at local and national levels	#	0	36			0			9			9			9			9			
<b>IR 3.1: Collaboration among HABP and other stakeholders consolidated to promote joint learning and scale.</b>																					
3.1.1. # of livelihood models / intervention modalities identified, tested through action research and disseminated.	#	0	12			0			4			4			4						
3.1.2. # of public - private partnerships formed by GRAD	#	0	18			18	16		0			0			0			0			√
3.1.3 Number of public-private dialogue mechanisms utilized as a result of GRAD assistance	#	0	4			0			1			1			1			1			√
<b>IR 3.2: Enabling Environment Improved.</b>																					
3.2.1. # of operational issues and bottlenecks with potential to accelerate graduation and resiliency identified	#	0	4			0			0			2			2			0			
3.2.2.# of such issues and bottlenecks addressed and resolved by Stakeholders	#	0	4			0			0			1			2			1			