

Final Evaluation

Ethiopia Development Assistance Consortium (EDAC)

USAID/FFP Title II DAP/MYAP/PAP assistance in support of the Productive Safety Net Program: 2005 - 2011



A New Graduate of the Productive Safety Net Program

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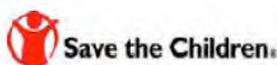
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ACRONYMS

ABE	Alternative Basic Education
ADRA	Adventist Development and Relief Agency
ARR	Annual Results Report
CAP	Community Based Action Planning
CARE	Cooperative for Assistance and Relief Everywhere
CBPWD	Community Based Participatory Watershed Development
CCI	Complimentary Community Infrastructure
CFSTF	Community Food Security Task Force
CHW	Community Health Worker
CIDA	Canadian International Development Agency
CMAM	Community Management of Acute Malnutrition
CS	Cooperating Sponsors
CRS	Catholic Relief Services
DFID	UK Department for International Development
DA	Development Agent
DAP	Development Activities Program
DRM	Disaster Risk Management
ECC-SDCOH	Ethiopian Catholic Church – Social and Development Coordinating Office of Harar
ECC-SDCOM	Ethiopia Catholic Church – Social and Development Coordinating Office of Meki
EDAC	Ethiopia Development Assistance Consortium
ENA	Essential Nutrition Actions
ESHE	Essential Services for Health
EWRD	Early Warning and Response Directorate
EW	Early Warning
EWTF	Early Warning Task Force
FANTA	Food and Nutrition Technical Assistance Project
FFP	Office of Food for Peace
FFT	Full Family Targeting
FH	Food for the Hungry
FHH	Female Headed Households
FMoH	Federal Ministry of Health
FSCD	Food Security Coordination Directorate
FSP	Food Security Program [Ethiopia Government]
FTC	farmer training centers
GoE	Government of Ethiopia
HAB	Household Asset Building
HABP	Household Asset Building Programme
HEA	Household Economy Assessment
HEW	Health Extension Workers
HH	Household
HP	Health Posts
IGA	Income Generating Activity
IPTT	Indicator Performance Tracking Table
IMNCI	Integrated Management of Neonatal and Childhood Illnesses
IWRM	Integrated Water Resource Management
JEOP	Joint Emergency Operations Program
KFSTF	Kebele Food Security Task Force
LBPW	Labor based public works

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MoARD	Ministry of Agriculture and Rural Development
MYAP	Multi-Year Activities Program
NGO	Non-governmental organization
NNP	National Nutrition Program
NRM	Natural Resources Management
OFDA	Office of Foreign Disaster Assistance (USAID)
OFSP	Other Food Security Programs
ORS	Oral Rehydration Solution
ORT	Oral Rehydration Therapy
PAP	Pastoral Areas Pilot
PASS	Payroll and Attendance Sheet System
PCA	Pastoralist Concern Association
PHAST	Participatory Hygiene and Sanitation Transformation
PIM	Programme Implementation Manual
PSNP	Productive Safety Net Programme
PW	public works
REST	Relief Society of Tigray
SCUK	Save the Children UK
SCUS	Save the Children US
SHG	Self Help Groups
SILC	Savings and Internal Lending Communities
SNAP	Safety Net Approach for Pastoralists
SNNP	Southern Nations, Nationalities and Peoples (Region)
SPSNP	Support to the Productive Safety Net Program
SSI	Small Scale Irrigation
SWC	Soil and Water Conservation
TOT	Training of Trainers
USAID	United States Agency for International Development
VSLA	Village Savings and Loan Associations
WCC	Wonji Catholic Church
WFSD	Woreda Food Security Desk
WFSTF	Woreda Food Security Task Force
WMoH	Woreda Ministry of Health
WV	World Vision

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EXECUTIVE SUMMARY

Since 2005 six non-governmental organizations (NGOs) have been implementing the Government of Ethiopia's (GoE) Productive Safety Net Program (PSNP) in 40 woredas of Ethiopia through the Ethiopia Development Assistance Consortium (EDAC). The Consortium is supported by commodities and funding under USAID Food for Peace PL480 Title II programs. Between 2005 and 2008, activities were implemented by CARE International, Catholic Relief Services, Food for the Hungry, the Relief Society of Tigray, Save the Children UK, Save the Children US and two other agencies, supported through Developmental Assistance Programs (DAPs) and one pilot pastoral area program. Since 2008, activities implemented by these six organizations in highland and agricultural areas of Ethiopia have been supported through Multi-Year Activities Programs (MYAPs), while three Pastoral Area Pilot (PAPs) programs have been implemented in two pastoral regions of the country and in one woreda in a mixed zone. Two agencies, World Vision and CHF, were not supported after 2008. In 2009 the Title II base program covered approximately 18% of PSNP beneficiaries nationally.

As the PSNP moved into a third phase, covering the period 2010 –2014, with an ongoing commitment of USAID support, the effectiveness and impact of these NGO-managed programs, including their relevance, potential sustainability and the lessons learned from their implementation, were evaluated. This evaluation included both a randomized household survey, replicating data collected in these areas at the start of the program in 2005, and the collection of qualitative data through the standard methodologies of interviews, document review, focus group discussions and group interviews. While built around the collective goal of the program, to *make a sustained change to food security and livelihoods of chronically poor communities in the operational areas and reduce their vulnerability to disaster shocks*, each Title II program was developed as an independent set of interventions with specific objectives and indicators, within the context of the PSNP. This evaluation focused on four shared goals measured by improvements in these impact indicators:

- *Average number of months of adequate food provisioning;*
- *Average value of assets in targeted households;*
- *Average household dietary diversity score; and*
- *Child nutritional status, measured through % of children 6-59 months who are stunted and % who are underweight.*

Duration of food sufficiency – which measures the adequacy of a household's food supply and is a key indicator of food security – has increased by 1.67 months among beneficiary populations since the start of the program in 2005, from a base of 5.88 months. Fluctuations in access to adequate food across the project population have been reduced, through a 'smoothing' of the curve tracing the proportion of the population having an adequate food supply in each month of the year.

Value of assets – household items, productive items and livestock - an indirect measure of the progress of households toward a condition where they are protected against shocks such as drought– varied across program households, with increases among sampled populations in Oromia and Tigray Regions, and slight declines among sampled populations in Amhara and Somali Regions. Doubtless the economic and climatic shocks of 2008-2009 affected the ability of households to build assets.

Dietary diversity – a measure of quality of diet closely associated with household nutritional status - increased over the period 2005 – 2010 by the addition of an average of more than one and a half food groups, from an average of 3.35; a high proportion of sampled households reported a positive change in their diet

The **nutritional status of children under five** – the fourth indicator of program impact – has shown no improvement since the start of the program in 2005. Levels of underweight and stunting remain the same. This is occurring despite significant Ministry of Health impacts in such areas as malaria control, and some increase in access to potable water in targeted communities. It is clear that effective implementation of food resource transfers and livelihood programming under PSNP are having a limited effect on the third element of food security, utilization, among the most vulnerable members of the beneficiary population, children 6 to 59 months old.

Cooperating Sponsors (CSs), the NGOs implementing this program, have demonstrated the capacity to ensure timely and appropriate commodity transfers. They proved highly effective in carrying out tasks relating to support for targeting of program beneficiaries, ensuring timely and adequate food distributions and supporting the implementation of public works activities, while dealing with frequent and significant changes in beneficiary numbers and locations, and in distribution patterns between cash and food. Pressures to spread commodity resources to a wider beneficiary population have been and remain high. CSs have worked effectively with local government to build capacity in managing and utilizing computerized systems for beneficiary tracking, in early warning activities and monitoring and evaluation, and in commodity management. Their implementation of public works activities mandated under PSNP has been effective, with contributions to community infrastructure and measurable improvements in environmental conditions through soil and water conservation.

CSs have added value to the PSNP program in several areas. Skills and experience in commodity management have enabled CSs to deal with adjustments in beneficiary populations, including the major increases brought about by growing needs for food commodities in ‘expansion’ woredas after 2008. Engineering expertise and the ability to draw on headquarters technical staff to reinforce available skills in the field have ensured sound execution of public works projects undertaken under the PSNP. In Northern Ethiopia, lengthy experience in soil and water conservation and community mobilization have been effectively utilized to promote public works activity, which forms the organizing principle for all development work.

In programming, all participating CSs have long experience in the promotion of sustainable livelihoods and child health. Innovations in livelihood security, including the widespread dissemination of the village-based self help group model for promoting savings and providing sustainable credit, and the promotion of sustainable seed production and seed exchange activities, as well as the launching of ‘value chain’ activities in areas such as beekeeping, have contributed toward the improved economic security of PSNP beneficiary households. The establishment of networks of voluntary health educators, usually community mothers, has enabled CSs to work effectively to complement Ministry of Health programs promoting child health and nutrition. Activities implemented under pilot programs in pastoral areas are innovative and flexible, reflecting the rapidly changing context. There is a real

concern, however, that increasing poverty among pastoral populations, as indicated by declines in livestock numbers and growing numbers of stockless pastoral poor, is outstripping the capacity of PSNP to promote retention and growth of assets. The establishment of self sufficient community assets is particularly important in this context. In the 2010 - 2014 phase of the PSNP, increasing emphasis will be placed on the longer term goal of full food security at household level, enabling households to become self sufficient through sustainable acquisition and maintenance of productive assets in an economic environment that promotes availability of and access to sufficient food.

Despite the effective implementation by these Cooperating Sponsors of appropriate programs to promote livelihood security among beneficiary populations and the growth in household assets among beneficiaries, progress toward the longer term objective of graduation from the PSNP through full food self sufficiency has been slow due to constraints on resources. To make more rapid progress, households will require access to a 'package' of interventions, including various levels and types of credit and inputs and technical assistance.

As the PSNP goes into a new program cycle, there will be a greater need for coordination among implementing partners and government and for strategic planning, to achieve the goal of significant rates of household graduation.

1. INTRODUCTION

Since 2005, six non-governmental organizations¹: CARE International, Catholic Relief Services (CRS) in conjunction with Ethiopian Catholic Church – Social and Development Coordinating Office of Harar (ECC-SDCOH) and (WCC), under the Ethiopia Catholic Church – Social and Development Coordinating Office of Meki (ECC-SDCOM),² Food for the Hungry Ethiopia (FH) in conjunction with ORDA, the Organization for Relief and Development of Amhara,³ The Relief Society of Tigray (REST), Save the Children UK (SCUK) and Save the Children US (SCUS) in conjunction with the Pastoralist Concern Association (PCA) and (ADRA)⁴ have, in collaboration with the Government of Ethiopia, been implementing the Productive Safety Net Program (PSNP) in 40 of the chronically food insecure woredas⁵ of Ethiopia designated to receive this assistance. These 40 woredas have been supported by the Office of Food for Peace (FFP) of USAID through Title II Developmental Assistance Programs (DAPs), Multi-Year Assistance Programs (MYAPs) and Pastoral Areas Pilots (PAPs) under the Ethiopia Development Assistance Consortium (EDAC).

1.1. Background to the PSNP

The PSNP or ‘Safety Net’ was developed in response to the recognition that the repeated cycle of emergency appeals and donor responses, in place in Ethiopia since the mid 1980s, did not provide a foundation for long term planning to deal with a situation of widespread chronic food insecurity, affecting up to 10% of Ethiopia’s population, a proportion which might grow to 15% in emergency years. The emergency appeal process lacked predictability and failed to address the chronic nature of food needs. Despite significant recent reductions in rural poverty levels, the unpredictability of Ethiopia’s climate, with high variability in rainfall and frequent droughts, had generated humanitarian aid requirements which averaged \$267 million a year between 1997 and 2002.

The Government, building on a major donor consultation in 2003, developed a national Food Security Program (FSP), initiated in January of 2005, intended to move away from the emergency relief model of assistance and to create a paradigm for food insecure households to attain a level of food security which would allow them to ‘graduate’ from food aid assistance.⁶ The Federal FSP had three major components: the PSNP, support to Re-settlement, which provided packages for households wishing to leave scarce and degraded areas and settle permanently in more fertile parts of the same or neighboring regions, and Other Food Security Programs (OFSP), including

¹ Agencies implementing US foreign assistance through the Office of Food for Peace are referred to as Cooperating Sponsors (CSs). All partner agencies in the Title II MYAP supporting the PSNP are also non-governmental (NGOs).

² CRS, the CS, will be referred to throughout the evaluation.

³ FH will be referred to throughout the evaluation while discussing their work and that of partners.

⁴ SCUS will be referred to throughout the evaluation, encompassing their work and that of partners. SCUS was implementing a pilot pastoral development program until 2008, when this was folded into the larger FSP. SCUK and CARE implemented pilot pastoral activities in a part of their program area, with major focus on the MYAP.

⁵ A woreda is an administrative unit roughly equivalent to a district, with an estimated population of 100,000.

⁶ Donors supporting the national food security program included the World Bank (IDA), the Canadian International Development Agency (CIDA), the World Food Program (WFP), the European Commission, IrishAid, the UK Department for International Development (DFID) and USAID.

small scale credit and household packages of inputs and other resources. The PSNP, a program through which individuals in food insecure households would carry out public works (PW) labor for five days a month in return for a monthly ration of food or a cash payment, was the largest. The objectives of the program were to meet food needs while smoothing household food consumption, protecting household assets by reducing or preventing the need for households to sell assets in food deficient periods, and to strengthen community food security through the creation of community assets and support to capacity building among local government officers implementing the program.

Public works were to focus on labor intensive activities including soil and water conservation, and construction and rehabilitation of roads and public infrastructure. These activities were identified in recognition of the fact that Ethiopia's loss of agricultural productivity and rural poverty were a direct consequence of degradation of the rural environment, with loss of water sources and soil erosion as major effects, while access to social services and marketing opportunities were limited by weak infrastructure

Targeting of woredas for inclusion in the program was based on a history of receipt of food aid assistance in the woreda during each of the past three years. Within this population, household eligibility for participation in Public Works labor as PSNP beneficiaries was based on a household history of three or more months of food gap during the previous three years - with receipt of food aid assistance - or of a severe loss of assets during the previous one to two years. Households lacking any means of support – the highly vulnerable, including the elderly and chronically ill – were entitled to receive Direct Support – food or cash support with no labor requirement. Under the guidance issued in the 2006 Programme Implementation Manual (PIM), the duration of need of individual households was to be determined through an annual assessment. The norm has tended to include six months of PW support, but this has been flexible. Community Food Security Task Forces (CFSTF), working in conjunction with kebele and woreda level food security task forces (KFSTF, WFSTF) were expected to review beneficiary lists twice a year.

Following re-organization and re-targeting late in 2005, the beneficiary population expanded rapidly from the initial 4.83 million, and by 2006 the PSNP was providing assistance to 7.19 million beneficiaries.

A number of mechanisms were included in the PSNP to ensure flexibility to meet unanticipated needs. These included a Contingency Budget of up to 20% of the full allocation of resources in food or cash. Five percent of this could be used at the discretion of the woreda to include additional households in the program in a given year or to lengthen the distribution period, while the remaining 15% would be disbursed at the discretion of Regional authorities to meet transitory needs. Where needs exceed the capacity of these mechanisms, particularly where food is required (rather than cash), the emergency response system is activated. The level of cash payment provided for daily PW labor, initially set at 6 birr, has been adjusted upward twice since the start of the program, in response to inflation in food prices.

The long term goal of the Federal Food Security Program has been the graduation from food aid assistance of households who have attained a degree of food security

which would allow them to leave the PSNP and eventually to be completely self sufficient, not requiring Government livelihood support. While the specific conditions for and definition of graduation were not included in the 2006 PIM, the document emphasizes the importance of household level linkages with other food security programs (OFSP) to facilitate graduation, stating that PSNP participants should receive priority in access to OFSPs.⁷ Asset-based criteria for graduation were published in 2007. The first graduations took place that year. Despite ambitious goals for graduation in the first phase, a total of 280,000 individuals - 3.73% out of a case load of roughly 7.5 million - had graduated by 2009.⁸

In 2008 the Government of Ethiopia proposed a five year extension of the Federal FSP, to cover the period 2010 – 2014. This new phase, which began in Sept. 2009, provides the context for the next USAID-supported MYAPs, scheduled to begin in Sept. 2011. The FSP extension has been accompanied by the production of a new Program Implementation Manual,⁹ currently in draft. This document broadens the approach to food security, acknowledging that a more intensive and integrated approach, bringing much greater ‘asset building’ resources to bear, will be necessary to provide households with the economic stability needed to approach the long term national goal of widespread graduation.

The FSP implemented under the 2010 PIM includes four components. The primary component is the extended PSNP. The Household Asset Building Program (HABP)¹⁰ encompasses a Federal (Central Government) grant to Regions together with an existing small loan program, both of which provide for a small agricultural credit, to be used to re-build the household asset base or to purchase a ‘household extension package’ containing agricultural inputs, with provisions for linkages with ‘demand driven’ agricultural extension services. These inputs are intended to strengthen the livelihood base of food insecure households, enabling them to connect with micro finance institutions to foster off-farm livelihoods and asset acquisition and to move toward graduation. A third component, investments made by regional governments in community assets through what is known as the Complementary Community Infrastructure program (CCI),¹¹ provides for larger scale capital intensive projects intended to promote food security. The fourth component is Resettlement, along lines established in the first phase of PSNP. The new directions for food security programming elaborated in the 2010 – 2014 phase of the PSNP are relevant to the evaluation of the PSNP as implemented under the Title II programs awarded in 2008, given the long term goals of Ethiopia’s national Food Security Program.

⁷ Productive Safety Net Programme, *Programme Implementation Manual (Revised)* Ministry of Agriculture and Rural Development, Addis Ababa, 2006 [hereafter PIM, 2006].

⁸ *Designing and Implementing a Rural Safety Net in a Low Income Setting: Lessons Learned from Ethiopia’s Productive Safety Net Program 2005–2009*, p. 103 [hereafter “Designing and Implementing”] accessed at: http://siteresources.worldbank.org/SAFETYNETSANDTRANSFERS/Resources/EthiopiaPSNP_LessonsLearnedLite.pdf on Dec. 2, 2010.

⁹ Ministry of Agriculture and Rural Development, Productive Safety Net Programme, *Programme Implementation Manual (Revised)* DRAFT v3 25, Addis Ababa, May 2010

¹⁰ For a full description of HABP, see Ministry of Agriculture and Rural Development August 2009; *Food Security Programme 2010 – 2014, Household Asset Building* August 2009

¹¹ For further information, see Ministry of Agriculture and Rural Development *Food Security Programme 2010 – 2014*, August 2009 and Ministry of Agriculture and Rural Development *Food Security Programme 2010 – 2014 Productive Safety Net*, August 2009.

1.2. Background to Title II Support in Ethiopia

The large scale involvement of USAID-Food for Peace in Ethiopia originated in the scaling up of food aid in the early 1980s in response to the drought and famine of that period. This activity established an ongoing US presence. In line with the traditional role of Food for Peace (FFP) in support of direct food aid assistance, the participation of USAID in the Ethiopian Government Food Security Program from 2005 onward was focused on support to woredas where the PSNP would be providing commodities. While the PSNP was intended to extend and strengthen a cash-based response to chronic food insecurity (the 'cash first' policy), the importance of commodity assistance was acknowledged, and over 55% of beneficiaries received food in 2005 and 2006. All of the EDAC Cooperating Sponsors¹² (CSs) had long term experience in implementing development programs in the regions where they were awarded Title II DAPs, dating back in several cases to the major drought and famine of the mid-1980s. Under Title II DAPs and MYAPs these agencies continued, where resources allowed, to carry out related development initiatives and activities, particularly livelihood support, in conjunction with the implementation of the PSNP. They quickly scaled up commodity assistance. In 2005 EDAC members were supporting 1.26 million beneficiaries out of a total of 4.83 million (26%) and in 2006 1.59 out of 7.18 or 22%.¹³

1.2.1. DAP, MYAP and PAP: 2005 - 2010

The Developmental Assistance Programs funded by FFP ran from Jan 2005 through Sept. 2008. The three year period funded in the MYAP is from Oct. 1, 2008 through Sept. 30, 2011. Guidance indicated that programs were to be focused on the objective of the PSNP, *"to provide transfers to the food insecure population in chronically insecure woredas in a way that prevents asset depletion at the household level and creates assets at the community level,"* supporting the USAID/Ethiopia Mission priority of contributing effectively to the PSNP.¹⁴ Potential implementing partners were encouraged to link their programs to ongoing bilateral programs in all sectors: Agriculture, Maternal and Child Health, Family Planning, Water and Sanitation, and Education. They were advised to use matching funds, where available, for these interventions and for livelihood activities. Sustainability, as related to graduation, was linked to access to resources of the OFSP. At the time guidance was issued, criteria for graduation had not yet been specified, but it was understood that reaching graduation would require access to livelihood-based inputs. The importance of capacity building, including skills training, as a mechanism to promote sustainability, was emphasized.

Five of the original DAP partners: CRS, CARE, FH, REST and SCUK, were funded for MYAPs through Sept. 2011, while SCUS received renewed support to continue implementation of a Pastoral Areas Pilot (PAP) program. PAPs were also established in the pastoral woredas of Afar Region under CARE and SCUK. SCUS expanded into two additional woredas, one in Somali Region and the other located in a pastoral

¹² This terminology, used by USAID/FFP to describe agencies implementing programs under Cooperative Agreements, describes US, European and local nongovernmental organizations. It is the preferred term to describe partners in the EDAC Consortium.

¹³ Agridev Consult, *Evaluation of USAID Supported Productive Safety Net Program Implemented in 35 Woredas of Ethiopia*, Final Report, Addis Ababa, April 20, 2007, p. 30. [This is the Mid Term Evaluation.]

¹⁴ *Ethiopia-Specific Country Information for Jan.22, 2008 MYAP Submission* [USAID Mission, Addis Ababa]

zone of Oromia Region adjacent to older pilot program areas. All of the Cooperating Sponsors (CSs) except REST expanded their areas of activity in the MYAPs, through the addition of one to three new woredas, from FY09 onward. Program areas are shown below.

**Table 1.1. Title II MYAPs and PAPs: 2008 - 2011
Regions and Woredas**

CS	Region	Woredas ¹⁵
SCUK-MYAP	Amhara	9
SCUK-PAP	Afar	3
CARE-MYAP	Oromia	5
CARE-PAP	Afar	1
CRS	Oromia	5
	Dire Dawa ¹⁶	1
SCUS-PAP	Somali	4
	Oromia	1 ¹⁷
FHI	Amhara	5
REST	Tigray	6
Total		40

1.2.2. MYAP Objectives

These MYAPs (and the DAP which preceded them) share four broad objectives:

- Improved food security status of chronically food insecure households;
- Improved and protected household assets and livelihoods in targeted areas;
- Enhanced community resilience to shocks and reduced vulnerability; and
- Improved community health and nutrition status.

While built around the collective goal of *making a sustained change to food security and livelihoods of chronically poor communities in the operational areas and reducing their vulnerability to disaster shocks*, each Title II MYAP was developed as an independent set of interventions with specific objectives and activities within the context of the PSNP. Each Cooperating Sponsor has developed its own program proposal, with objectives and indicators identified in and assessed through its Indicator Performance Tracking Table (IPTT). A total of eight Annual Results Reports, with accompanying IPTTs and other program data, are prepared within the EDAC. Across all CSs, there are a wide range of variables, with diverse indicators and measurement methods. Several CSs carry out annual program reviews, including collection of quantitative survey-based data on impact indicators. While there may be some overlap between CS-specific data and that collected at baseline and in the final survey, this evaluation has not attempted to measure these partner-specific indicators.

¹⁵ A full list of program woredas is shown in Annex A.

¹⁶ Dire Dawa, which has regional status, will be included in data for Oromia Region in tables throughout the text.

¹⁷ The SCUS PAP includes Arero, a pastoralist woreda in Oromia Region, which will be referred to as 'Borena' [the name of the Zone in Oromia Region in which it is located], in tables that follow. Data from Arero will be aggregated with data from SCUS program woredas in Somali Region.

Given the diversity of lower level objectives among these programs, the major focus of this evaluation has been on four key indicators of impact utilized by all consortium members:

1.2.3. Impact Indicators:

- *Average number of months of adequate food provisioning;*
- *Average value of assets in targeted households;*
- *Average household dietary diversity score; and*
- *Child nutritional status, measured through % of children 6-59 months who are stunted and % who are underweight.*

Each of these impact indicators provides a means of assessing progress toward one or more of the objectives listed above.

1.2.4. PAP Objectives and Context

The Pastoral Pilot Programs are focused on objectives specific to conditions in dry lowland areas: to maintain household assets and prevent losses; to increase access to infrastructure and build community assets through work with communities on identifying the most appropriate projects; to strengthen livelihoods and, in line with the 'pilot' status of these programs, to provide a means of identifying, documenting and sharing lessons on the most effective means of achieving the larger objectives of the PSNP in pastoral communities. As with the MYAPs, there is also a focus on government and community capacity building.

With the exception of three SCUS woredas, PAP programs were initiated in 2008, with a shorter implementation period than MYAPs – two years as compared with five - and under environmental and socio-economic conditions which have affected progress toward achievement of objectives. These included frequent and severe droughts, weak or no infrastructure, limited local government staffing and a long history of gratuitous relief food distributions. In 2010, severe flooding in Afar Region limited program implementation and affected data collection for this evaluation. Results shown below for lowland pastoral areas reflect the slower progress and limited objectives of these programs. Where feasible, results for pastoral areas in Afar and Somali Regions and in Arero Woreda of Oromia have been disaggregated in data shown throughout this report. Where CS performance is measured as a whole, slower rates of progress and more limited objectives in pastoral areas will have affected data for CSs implementing PAPs: SCUK, CARE and SCUS.

1.3. Organization of the Evaluation

The evaluation describes the data collection methodology, followed by a review of the data on the four key objectives shown above. The organization of the discussion reflects the relative weight of these objectives. The first objective, met through well targeted and timely food transfers, well managed participatory public works activities and effective support to local government, absorbs the largest part of program resources – roughly 80% - and occupies the largest part of this study. Activities in support of asset protection and acquisition through sustainable livelihoods, while reduced in scale as a result of resource cut backs in the MYAP phase of the Title II program after 2008, are also discussed and evaluated at some length, given the importance of this objective in achieving the long term goal of full self sufficiency

embodied in the current (2010 – 2014) phase of the PSNP. Community resilience to shocks, the third objective, is cross cutting; the discussions of the first and second objectives cover much of the information relevant to reduction of community vulnerability. This discussion is brief. Community health and nutrition form the basis of utilization, the third element of food security. Given the centrality of child nutritional status to the overall assessment of the program, the scope of these activities is reviewed at some length. Pastoral programs, which differ in major ways from those implemented in agricultural areas, are reviewed separately. The report concludes with findings and recommendations. This report is not intended to serve as a basis for comparing the performance of individual CSs; however, quantitative comparisons are made and, where appropriate, examples drawn from activities of specific partner agencies are used to illustrate programming contexts and practices.

2. METHODOLOGY OF THE EVALUATION

Background

In line with the mandate for impact evaluation and the complexity and scale of the program, the Final Evaluation utilized both quantitative and qualitative data collection methodologies. Collection of quantitative data collection closely followed the methodology established in the baseline, focusing on the four shared key impact indicators, with the objective of being able to compare results to measure progress toward achievement of key objectives. A randomized sample of 4474 beneficiary households were interviewed in all program locations.

A qualitative component was used both to verify quantitative data and to provide the context for the associations shown in quantitative results. This included field visits by lead consultants and by four field teams, who visited all CS program areas. An external consultant interviewed key program and donor staff and visited five field locations. Four field teams, visiting all program areas, assessed implementation of the PSNP through Title II resources. Success of Cooperating Sponsor partners in achieving major program objectives was examined through focus group discussions, interviews with beneficiaries and other community members, program staff and local government officers and through observation in Tigray, Amhara, Oromia and Somali Regions.

The initial draft report was subjected to three rounds of review by all stakeholders. Donor reviewers requested additional quantitative data, including the expansion of statistically verifiable comparisons of key impact indicators measured at baseline and in the final evaluation.

2.1. Quantitative Data Collection and Analysis

2.1.1. Baseline Survey

In June and July of 2005, just after the initiation of the USAID-funded Title II program to support implementation of the Productive Safety Net Program by eight Cooperating Sponsors (CSs) in 40 woredas, a comprehensive household baseline survey was undertaken. Target populations were sampled in the program areas of CARE, CRS, CHF, FH, REST, SCUK, SCUS, implementing a pastoral pilot program, and World Vision (WV). Using a two stage cluster sampling model, 4631 household interviews were carried out in five Regions: Tigray (REST); Amhara (CARE, FH and SCUK); Oromia (CARE and CRS); SNNP (WV and CHF); and Somali (SCUS). Sample size was determined using the estimated variance of the impact indicator, “Percentage of months of Inadequate Household Food Provisioning per Year”. This represents a modification of the indicator “months of adequate food provisioning” shown above. The baseline household questionnaire is available as Technical Annex 3. The approach was modular, allowing for the inclusion of additional questions related to specific objectives of one partner. These results did not form part of the baseline analysis.¹⁸

¹⁸ The baseline survey is: Tefera, Mulugeta, *Productive Safety Net Program Baseline Survey Report in the USAID/Ethiopia Target Area*, INDAK International PLC, Addis Ababa, November 2005.

Community data checklists were also completed with 164 community groups at baseline to provide context. This portion of the work was not replicated; but those data were reviewed in preparation for the qualitative data collection exercise. The FANTA Project is reported to have provided advice on survey design, analysis and write up at baseline.

2.1.2. Final Survey

The final evaluation survey followed the content and methodology of the baseline household survey closely, utilizing most of the same questions and a similar two stage sampling method. There were several key differences that have affected the comparability of the results and complicated the analysis:

- With the renewal of USAID funding for the period 2008 –2011, Title II support was discontinued to two participating agencies, CHF and World Vision. Both programs were located in SNNP Region;
- Most of the six other CSs modified their MYAP operational areas, adding additional woredas; the total number covered remained at 40 but the sampling frame used during the baseline no longer ‘fit’ the program area after 2008; and
- PSNP PAP programs were expanded to additional pastoral communities in Somali and Afar Regions and Borena Zone of Oromia. Socio-economic conditions affecting most indicators used in program assessment, vary greatly from those in predominantly agricultural areas.

Questionnaire Design and Development

The household questionnaire followed the baseline survey questionnaire with minor simplifications. The data collection tools were translated into four local languages (Amharic, Oromifa, Tigrinya and Somali) and pre tested before starting the data collection. The English version is found in Technical Annex 2.¹⁹

Sampling

In order to collect data from representative sampled communities/ institutions in the target area, the sampling techniques divided the respondents into four clusters in each of the target woredas. The cluster design was set at 4X28 (four clusters per woreda with 28 households in each), yielding 112 households per woreda or a total of 4,480 households across the forty woredas, enough to satisfy the sampling requirements used for the baseline survey in 2005. The actual total was 4474.

Clusters in each woreda were based on kebeles.²⁰ Four kebeles were selected at random from the list of those considered food insecure and targeted by the project using a lottery method. In the secondary sampling households were selected randomly from the program beneficiaries’ list. The CSs were provided with the list of program beneficiary households in each selected kebele and a random draw was made to select the households by the survey supervisor in the presence of the CS representative, using a cluster specific sampling interval with a randomly selected starting point.

¹⁹ Copies in Amhara, Somali, Oromifa and Tigrinya are available from JaRco.

²⁰ This is the smallest official administrative unit discussed in this report.

At eligible households, enumerators selected a third sampling unit – the reference child for anthropometric measurement. If there was only one child within the age range of 6-60 months, that child was automatically selected. In case there was more than one child in that age range of 6-60 months in the household, the reference child was selected using a random assignment technique. When there was no child between the age of 6-60 months in the sampled household, the questionnaire was administered for that household and the anthropometric measurement part of the questionnaire was skipped.

The sample size and distribution are shown below:

Table 2.1. Sampling Size by CS and Number of Woredas

CS	Region	Woredas	Households (HH)	Total Sample for CS
SCUK	Amhara	9	1,006	1,341
	Afar	3	335	
CARE	Oromia	5	558	670
	Afar	1	112	
CRS	Oromia	5	561	673
	Dire Dawa	1	112	
SCUS	Somali	4	448	560
	Oromia Region: Arero Woreda	1	112	
FHI	Amhara	5	560	560
REST	Tigray	6	670	670
Total		40	4,474	4,474

Data Entry and Processing

Data Verification

A user-friendly and self-automated data checking household survey data entry program has been developed by JaRco using CSPro²¹ (version 4.0). This program has facilities to clean and export data to SPSS which was used as a tool for survey data analysis.

Once the data collection was completed, the field team supervisors had the responsibility to double-check all filled questionnaires for accuracy, completeness and readability before leaving the survey sites. If any problem or doubt arose, the enumerators were sent back to the enumeration sites to rectify the problem. The quality of data was further ascertained during the data entry and cleaning process. To reduce data entry errors as much as possible, five percent of the questionnaires were double entered. Based on this procedure the statistician conducted a comparison between the two entries to check instances of data entry errors for further visual verification of variables where frequent errors have been identified.

Data Entry

Various software tools are used to enter and analyze the data. For anthropometric measurements, the data were entered in EPI Info. The rest of the data were entered using CSPro 4.4. All the entered data were checked through conditions embedded in

²¹ CSPro stands for Census and Survey Processing system. It is a software tool designed by the US Census Bureau with the aim of supporting in developing computer based census and survey data. It is a public-domain software package for entering, editing, tabulating and mapping census and survey data.

the data entry software and were further checked for outliers by looking into frequency distributions and cross-tabs. Skip rules were used in some of the Yes/No questions to ease data entry. Once the data was entered in CSPro 4.0, it was cleaned, exported and converted to SPSS. The cleaned survey dataset was then organized into modular files in SPSS format.²²

Data Analysis

Data analysis involved the creation of three separate data sets, for purposes of statistical comparison, and the re-analysis of data collected in the 2005 baseline survey. Several levels of analysis were defined:

- Comparisons among all CSs programs, treating and analysing data collected in MYAP and PAP programs separately;
- Inter-Regional comparisons, aggregating work done by two or more consortium partners in the same regions; and
- Comparisons of data collected among comparable populations or sampling universes in 2005 and again in 2010. This was necessary to enable the use of tests of statistical significance. It required the construction of two data sets encompassing the 27 woredas included in the 2005 target area, which are currently also included in the Title II program.²³

2.2. Qualitative Data Collection and Analysis

Field Data Collection

Field visits were carried out in a sample of 22 woredas by four teams experienced in field research, each including graduate level sector experts in infrastructural development, natural resources management, health and nutrition, and livelihood development. Each team utilized interview schedules, focus group discussion guides, and guidance on preparation of woreda level reports and tables covering resource transfers through the PSNP and public works construction.

Field teams carrying out the qualitative review were asked to:

- Assess whether the Title II programs' outcomes and impacts are achieved in line with the stated goal, objectives and intermediate results;
- Assess constraints, lessons learnt/good practices, opportunities as well as successes in program implementation;
- Determine the relevance and effectiveness of the program strategies/ approach utilized in implementation of the program; and
- Assess the sustainability of the program benefits, including but not limited to the development of capacities of stakeholders.

Each field visit took four days, and included 12 – 16 focus group discussions with a range of community members and local officials in four kebeles participating in PSNP,²⁴ selected with guidance from program staff to represent both successful and problematic conditions. Program staff and local officials at woreda level were interviewed, site visits conducted and photos taken. Written reports on each woreda were submitted, reviewed and revised, followed by a de-briefing meeting in Addis.

²² Full data sets have been made available to the FANTA Project, advisors to FFP Washington.

²³ These 27 woredas have become 28, with the division of DodotaSire into two separate woredas after 2005.

²⁴ Field work schedules are included in Annex B.

These visits were followed up by the lead evaluators, who visited program areas of five CSs, spending roughly two days in each location. Other evaluation responsibilities limited the time available for field work and the external consultant was reliant on stakeholders for language interpretation during interviews.

Interviews

Interviews were carried out in Addis Ababa with key staff of all CSs, with donors and government officials, including key staff of the Food Security Coordination Directorate (FSCD).

Document Review

This included review of annual and other reports generated by CSs, project proposals, monitoring data and reports of assessment and surveys. In some cases full series of key reports were available from the inception of the PSNP. Additionally, evaluations of the PSNP itself and of closely related programs, particularly in the area of livelihood support, were utilized to provide context and background to an understanding of EDAC-specific findings. As Africa's second largest cash-based entitlement program²⁵ and one regarded as having been successful in the achievement of its major short term objectives, the PSNP has been very widely studied and documented. In addition, the PSNP itself carries out biannual impact assessments including household sample surveys among beneficiaries and non-beneficiaries²⁶; some data from the survey rounds conducted in 2006 and 2008 has been published and was consulted in preparing this report.

2.3. Mid-Term Evaluation

In 2007 a mid-term evaluation of the program was undertaken.²⁷ The study was largely qualitative but included a rapid survey to measure a small number of variables, including perceptions of fairness of targeting in the distribution of PSNP assistance, an issue that was explored in the Final Evaluation through qualitative data collection. Mid Term recommendations informed the findings and recommendations of this evaluation.

Through an examination of activities implemented in pursuit of the overall goal this evaluation will attempt to assess program dimensions of appropriateness and relevance, effectiveness, sustainability, and impact.

²⁵ The national pension program implemented in the Republic of South Africa is the largest.

²⁶ See Daniel O. Gilligan, John Hoddinot, Neha Rati Kumar and Alemayehu Seyoum Taffesse, *Impact of Social Protection on Food Security and Coping Mechanisms: Evidence from Ethiopia's Productive Safety Net Programme*, Draft, March 6, 2009. These surveys are jointly implemented by the Ethiopia Central Statistical Agency and the International Food Policy Research Institute in Washington, DC.

²⁷ See Agridev Consult, op.cit.

3. HOUSEHOLD DEMOGRAPHICS

Household size and composition and the educational levels and livelihoods of heads of PSNP beneficiary households are all important in understanding the impacts of the Title II program on them. Households assisted under the MYAP and PAP programs share many characteristics with other rural households in Ethiopia. At an average size of 5.4 persons, they appear somewhat larger than the national average size for rural households, 4.9 persons, as measured through the 2007 national Population and Housing Census.²⁸ As expected, households in pastoral areas, Somali/Borena and Afar, appear to be larger than those in agricultural areas. Data are shown below:

Table 3.1. Average Household [HH] Size by Region [2010]

Region	Average HH Size
Oromia	5.4
Amhara	4.6
Somali and Borena ²⁹	6.9
Tigray	5.6
Afar	6.5
Total	5.4

A correlation between the sex of the household head and other socio-economic variables has been widely observed, with female headed households generally found to be poorer, with less well educated heads. In addition, the absence of an adult economically active male member may reduce household labor availability. The proportion of female headed households (FHH) was estimated for the full sample of 4474 HHs, which showed over 33% , as compared with the 2005 baseline survey sample proportion, of 19.2%.³⁰ The Demographic and Health Survey,³¹ also undertaken in 2005, found a fraction similar to the baseline among rural households, of just over 20%.³²

In order to verify the extent of this apparent increase in female headed household, comparisons were made by CS for samples based on the 27³³ woredas participating in the Title II program throughout the full period. These are shown below:

²⁸ It was not possible to do significance tests on national Census data to confirm this difference. See Federal Democratic Republic of Ethiopia Population Census Commission, *Summary and Statistical Report of the 2007 Population and Housing Census*, Addis Ababa December 2008, p. 83. Comparisons were with rural households only.

²⁹ Hereafter, Arero Woreda in Borena Zone of Oromia Region will be understood to be included in the regional heading 'Somali Region' on tables unless it is indicated separately as Borena.

³⁰ Tefera, Table 13.

³¹ *Ethiopia Demographic and Health Survey 2005*, Central Statistical Agency, Addis Ababa, Ethiopia and ORC Macro Calverton, Maryland, USA, September 2006

³² p. 14

³³ This includes 28 in the 2010 sample, due to the division of Dodota-Sire. This administrative change does not affect the values of the variables measured.

Table 3.2. Percentage of Female-Headed Households in 2010 and 2005

CS	Sex of HH 2010 [28 Woredas]				Sex of HH 2005 [27 Woredas]			
	Male	Female	Total	% Female	Male	Female	Total	% Female
CARE	334	113	447	25.3 *	399	60	459	13.1
CRS	357	91	448	20.3*	381	65	446	14.6
SCUK	346	325	671	48.4	558	116	674	17.2
FH	316	133	449	29.6	344	104	448	23.2
REST	385	285	670	42.5	442	247	689	35.8
SCUS	208	128	336	38.1**	292	44	336	13.1
Total	1946	1075	3021	35.6***	2416	636	3052	20.8

* p = .10 ** p = < .01 *** p = < .005

In 2010 the proportion of female headed households was highest in the SCUK³⁴ and REST program areas, in Amhara and Tigray Provinces, but they appear to have increased everywhere. The changes are highly significant across the entire population. The long term effects of casualties of war have left many households in Tigray without male heads. It is not clear why the proportion of female headed households among PSNP households has increased since 2005. Given the consistent association between poverty and female headship, these data suggest, however, that Title II MYAPs have been appropriately targeted to meet the needs of vulnerable households.

The educational level of the head of household may be associated with employment and the household's economic situation. The educational levels of heads of households in the sample drawn from the full project population are uniformly low. Almost 70% reported not having attended school, as shown below, by Region.

Table 3.3. Educational Level of HOH, by Region [2010]

Level of Education	Oromia		Amhara		Somali		Tigray		Afar		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Did Not Attend School	757	61.7	1,175	75.2	415	74.2	436	65.3	318	71.8	3,101	69.5
Primary	280	22.8	189	12.1	82	14.7	172	25.7	50	11.3	773	17.3
Secondary	22	1.8	33	2.1	12	2.1	27	4.0	9	2.0	103	2.3
University	5	0.4	-	-	-	-	1	0.1	-	-	6	0.1
Religious School	61	5.0	43	2.8	39	7.0	28	4.2	59	13.3	230	5.2
Adult Education	102	8.3	123	7.9	11	2.0	4	0.6	7	1.6	247	5.5
Total	1,227	100.0	1,563	100.0	559	100.0	662	100.0	443	100.0	4,460	100.0

Household livelihoods were also examined by Region, for the sample drawn from the full program beneficiary population, 40 woredas. These follow the anticipated patterns of dependence on agriculture in Oromia, Amhara and Tigray, with livestock rearing representing over 90% of sampled households in Afar Region.

³⁴ The adjusted sample for SCUK includes only the six original woredas included in the DAP.

Table 3.4. Key Household Livelihood, by Region [2010]

Livelihood	Oromia		Amhara		Somali		Tigray		Afar		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
None	-	-	-	-	1	0.2	-	-	2	0.5	3	0.1
Agriculture	1,176	95.9	1,467	93.9	158	28.3	561	84.6	21	4.7	3,383	76.0
Daily Labour	7	0.6	47	3.0	190	34.1	62	9.4	3	0.7	309	6.9
Livestock Rearing	2	.02	-	-	184	33.0	1	.02	406	91.4	593	13.3
Trading	6	0.5	36	2.3	7	1.3	33	5.0	-	-	82	1.8
Employee	2	0.2	2	0.1	4	0.7	2	0.3	9	2.0	19	0.4
Pensioned	33	2.7	9	0.6	7	1.3	4	0.6	3	0.7	56	1.3
Hand Craft	-	-	1	0.1	-	-	-	-	-	-	1	0.0
Other, Specify	-	-	-	-	7	1.3	-	-	-	-	7	0.2
Total	1,224	-	1,562	-	551	-	662	-	444	-	4,443	-

The data for the sample drawn in Somali Region and Borena Zone, SCUS program areas, suggest livelihood patterns in pastoral communities during the period of Title II support which may have major implications for their livelihood security. One third of sampled household heads in this area reported ‘daily labor’ as their major livelihood, higher than the proportion identifying livestock rearing. While direct comparisons are limited by the change in program populations³⁵, it can be noted that in 2005, 80% of household members in the SCUS program area reported either agriculture or livestock rearing as their main occupation as compared with 61% in the current survey. Wage labor was identified by only 3% of the surveyed sample in the SCUS program area in 2005 as their main occupation. This may indicate increasing impoverishment of beneficiary households across the original program area; it may also reflect a higher level of poverty in woredas added to SCUS’s PAP program, Bare and Arero (in Borena Zone), in 2008. Qualitative findings for this evaluation as well as an evaluation commissioned by SCUS in May 2010 highlighted the growing numbers of marginal pastoralists lacking a viable livestock-based livelihood.³⁶ This group, who have no reliable livelihood, poses a challenge to the long term PSNP goal of increasing food self sufficiency.

Land holdings among households in the Title II area reflect both the livelihood patterns shown above and the very low asset levels in this population. Over three quarters of sampled HHs reported owning land,³⁷ but the distribution varied strongly between MYAP program areas and PAP areas.

³⁵ Significance tests on matched samples were not run on these data.

³⁶ These groups are sometimes referred to as ‘pastoralist dropouts’ or ‘stockless pastoralists’.

³⁷ Land was re-distributed in the early 1990s. There are now complex Regionally based land tenure laws regulating rental and alienation of land.

Table 3.5. Land Ownership By CS [2010]

CS	No		Yes		Total	
	No.	%	No.	%	No.	%
CARE-MYAP	30	5.8	490	94.2	520	100.0
CARE-PAP	66	67.3	32	32.7	98	100.0
CRS	28	4.4	607	95.6	635	100.0
SCUK-MYAP	88	9.2	865	90.8	953	100.0
SCUK-PAP	254	85.5	43	14.5	297	100.0
FHI	45	8.3	494	91.7	539	100.0
REST	121	18.1	546	81.9	667	100.0
SCUS	301	54.0	256	46.0	557	100.0
Total	933	21.9	3,333	78.1	4,266	100.0

Plot sizes among households reporting ownership of land are small; these also vary among sampled HHs in different program areas.

Table 3.6. Mean Land Holding [ha.]

CS	Mean Area
CARE-MYAP	0.40
CARE-PAP	1.46
CRS	0.76
SCUK-MYAP	0.86
SCUK-PAP	1.61
FHI	0.69
REST	0.70
SCUS	1.58
Total	0.79

The demographic profile of the Title II program area has changed in the period since the baseline survey was undertaken. There has been a significant increase in the proportion of female headed households, while a decline in the mean size of land holdings probably occurred.³⁸

Re-Targeting 2005 and 2006

It is important to stress that while the target woredas used for baseline-final comparisons were matched for statistical comparisons, changes in the demographic profile of HHs targeted as PSNP beneficiaries occurred nationally between 2005, when the baseline was carried out, and 2006, when an extensive re-targeting exercise was carried out. The rapid start-up of the PSNP, coupled with the focus on ensuring

³⁸ Tests of significance showed significant declines in land holding sizes [$p < .05$] from 2005 in program areas of CARE, SCUK, FH and REST [for all $p < .005$], with a significant decline in the full sample [$p < .05$]. These comparisons were not included in the table above as the questions regarding land size were differently structured in the baseline and final surveys.

that beneficiary households would be viable candidates for graduation, resulted in the exclusion from initial beneficiary lists of many very poor households, who were expected to re-settle in other areas, following the first targeting. This situation was focused primarily in Amhara,³⁹ where extensive re-targeting took place late in 2005, after the baseline had been conducted, together with an expansion of the program itself between 2005 and 2006, as the scale of need was more broadly recognized. The initial exclusion of ‘ultra poor’ households from PSNP beneficiary rolls in Amhara may have affected the composition of the household samples drawn from program areas of FH and SCUK, CSs working in that Region.

³⁹ See *Designing and Implementing a Rural Safety Net*, p. 53.

4. OBJECTIVE 1: IMPROVED FOOD SECURITY STATUS OF CHRONICALLY FOOD INSECURE HOUSEHOLDS

Background

This objective is focused on the timely and effective delivery of food transfers in return for public works labor by able bodied households - getting the right amount of the right commodities to the right beneficiaries at the right time, including highly vulnerable households lacking labor who receive Direct Support. Transfers of food and cash occupy the major part of the PSNP budget and effort, at over 80% of a total budget estimated to be \$360 million in 2009.⁴⁰ The proportion devoted to food commodities has varied over time. As shown below, CSs receiving Title II support have served increasing numbers of beneficiary households since the start of the program.

Between 2005 and 2010, the six Cooperating Sponsors implementing Title II assistance to the PSNP served the following beneficiary numbers:

Table 4.1. Beneficiary Numbers, DAP, MYAP, and PAP Programs, 2005-2010

CS	2005			2006			2007			
	Public Works [PW]	Direct Support [DS]	Total	Public Works [PW]	Direct Support [DS]	Total	Public Works [PW]	Direct Support [DS]	Contingency	Total
CARE-MYAP	146955	36307	183262	298632	34780	333412	182057	45378	44000	271435
CRS	107646	20004	127650	155342	28867	184209	142118	26578	33739	202435
FHE	183544	25029	208573	221821	30248	252069	105484	24342	32457	162283
REST*	285055	57597	342652	403946	69495	473441	340679	56233	61233	458145
SCUK-MYAP	225857	23258	249115	257085	32347	289432	273542	32091	8338	313971
SCUS	47654	26419	74073	47654	26419	74073	47654	26419	-	74073
Total	996711	188614	1185325	1384480	222156	1606636	1091534	211041	179767	1482342

*: Includes contingency beneficiaries.

Table 4.1. Beneficiary Numbers, DAP, MYAP, and PAP Programs, 2005-2010 [Continued]

CS	2008				2009					2010				
	Public Works [PW]	Direct Support [DS]	Contin.	Total	Public Works [PW]	Direct Support [DS]	Contin.	Expan.	Total	Public Works [PW]	Direct Support [DS]	Contin.	Expan.	Total
CARE-MYAP	183238	24720	39138	247096	123989	13567	50537	143501	331594	121923	12681	33298	127025	294927
CARE-PAP	8739	2185	-	10924	11212	4677	2120	-	18009	10342	3826	708	-	14876
CRS	142118	26578	33739	202435	142118	26578	32833	137565	339094	142118	26578	32833	137565	339094
FHE	104413	24085	32127	160625	121558	28052	37402	-	187012	210171	48500	64668	-	323339
REST	343821	53091	66155	463067	323976	53091	232139	182108	791314	301649	75417	279384	243325	899775
SCUK-MYAP	321433	36510	59654	417597	364493	39736	59622	57535	521386	394480	41410	59642	87288	582820
SCUK-PAP	28411	16364	-	44775	43127	28118	-	-	71245	43127	28118	-	-	71245
SCUS	76034	24747	-	100781	76034	24748	20156	-	120938	76034	24,747	20156	-	120,937
Total	1208207	208280	230813	1647300	1206507	218567	434809	520709	2380592	1299844	261277	490689	595203	2647013

⁴⁰ See *Designing and Implementing a Rural Safety Net*, p. 18-19.

As these tables show, beneficiary numbers have expanded greatly since the start of the Title II program, with greatest areas of growth among Contingency and Expansion beneficiaries. In 2010, these two groups made up over 40% of the total.

Objective 1 is supported by four key activities:

- Targeting of beneficiaries in collaboration with local government;
- Timely and predictable food transfer for chronically food insecure households;
- Public works activities; and
- Strengthening local government's technical and institutional capacity.

Data on the effectiveness and potential sustainability of food transfers and support to implementation of public works activities, including capacity building with local government, is based on CS reporting and interviews in the field, as well as discussions with woreda, kebele and community food security committees and with an average of 15 community focus groups in each of the 22 woredas visited. These field reports provide a broad overview of program performance; specific issues and examples will be raised where they are reported to have posed particular challenges to program implementation.

Average number of months of adequate food provisioning is used as the most important indicator to assess the impact of transfers under the PSNP. The baseline value of this indicator will be compared with the value measured in the 2010 household survey.

The targeting, timeliness and predictability of food transfers will be jointly discussed.

4.1. Food Transfers

Program Implementation

4.1.1. Targeting

The targeting process was developed and is implemented through departments of the Ethiopian Government at Federal, Regional and local – woreda, kebele and community levels. In MYAP areas, the roles of Cooperating Sponsors in this process are limited. Criteria and mechanisms for selection of client lists were defined at the outset of the program in 2005. As the program became established, the 2006 PIM included extensive provisions for review, updating and 're-targeting' and revision of beneficiary lists, with strong community involvement. Community members in all locations visited during field work expressed the view that targeting had been fairly done, but several groups noted that community level need was great, while scope for increases in the overall beneficiary numbers was very limited, leaving a gap between needs and available resources. This was also mentioned by members of a woreda food security task force, although a committee in another location raised the issue of dependency if levels were increased.

During the period from 2005 – 2007, most CSs report having participated in and supported training of local government on elements of the targeting process described in the PIM, as well as on other elements of the program. With re-targeting established as an annual or semi-annual exercise and high turnover of local administration

officers responsible for managing the review process, refresher training by CSs and others has been used to facilitate the process.

The perceptions of the fairness of targeting was examined during the Mid-Term Evaluation of this program,⁴¹ where judgments varied among CS operational areas. In all areas, at least 89% of respondents felt that targeting had been fair in at least 75% of cases. This is consistent with results of community discussions held during this evaluation. CS staff expressed concern that the implementation of Full Family Targeting (FFT) - ensuring that every member of a household receives a ration - where it has not been used up to now, is likely to increase pressure on resources, especially where new households are forming or where graduation has proceeded slowly.⁴²

The involvement of CSs in PAP areas has been important to the establishment of community based targeting mechanisms. These are discussed in more detail below and in section 8.

Several issues related to targeting and more broadly to implementation of transfers have posed challenges to the effectiveness of CS operations relating to resource transfers during the period from 2005 to the present. They include:

- The re-drawing of administrative boundaries to either increase the number of woredas or, in the case of Somali Region, to reduce the number of kebeles, has required re-targeting by CSs, with implications for logistics and community relations; and
- The modification of beneficiary numbers at Regional level, with the concurrence of the Federal Government has, in at least two regions, necessitated a reduction in the number of months of USAID commodity support to all households, as well as re-targeting exercises.

Based on CS reporting, these issues relating to targeting have been resolved without negative effects on overall implementation of food transfers.

4.1.2. Timely and Predictable Food Transfers

The key objectives of food transfers to chronically food insecure households are to smooth consumption patterns, ensuring access to adequate food during periods of low production, and to protect household assets, preventing the permanent vulnerability which can result from asset stripping during periods of food shortage. The national biannual impact evaluation of PSNP has identified the regularity and reliability of transfers as key factors in asset preservation.⁴³

4.1.2.1. Timeliness and Scheduling

In the course of discussion with CS staff, partners, Government staff and community members, there was a high level of satisfaction with CS performance, but beneficiaries in all woredas visited in Oromia Region⁴⁴ and in one woreda of Amhara

⁴¹ See *Evaluation of USAID Supported Productive Safety Net Program*, p.30-31.

⁴² FFT is the PSNP norm but field teams were told in some locations that woreda food security task forces have not implemented it fully, in favor of 'spreading' available resources to a larger number of individual households.

⁴³ Gilligan, Hoddinot, Kumar and Taffesse, *Impact of Social Protection, op. cit.* and Rachel Sabates-Wheeler and Stephen Devereux, *Cash Transfers and High Food Prices: Explaining Outcomes on Ethiopia's Productive Safety Net Programme*. Future Agriculture Working Paper 004, January 2010, Table 4, p.7.

⁴⁴ Not including Arero, in the SCUS program area.

Region mentioned delays in distributions. Some of these related to cash transfers, and significant problems were mentioned by woreda food security task forces in submitting documentation in a timely way. Regional accounting for cash disbursed is a time consuming process, as information passes through multiple channels before funds are released. These delays can affect the timeliness of commodity distributions, even where commodity logistics have been effectively managed. Steps are underway on the part of Government and donors to simplify the accounting process.

Where delays in transfers have occurred, especially in the current year, they are traceable to factors largely beyond the control of individual CS partners. In two Regions, Amhara and Tigray, the mobilization of populations for free labor⁴⁵ was reported to have resulted in delays in initiating PSNP PW activities, leading to a delay in payment. In Oromia Region it was reported that payments were withheld based on the requirement that all beneficiaries had to have been issued with PASS client cards. The introduction of the computerized PASS – Payroll and Attendance Sheet System - to track public works (PW) labor and compensation, including issuance of individual client cards for all beneficiaries, entailed delays in most regions of the country. Through training and direct technical support, CS partners made major contributions to the establishment of PASS. These are discussed below in connection with activities to strengthen local government capacities.

Logistics continue to challenge timely delivery; community members in some kebeles reported that their remoteness from the woreda headquarters had caused delays in commodity and cash payments. CS's have made accommodations, including longer payment intervals (two months) in more remote locations. In general, delays in commodity transfers were manageable, and there were no reports of asset sales or other responses to food shortages arising from delays, in any discussions with communities or local officials.

The mandate for mixed food and cash distributions has given rise to a range of distribution patterns among CSs since 2008. In agricultural areas these have included an initial three months of food followed by three months of cash, alternating months of food and cash, and a pattern of alternating cash and food on a monthly basis at woreda level with the opposite pattern in effect in the neighboring woreda. Discussions with community groups revealed a strong demand for cash payment during the first three months of distribution, January through March, when food harvested in the previous season is still available, and food prices are low. It has been difficult for CSs to meet this demand in situations where commodities are available at the start of the distribution cycle in January, while delays are experienced in cash disbursement. It would have been useful to compare the impacts of differing distribution patterns on other elements of food security; this was beyond the scope of the evaluation.

The biggest challenges to timely and effective delivery of commodities probably occur in pastoral areas, where the six month distribution cycle, running from January to June, is not consistent with periods of food sufficiency and food deficit, and there are additional logistical challenges. While distributions are 100% commodities in

⁴⁵ The regional government can require 'free mobilization' labor, also devoted to public works, for 20 – 40 days each year.

these areas, food is not always available when most needed. The diverse livelihoods now found in these regions, including some agro-pastoralism, sedentary rural poverty among households who have lost access to animals, and various degrees of pastoral activity, generate different seasonal patterns of need and complicate planning. The six monthly distribution cycle, based on the traditional highland planting season is not consistent with the pattern of needs experienced in 'traditional' pastoral communities. CS adaptations to these needs are discussed in section 8. below.

4.1.2.2. Cash vs. Food

This issue arises in most assessments of the PSNP and it was included in community focus group discussions in the field. Continual pressure from beneficiaries in favor of food resources has been present since the initiation of the program. There have been a number of reasons for this. Although the program was founded on the principle that cash, by stimulating local markets and production, would be more developmental, a strong preference for commodity assistance emerged early in the life of the program. Impact studies of the PSNP have shown a growing preference for cash between 2006 and 2008.⁴⁶ All community informants stated a preference for food over cash. They gave these reasons for preferring food:

- The market value of food commodities provided under PSNP - 15 kgs. of grain, 1.5 kgs. of pulses and 0.45 kgs. of oil – is acknowledged to be higher than the cash compensation provided for PW labor, of 50 birr for 5 person-days of work;
- Community members widely reported that local commodity prices rose at the time when cash was distributed;⁴⁷
- The greater diversity of the USAID-supported food basket, which includes oil and pulses in addition to grain, is considered superior to what can be purchased with the cash payment; and
- Women respondents mentioned the risk of diversion of cash payments into non-food uses, with the consequent negative impact on household well being; this is a particular concern of the poorest households, the 'ultra poor'.⁴⁸

The 2008 Food Price Crisis

The impact on food security of changes in a commodity-based safety net program over the past five years cannot be understood outside the context of the crisis precipitated by the worldwide rise in commodity prices in 2008, which had a stronger impact on Ethiopia than on almost any other country in Africa. The reasons for the rapid global increase in commodity prices are not fully understood, but they had the immediate effect, from the start of 2008, of raising the cost of grain in markets throughout Ethiopia. The purchasing power of the PSNP daily wage of 6 birr, in effect through 2007, was intended to be sufficient for the purchase of 3 kgs of cereal, or a full individual monthly ration of 15 kgs from the norm of 5 days of work. Prices fluctuated seasonally and varied by region between 2005 and 2007, but the increase in

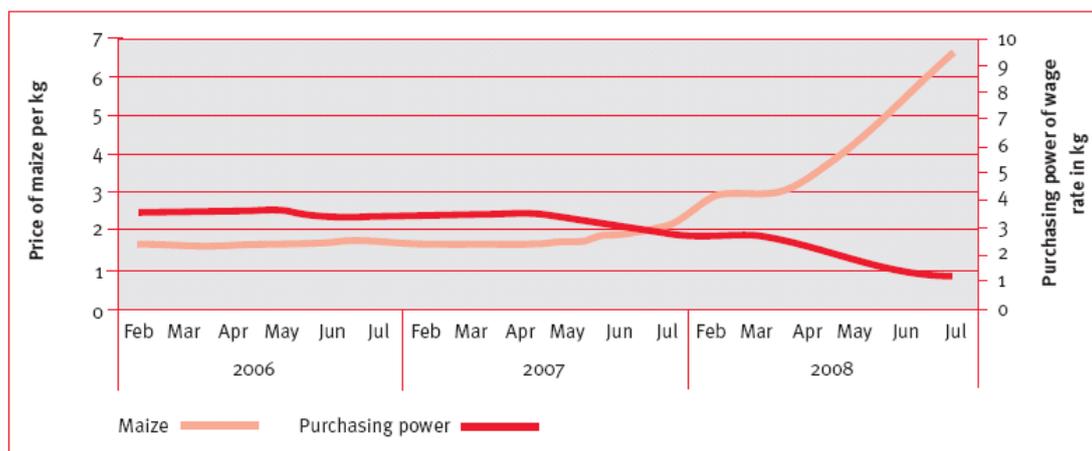
⁴⁶ See *Designing and Implementing a Rural Safety Net*, Figure 6, p. 63, adapted from IFPRI/CSA. *Ethiopia Food Security Program: Report on the 2008 Survey*, Washington DC and Addis Ababa, 2009.

⁴⁷ In one case, a Region was delayed in completing the financial accounting needed to access cash payments, and three months of arrears were distributed during a period of one week at the end of the distribution cycle in 2010. This rapid infusion of cash was described as having stimulated major inflation in food prices.

⁴⁸ In one community discussion in Amhara Region group a woman recounted this story: "My husband received two months payment of 300 birr. He used the 100 birr for drinking alcohol. At that time I gave birth and was on my bed. He came with the rest 200 birr. When I asked him about the 100 birr he started beating me...". [Simada Woreda]

grain prices from early 2008 were unprecedented. This was exacerbated by the total failure of the early season (Belg) rains in 2008, followed by poor Belg rains in 2009 and late Meher rains over large parts of eastern Ethiopia. The increase in the mandated daily cash wage from 6 birr to 8 birr in early 2008 was insufficient to cushion the shock of lost purchasing power. Trends tracked in one Amhara woreda in 2007 – 2008, where by August 2008, the PSNP wage would purchase about 1.2 kgs of maize, are shown below. The loss in purchasing power was greatest in Tigray – where prices are generally highest - followed by Amhara and Oromia.

Figure 1: Purchasing Power of PSNP Wage Rate in One Woreda of Amhara Region During 2008 Food Crisis⁴⁹



CS Response: 2008 – 2010: Extension of Commodity Transfers

In 2009 CSs responded to a request by the Government to extend commodity assistance to areas outside their target areas by reducing commodity transfers in traditional woredas to three months out of the planned six, with cash transfers, provided by the Government, to cover the remaining three months. Implementation of this change required extensive discussion and negotiation with woreda officials, local communities - who perceived this change as a reduction in benefits - and CS managers at other levels. Additional warehouse space was required, the beneficiary verification process was extended and CSs sought to ensure that cash payments, made by local authorities (in lieu of food for three of the six program months) were timely. Resources of related projects being implemented by the CS in the same area were mobilized and woreda level officials increased their communication with local communities in an effort to explain these changes. The extensions of food distributions into woredas which do not form part of target areas for the PSNP continued into 2010. It is ongoing in FY2011. Overall distribution patterns showed an increase of over 45% in total beneficiary numbers between 2008 and 2009, with a further increase of 11% in 2010.

In several areas emergency distributions to families experiencing short term or ‘transitory’ food emergencies were carried out under the Joint Emergency Operations Program (JEOP) managed by CRS, in some cases simultaneously with PSNP distributions, over several years. These occurred in at least one location during every

⁴⁹ Figure 1 adapted from Matt Hobson, *The food price crisis and its impact on the Ethiopian Productive Safety Net Programme in 2008*, Humanitarian Exchange Magazine, Issue 42, March 2009, Figure 6, p. 21

year of the PSNP program. Where Risk Financing has been available to a woreda, the duration of distributions has been extended beyond six months, reaching eight months of food distribution during the period 2005 – 2008 in one Region, including four months of food and cash each in at least two agricultural woredas in 2009, a drought year. The existence of these multiple commodity support mechanisms has provided a challenge to CS logistical and management capacities.

Conclusions: Program Impact of Food Transfers Under Title II

The accurate targeting and timely delivery of food commodities are two key measures of the effectiveness of CS partners in meeting the program objective of improving the food security status of chronically food insecure households. The demographic profile of targeted households, discussed above, supports the appropriateness of targeting in meeting the needs of the most food insecure. The timing, regularity and adequacy of rations delivered are critical factors in ensuring that commodity distributions have a maximum impact on food security among beneficiary households. One of the most significant contributions to the targeting process by CSs implementing PSNP under USAID funding has been in the establishment of community-based targeting methods in pastoralist communities. The three CSs working in Afar and Somali-Borena reported success in introducing values based targeting and triangulation – discussed below in section 8. The involvement of elders in the targeting process has also proven effective in these areas. CSs working with pastoralist communities have extensive experience of community based methods of work which they have been able to effectively adapt to the targeting process.

CSs have dealt with considerable challenges in fulfilling the need to ensure timely and predictable food transfers. They have effectively adapted to Government mandated changes in beneficiary populations and distribution patterns, including increases in beneficiary populations, even when these necessitated new warehouse and storage construction. They also supported the implementation of the PASS system, both through training and provision of computer equipment.

While there is ongoing pressure for increased food resources, CS performance and flexibility in meeting unanticipated needs is appreciated by Government, where requests for CS expansion of commodity distributions have been met. Further growth is envisioned. Obstacles to timely distributions, affecting primarily cash and arising from late accounting, are recognized as beyond the control of CSs.

Program Impacts: Household Level Impact on Food Security

4.1.3. Months of Household Food Sufficiency

The food security impact of transfers in the Title II program implemented under the EDAC Consortium was measured through *the average number of months of adequate household food provisioning*, a key indicator for programs implemented by CSs under the USAID MYAPs and PAPs, as well as in the national level assessments of PSNP.

At baseline and in the final evaluation, household heads were asked for their recall of adequacy of household food supplies for each month of the previous growing season. To measure changes over the life of the program, 2005 to 2010, sub-samples of all

households interviewed were selected and compared. They included 27 woredas in 2005 and 28 in 2010.⁵⁰

Table 4.2. Estimated Months of Food Sufficiency [2005 – 27 woredas]

CS	Mean
CARE	3.96
CRS	4.26
FHI	8.46
REST	6.06
SCUK	6.92
SCUS	4.62
Group Total	5.88

Table 4.3. Estimated Months of Food Sufficiency [2010 – 27 woredas]

CS	Mean
CARE	7.70**
CRS	6.31*
FHI	9.34
REST	8.80**
SCUK	7.19
SCUS	4.77
Group Total	7.55***

*: Significant at p = .10

**: Significant at p < .05

***: Significant at p = .0001

As these tables show, there has been a statistically significant increase in the reported number of months of food security between 2005 and 2010, among three CSs: CARE, REST and CRS (at .90 significance) and in the total program population, where the increase is over 1.5 months. Data are shown below for Regions, also based on matching of program woredas.

Table 4.4. Estimated Months of Food Sufficiency [2005 – 27 woredas], by Region

Region	Mean
Oromia	4.10
Amhara	7.53
Somali	4.62
Tigray	6.06
Group Total	5.88

Table 4.5. Estimated Months of Food Sufficiency [2010 – 27 woredas], by Region

Region	Mean
Oromia	7.01***
Amhara	8.05
Somali	4.77
Tigray	8.80**
Group Total	7.55***

***: Significant at p < .005

Program areas in Oromia and Tigray show significant increases in food sufficiency since the baseline. Comparisons among these Regional estimates also show significant differences. (p = .001), with Somali Region showing a higher level of vulnerability [shorter duration of food sufficiency than all other Regions]. Estimates based on responses during the 2010 household survey for current program areas are shown below (without significance tests).

⁵⁰ The woreda of DodotaSire was split during this period, to increase the number by one.

Table 4.6. Estimated Months of Food Sufficiency, All Program Areas [2010]

CS	Mean
CARE-MYAP	7.94
CARE-PAP	8.50
CRS	5.92
SCUK-MYAP	7.06
SCUK-PAP	5.27
FHI	9.31
REST	8.80
SCUS	4.48
Group Total	7.13

These results are important, as studies undertaken with national samples of PSNP beneficiary populations between 2006 and 2008 have shown that households remained at a constant level of food security, as measured through the length of the food gap period, which was not reduced. This lack of change is attributed to the impact of the crisis of 2008.⁵¹ Lacking trend data, we do not know whether households surveyed here were similarly affected by the situation in 2008.

The distributions of households reporting sufficient food for varying ranges of months for samples drawn from comparable populations at baseline and in the final survey are shown below in tables and graphs.

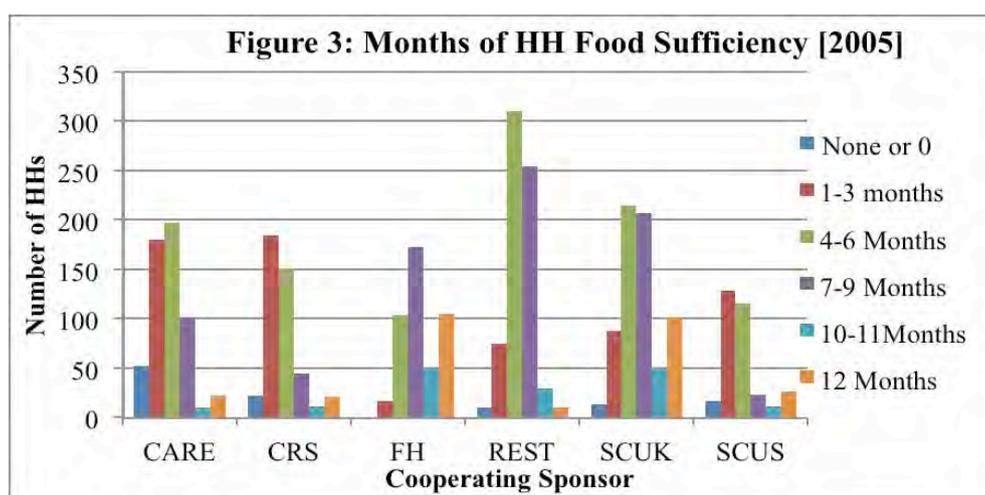
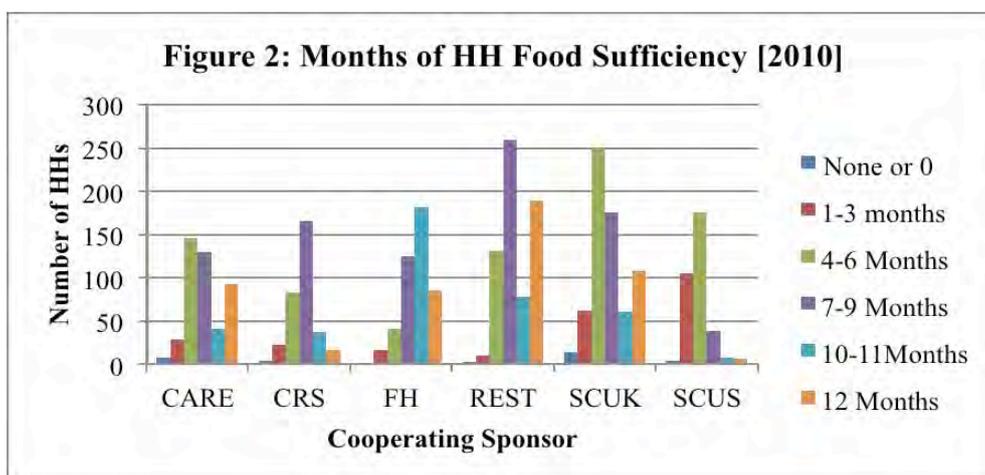
Table 4.7. Mean Number of Months with Sufficient Food to Cover Household Consumption Needs [2010, 27 Woredas]

Number of Months	CS						Sex of HH		
	CARE	CRS	FH	REST	SCUK	SCUS	Male	Female	Total
None or 0	8	4	0	2	13	4	16	15	31
1-3	29	22	16	10	62	105	123	121	244
4-6	146	83	41	131	250	175	481	340	821
7-9	130	166	125	259	175	38	603	289	892
10-11	41	37	181	78	60	8	293	110	403
12	92	16	85	189	107	6	329	166	495
Number of HHs	446	328	448	669	667	336	1,845	1,041	2,886
Avg. No. Months with Enough Food	7.70	6.31	9.34	8.80	7.19	4.77	7.76	7.16	7.55

⁵¹ See Gilligan, Hoddinot, Kumar and Taffesse, p.8

Table 4.8. Mean Number of Months with Sufficient Food to Cover Household Consumption Needs [2005 – 27 Woredas]

Number of Months	CS						Sex of HH		
	CARE	CRS	FH	REST	SCUK	SCUS	Male	Female	Total
None or 0	52	22	0	10	13	16	85	28	113
1-3	180	184	17	75	88	128	525	147	672
4-6	197	151	104	310	214	116	837	255	1,092
7-9	102	44	172	254	207	23	641	161	802
10-11	10	11	50	29	49	11	128	32	160
12	22	21	105	10	100	26	250	34	284
Number of HHs	563	433	448	688	671	320	2,466	657	3,123
Avg. No. Months with Enough Food	4.53	4.26	8.46	6.06	6.92	4.62	6.03	5.48	5.91

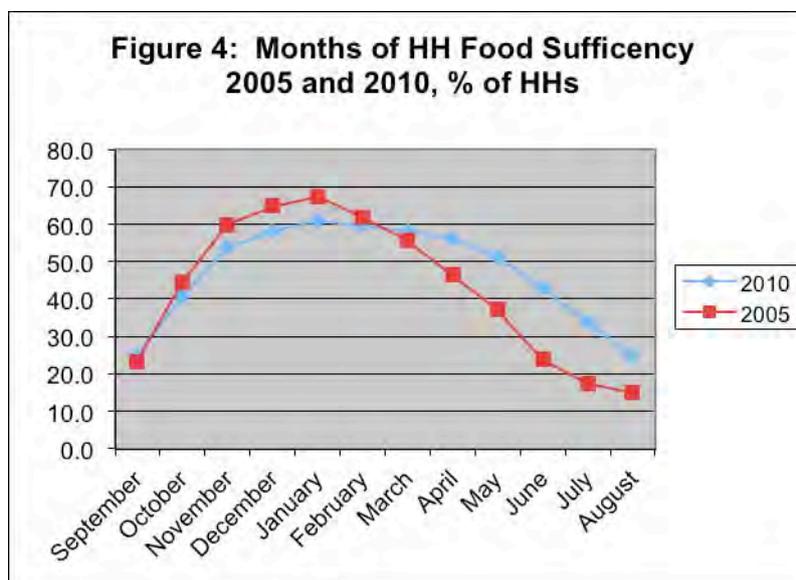


A comparison of reported food sufficiency reported for each month of the year in 2005 and 2010 gives a clear indication of the effect of the increase in total months. This shows that while peaks are slightly lower during the post-harvest season in 2010, more households reported sufficient food during the hunger months from March through August. It is not possible to disaggregate factors contributing to the

household food basket, but we know that households served by the Title II program received all distributions due to them, and that timeliness was, in general, good, despite the major adjustments required to meet the commodity needs of households outside the traditional program areas. The percentages of households reporting adequate food in each month, across all 12 months, in 2005 and in 2010, are shown below.

Table 4.9. Percentage of HH Reporting Sufficient Food Each Month, 2005 and 2010

Month	2010	2005
September	24.9	23.1
October	40.6	44.6
November	53.7	60.0
December	58.1	64.8
January	60.9	67.4
February	59.5	61.8
March	58.0	55.6
April	56.1	46.6
May	51.3	37.2
June	43.1	24.0
July	34.0	17.5
August	25.0	15.1

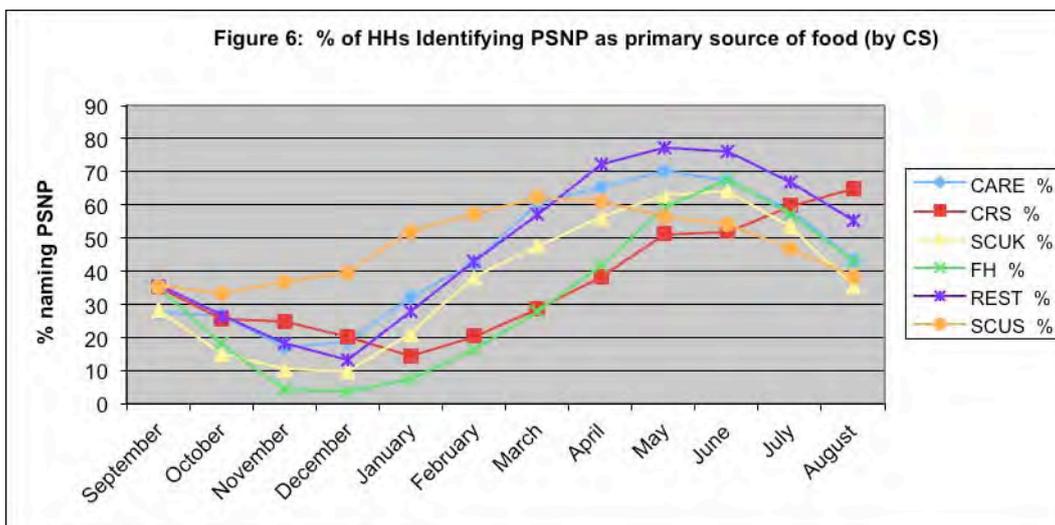
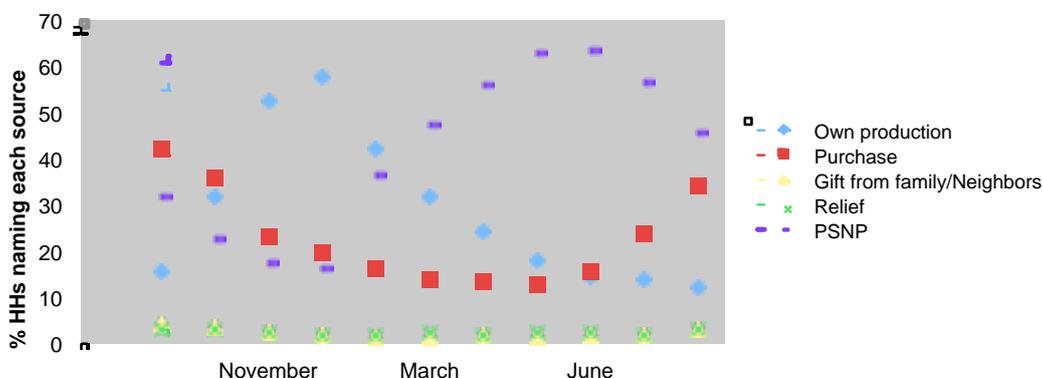


While it may not be possible to draw a conclusion about overall changes in food security from data collected over two seasons, 2005 and 2010, one of which, 2009/10, included the end of a period of drought and relatively poor production, the smoothing of the curve is evident. As this is one of the core objectives of food distribution under PSNP, it is further evidence that the use of food commodities, as implemented by CSs, is supporting this program effectively.

Households were asked to identify their major sources of food during each month of the year. Their responses, shown below for the full sample, confirm the seasonal complementarity between household production, purchases and PSNP distributions. As availability of harvested food declines, from December onward, PSNP distributions, in food or cash, become available. During the pre-harvest period, as PSNP distributions are phased out, purchases of food increase. The somewhat irregular administration of PSNP cash distributions last season, which resulted in ‘bunched’ payments during June in some areas, may have influenced this pattern of spending. From September until December, a household’s own production becomes the most important source, identified by 57.8% of sampled households at its peak in December. This pattern of food sourcing and utilization is highly relevant to any future modifications in the scheduling of PSNP distributions, particularly the phasing of food and cash.

□

Figure 5: Primary sources of food by month, all HHS



As shown above, sampled households in program areas of all CSs with the exception of those served by SCUS in Somali/Borena, show very similar patterns of dependence on PSNP as a key source of food. This graph supports the role played by the program in these communities.

4.1.4. Responses to Household Food Insecurity

Households' responses to food shortages demonstrate a range of coping strategies. The final survey questionnaire did not follow standardized methodologies allowing for construction of a coping strategies index.⁵² Data on key coping strategies for matched samples from the baseline and final surveys are shown below.

Table 4.10. Household Coping Strategies [2010 - 27 Woredas]

Coping Strategies	CS for 27 Woredas 2010													% All Resp.
	CARE	%	CRS	%	SCUK	%	FH	%	REST	%	SCUS	%	Total	
Sold productive assets*	25	5.6	86	19.2	23	3.4	27	6.0	159	23.7	229	68.2	549	18.2
Consume seed stock**	132	29.5	213	47.5	155	23.1	80	17.8	260	38.8	210	62.5	1,050	34.8
Ate wild food	28	6.3	72	16.1	7	1.0	47	10.5	7	1.0	160	47.6	321	10.6
Ate less preferred food	38	8.5	97	21.7	6	0.9	63	14.0	67	10.0	270	80.4	541	17.9
Ate borrowed cash or grain	150	33.6	186	41.5	262	39.0	156	34.7	272	40.6	253	75.3	1,279	42.3
Ate fewer meals per day	290	64.9	223	49.8	397	59.2	294	65.5	272	40.6	256	76.2	1,732	57.3
Skipping meals / Delay meal time	225	50.3	187	41.7	223	33.2	233	51.9	193	28.8	188	56.0	1,249	41.3
Give priority for children	222	49.7	207	46.2	170	25.3	274	61.0	269	40.1	254	75.6	1,396	46.2
Reduced quantity of food per meal	218	48.8	240	53.6	209	31.1	252	56.1	73	10.9	165	49.1	1,157	38.3
Total Households	447	-	448	-	671	-	449	-	670	-	336	-	3,021	-

*: Statistically significant change 2005 – 2010 for CARE, CRS, SCUK, FH and total sample.

** : Statistically significant change 2005 – 2010 for CARE, SCUK, SCUS and total sample

Table 4.11. Household Coping Strategies [2005 - 27 Woredas]

Coping Strategies	CS for 27 Woredas 2005													% All Resp.
	CARE	%	CRS	%	SCUK	%	FHI	%	REST	%	SCUS	%	Total	
Sold productive assets*	184	40.1	143	32.1	173	25.7	56	12.5	41	6.0	223	66.4	820	26.9
Consume seed stock*	242	52.7	227	50.9	251	37.2	244	54.5	239	34.7	67	19.9	1,270	41.6
Ate wild food	176	38.3	143	32.1	131	19.4	133	29.7	120	17.4	100	29.8	803	26.3
Ate less preferred food*	309	67.3	320	71.7	228	33.8	144	32.1	325	47.2	213	63.4	1,539	50.4
Borrowed cash or grain*	179	39.0	201	45.1	197	29.2	169	37.7	451	65.5	139	41.4	1,336	43.8
Ate fewer meals per day*	328	71.5	330	74.0	329	48.8	180	40.2	573	83.2	254	75.6	1,994	65.3
Skipping meals*	332	72.3	300	67.3	399	59.2	239	53.3	333	48.3	230	68.5	1,833	60.1
Give priority for children	195	42.5	227	50.9	351	52.1	222	49.6	394	57.2	128	38.1	1,517	49.7
Reduced quantity food per meal*	299	65.1	249	55.8	377	55.9	242	54.0	564	81.9	194	57.7	1,925	63.1
Total Households	459	-	446	-	674	-	448	-	689	-	336	-	3,052	-

*: In the last 12 months

Reported coping strategies are shown below, for the full 2010 survey sample, by Region.

⁵²For a discussion of this methodology, see Maxwell, Dan, Ben Watkins, Robin Wheeler, and Greg Collins, *The Coping Strategies Index: Field Methods Manual*. Nairobi: CARE and WFP, 2003. The questionnaire used in this survey asked, "Which of the following can you say was true for your household at any point during the last 12 months?"

Table 4.12. Coping Strategies by Region [2009/10 Season]

Coping Strategies	Oromia %	Amhara %	Somali %	Tigray %	Afar %	Total %
Sold productive assets	13.2	5.6	56.4	23.7	3.1	16.5
Consume seed stock	42.4	24.4	58.6	38.8	2.9	33.6
Ate food normally we do not eat (eg. wild food)	12.4	4.0	45.7	1.0	16.1	12.3
Ate less preferred food	17.0	5.3	72.7	10.0	17.0	18.8
Ate borrowed cash or grain	38.0	41.2	74.3	40.6	23.9	42.6
Labor migration	28.4	17.8	77.7	61.0	8.7	33.8
Ate fewer meals per day	58.5	62.2	79.5	40.6	65.8	60.5
Skipping meals/Delay meal time	48.8	41.8	61.3	28.8	66.7	46.7
Give priority for children	50.4	38.4	77.5	40.1	68.7	49.9
Reduced quantity of food per meal	53.5	41.2	56.4	10.9	42.7	42.1
Remittances	0.5	0.2	1.3	3.9	0.0	0.9

Severity and frequency of responses given were not measured, and it is evident that reported recourse to many of the daily strategies relating to food consumption, such as skipping meals or eating less preferred foods, have declined since 2005. The two strategies most likely to have an impact on agricultural production in the next year – sale of productive assets⁵³ and consumption of seed stock - have declined in sampled populations in most areas. It is difficult to interpret the implications of increases in coping strategies, where these are evident. In 2010 over one third of sampled households reported consuming seed stock and one third had members who migrated to work elsewhere, actions which may negatively affect the following growing season. Seeds, however, appear to be relatively widely available through the Agriculture Ministry, so this may have mitigated the impact of sales.

About one sixth of sampled households mentioned sale of productive assets, as compared with about 30% in 2004/05. One of the key objectives of the PSNP is to reduce asset stripping in response to food insufficiency, and this may represent a real change in levels of dependence on this strategy. In Somali Region, where over 50% of households mentioned this action, reported asset sales have declined slightly in sampled populations. Labor migration, not enumerated in 2004/05⁵⁴, was very high in Somali Region, mentioned by almost 80% of the population. If is a reliable indicator of coping strategies, this may be a leading indicator of erosion of viable livelihoods in pastoral areas.

⁵³ The wording of the option 'sold productive assets' in translation could have been understood to refer both to animals used for animal traction (oxen) and to other assets.

⁵⁴ It was included in the 'other' category, making up only 4.2% of responses.

4.2. Public Works

Background

The Public Works component of the Productive Safety Net Program has two objectives: the provision to beneficiaries of labor intensive employment during the slack agricultural season, preventing dependency and encouraging a work ethic; and the creation of community infrastructure intended to improve the environment, increase production and incomes, and promote sustainable development through improved access to services. Public works labor supports three major types of development:

- Conservation and improvement of natural resources/ soil and water conservation (SWC) through Community Based Participatory Watershed Development (CBPWD);
- Development of rural infrastructure, including access roads, schools, health posts (HP), farmer training centers (FTC) and small scale water development; and
- Development of community assets which directly support household income, small scale irrigation (SSI), and spin offs from natural resources management (NRM) including enclosed land available for utilization of grass, tree crops and for beekeeping.

In most communities these activities are inter-related and mutually reinforcing.

Assessment

The assessment of program implementation is based primarily on qualitative data. Field teams, including at least one expert on infrastructure, visited public works sites in 22 woredas,⁵⁵ just over half of those included in the Title II program. Selection of sites, based on discussion with program field staff, was intended to balance visits to best achievements with exposure to projects that had faced challenges in planning and implementation. Sites visited and described included roads, small scale water harvesting, social infrastructure, small scale irrigation, enclosure of fallow lands and the wide range of activities related to watershed development, including check dams, bunds and terraces, river diversion, cut off drains, and tree plantations. The limited time available for field work – four days in each location – restricted the numbers of each structure or activity visited. Those numbers were small in relation to the scale of the Title II program. The evaluators, one of whom has a background in engineering, also visited a small number of PW sites in Amhara, Tigray and Oromia.

PW Planning

In national planning for PSNP, much consideration was given to the challenge of identifying PW activities which would provide durable assets, could be selected with a high level of community participation, and could be competently carried out with unskilled labor, limited supervision and at reasonable cost. Field visits and discussions with community members, local government and CS staff indicate that most watershed-based public works activities implemented under both the MYAP and PAP programs were planned with an appropriate level of community participation, with needs identified at community level, followed by a process of review, technical

⁵⁵ These are listed in Annex A.

assessment, community prioritization, planning and budgeting, as described in the PIM.

CSs and community groups have jointly identified seriously degraded areas with the potential for recovery in all regions. In Tigray, where mobilization of voluntary community labor is a long established tradition, it was reported that an explicit understanding has been established among the community, local administration and REST staff on their relative contributions of materials and labor. Elsewhere labor is scheduled under PSNP planning and the relative contributions are worked out in relation to each project; in most areas, community contributions of local materials are the norm.

A few instances of difficulties with participatory planning were identified in Amhara, where woreda level authorities 'short circuited' the community's role in identification and prioritization of activities. CSs are reported to have played a valuable mediating role, facilitating discussion and resolution in these situations and where community members disagreed on the siting or extent of a watershed.

This evaluation does not attempt to quantify PW activity across the Title II program. Indicator Performance Tracking Tables (IPTT) provide detailed monitoring data on numerical targets and achievements for all major PW activities on an annual basis. CSs reported having been able to approach or exceed their own targets for PW activities in most years.

4.2.1. Community Based Participatory Watershed Development

Program Implementation

(CBPWD) is the organizing methodology adopted by the Government of Ethiopia for natural resource management (NRM) and related soil and water conservation (SWC) activities in degraded areas; it encompasses a wide range of PW activities. Based on the concept of integrated planning and labor for reclamation of an entire watershed area, projects are implemented following a detailed set of guidelines on identification of projects, planning and execution provided by the Government as part of PSNP implementation. These are summarized in the PIM (2006), updated and expanded in the 2010 revisions.⁵⁶ The CBPWD approach utilizes the planning principle of protecting the watershed in order to have a maximum beneficial environmental impact on the entire surrounding area, with the long term goal of improving all eroded or damaged land in a community. The size of the watershed is determined by topography; a kebele tends to encompass two to three watersheds. A typical size of 200 ha. has been estimated. This approach to planning assumes that households living within the watershed will have common interests in its reclamation and will participate actively in both the planning and labor required to improve it.

The watershed model has come out of the experience of the highland agricultural areas of northern Ethiopia, where long term degradation of hillsides had led to extensive soil erosion, loss of ground moisture in lowland farming areas, and reduced productivity. With CBPWD principles in place for almost 20 years, through the

⁵⁶ A two volume set of Community Based Participatory Watershed Development Guidelines was issued in 2005. A list of CBPWD outcomes and activities is provided in the PIM (2006), p.9. This discussion is substantially expanded in the revised 2010 *Programme Implementation Manual*, section 7.2.4, pp. 120 – 121, available in draft.

active involvement of REST in partnership with the GoE, Tigray has made substantial progress toward a more productive rural landscape and improved physical infrastructure.⁵⁷ Watershed development applies as well to overgrazed and neglected lowlands, and poorly conserved micro plots in midland locations. A wide range of community level activities may be included in CBPWD,⁵⁸ including erosion control through construction of gullies, check dams and other physical structures, SWC through construction of bunds and terraces, with planting on degraded areas, land enclosure with planting, clearance and spontaneous regeneration of vegetation, stream diversion and spring capping, dams and a wide range of water harvesting techniques,⁵⁹ as well as support to agricultural development and potable water.

Construction and rehabilitation of rural infrastructure and activities which directly support household livelihoods and asset accumulation are included in CBPWD; some of these will be discussed below. Construction and rehabilitation of small scale irrigation systems (SSI), an activity often integrated with livelihood support, is discussed under Objective 2.

Reported levels of participation in watershed management are high in all MYAP areas, as shown below. In two PAP areas, where the watershed concept is less well developed, reported participation is lower.

Table 4.13. Participation in Watershed Management Activities

CS	Participation		Total	
	No.	%	No.	%
CARE-MYAP	335	60.5	554	100
CARE-PAP	71	67.6	105	100
CRS	290	43.3	669	100
SCUK-MYAP	862	85.9	1,004	100
SCUK-PAP	135	43.3	312	100
FHI	502	89.6	560	100
REST	551	82.2	670	100
SCUS	74	13.2	560	100
Total	2,820	63.6	4,434	100

Over 80% of households responding also indicated that they would be willing to participate in watershed management without compensation. This suggests a high level of appreciation of the benefits of this activity.

In Tigray, as noted, the goal for the Region is complete coverage through fully developed watersheds. There, evaluators were shown plans for watershed coverage of the entire area of one PSNP woreda visited. In other regions comprehensive targets have also been developed, although much of the work is at an earlier stage. In one

⁵⁷ Tigray has been described as now almost entirely covered with SWC structures. See A. Tekalign Mamo and Volli Carucci *The Ethiopian Strategic Investment Framework for Sustainable Land Management (ESIF-SLM) — The Long Journey to Reach There*, Ministry of Agriculture, Addis Ababa, Ethiopia and World Food Programme, Rome, accessed online Jan.29, 2010, at www.fao.org/nr/lada/index.php. [PPT file]

⁵⁸ CRS has developed a similar model, the Integrated Watershed Model (IWM), first implemented in 2002. It includes the full range of support to improved agriculture, creation of multi-user water supplies, health, water and sanitation teaching. The impacts of this model, as evaluated by CRS, will be discussed under Objective 2.

⁵⁹ For slides illustrating the process and range activities involved in a typical watershed, see Mamo and Carucci.

seriously eroded food insecure part of Northern Amhara Region, 74 watersheds occupying over 15,000 ha. have been delineated for development in plans prepared between 2005 and 2010. Similarly sized areas have been identified in Oromia.

Program Impacts: Restoration of Soil Moisture, Water Sources and Vegetation

It is difficult to measure the direct impact of public works labor on the food security of households participating in the PSNP, as this is brought about through changes which contribute indirectly to the result. Household survey results, however, demonstrate a high level of satisfaction among PSNP beneficiaries with SWC activities and land enclosure in MYAP areas.

Households perceived a wide range of benefits from SWC activities, as shown below:

Table 4.14. Perceived Benefit from SWC Activities: Percentage of Households Naming Each *

Type of Benefit	CARE-MYAP %	CARE-PAP %	CRS %	SCUK-MYAP %	SCUK-PAP %	FHI %	REST %	SCUS %	Total %
Improved environment	33.0	85.5	44.8	65.6	48.8	84.2	87.4	35.6	61.2
Provision of seedlings	63.1	11.3	66.3	45.6	11.2	39.9	10.1	12.6	40.3
Improved micro-climate	76.7	9.7	50.7	17.6	34.4	41.5	43.0	16.4	39.4
Cut and carry of grass	23.8	32.3	39.0	32.5	18.4	10.6	31.0	24.3	27.9
Water availability improved	23.8	1.6	24.5	17.0	7.2	34.6	31.9	30.9	24.8
Wood from trees	22.9	14.5	33.9	30.1	5.6	15.7	14.2	12.9	22.6
More crop production	19.6	3.2	5.0	7.0	2.4	5.5	22.5	2.5	10.3
Fruit from trees	5.8	3.2	5.0	0.6	0.8	1.8	3.9	0.9	2.9
Honey production	1.7	-	3.8	0.9	0.8	0.4	3.3	0.9	1.8

* Multiple responses allowed.



Typical terraced watershed area, Tigray Region

Perceptions of the usefulness of these activities to mitigate the effects of drought were similarly widespread, with over 70% of HHs sampled in MYAP areas giving positive responses. Responses in the three PAP areas were lower, ranging from 14% to 34% positive, possibly reflecting the more



Water harvesting, Tigray Region

limited extent of SWC activities in these newer program areas.

The environmental impacts of soil and water conservation have long been recognized in Ethiopia, where land degradation has led to a reduction in soil

moisture content in all areas covered by PSNP. Potable water development, coupled with water management through check dams, small scale irrigation, spring capping and other methods is also highly relevant in all PSNP MYAP and PAP areas, where household access to drinking water is limited. This evaluation did not measure the hydrogeological impacts of SWC. In several areas, CS staff and communities reported on the emergence of new water sources and the re-charging of older ones, including shallow wells and springs. These provided evidence of a rising water table, due to improved water retention of highland drainage areas following closure, terracing and re-forestation. New vegetation, especially tree growth, is highly visible on a well managed watershed. As these results become evident, and communities gain improved access to water supplies, a process that may take 2-3 seasons,⁶⁰ community support is reported to strengthen. Asset gains, discussed below under livelihood impacts, are also key to the mobilization of community support for watersheds. It has been widely observed that improvements in soil conditions and moisture content contribute to higher crop yields. In areas of rainfed agriculture, these effects are difficult to measure independently of seasonal variations in rainfall.

4.2.2. PW Construction: Infrastructural Development

Program Implementation

This assessment of the quality and impact of infrastructural development and construction is based on a limited sample of public buildings, roads, and water construction. Most work was found to be at a high standard; small buildings - health centers, farmer training centers and staff housing – met the official Government standards. It was noted that Government buildings are not required to include rainwater catchment systems, even in structures such as health posts, where water is essential to the activities being carried on. Similarly, latrine construction was not consistently implemented in conjunction with public buildings.

Water construction appeared to be well engineered. In Tigray many years of focus on PW implementation through the watershed management model has ensured a very high standard of public works construction for SWC activities. Technically sound construction was not universal, however. Damage resulting from major flooding in August of 2010 in parts of Amhara Region highlighted issues relating to poor construction observed by field teams in some areas.

As shown in Table 4.15 below, access roads are a widely implemented PW activity, having an impact on most communities. One infrastructure area of concern to the lead evaluators was road construction. Mechanisms have been put in place to ensure road maintenance, but this is an ongoing concern, as several areas were identified where access roads are regularly damaged by seasonal rainfall. In addition, some have been constructed in extremely rough terrain, in conditions which challenge the use of manual labor. Participating CSs may need to consider higher levels of investment in the initial engineering and maintenance to accompany road construction in these areas.

⁶⁰ This cycle, which has been widely studied in Ethiopia, was described by field teams and observed in the field during visits to watersheds, one with restored grass cover and one with successfully established trees. This cycle of watershed recovery following enclosures, terracing and other SWC activities can be widely observed in Kenya, where one evaluator has worked in dry areas and followed these changes for over 20 years.

The wide recognition of a range of PW activities, including both SWC and infrastructural development, in all program areas is indicative of the reach and extent of this work.

Table 4.15. Households Reporting Awareness of Community Infrastructural Development, by CS and Type of Infrastructure*

Type of Infrastructure	CARE		CRS		FH		REST		SCUK		SCUS	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Access road	622	92.8	635	94.4	484	86.4	601	89.7	1,019	76.0	524	93.6
Water harvesting structure	272	40.6	299	44.4	361	64.5	588	87.8	557	41.5	276	49.3
SWC on communal land	540	80.6	539	80.1	514	91.8	647	96.6	902	67.3	130	23.2
SWC on private land	400	59.7	369	54.8	418	74.6	478	71.3	542	40.4	47	8.4
School	598	89.3	621	92.3	491	87.7	621	92.7	1,023	76.3	466	83.2
Health post	490	73.1	575	85.4	358	63.9	566	84.5	779	58.1	314	56.1
Spring /Shallow well	324	48.4	234	34.8	340	60.7	518	77.3	374	27.9	259	46.3
Public toilet	9	1.3	-	-	-	-	-	-	-	-	15	2.7
Grazing field enclosure	24	3.6	-	-	-	-	-	-	-	-	-	-
Number [total sample]	670		673		560		670		1,341		560	

* Multiple responses allowed.

Technical support to planning, construction and subsequent maintenance of PW is provided in a number of ways. The PSNP model includes linkages among woreda staff and relevant sectoral experts based at zonal and regional levels. Given the competing work demands on sectoral local government technical staff, CS sector technical staff play a key role in ensuring the quality of projects, and add value to the PW process through this involvement. In pastoral areas, where local government is often understaffed and technical staff are very few, both field teams and CSs' own reporting acknowledge the key role of CS technical support in PW implementation.

Program Impacts: Infrastructure and Increased Community Assets

Discussions with community members indicated their strong appreciation of improved access to schools and health posts through new and improved physical structures. Additional classrooms were reported to increase access for children who would otherwise have discontinued their schooling. Construction of related facilities, including school latrines, has also been important to ensuring access, especially for girls. Farmer Training Centers and housing for DAs, which form part of the Government's strategy for improving capacity through training, facilitate this function.⁶¹ SCUK and SCUS have increased access to alternative basic education (ABE) - flexible classes with shorter hours appropriate to pastoral areas - through



School construction, Dire Dawa, using local materials.

⁶¹ The biannual national evaluation survey of the PSNP found that almost 2/3 of farmers reported having attended a course at an FTC, with most applying at least some of the techniques learned. *Designing and Implementing*, p.75.

construction of classroom spaces.

The household survey showed a high level of awareness of PW activities. Households also reported on the perceived benefits of these activities.

Table 4.16. Households Reporting Benefits from Infrastructural Development*

Type of Benefit	CARE		CRS		FH		REST		SCUK		SCUS	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Improved access to schooling	585	90.4	617	94.6	483	87.8	505	77.3	1000	85.0	346	86.3
Increased agricultural activity	393	67.0	490	91.2	339	62.0	372	56.4	523	47.4	83	20.7
Better access to market	274	50.8	283	59.3	158	28.9	399	60.6	204	20.7	104	26.1
Improved access to water	400	69.2	384	71.8	327	60.0	510	77.4	476	47.1	218	54.6
Improved access to health service	511	82.4	604	97.0	361	66.0	547	83.8	801	73.5	222	55.4
Improved access to extension service	327	68.0	444	90.6	212	45.7	441	70.2	335	38.9	123	33.9
Construction of improved roads	-	-	-	-	-	-	-	-	-	-	16	100.0
Public toilet	-	-	-	-	-	-	-	-	-	-	6	100.0

* Multiple responses allowed.

Among sampled households acknowledging benefits from infrastructural development during the life of the project, the highest proportion cited improved access to schooling, followed by access to health services, water and extension services. Roads were relatively less important, except in pastoral areas.

In discussion community groups affirmed that both PSNP beneficiaries and other community members utilized facilities and enjoyed benefits from infrastructure created through PSNP PW activities. In most cases, siting of shared facilities, particularly improved water sources, determined the user population, and community facilities served non-beneficiaries equally with PSNP HHs.

4.2.3. Development of Potable Water

Program Implementation

Development of improved household water sources has been a major component of PW activities among PSNP beneficiaries. At least three CSs obtain all funding for potable water development through non-Title II sources. These include private donors and other US Government programs. Household water supplies are discussed here because of their implications for achievement of other program objectives, notably in health, but also through increased time available for participation in public works labor, household economic activities and education.

Activities have included spring protection, well construction, and stream diversion, as well as potable water provision through part of multi-use schemes. These projects usually involve both community labor and donated local materials; user fees are collected for ongoing maintenance. Technical support is provided by the Woreda Office of Water Resources Development and by relevant CS technical experts. Potable water development is accompanied by water use and sanitation training, either through the PHAST⁶² or Community Led Total Sanitation approaches. Since the start

⁶² WHO's Participatory Hygiene and Sanitation Transformation training for communities.

of the project, hundreds of water sources have been protected. Access to protected water sources was reported to have greatly increased, in some cases almost tripling, during the life of the project. The data below give an indication of changes in population-level access to protected water sources as reported by respondents since the start of the program. Reported increases have been greatest in the REST and FH program areas. REST, in particular, has obtained all funding for potable water development through non-Title II sources. The inclusion of data for PAP households in Afar, who did not participate in the full life of the program outside of Somali Region, may have affected levels of access reported by respondents in CARE and SCUK program areas.

Table 4.17. Households Reporting Change in Major Source of Water, Before and After PSNP⁶³

CS	Protected Source ⁶⁴ [Pre-project]	Protected Source [2010]	% of All HHs with Access to Protected Source [2010]	Reported Change [Pre-project to 2010] %	Total HHs
CARE	258	456	68.1	76.7	670
CRS	147	393	58.4	167.3	673
SCUK	370	696	51.9	88.1	1341
FH	104	411	73.4	295.2	560
REST	164	533	79.6	225.0	670
SCUS	197	283	50.5	43.7	560
Total	1240	2772	61.2	123.5	4474

Program Impacts

Health-related impacts of increased access to potable water are discussed further, in section 7 below, in relation to hygiene and utilization of food.

Households reported a range of benefits from access to improved water, with time savings usually ranked first, followed by improvement in health. Among those reporting gaining extra time, the largest proportion indicated that time would be used for other income earning opportunities (34.5%), followed by those who mentioned schooling (24.2%). The largest percentage reporting use of time for earning were in the REST program area (64.4%), while the largest number reporting use of free time for schooling were in the CRS area (67.5%), suggesting that children play a major role in collecting water in communities served by CRS. While substantial progress in development of potable



Well with hand pump, Amhara Region

⁶³ Based on recall of conditions 'before the project'.

⁶⁴ Defined as protected hand dug well, protected spring, deep well, or water tap at home.

water sources has been made, field work teams heard frequent reports of unmet demand for improved drinking water, particularly in Oromia.

4.2.4. Increased Household Assets

PSNP PW activities contribute to increased household assets in several ways. The strongest income effect at individual household level is probably achieved through participation in small scale irrigation projects, which will be discussed further in Section 5 below, in relation to the range of program interventions to promote HH asset acquisition. During farm visits, research teams and consultants were told about increases in income of up to 10,000 birr (\$769) in a season among farmers with access to irrigated land. Teams met several graduates who had become food secure through income gained from crops produced in a local SSI. The primary income benefit arises from the potential to produce 2-3 crops per year, and to diversify into higher value horticultural crops, fruits, vegetables and dairy cattle.

Among poor and landless households, significant benefits arise from watershed development through access to a range of income generating activities. Landless youth have been able to utilize enclosed land for beekeeping, cut and carry utilization of fodder grass for livestock raising and group crop cultivation. Moves have begun toward registration of land by groups, making use rights more secure. This has been especially significant in Tigray and in East and West Harerghe. In both places over 1000 youth have been provided with livelihoods through PW activities.

Access to tree products, including Eucalyptus and forage species, grown on recovering watershed terraces, provides an additional income/ asset benefit to beneficiary households. CS field staff in two locations reported that the prospect of this resource increased the willingness of communities to become involved in watershed planning and to provide labor. Visible evidence of a future benefit has been important to sustainability of watersheds.

4.2.5. Improved Community Capacity and Technology Transfer

Farm-Based Soil and Water Conservation: One of the anticipated positive impacts of PW implementation is skills transfer and adoption of improved cultivation and SWC techniques by beneficiary households on their own land. Farmers are implementing conservation initiatives on household plots, using techniques learned through participation in PW SWC activities, as shown below.

Table 4.18. Households Carrying Out Individual Conservation Initiatives

CS	No.	%	Total
CARE-MYAP	435	78.0	558
CARE-PAP	50	44.6	112
CRS	560	83.2	673
FHI	454	81.1	560
REST	543	81.0	670
SCUK-MYAP	730	72.6	1,006
SCUS	133	23.8	560
Total	3,009	67.3	4,474

As these tables indicate, over two thirds of the sampled HHs reported using individual conservation techniques on their farms. These include construction of bunds, check dams and terraces, as well as tree planting (over 50% of the sample) and use of cut and carry grass from enclosed areas (over 20%). Sampled households reported adoption of an average of 3.9 new conservation practices per household. As would be expected, households interviewed in pastoral areas had much lower rates of adoption.

Table 4.19. Mean Number of New Conservation Techniques Reported by Households

CS	Total No. Techniques	Total Households	Mean No. Techniques
CARE-MYAP	4,002	558	7.2
CARE-PAP	36	112	0.3
CRS	5,898	673	8.8
FHI	670	560	1.2
REST	4,224	670	6.3
SCUK-MYAP	2,292	1006	2.3
SCUK-PAP	57	335	0.2
SCUS	182	560	0.3
Group Total	17,361	4474	3.9

Sampled households ranked “improved environment” first among perceived benefits of SWC activities, followed by provision of seedlings, improved micro-climate, cut and carry of grass, water availability, wood and increased crop production.

Planning and Management, Particularly of Water and Watershed Projects:

A second key impact relating to skills transfer arises from community participation in planning and implementation of water and watershed projects. Qualitative field reports described a participatory planning process, through which the community, usually starting with the Community Food Security Task Force (CFSTF) and the DA, as well as any counterpart staff deployed by the CS at village level, identified and put forward planning preferences. These were considered by the woreda for inclusion in the annual woreda plan and budget, with final decisions usually made jointly. All water development projects and watersheds visited had local management committees, selected by community members, who enforced by-laws and coordinated with CSs, kebele and woreda authorities.

Effective participatory management is critical to sustainability of small scale water development. Reported levels of participation are high. As shown in Table 4.13 above, over 63% of sampled households reported participating in watershed management, and over 80% indicated a willingness to participate without compensation. Not surprisingly, the proportions responding positively tended to be lower among households sampled in pastoral areas, which have a long history of dependency on relief assistance. Perceptions of the importance of community participation were also high, with almost 95% of respondents indicating that they felt this was important to the success of the project.

4.2.6. Work Ethic and Risk Taking

Public works projects under PSNP are widely believed to contribute to and reinforce a work ethic, the principle that a reliable level of benefits is provided in return for a fixed and predictable labor input. While some instances of ‘payment’ being implemented without completion of the work accounting were reported,⁶⁵ this was rare. The discipline of maintaining work hours was also mentioned, particularly in Tigray.

A second impact mentioned in the literature is the willingness of households who have the assurance of receiving regular transfers of cash and commodities to accept the level of risk involved in accepting small scale credit and investing. Individual and group testimonies given in the field mentioned the importance of PSNP in building the confidence needed for participation in activities such as savings and credit groups leading to the acquisition of other assets, and in self sufficiency.

4.3. Public Works in Pastoral Areas

Pastoral programs (PAPs) will be discussed in greater detail below in section 8. The adaptation of all elements of the Productive Safety Net Program to conditions in pastoral areas has been challenging for several reasons:

- The scheduling of periods of labor (and food transfers) may coincide with a period of migration away from the HH base or a period of plenty, as in Afar, where the months of October to February are considered optimum for PW labor, while migration takes place in the drier months of May to August;
- Local government is often under-staffed, with high rates of turnover, making it difficult to establish capacity; technically qualified staff are in particularly short supply; and
- Cultural traditions may not include heavy physical labor by men, with consequent lack of experience or familiarity with this type of work.

CSs participating in PAP have been actively involved with Government authorities at all levels in program design and capacity building. This has included participation in the Federal Pastoral Task Force and training of local government staff, including food security task forces and DAs, on community-based planning.

CSs working in pastoral areas uniformly report that certain key elements are important to the success of PW activities in these areas. They need to be identified

⁶⁵ It is a principle of PSNP that food or cash should not be withheld from legitimate beneficiaries.

through a process of community planning and selection, and to reflect felt community needs. Improvement of rangelands and of local water sources are the most effective and widely accepted PW activities. Participatory rangeland management, which includes enclosure of sites with, in some cases, removal of non-productive vegetative species, has reached approximately 7000 ha. in Somali Region and Borena Zone.⁶⁶ Local water sources, including *birkas* and traditional ponds have been rehabilitated. Road construction and construction of social infrastructure, including both schools and houses for staff, are important in areas characterized by long distances and very poor road networks. In Somali Region, over 600 kms of access roads were constructed in 2009.⁶⁷

4.4. Strengthening Local Government's Technical and Institutional Capacity

All of the participating CSs have areas of special technical expertise, built up over years of operations in Ethiopia and other resource poor countries. Through their participation in the PSNP they have been able to contribute these skills to strengthen local government capacities. In addition, most CSs maintain local counterpart staff who work directly with DAs. And several have participated in cross visits to other regions to build local capacity and to demonstrate promising technologies. Staff have also participated in overseas visits to other developing countries to build their capacity to adapt locally appropriate technologies in wide use outside Ethiopia.

An estimated 725 regular Government of Ethiopia staff are fully occupied with the PSNP, while over 14,000 DAs in chronically food insecure woredas spend a substantial part of their working time on PSNP activities. In addition, over 1000 technical assistants, including focal persons, accountants, cashiers and public works foremen were employed in the PSNP at region, zonal and woreda level in 2008.⁶⁸ In a program of this size, CS staff work strategically to support and strengthen local government. Between 2005 and 2010, much of the training was focused on the implementation of the program, utilizing the PIM and emphasizing the processes of local kebele and woreda level planning, and establishment and operation of early warning systems.

The Payroll and Attendance Sheet System (PASS), introduced in 2007 to computerize tracking of PW labor and payments, was taken up slowly and by 2008 it was in use in only about half of the PSNP woredas. During 2009 several CSs implementing the PSNP devoted significant resources to working with woreda staff on making PASS functional. This included provision of computers, printers and technical assistance, including direct 'hands on' assistance in one case. Training was also provided in commodity management. Planning training, facilitated by a CS counterpart, is reported to have been highly effective, resulting in successful drafting of local development and early warning plans and increased competence in monitoring and evaluation.

⁶⁶ Richards, Simon, and Hanna Teshome, *An Impact Review of Save the Children US Safety Net Approach in Pastoral Areas and Pilot Safety Net Program in Pastoral Areas Pilot*, May 1, 2010, p. 23.

⁶⁷ Table 8.3 below shows examples of typical infrastructural and SWC activities in pastoral areas.

⁶⁸ *Designing and Implementing a Rural Safety Net*, Table 2, p. 20, citing Food Security Coordination Directorate, *Report to the October 2008 PSNP Mid-Term Review Mission*, Addis Ababa, 2008.

Conclusions

Household Food Security

Cooperating Sponsors have effectively implemented the PSNP in their 40 target woredas, providing timely food transfers and key technical and management support, as well as financial resources, to the public works activities of the PSNP.

They have been challenged by recent government-mandated changes in the management of resource transfers. Beneficiary numbers, locations and scheduling of distributions have changed, with large increases in commodity beneficiaries in response to pressures arising from scarcity of food commodities, price inflation and re-targeting. CSs have demonstrated responsiveness and flexibility, innovating where necessary in their commodity timetables to ensure access to food among the largest possible beneficiary population. Their effectiveness is indicated by the Government's expressed interest in an expansion of the Title II program coverage under the new MYAP.

Data show that the reported duration of household food sufficiency has increased significantly – by 1.67 months since the start of this program in 2005. Food sufficiency measured throughout the year shows fewer reported fluctuations since the baseline, suggesting that implementation is achieving the middle term PSNP objective of smoothing consumption. Given the extreme inflation of food prices in 2008 and the adverse climatic conditions in 2009, these gains are noteworthy, and appear to have exceeded progress made in other PSNP areas outside the Title II program.

Public Works

Public works implementation has been broadly effective. Planning and site selection are done through joint planning with government and communities and the technical standard of work is generally good. CSs have met most of their annual targets during the life of the project. While substantial increases in access to infrastructure have been achieved between 2005 and 2010, there continues to be unmet need for potable water. Watershed development, probably most advanced in Tigray, will require several more years of effort at current levels to achieve significant impacts on household food security in all Title II MYAP areas. SWC work to date has created livelihood opportunities for a small number of landless individuals and households, a group for whom few options exist in the current rural economy of these woredas. Maximizing the impact of available resources, including labor, on the food security status of PSNP households through creation of community assets continues to be a challenge.

Sustainability

This is probably the biggest challenge faced by CS implementers of PW projects, requiring both community commitment and Government support, particularly technical supervision. Technical support to planning, construction and subsequent maintenance of PW is provided by CSs in a number of ways. The PSNP model includes linkages among woreda staff and relevant sectoral experts based at zonal and regional levels. Given the competing work demands on sectoral local government technical staff, CS sector staff play a key role in ensuring the quality of projects. This is particularly important in pastoral areas, where local government is often understaffed and technical staff are very few.

The perception among community members that PW activities are of direct benefit to them through resource generation, on watersheds and in small scale irrigation, better access to services and improved knowledge was reported to be the most important factor in obtaining support. As PSNP phases out, it may become more difficult to maintain enthusiasm for ongoing maintenance of shared facilities.⁶⁹ The expressed willingness of beneficiaries to participate in maintenance and to provide labor without compensation are positive indications of social changes. The spontaneous adoption of SWC improvements on household farms by more than two thirds of households interviewed is one of the most promising indications of longer term sustainability of these changes at community level.

CSs have made a definite contribution to capacity building through their work with local government and communities. The implementation of PASS, the management and tracking of commodities and PW management in general are areas where CSs have worked jointly with local government, providing an element of stability in the management of the PSNP in locations with high turnover and transfer rates of government staff.

⁶⁹ There was some evidence of this observed in the field, in failed maintenance of installations such as roof water collection systems.

5. OBJECTIVE 2: IMPROVED AND PROTECTED HOUSEHOLD ASSETS AND LIVELIHOODS IN TARGETED AREAS

Background

The second key element in the Productive Safety Net Program consists of initiatives designed to support the goal of moving households toward graduation, through longer term food sufficiency – self provisioning of adequate food for twelve months, with the ability to withstand minor shocks – eventually leading into long term food security.⁷⁰ Since the inception of the program it has been recognized that this transition will require additional elements to those enabling households to meet short term food and income needs and to respond to shocks such as drought, food price inflation and individual household emergencies. The second objective of the Title II program has been to improve and protect household assets and livelihoods.

The first and second phases of the PSNP, implemented between February 2005 and the end of 2009, included Other Food Security Programs (OFSP) which provided credit and technical support to increase agricultural production. At the start of the PSNP, OFSP included a donor-funded lending program which included access to “household packages” of agricultural inputs designed to increase production and household income and assets. The Government target for credit coverage was ambitious- 30% of PSNP beneficiaries each year.⁷¹

The need for technical assistance to farm households engaging in new small enterprises was recognized and the Government increased the number of DAs, who play a role both in agricultural development and in the household planning of agriculturally based businesses, on the basis of three per kebele, to 62,000.

Additional support to improved rural livelihoods among PSNP beneficiaries was provided through USAID and targeted at households in Title II-supported areas. The Support to the Productive Safety Net Program (SPSNP) was funded by USAID between 2004 and 2007, in an area including 27 PSNP woredas in the DAPs. This two year program targeted 83,000 PSNP beneficiary households with livelihood support to promote household asset building.⁷² Of the SPSNP woredas, 18 continued to receive Title II support through the 2008- 2011 MYAP after the conclusion of the SPSNP.

USAID is now supporting PSNP Plus in MYAP areas. This program is similar to SPSNP, with a strong emphasis on the creation of ‘value chains’ enabling households to increase the value added of their agricultural production before bringing it to market, as a means of building household assets. The PSNP Plus includes both credit and technical assistance. This support is provided in nine woredas, with a target

⁷⁰ See the 2010 PIM, Figure1, The Process of Graduation, p. 10.

⁷¹ *Designing and Implementing . . .*

⁷² Weidemann Associates, Inc for USAID/Ethiopia, *Evaluation of Livelihood Interventions Funded through USAID Famine Fund Support to the Productive Safety Net Program: Final Report* October 2006. The initial funding was extended through 2007 with local mission development assistance funding.

population of over 42,414 PSNP households,⁷³ about half of the number targeted in SPSNP.

In every discussion, CSs stressed that available Title II resources for livelihood support, which were reported to have been reduced between the first and current program cycles, were not adequate to move large numbers of households to readiness for graduation. The composition of funding at woreda level, including MYAP, PSNP Plus and Government programs,⁷⁴ was not available to the evaluators. In some locations, however, field teams were told that livelihood support had come to a stop with the conclusion of the DAP.

In planning for the new PIM, the Government has continued to recognize the role of OFSP assistance to PSNP beneficiaries, recognizing explicitly that households within the PSNP include a range of economic levels, from the “ultra poor” to those who have achieved food sufficiency. New types of assistance are described in the 2010 draft PIM document; these are based on HABP, Household Asset Building Programs, focused on small scale household credit with intended eventual linkages to microfinance institutions,⁷⁵ which are now being actively supported in Oromia, Amhara and Tigray Regions.⁷⁶

This objective was evaluated in the understanding of PSNP as a program linked to asset generation, with the long term objective of full household food security for all chronically food insecure households.⁷⁷ The strategies used in the Title II program to promote this objective have focused on support to agricultural production and marketing. Small scale irrigation, which may involve public works labor, has been an important means to this objective. The impact of the livelihood component of the program will be assessed in terms of the global key indicator of *value of household assets*. Other data related to impact and effectiveness will also be discussed.

Program Implementation

5.1. Improvement and Diversification of Agriculture to Increase Production and Productivity

Cooperating Sponsors implementing the PSNP through the Title II program have used their wide collective experience and expertise in the promotion of increased and diversified agricultural production, and in activities designed to increase household farm-based income. PSNP is implemented in communities where CSs have worked for many years, and they have built on this knowledge of local conditions in the

⁷³ Burns John, Solomon Bogale, Gezu Bekele, *Linking Poor Rural Households to Microfinance and Markets in Ethiopia: Baseline and Mid-term Assessment of the PSNP Plus Project in Doba*. Tufts University, March 2010. p.12.

⁷⁴ The evaluators were told that woredas supported through PSNP Plus would not participate in other food security programs (those intended to build household assets through access to credit), in order to spread resources as widely as possible.

⁷⁵ Other elements are the Complementary Community Infrastructure (CCI) and Re-Settlement Programs.

⁷⁶ These are: the Dedebit Credit and Saving Institution (DECSI) in Tigray; the Amhara Credit and Saving Institution (ACSI); the Oromia Credit and Saving Institution (OCSI) and the Dire Dawa Credit and Saving Institution (DCSI).

⁷⁷ Households receiving Direct Support due to disability, old age or extreme labor shortage are not expected to graduate, although they may receive assistance to improve their household assets.

design of interventions. Key activities to increase production through improved agricultural practices include⁷⁸:

- Introduction of drought resistant and higher yielding seed varieties;
- Introduction of new crops, particularly those with market potential;
- Training in basic agricultural technologies such as composting, crop rotation, erosion control and integrated pest management;
- Training in new adaptive technologies such as drip irrigation and production of bio pesticides;
- Assistance with production of improved forage crops, including provision of seeds, training and supervision; and
- Training on livestock management.

Access to improved inputs has been facilitated through several methods. Revolving seed funds have been established. Farm households have obtained improved seed in local markets through CS-facilitated voucher schemes. Farming households are provided with vouchers redeemable at organized seed fairs where sales are made by local producers, stimulating the local economy while providing needed inputs [CRS].

CSs have introduced new high value crops, such as apple and other fruit trees, garlic, peppers and beans, and have acted as brokers to provide access to certified seed from regional and national research stations for cultivation and multiplication by farming households of improved varieties of newly popular crops such as potatoes [FH, CARE].⁷⁹

New agricultural technologies, based on improved soil and water management, have also contributed to increased production. The most widely diffused of these is probably small scale irrigation. Access to innovative small scale irrigation has made possible the cultivation and sale of high value horticultural crops, while soil and water conservation measures have increased productivity of existing farms by increasing moisture retention. [REST, CARE] CSs have reached landless HHs, especially youth and FHH, through small scale irrigation, access to technologies such as beekeeping, and access to fallow communal lands for cultivation of forage crops.



Seed of improved potato varieties stored in a diffused light store, Amhara Region.

All CSs have promoted the treatment of fallow land and planting with trees and forage crops under the SWC element of PW activities have also provided sources of additional income. Cultivation of forage crops is actively promoted as a part of the rearing of livestock. Fattening and sale of small ruminants (sheep and goats or

⁷⁸ CSs promoting specific techniques will be identified in brackets; in most cases, several CSs have introduced and are teaching these methods.

⁷⁹ Certified seeds, obtained from national research stations, are higher in value and ensure the quality of these crops. Ethiopia's phytosanitary regulations require certification by sellers of seed. The quality of these seeds greatly expands the market, to include other regions. Potatoes have been identified globally as an important crop in tackling food insecurity due to their food value and the high volumes which can be produced on relatively small plots.

‘shoats’) has been another widely supported activity. Starting with household packages in the first phase of the PSNP, small animals have been provided on a loan or revolving basis, usually to individual households [REST]. One CS has piloted voucher-based livestock purchase schemes, based on the same principle as seed fairs, which directly increase household assets while stimulating sales from other households [CRS].

Beekeeping, identified as a potentially profitable enterprise requiring a low capital input, has been widely encouraged, both with individual farm households and on enclosed fallow land.⁸⁰ Several CSs have promoted this activity among landless youth.⁸¹

Training on livestock management and on activities to support increased production of fodder crops promote the transition to a more sustainable and equitable ‘cut and carry’ system of livestock rearing in an environment where grazing land is declining, has been important.⁸² An ongoing impact evaluation of livelihood support provided through the PSNP Plus program has argued strongly that an even greater emphasis should be put on livestock-based livelihood strategies which, it is argued, carry lower risk for vulnerable households than crop production.⁸³

Program Impacts

The effectiveness of these activities is closely linked to program coverage, which varies widely among CSs. In 2010 CARE reported training over 48,000 individual farmers, over half of them women, in improved farming technologies, with additional training of 3645 volunteer extensionists in extension methodologies. In other program areas, targets were lower, numbering several hundred up to several thousand.

Coverage was estimated through several questions on the final survey. As in public works implementation, CSs have worked closely with Development Agents, the grass roots level government extensionists, to increase production and productivity. Potential impacts of contacts with DAs, who support activities under Objective 2, are included in the discussion of program impacts.

Households were asked about participation in crop production training led by CSs during the DAP/MYAP period.

⁸⁰ Placement of hives is a land use that avoids conflict, as it does not create a permanent asset on the ground.

⁸¹ Beekeeping is an ancient practice in Tigray, where REST has widely disseminated modern methods as part of their program.

⁸² This practice is also described in East Africa as ‘zero grazing.’

⁸³ Burns, Bogale, and Bekele, op. cit., p. 9. Tufts University, through the Longitudinal Impact Study (LIS) is evaluating PSNP Plus in selected areas.

Table 5.1. Participation in Crop Production Training in Last Five Years

CS	No.	%	Total HHs
CARE-MYAP	391	70.1	558
CARE-PAP	1	0.9	112
CRS	510	75.8	673
FHI	184	32.9	560
REST	394	58.8	670
SCUK-MYAP	347	34.5	1,006
SCUK-PAP	8	2.4	335
SCUS	19	3.4	560
Total	1,854	41.4	4,474

Just over 40% of sampled households reported participating in this crop production training. Reported levels are significantly higher in agricultural areas, where the sampled proportions range from 32% to 75%, than in PAP program areas.

Receipt of crop extension services during the previous year was reported to have been at similar levels, but receipt of extension training during the previous year was lower than the five year totals for participation. These numbers include activities under both CS and Government implementation.

Table 5.2. HHs Reporting Access to Crop Extension Services During the Past Year [2010]

	No.	%	Total HHs
CARE-MYAP	351	62.9	558
CARE-PAP	1	0.9	112
CRS	363	53.9	673
FHI	250	44.6	560
REST	412	61.5	670
SCUK-MYAP	325	32.3	1,006
SCUK-PAP	17	5.1	335
SCUS	52	9.3	560
Total	1,771	39.6	4,474

Table 5.3. HHs Reporting Participation in Crop Extension Training During the Past Year [2010]

	No.	%	Total HHs
CARE-MYAP	327	58.6	558
CARE-PAP	2	1.8	112
CRS	378	56.2	673
FHI	132	23.6	560
REST	199	29.7	670
SCUK-MYAP	235	23.4	1,006
SCUK-PAP	8	2.4	335
SCUS	17	3.0	560
Total	1,298	29.0	4,474

Training was defined as a formal session on specific topics for purposes of the survey, which may explain the lower reported rates of participation, as compared with access to services. Lower levels may also reflect differing levels of skills among farmers; as experience with new technologies is gained, participation in training may decline. If these reported levels among sampled households are indicative of coverage, however, they suggest a training/extension gap, affecting 30 – 40% of HHs. Contacts with DAs, which may be less formal than extension services or training, were reported to be more widespread. Households also reported on contacts with and types of support received directly from DAs.

Table 5.4. HH had Contact with Local DA

CS	No.	%	Total
CARE-MYAP	452	81.0	558
CARE-PAP	24	21.4	112
CRS	523	77.7	673
FH	459	82.0	560
REST	489	73.0	670
SCUK-MYAP	755	75.0	1,006
SCUK-PAP	82	24.5	335
SCUS	152	27.1	560
Total	2936	65.6	4474

Table 5.5. HH Received Effective Support from DA [Among Those with Contacts]

CS	No.	%	Total
CARE-MYAP	333	77.4	430
CARE-PAP	12	52.2	23
CRS	348	67.3	517
FH	350	76.4	458
REST	373	76.3	489
SCUK-MYAP	600	81.1	740
SCUK-PAP	11	17.2	64
SCUS	116	76.8	151
Total	2,143	74.6	2,872

Reported levels of contact with DAs are very high in MYAP areas, as would be expected, given their multiple roles. DA support is reported to be effective by almost 75% of HHs who reported having contact. The more limited contacts reported by sampled HHs in PAP areas is consistent with reports from field teams, who strongly emphasized the understaffing of this key position, and the importance of the CS presence in filling in gaps in technical and community support. This is discussed in section 8 below.

Households reported receiving several types of support from DAs, with the largest proportion mentioning soil and water conservation, as shown below.

Table 5.6. Type of Support Received by Households Receiving Support from DA*

Type of Support	CARE-MYAP		CARE-PAP		CRS		FH		REST		SCUK-MYAP		SCUK-PAP		SCUS	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Food Crop Production Technology	349	77.2	7	29.2	463	88.5	316	68.8	360	73.6	435	57.6	6	7.3	51	33.6
Cash Crop Production Technology	244	54.0	4	16.7	190	36.3	108	23.5	163	33.3	127	16.8	3	3.7	21	13.8
Livestock Production Technology	255	56.4	15	62.5	358	68.5	167	36.4	263	53.8	267	35.4	5	6.1	81	53.3
SWC Technology	379	83.8	16	66.7	451	86.2	388	84.5	436	89.2	628	83.2	17	20.7	63	41.4
Total HHs responding	452	-	24	-	523	-	459	-	489	-	755	-	82	-	152	-

* Percentages are of all HHs indicating having received support. Multiple responses allowed.

Coverage will be explored further in relation to CS activities to promote marketing, savings and access to credit among beneficiaries.

Access to extension services for livestock production was also examined. This is important throughout Ethiopia, but particularly in PAP areas. Reported access to livestock extension services was higher in MYAP areas than PAP areas. The absence of DAs in many PAP areas may explain the apparent disparities in coverage. While the service provision in predominantly agricultural areas is important, the gap in coverage in pastoral areas may be negatively affecting livestock productivity.

Table 5.7. HHs Received Livestock Production Extension Services in the Last Year

CS	No.	%	Total HHs
CARE-MYAP	312	55.9	558
CARE-PAP	8	7.1	112
CRS	289	42.9	673
FHI	131	23.4	560
REST	331	49.4	670
SCUK-MYAP	221	22.0	1,006
SCUK-PAP	31	9.3	335
SCUS	32	5.7	560
Total	1,355	30.3	4,474

Among households receiving livestock extension services, a high proportion reported receiving formal training as well. As with access to services, however, the sampled percentage in two PAP areas reporting receiving training was lower than that in MYAP areas.

A summative indicator of extension impacts is agricultural productivity. Given the challenges of measuring increases in agricultural production across a large and heterogeneous population, with two distinct growing seasons, this evaluation presents basic comparative data on agricultural productivity with the caution that multiple factors relating both to the implementing environment and to the administration of the survey may have influenced the results below. Average output per hectare is shown for five major crops. Baseline data for 2005 included the program areas of the six CSs who continued to receive Title II resources after 2008: CARE-MYAP, CRS, FH, REST, SCUK-MYAP and SCUS. Data for 2010 includes woredas in the original program area.

Table 5.8. Crop Yields, Quintal*/Ha, 2005 and 2010

Crop Type	Yield Qt/ha (2005)	Yield Qt/ha (2010)
Barley	5.6	4.9
Maize	5.4	4.2
Sorghum	4.3	2.4
Teff	3.5	2.6
Wheat	6.4	2.6

*: One quintal = 100 kgs.

Based on this data set, there are indications that productivity may have declined since 2005. Without time series data for the period 2005 – 2009, it is impossible to know whether this represents a consistent trend or a response to the adverse conditions in 2009.⁸⁴

⁸⁴ Data were collected before the very good harvest of October-november 2010. See FAO, *GIEWS Country Brief Ethiopia*, 12 Jan.2011 for a description of record Meher season cereal production

Value of assets, which subsumes both increased production and successful marketing, and is a key indicator in this program, will be discussed under program impact in the final portion of the section.

5.2. Support to Agricultural Marketing, Savings and Credit

Program Implementation

Encouragement of agricultural and livestock marketing is the second element of Title II livelihood support aimed at increasing household assets with the long term goal of promoting household food security. Both HABP and PSNP Plus have the objective of preparing PSNP beneficiary households to be able to work with micro finance institutions,⁸⁵ by developing products and services which will increase the financial assets of beneficiary households, as well as strengthening their financial literacy and business skills to promote saving.⁸⁶

The CSs implementing Title II DAPs/MYAPs among PSNP beneficiaries have promoted a series of activities designed to support development of small agro- and livestock-based enterprises, savings, and access to credit.

CSs have implemented these activities:

- Identification and promotion of a ‘value chain’ approach to agricultural production and marketing; training farmers on production and marketing of crops or products which allow for a high value added component;
- Facilitation of formation of small scale savings and credit groups: referred to as Village Savings and Loan Associations (VSLAs); Savings and Internal Lending Communities (SILCs), Self Help Groups (SHGs) or Savings and Credit Groups;
- Facilitation of formation of farmer-based marketing groups as part of the value chain approach;
- Training of farmers on marketing;
- Provision of agricultural inputs or small livestock to farm households on loan or grant basis; and
- Support to income generating activities (IGAs) among groups and individual beneficiaries.

The value chain approach – strongly supported by PSNP Plus and other enterprise-promotion programs – is used to identify products with a high potential for adding value at the producer level, and strong market prospects.⁸⁷ Featured value chains in Title II program areas have included small livestock, white pea beans and honey production. The establishment of value chains involves facilitation both of production and marketing by the CS.

⁸⁵ The introduction of HABP in the new PSNP phase, and the legacy of SPSNP, have created a situation where only a portion of woredas supported through Title II MYAP funding are also participating in PSNP Plus

⁸⁶ Ethiopia: USAID, *CARE Launch PSNP PLUS to Improve Micro-Finance and Market Linkages*, Addis Ababa, Ethiopia, March, 17 2009 accessed at: <http://www.syminvest.com/market/news/microfinance/ethiopia-usaid-care-launch-psnp-plus-to-improve-microfinance-and-market-linkages/2009/3/17/1683> on Sep 4 2010.

⁸⁷ For an example of value chain analyses in Tigray, see Emerging Markets Group, Ltd, *Sector Assessment and Identification, Kilte Awlaelo Incorporating Sector Assessment Identification into a Graduation Pilot for Safety Net Beneficiaries in Kilte Awlaelo*. for USAID. Draft. November 11, 2008.

Small scale savings and credit groups have probably been the most sustainable of all initiatives undertaken by CSs to directly promote livelihoods, particularly among highly vulnerable households, the “ultra poor”. The GoE recognizes their role in relation to the graduation process.⁸⁸ These groups, typically with fewer than 30 members - predominantly or entirely women, have specific features that enable them to serve as vehicles for on or off-farm enterprise development while also performing the social protection functions typical of older traditional social groupings. Members deposit savings for an initial period before lending is initiated, and these pooled funds make up the initial loan capital.



Self help savings and credit group, with baskets being sold as small enterprise.

Interest is charged on loans taken by members, which typically have short repayment periods – from one to four months – and savings and credit groups usually establish a ‘social fund’, a pool of resources accessible for emergency expenses such as medical care and funerals, based on a monthly contribution separate from the regular savings contributions required of members. Basic operating procedures are similar in all PSNP models, and include safeguards for saved funds, and short repayment periods. Basic equipment – box, locks and stationery – and training on group formation and management are the only CS inputs required for establishment of a group.⁸⁹

The combination of very low start up costs, a high degree of self sufficiency and a good cultural ‘fit’⁹⁰ contributes to the relevance of these groups. CSs have provided training to members with the long term objective that they will be able to link up with micro-lending institutions. Discussions in the field suggested that most group members in their first or second year of participation are still borrowing from within the group. Those with multiple enterprises or higher reported savings reported links with other lending programs, thus securing access to multiple livelihood options, increasing the chances of becoming food self sufficient.

While households were not asked about participation in savings and credit groups, information was gathered on patterns of savings and access to credit.

⁸⁸ See the PSNP graduation schematic featured in the 2010 revised PIM, p.10.

⁸⁹ Key features of savings and credit groups are described in Guy Vanmeenen, *Savings and Internal Lending Communities –Voices from Africa*, Nairobi, Kenya, Catholic Relief Services, October 2010 and in Helmore Kristin, Sybil Chidiac and Lauren Hendricks, *Bringing Financial Services to Africa’s Poor*, CARE, April 2009.

⁹⁰ Savings and Credit groups have flourished all over Africa, primarily among highly vulnerable women. CRS and CARE have links with groups in over 20 African countries.

Table 5.9. Households Reporting Cash Savings

CS	No.	%	Total
CARE-MYAP	359	64.45	557
CARE-PAP	4	4.08	98
CRS	237	35.11	675
FH	83	14.82	560
REST	86	12.87	668
SCUK-MYAP	152	15.12	1,005
SCUK-PAP	14	4.61	304
SCUS	56	10.02	559
Total	991	22.39	4,426

Table 5.10. Average Amount Saved*

CS	E. birr*
CARE-MYAP	303.6
CARE-PAP	440.3
CRS	176.8
FH	341.0
REST	1,086.5
SCUK-MYAP	359.4
SCUK-PAP	688.6
SCUS	580.0
Average for All	363.8

*: Exchange rate varied from \$1=9 to 13 birr

It can be seen that rates and amounts of savings reported by sampled households vary among CS program areas. CARE shows what is probably a significantly higher proportion of households reporting saving, while reported amounts saved by households in the REST program area – are almost double other MYAP areas. When amounts saved are compared across the life of the program, with target areas adjusted to be comparable, only CARE shows a significant increase between 2005 and 2010. Methods of saving reflect a mix of more traditional methods – home and traditional savings groups – and use of savings and credit associations and banks. Keeping money at home was the most widely reported savings method, followed by savings and credit associations and traditional group saving systems.

The links between savings and credit groups and the successful establishment of a micro enterprise are complex. Some groups pay out accumulated capital to members at the end of a year, enabling them to invest in an enterprise; others retain these funds and grow them through the next year of operations. Similarly, there is not a single pattern of enterprise development, with some groups engaging in a collective activity, or one managed by several members, while others operate on the basis of individual economic activities. The choice of activity is influenced by familiarity and skills - as with work like basket making - and perceptions of market conditions - as with fattening of small livestock. CSs may provide training on marketing, assist with market research where an enterprise has been established, and sometimes support business operations through provision of credit or services such as transport to markets.

Taking account of the generally low payment primary producers receive for agricultural products, the importance of the value chain approach is also evident; the activities selected under PSNP Plus, cereals, white pea beans, livestock fattening and honey production, have been identified as most appropriate to production conditions in MYAP areas of Tigray, Amhara and Oromia, while having a strong local market.

Access to credit was also assessed in the final survey, together with source and reported uses. Given the low proportion of households reporting savings and the small amounts saved, access to credit is essential to the establishment of a small enterprise. Just over 30% of HHs reported access to credit; among these, rural credit

and savings associations are the most important sources in every MYAP program area. These data are shown below.

Table 5.11. Access to Credit in Last 12 Months

	No Access %	As an Individual %	As Member of a Group %	Total HHs Responding
CARE-MYAP	66.5	32.4	1.1	552
CARE-PAP	99.0	1.0	-	99
CRS	75.8	21.4	2.8	669
FHI	68.8	20.2	11.1	560
REST	65.6	28.0	6.4	668
SCUK-MYAP	51.5	32.0	16.5	1,003
SCUK-PAP	84.7	14.6	0.7	288
SCUS	86.6	11.1	2.3	558
Total	69.1	23.8	7.1	4,397

Table 5.12. Most Important Source of Credit ⁹¹

CS	Relatives %	Rural Savings and Credit Assoc. %	Co-Op or Co-Op Bank %	Traditional Lenders %	NGOs %	Commercial Bank /Devel. Bank %	Micro-Finance Inst. %
CARE-MYAP	28.6	34.6	4.4	4.9	19.8	-	6.0
CARE-PAP	-	-	-	-	-	-	-
CRS	19.4	56.9	2.5	1.9	13.1	0.6	3.8
FHI	7.4	29.7	25.7	1.1	26.3	-	8.6
REST	12.2	77.0	6.1	2.2	-	0.4	0.9
SCUK-MYAP	9.3	37.7	22.4	4.3	21.9	-	1.4
SCUK-PAP	95.7	-	-	-	4.3	-	-
SCUS	70.7	20.0	-	1.3	6.7	-	-
Total	19.7	42.9	13.2	3.0	16.0	0.1	3.0

Rates of access to credit, as reported by sampled households, vary by program area, with sampled households in areas of CARE, SCUK and REST reporting the highest rates. SCUK and FH households report higher rates of group access. Sources of credit and methods of accessing credit highlight the role of savings and credit organizations. Informal sources and channels, through family members, remain important in pastoral areas, and cooperative banks, supplemented in some areas by NGOs, are reported to have provided almost 30% of credit.

⁹¹ The apparent discrepancies between sources of credit as reported in monitoring data, particularly for REST and CARE areas, and results shown here suggest that the distinctions between different types of institutions may not have been clearly communicated and understood in translated questionnaires.

Table 5.13. Reported Use of Credit in Last 12 Months

CS	Livestock Purchase	Input Purchase	Petty Trade	Consumption Needs (Food, Clothing, School Fees)
	%	%	%	%
CARE-MYAP	44.57	5.14	5.71	25.71
CARE-PAP	-	-	-	100.00
CRS	50.96	20.38	3.18	19.75
SCUK-MYAP	56.43	6.22	7.47	25.93
SCUK-PAP	2.17	2.17	4.35	91.30
FHI	67.65	2.94	2.94	25.29
REST	48.17	20.64	6.88	20.64
SCUS	12.50	-	9.72	75.00
Total	49.96	9.24	6.06	29.22

Households report use of credit for livestock purchases in very high proportions. Observations made elsewhere, and in the field by the evaluators, on the central role of livestock in the rural economies of areas covered by the Title II PSNP program are supported by these data, at least among households obtaining credit. Use of credit for consumption needs - usually seen as indicative of marginal livelihood security – on such items as food, clothing and school fees, is reported by very high proportions of households sampled in PAP areas. While numbers of HHs in these areas accessing credit are small, these data may be indicative of the high level of vulnerability in these areas. In MYAP areas, an estimated 20 – 25% of sampled HHs also report using credit for daily consumption needs; if these data are indicative of the population prevalence among beneficiaries, these HHs may constitute some of the ‘ultra poor’ identified in PSNP planning as in need of asset building assistance provided through mechanisms such as savings and credit groups. During field discussions with group members, use of small loans for daily consumption needs was not mentioned, and it should be noted that items such as school fees can also be seen as a form of investment in future livelihood strengthening.

Two other indicators relating to potential development of market-based agricultural activities were explored. Households were asked about access to and use of market information and linkages to market nodes. These are key elements in the value chain based economic development model promoted by PSNP Plus and implemented across MYAP areas.

Table 5.14. HH Reports Access to Market Information in Kebele

CS	No.	%	Total HHs
CARE-MYAP	382	68.5	558
CARE-PAP	0	0.0	112
CRS	238	35.4	673
FHI	67	12.0	560
REST	379	56.6	670
SCUK-MYAP	132	13.1	1,006
SCUK-PAP	46	13.7	335
SCUS	271	48.4	560
Total	1,515	33.9	4,474

Table 5.15. HH Reports Using Market Information for Sales

CS	No.	%	Total HHs
CARE-MYAP	370	66.3	558
CARE-PAP	0	0.0	112
CRS	228	33.9	673
FHI	64	11.4	560
REST	306	45.7	670
SCUK-MYAP	162	16.1	1,006
SCUK-PAP	38	11.3	335
SCUS	278	49.6	560
Total	1,446	32.3	4,474

Reported access to and use of market information vary among CS program areas, with highest reports from sampled households in CARE and REST areas. High rates reported in the pastoral areas where SCUS is working may be specific to livestock marketing, as support for marketing of other products is a small component of CS program activity. Linkages to market nodes and cooperative membership are shown below.

Table 5.16. HH is Linked to Market Node

CS	No.	%	Total
CARE-MYAP	145	26.0	558
CARE-PAP	0	0	112
CRS	162	24.1	673
FHI	22	3.9	560
REST	367	54.8	670
SCUK-MYAP	92	9.1	1,006
SCUK-PAP	4	1.2	335
SCUS	312	55.7	560
Total	1,104	24.7	4,474

Table 5.17. HH is Member of Service or Marketing Cooperative

CS	No.	%	Total
CARE-MYAP	37	6.6	558
CARE-PAP	1	0.9	112
CRS	101	15.0	673
FHI	34	6.1	560
REST	116	17.3	670
SCUK-MYAP	25	2.5	1,006
SCUK-PAP	6	1.8	335
SCUS	66	11.8	560
Total	386	8.6	4,474

These tables suggest that use of market information is much more widespread than links to marketing nodes. Only in REST areas were more than half of HHs interviewed reporting these links. This may represent a progression in Tigray from accessing and using information to the establishment of marketing links, as a HH becomes more ready for entering the market. Membership in a marketing cooperative, a final step in entering the marketplace, was also examined. Reported rates of membership, while low, followed the patterns identified above, with highest reported rates of membership in REST areas.

Both access to and use of information, and marketing linkages, are reported for SCUS program areas. This may be explained by SCUS activities in other programs to promote livestock marketing in Somali Region, including re-stocking with promotion

of offtake sales. In addition, external sources of livestock marketing information are available, such as the BBC Somali service.

Program Impacts

The collective impact of these activities is difficult to assess at this stage. A mid-term evaluation of the PSNP Plus program noted that measurable changes in progress toward sustainable economic changes would be unlikely to be measurable before early 2011. The outreach in terms of group formation has been extensive; CARE reports over 11,000 members in over 550 groups; others have achieved lower coverage. The lack of a clear strategy for enterprise development in credit and savings groups may lessen the impact of this activity in the longer term. Support to Income Generating Activities (IGAs) or small enterprises is provided alongside savings and credit activity, often linked to group formation. An IGA model which includes provision of inputs on a grant basis,⁹² may undermine the principles of full self sufficiency needed for effective operation of IGAs by VSLAs, SILCs and SHGs. While savings and credit groups benefit from business training and guidance under IGA development programs, heavily subsidized or granted inputs to these groups (including free transport of marketable commodities) may reduce their ability to establish a viable model of profitability under normal market conditions.

Substantial progress has been made in the establishment of access to groups, credit and other marketing services. With limited resources, targeting varies widely among CSs, and, as noted, every CS reported that the resources available for support to livelihoods had decreased significantly between the funding of the DAP and the MYAP/PAP programs. The structure of assistance may also have changed; in Tigray the point was made that earlier programs had provisions for very small levels of assistance, appropriate to ultra poor households, who could not accept the risk inherent in a larger loan. These small packages were reported to no longer be available.

Sustainability

The sustainability of market-based interventions will depend on the durability of the social structures created to promote production and marketing, such as VSLs and marketing groups, as well as external market conditions. These have started well, but they will require ongoing technical support, particularly as and if they establish small enterprises.

Limited coverage and limited resources in this MYAP cycle have restricted the growth of livelihood programs, and they face additional issues affecting sustainability:

- Interventions involving subsidized or granted inputs or loans are costly and funding is limited;
- The use of grant aid, especially in 'IGA' programs, instead of loans or revolving credit, can cushion small producers from dealing with market conditions;

⁹² Policies vary among CSs regarding granted assistance. REST pointed out that all resources are provided to their beneficiary populations on a loan basis.

- While targeting better off households may increase chances of sustainability, it reduces the resources available to poorer households who may have the potential to become food sufficient;
- The economic crisis of 2008/ 2009 with subsequent adverse climatic conditions is widely described as having created conditions that led to a drop in production and loss of assets; and
- There is an expressed demand for larger loans and cattle/ oxen; programs providing these levels of support, while appropriate for middle income beneficiary HHs, may increase the risk experienced by small producers.

5.3. Small Scale Irrigation

Program Implementation

Small scale irrigation (SSI) has been held out as one of the most promising activities for increasing incomes and moving HHs toward graduation from PSNP. Supported in all MYAP areas, schemes are being implemented in Amhara, Tigray and Oromia Regions and in Dire Dawa. Field visits and case studies provide ample testimony from farm households about the income benefits of irrigated agriculture. This activity

may include rehabilitation and upgrading of older irrigation systems, development of systems based on check dam pools and river or stream diversion, or be based on rainwater catchment, well or borehole water. They often form part of a larger public works watershed development plan, benefiting from PW labor in development. They may also operate as ‘stand alone’ projects. Each of these technologies has different investment costs and provides irrigation access to differing numbers of households. There is widespread agreement that households with access are able to produce 2-3 crops a year, allowing them to diversify agriculture into higher value crops and to increase income from agricultural sales and withstand periods of drought. This survey did not attempt to measure household income, so direct data on income gains from access to irrigation are not available.



Small scale rainwater catchment irrigation system serving 5 farm HHs, Oromia Region

Field visits and document reviews provided some evidence that access to SSIs was limited, and often targeted at more food secure households, including many who are not PSNP beneficiaries. SSIs based on rehabilitation of existing older schemes or diversion of river water in locations where riverine cropping is already in place will necessarily focus membership among ‘able’ farm households with pre-existing access. Households with prior access to irrigation typically are more food secure than those depending entirely on rainfed agriculture. Some notable exceptions to this pattern

were documented, where mixed access was ensured through project design.⁹³ Smaller low cost irrigation projects such as shallow wells fitted with treadle pumps have been targeted at PSNP beneficiaries most in need, such as female headed households.

The final survey examined access to irrigation, comparing reported levels of access before the Title II program⁹⁴ and sources of irrigation water.

Table 5.18. Access to Irrigation Before PSNP and in 2010

CS	HH has Irrigated Land Now		HH had Irrigated Land Before PSNP	
	No.	% of All HHs	No.	% of All HHs
CARE-MYAP	73	13.1	64	11.5
CARE-PAP	14	12.5	14	12.5
CRS	95	14.1	56	8.3
SCUK-MYAP	147	14.6	100	9.9
SCUK-PAP	25	7.5	17	7.5
FHI	39	7.0	26	7.0
REST	58	8.7	35	5.2
SCUS	36	6.4	20	3.6
Total	487	10.9	332	7.4

Reported levels of access to and use of irrigated land among PSNP beneficiaries in CS program areas are low, and increases in access shown among sampled households are modest, with 7.4% of sampled HHs reporting having had prior access, while just over 11% report current access. About one third of those with current access to irrigated land report having obtained this access during the life of the project. These data may need further examination, as sample sizes are small. Among current users, who make up about 80% of households reporting current access [not all HHs with access reported using their irrigable land], over half are reporting use of sources developed by the Title II PSNP program. This is true in all program areas except CARE, where over 70% of users report obtaining water through traditional canals or rainwater harvesting.

Program Impacts

In-depth studies of SSIs, including cost benefit analysis, have been carried out by CSs. A detailed study of a SSI developed in Dire Dawa based on a borehole-fed multi use scheme showed a significant increase in months of household food sufficiency through access to SSI,⁹⁵ with a favorable cost benefit ratio for participating households. Similar data has been produced by REST in Tigray.

In assessing the impacts of SSIs, however, the high cost per household of some schemes and low levels of coverage of PSNP beneficiary households must be

⁹³ Hebert, Paul, Bezabih Emana and Tsegahun Tessema *Transforming Lives: An Evaluation of CRS Integrated Watershed Management Programs in Ethiopia*, CRS, 2010 describes a scheme in Dire Dawa with a mixed user population. Smaller schemes based on rainwater catchment and shallow wells may have a predominant or mixed PSNP membership.

⁹⁴ Households with irrigation access were asked for recall of their situation before PSNP.

⁹⁵ Participation included the full 'package' of agricultural extension and marketing support, as well as SWC activities. See Hebert, Emana and Tessema, op. cit.

considered.⁹⁶ Given these apparent low levels of access – roughly 11% having access, with fewer HHs using their land – SSIs appear to have limited potential to contribute to population-wide food security conditions among Title II PSNP beneficiaries. ‘Knock on’ effects which may enhance household food security in non-member beneficiary populations are limited to opportunities for daily labor on irrigated farms or increased access in the market to diverse crops. Smaller irrigation schemes which do not depend on tenure rights to irrigable riverine land are able to target more vulnerable households at lower cost per household.

While participation in SSIs is highly effective in increasing household incomes, questions should be raised about the comparative benefit of alternative PW investments which may have an impact on a greater number of beneficiary households who do not qualify for inclusion in SSIs.

5.4. Program Impacts: Objective 2

Asset Values

The protection and improvement of assets and livelihoods are key objectives of the PSNP program. In order to move toward graduation, households need to acquire an asset ‘cushion’. This serves two key functions: acquisition of productive assets can be expected to increase agricultural productivity and raise the value of marketable crops, while ownership of additional assets, particularly small livestock, will allow a household to liquidate a small portion of assets in times of need without losing productive capacity.

For these reasons, *value of household assets* was identified at baseline as a key indicator of improved household food security in households supported by CSs through MYAP and PAP programs. This was measured through estimation and averaging of the value of three lists of key items: domestic assets, such as household furnishings and utensils; productive assets, including ploughs and related equipment and small agricultural utensils; and livestock, including 17 animal types.

Current asset values were determined through focus group sessions at field level, as was done during the baseline, with verification from values provided during household survey interviews. Following review of the 2005 and 2010 results, it was decided to revise 2005 baseline figures for productive assets through the exclusion of ‘outlier’ items of very high value. Probably as a result of the inclusion in the initial 2005 PSNP beneficiary group of many ‘middle income’ households – those considered to have strong prospects for early graduation – particularly in Amhara Region, some sampled HHs reported ownership of high value productive assets in 2005. These were removed from the sample. A list of items used for this purpose is attached in Annex C. Sampled areas were matched as with other tables, and included those woredas where the program was implemented between 2005 and 2010.

⁹⁶ The latter group may be using rainwater harvesting sources developed by the CS; that option was not included in the questionnaire.

Table 5.19. Average Household Asset Value, 2010

CS	CARE	CRS	FH	REST	SCUK	SCUS
Region	Oromia	Oromia	Amhara	Tigray	Amhara	Somali
Asset Type						
Domestic asset	338	540	262	566	195	619
Productive asset	385	408	233	455	215	120
Livestock asset	5011	6794	3623	4536	4304	30718
Total [birr]	5734	7742	4118	5557	4714	31457
USD [\$]	424.74	573.48	305.04	411.63	349.19	2330.15

\$1 = 13.5 birr.

Table 5.20. Average Household Asset Value, 2005

CS	CARE	CRS	FH	REST	SCUK	SCUS
Region	Oromia	Oromia	Amhara	Tigray	Amhara	Somali
Asset Type						
Domestic asset	193	185	125	228	165	822
Productive asset	114	129	133	165	132	84
Livestock asset	1769	2331	2990	2406	3183	19912
Total [birr]	2076	2645	3248	2799	3480	20818
USD [\$]	249.52	317.91	390.38	336.42	418.27	2502.16

\$1 = 8.32 birr.

These data show an increase in average asset values expressed in birr among sampled households in MYAP areas in Oromia, Amhara, and Tigray. In Somali Region, asset values reported by sampled households in birr appear to have declined slightly between 2005 and 2010. When converted into dollars, at prevailing exchange rates, patterns of change vary, with increases in Oromia and declines in Amhara, Tigray and Somali Regions. It was not possible to make a direct comparison between changes in purchasing power of each currency during the period between 2005 and 2010. We know that the cash compensation for PW labor was increased during this period, apparently reflecting a decline in birr purchasing power for food commodities.

This mixed result, while it represents a single measure of progress toward the protection and improvement of household assets and livelihoods, suggests that positive change may have occurred across the entire Title II area, given economic pressures during the period from 2008-2009 and constraints on program resources for livelihood support. Values for all sampled HHs in the 2010 survey are shown below in both currencies. Livestock values in pastoral areas are significantly higher than full asset values in agricultural areas.

Table 5.21. Average Household Asset Value, 2010 [40 Woredas]

CS	CARE		CRS	SCUK		FH	REST	SCUS	Livelihood Area	
	Oromia	Afar	Oromia	Amhara	Afar	Amhara	Tigray	Somali	High-land	Pastoralist
Asset Type										
Domestic asset	338	337	540	195	295	262	566	619	426	417
Productive asset	276	110	408	189	26	234	455	120	343	85
Livestock asset	5011	36424	6794	4304	48279	3623	4536	30718	4991	38474
Total [birr]	5625	36871	7742	4687	48600	4119	5556	31456	5760	38976
USD [\$]	416.67	2731.19	573.48	347.19	3600.00	305.11	411.56	2330.07	426.67	2887.11

\$1 = 13.5 birr

Conclusions

While HHs supported through the Title II program have made substantial progress toward the achievement of the second objective, to improve and protect their household assets and livelihoods, most do not appear to be within reach of graduation. Small landholdings (see Table 3.7) and growing rates of landlessness are undoubtedly factors limiting economic growth. Impact studies of the SPSNP and studies of the role of credit in PSNP included as part of the biannual national impact measurement have found that multiple interventions are needed for an individual household to achieve sustainable growth in household assets sufficient to enable it to meet shocks without loss of livelihood. Field interviews strongly suggested that the most successful households were those with access to more than one source of credit or inputs.

CSs have added value to the implementation of livelihood support activities in several ways. Their collective experience in improved agricultural methods and in support of formation of savings and credit groups, and their technical knowledge in small enterprise development have been brought to bear on promoting the livelihood strategies adopted in the PSNP. The full impact of livelihood support activities – economic self sufficiency with accompanying food security- will require several years to be felt by most households, and may also necessitate a higher level of investment than what is available with limited Title II and Government (HABP) resources. Much depends on global economic trends and local climatic conditions, both beyond the control of program implementers. With increasing pressure toward graduation, programming decisions will need to be made which may involve ‘trade offs’ between providing limited support to households with high economic potential or utilizing resources to generate small scale incremental change among larger numbers of the ‘ultra poor’ and other households with limited resources.

Two program activities are mentioned to conclude, as examples of good practice in promoting livelihood security. They are noteworthy, despite limited coverage, because of their effectiveness in reaching the able bodied very poor, groups with limited options for increasing incomes based on agricultural production. The allocation through a community decision making process of enclosed fallow land to landless groups and individuals, many of them youth who have ‘graduated’ into landlessness as their parental households have not been able to split small plots

among several children, has provided what may be a partial solution to the widespread challenge of finite productive resources in a situation of rapidly population growth. All CSs implementing MYAPs are working actively with landless youth to promote activities such as beekeeping and cut and carry use of forage grass for small livestock on enclosed reclaimed communal land. Moves are underway to promote group registration of land being used in this way.⁹⁷

A second initiative, the creation of shallow wells and micro catchments for use in irrigated agriculture by small groups of female headed households, also limited in coverage, has reached another PSNP beneficiary sub-group with few options for increasing farm-based income. Both of these activities are dependent on the mobilization of larger community groups for PW labor with the objectives of increasing food security and ability to withstand shocks among the most vulnerable able bodied community households. These measures by themselves are not sufficient in most cases to bring a household to graduation, but they may move HHs forward and enable them to take advantage of other resources when these become available.

⁹⁷ Under Ethiopia's land registration procedures, groups can be certified as users of land without formal ownership.

6. OBJECTIVE 3: ENHANCED COMMUNITY RESILIENCE TO SHOCKS AND REDUCED VULNERABILITY

While livelihood support strengthens the ability of individual PSNP beneficiary households to withstand shocks without asset stripping, the larger objective of preserving community assets and strengthening community based systems to reduce the impact of changes is also a major part of the implementation of the PSNP by USAID-supported CSs. This objective is supported by two key types of activities:

- Development and management of community infrastructures to strengthen the community's ability to withstand shocks through mitigation of environmental factors such as erosion, and to strengthen a community's social capital through increased access to education and health facilities; and
- Community mobilization, enabling early warning systems to function effectively in response to shocks having the potential to undermine food security.

The role of public works labor in the development and management of community infrastructures, including watershed reclamation and the construction of roads, schools, training facilities, etc. has been discussed above. The extension of early warning systems by CS implementers of PSNP under USAID support is discussed here.

In the PSNP the early warning function is the responsibility of the Early Warning and Response Directorate (EWRD), a Federal department that coordinates with the Food Security and Coordination Directorate (FSCD), joined under the Disaster Risk Management and Food Security Sector. Early Warning activities are focused at the woreda level, where the Woreda Food Security Desk (WFSD) plays a key role in collecting and aggregating data for onward transmission to Zonal and Regional authorities. This is done through monthly or quarterly assessments, with semi-annual pre and post harvest crop and livestock assessments.

This information system is linked to three emergency response mechanisms: Risk Financing, the Contingency Budget and the provision of emergency commodities through the Joint Emergency Operations Program (JEOP). The Contingency Budget provides an additional potential 20% of resources above those budgeted for PSNP. Of this 5% may be used at the discretion of the woreda to meet the needs of households that would normally qualify for inclusion in the PSNP population, while the remaining 15% may be used either for transitory needs of established beneficiaries or to meet the needs of non-beneficiaries where early warning data has shown a need. The Risk Financing mechanism is also triggered by early warning information and it is activated after the Regional Contingency budget has been committed. Finally, an exceptional transitory food crisis will trigger an emergency response, meeting needs through the JEOP. All of these processes require contingency planning and sufficient local capacity for effective implementation. All information feeding into this system originates at kebele level, where DAs are expected to collect information every month. CSs responded effectively to these conditions in conjunction with regional, zonal and woreda authorities through expanded commodity distributions between 2005 and 2010. This is discussed in Section 4 above.

The role of CSs in early warning activities is largely focused at community and kebele level, where the formation and training of local early warning committees has been facilitated. At the time of this evaluation, three CSs: CARE, REST and FH, had met planning targets for EW activities, facilitating the formation of Early Warning committees in all kebeles in their program areas, for a total of 360 functioning committees. Additional early warning mechanisms, including use of farmer development groups (in Tigray) and the establishment of sentinel sites for observation and measurement (in Oromia) were developed by CSs. Early Warning committees worked with local officials at both the kebele and woreda levels. Committees have been established through a process of capacity building and training of community volunteers, who work closely both with DAs – who have major responsibility for channelling EW information through the kebele to the Woreda Early Warning Task Force (EWTF) – and with the CSs own community facilitators, if these staff exist. Several hundred community EW facilitators have been trained by CSs, together with government and project staff. CS staff have also participated in Government led early warning crop and livestock assessment activities.

Household level access to early warning information appears to vary widely. As expected, a higher proportion of HHs in program areas of CSs supporting local level committees reported access to information, strongly suggesting the effectiveness of local committees at household level.

Table 6.1. Household has Access to Early Warning Information

CS	No.	%	Total HHs
CARE-MYAP	421	75.4	558
CARE-PAP	1	0.9	112
CRS	234	34.8	673
FHI	335	59.8	560
REST	513	76.6	670
SCUK-MYAP	478	47.5	1006
SCUK-PAP	52	15.5	335
SCUS	181	32.3	560
Total	2,215	49.5	4474

CSs have been involved in responses to short term natural disasters as well as recurrent threats to food security. In Amhara Region, where major floods in August of 2010 caused serious infrastructural damage, SCUK reported that headquarters staff with expertise in disaster response were working with the local office and local officials on a long term (six year) response and mitigation plan.

While the PIM places the major responsibility for collection, interpreting and channelling of EW information at the level of the woreda, which receives most resources from the region, support by CSs to kebele level EW committees is an effective means of building community capacity to strengthen planning for disaster mitigation.

Community based early warning committees are strongly supported in the context of Title II programming, where their presence is a Food for Peace standard indicator. It was not clear from discussions with woreda committees what degree of support local committees have provided to early warning functions, including the woreda's periodic assessments at that level. CARE, for example, reported that monitoring and evaluation staff were involved in following up village level work and in providing logistical support to food security task forces during routine assessments. There does not appear to be a uniform mechanism in place for communication from committees to communities on situations requiring responses to early warnings. Households reported obtaining EW information from a wide range of sources, as shown below.

Table 6.2. Households' Major Sources of EW Information

Source of Information*	CARE-MYAP**		CRS		FHI		REST		SCUK-MYAP		SCUK-PAP		SCUS	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Radio	210	49.9	74	31.6	80	23.9	92	17.9	57	11.9	5	9.6	43	23.8
Person selected/ trained by Gov't.	108	25.7	75	32.1	37	11.0	335	65.3	63	13.2	-	-	2	1.1
Gov't dev't. agent	208	49.4	36	15.4	240	71.6	209	40.7	403	84.3	2	3.8	4	2.2
Person trained to assess and report	132	31.4	30	12.8	64	19.1	51	9.9	21	4.4	-	-	48	26.5
Neighbor/ friend	178	42.3	74	31.6	120	35.8	123	24.0	106	22.2	2	3.8	15	8.3
Trad. forecaster	-	-	7	3.0	3	0.9	12	2.3	8	1.7	9	17.3	32	17.7
Trad. assessment team	3	0.7	6	2.6	4	1.2	3	0.6	1	0.2	33	63.5	44	24.3
HHs reporting access to EW information	421	-	234	-	335	-	513	-	478	-	52	-	181	-

* multiple responses allowed.

** CARE-PAP omitted because there was only one case.

The importance of informal mechanisms for information dissemination is evident from Table 6.2. The role of traditional sources of information, forecasters and traditional assessment teams- who are reported to account for over 80% of information in SCUK's PAP program area in Afar, and over 40% in SCUS programs - appears to remain strong in pastoral areas.

Early warning mechanisms to supplement the ongoing GoE EW process have been put in place comprehensively by three CSs. Sampled households in those three areas report that they have used EW information for decision making in greater numbers than elsewhere, suggesting that these systems have reinforced the woreda EWC. Data are shown below:

Table 6.3. HH has Ever Used Early Warning Information to Make Decisions

CS	No.	%	Total HHs
CARE-MYAP	366	65.6	558
CARE-PAP	0	0.0	112
CRS	115	17.1	673
FHI	240	42.9	560
REST	442	66.0	670
SCUK-MYAP	304	30.2	1,006
SCUK-PAP	45	13.4	335
SCUS	112	20.0	560
Total	1,624	36.3	4,474

Conclusions

As discussed above, CSs have been able to promote community resilience through effective adaptation to changing commodity requirements, expanding distributions with available resources and, where necessary, obtaining authorization for an expanded commodity budget to meet extraordinary short term needs. Community PW have been well executed in most cases and social infrastructure is strongly valued.

Some remaining challenges to the full implementation and utilization of local EW systems remain. There is a need for clarity on their roles vis-à-vis the bureaucratic mechanisms of the Government. Where community based methods of assessment, such as the Household Economy Assessment (HEA) have been attempted, CSs report a failure to link effectively with the woreda-zonal-regional Early Warning system. Lack of resources for basic equipment – in one location the local committee lacked a rain gauge – and the burden on farming households of this voluntary function, may be limiting factors in the effective expansion by CSs of community based EW activities and on their sustainability. Community committees do appear to strengthen the EW function, if comprehensively established, increasing access to and utilization of information.

7. OBJECTIVE 4: IMPROVED COMMUNITY HEALTH AND NUTRITION

Background

This objective encompasses the third element in food security, improved utilization of food consumed. Health and nutrition activities initiated during the DAP have been maintained in the MYAP and PAP programs implemented by these six Cooperating Sponsors despite a major decline in funding for this work in the second phase, following the global food crisis of 2008. Every CS reported being constrained by limited resources for health and nutrition in the new MYAP/ PAP cycle, 2008 – 2011. All have maintained program activities supporting community based health outreach, as well as continuing to collaborate with the Federal Ministry of Health through links with local woreda health bureaus, in conjunction with joint outreach with Health Extension workers. At the same time, several CSs have implemented interventions aimed at improving household water supplies and sanitation, using a range of methodologies. In most cases, complementary funding has been sought and utilized for these activities, but the scope and coverage of health promotion work is reported to be limited everywhere by lack of resources. Child nutritional status, measured by rates of stunting and underweight, is an important indicator of food security in Title II programs as a whole. This will be discussed below, together with household dietary diversity, an indirect indicator of the value of the diet consumed by children and adults in food insecure areas.

Extensive discussions were held with field staff and community groups – mainly women - on program activities, health knowledge and changes in practices. In addition, questions relating to health, nutrition and hygiene were included in the household survey. This section will discuss two key indicators of child health surveyed during the baseline: malaria prevention and management of diarrheal diseases. Sanitation and hygiene practices will also be discussed. Child nutritional status, often considered a summative indicator of a community's food security, was assessed at baseline and in the final survey, through weighing and measuring of age eligible children found in sampled households. A total of 1897 children were assessed in the final survey. Samples matching the 27 woredas included in both the baseline and final surveys were used for statistical comparison of changes in child nutritional status. Current full 2010 data are also presented, by Region.

7.1. Community Health and Nutrition Programming:

Program Implementation

Community health and nutrition programming implemented by CSs in conjunction with PSNP implementation have shared the following features:

- Focus on child health and nutrition, primarily among beneficiary households, but based on a model of population or community-wide coverage;
- Selection and training of community volunteers, preferably mothers, but also including other community members willing and able to work as health information disseminators. These included 'Leader Mothers' [FH]; 'Community Resource Persons' [REST]; 'Health and Nutrition Promoters' [SCUK] and volunteer community health workers [CRS, CARE];
- Close liaison with the Federal Ministry of Health (FMoH), using training materials and protocols based on or closely related to the Essential Nutrition

Actions (ENA) package of 7 key actions formulated as national policy to improve the health and nutritional status of women and children;⁹⁸

- Use of a ‘cascading’ or TOT approach to training, in which trainees disseminate knowledge to other groups until the household level is reached;
- Collaboration with the Woreda Ministry of Health (WMOH) through links with Health Extension Workers (HEWs), the front line staff deployed at Health Posts (HP), in several activities including:
 - joint training of WMOH staff and CS Health technical staff;
 - joint supervision of community volunteers; and
 - provision of logistical support and essential equipment to the WMOH;
- Use of public assembly points such as commodity distribution locations and public works sites for community education on health and nutrition; and
- Participation in and training support for related programs such as Community Management of Acute Malnutrition (CMAM) and Integrated Management of Neonatal and Childhood Illnesses (IMNCI).

In addition, Health Posts, the extension of MOH activities to kebele level, have been constructed and in some cases provided with equipment, under the PW component of PSNP.

This approach to health outreach has had considerable success in reaching thousands of women of child bearing age across Title II program areas with basic information on improved health, nutrition and sanitation. Women selected to participate in focus groups and discussions in all program locations appeared to have a good understanding of basic health, nutrition and hygiene practices. They were able to identify harmful child feeding practices, were aware of the need for basic hygiene measures, use of mosquito nets, and of optimum breastfeeding and weaning practices. One CS, FH, has developed a system of knowledge and participation-based certification or graduation for mothers enrolled in community outreach activities, and has been able to track several thousand ‘graduates’ over a five year period in Amhara Region. Several CSs, including CRS, REST and FH have produced original training materials for such topics as child care and feeding, malaria prevention and hygiene and sanitation.⁹⁹

Despite limited CS resources, a high proportion of households in MYAP areas reported having participated in health teaching led by staff of the program or a Community Health Worker (CHW), as shown below. HHs in PAP program areas reported low rates of exposure to health teaching.

⁹⁸ ENA is widely considered one of the successes of Ethiopia’s national maternal and child health strategy. For an assessment see Jennings, Joan and Mesfin Beyero Hirbaye, *Review of Incorporation of Essential Nutrition Actions into Public Health Programs in Ethiopia*, Food and Nutrition Technical Assistance (FANTA) Project, Academy for Educational Development, January 2008.

⁹⁹ CRS’s regional technical officers have produced and piloted manuals for child health training, including *We have healthy children*. REST has adapted and is using GoE training materials. Amharic community training materials prepared by FH can be accessed online at: <http://www.k4health.org/node/620932>.

Table 7.1. Percentage of Households Participating in Health Teaching

CS	No.	%	Total
CARE-MYAP	489	87.6	558
CARE-PAP	13	11.6	112
CRS	547	81.3	673
FH	406	72.5	560
REST	462	69.0	670
SCUK-MYAP	672	66.8	1,006
SCUK-PAP	30	9.0	335
SCUS	109	19.5	560
Total	2,728	61.0	4,474

Program Impacts

These were measured in three key areas of health behavior: ownership and use of mosquito nets, management of childhood diarrhea and basic hygiene and sanitation. Household survey results relating to health behaviors are presented below. It is recognized that actual behaviors may differ from reported practice. Households were asked about ownership of a mosquito net and its use.

**Table 7.2. Household Ownership of Mosquito Net/s,
by CS [2010, All Woredas]**

CS	Household Owns Net				Total	
	No		Yes		No.	%
	No.	%	No.	%		
CARE	363	54.8	299	45.2	662	100
CRS	223	33.3	447	66.7	670	100
SCUK	128	9.6	1,208	90.4	1,336	100
FH	109	24.9	329	75.1	438	100
REST	115	17.2	553	82.8	668	100
SCUS	164	29.3	396	70.7	560	100
Total	1,102	25.4	3,232	74.6	4,334	100.0

**Table 7.3. Household Ownership of Mosquito Net/s,
by Region [2010, All Woredas]**

Region	Household Own Net				Total	
	No		Yes		No.	%
	No.	%	No.	%		
Oromia	578	47.4	641	52.6	1,219	100
Amhara	191	13.2	1,252	86.8	1,443	100
Somali*	164	29.3	396	70.7	560	100
Tigray	115	17.2	553	82.8	668	100
Afar	54	12.2	390	87.8	444	100
Total	1,102	25.4	3,232	74.6	4,334	100

*: Includes Arero woreda in Oromia Region

Just under 75% of all households indicated that they owned a mosquito net. Mass distribution of nets, launched as part of Ethiopia's national five year strategic malaria control program, has been linked with other interventions to promote prevention and effective treatment. These survey results reflect Government activity carried out in conjunction with work by participating CSs. Results of a national survey undertaken in 2007¹⁰⁰ showing an increase in mosquito net ownership from 3.4% in 2005, at the time of the DHS survey, to 53.3% nationally, and to 65.6% in malarious areas, confirm the impact of the national campaign. These household survey data are consistent with national levels of coverage. The lower rates of ownership reported in Oromia, most parts of which are malarious, may, however, be a signal that more mobilization is needed.

In an open ended question, respondents were also asked which household members slept under the net the previous night. This was intended to measure appropriate use of nets. Households who indicated that all members, the mother and youngest children, or children under five used the net were considered to have used it appropriately. Results are shown below by CS and Region.

Table 7.4. Households Using Mosquito Net Appropriately, by CS [2010, All Woredas]

	Appropriate Use		Not Appropriate Use		Total	
	No.	%	No.	%	No.	%
CARE	228	76.3	71	23.7	299	100
CRS	383	85.7	64	14.3	447	100
SCUK	1,001	82.9	207	17.1	1,208	100
FH	238	72.3	91	27.7	329	100
REST	481	87.0	72	13.0	553	100
SCUS	384	97.0	12	3.0	396	100
Total	2,715	84.0	517	16.0	3,232	100

Table 7.5. Households Using Mosquito Net Appropriately, by Region [2010, All Woredas]

	Appropriate Use		Not Appropriate Use		Total	
	No.	%	No.	%	No.	%
Oromia	513	80.0	128	20.0	641	100
Amhara	981	78.4	271	21.6	1,252	100
Somali	384	97.0	12	3.0	396	100
Tigray	481	87.0	72	13.0	553	100
Afar	356	91.3	34	8.7	390	100
Total	2,715	84.0	517	16.0	3,232	100

Reported rates of appropriate use are very high, 84% overall. These data suggest that the FMOH efforts both to distribute nets and to disseminate information on their use, reinforced by CS health outreach, have been highly effective.

¹⁰⁰ *Ethiopia National Malaria Indicator Survey 2007: Technical Summary*, Federal Democratic Republic of Ethiopia Ministry of Health 2008.

A second indicator used to assess child health, the incidence and management of diarrhea in children under five, was also measured. This reflects both maternal knowledge/ caretaking and access to safe water, which is discussed below.

Table 7.6. Incidence of Diarrhea in Previous Two Weeks, by CS [2010, All Woredas]

	Child had Diarrhea in Past Two Weeks					
	No		Yes		Total	
	No.	%	No.	%	No.	%
CARE	269	81.3	62	18.7	331	100
CRS	383	86.5	60	13.5	443	100
SCUK	471	71.1	191	28.9	662	100
FH	195	80.6	47	19.4	242	100
REST	228	83.8	44	16.2	272	100
SCUS	304	84.2	57	15.8	361	100
Total	1,850	80.1	461	19.9	2,311	100

Table 7.7. Incidence of Diarrhea in Previous Two Weeks, by Region [2010, All Woredas]

	Child had Diarrhea in Past Two Weeks					
	No		Yes		Totals	
	No.	%	No.	%	No.	%
Oromia	627	86.4	99	13.6	726	100
Amhara	545	75.7	175	24.3	720	100
Somali	304	84.2	57	15.8	361	100
Tigray	228	83.8	44	16.2	272	100
Afar	146	62.9	86	37.1	232	100
Total	1,850	80.1	461	19.9	2,311	100

These reported rates are comparable to a rate of 21% among children under two shown in the National Nutrition Survey.¹⁰¹

Respondents who reported cases of diarrhea among children under five in the previous two weeks were also asked about treatment, to determine knowledge of appropriate use of oral rehydration therapy (ORT). Respondents who mentioned using either commercial or home made oral rehydration solutions (ORS) were considered to have managed the child's diarrhea appropriately. Results by region are shown below.

¹⁰¹ Ethiopian Health and Nutrition Research Institute, *Draft Report on Baseline Survey for National Nutrition Program, Ethiopia, 2009/10*. p.ix.

Table 7.8. Percentage of Children with Diarrhea Treated Appropriately, by Region [2010, All Woredas]

Percentage of Children Given ORS by Regions						
	Other than ORS		ORS		Total	
	No.	%	No.	%	No.	%
Oromia	67	67.7	32	32.3	99	100.0
Amhara	138	78.9	37	21.1	175	100.0
Somali	26	45.6	31	54.4	57	100.0
Tigray	29	65.9	15	34.1	44	100.0
Afar	46	53.5	40	46.5	86	100.0
Total	306	66.4	155	33.6	461	100.0

Here, knowledge of appropriate management of diarrhea is low among sampled households, with almost two thirds administering sub-optimum treatment. The highest rates of appropriate treatment were reported by HHs in Somali /Borena region, in SCUS's program area. Amhara showed the lowest apparent rates. These results are the opposite of what would be expected, given the relative levels of health outreach and teaching achieved in these areas. Reported levels of treatment with appropriate rehydration fluids were lower than the 50% of children nationally given either ORS or the Government recommended fluids.¹⁰² The knowledge gap on management of diarrhea may be a contributory factor in the failure of children under five in CS programs areas to show improved nutritional status.

7.2. Water and Sanitation

Program Implementation

A second critical element in food utilization is disease prevention through improved household water supplies and hygiene, including sanitation practices at HH level. Several CSs have included hygiene and sanitation in their community health programs, but resources for improvement of household water supplies have been limited. Development of potable water in CSs' programs is discussed in Section 4.2.3 above, in the context of PW activity.

Under the PSNP planning process, household water supplies compete for scarce resources with other public works construction including irrigation systems, livestock watering points as well as the wide range of soil and water conservation and infrastructural projects included in integrated watershed planning and management.

Activities undertaken to promote improved household drinking water, better hygiene and sanitation have typically included: construction or rehabilitation of water points, including boreholes, protected springs, wells and catchments and assistance with latrine construction, including training, provision of slabs or other materials and hygiene teaching on handling of drinking water and hand washing. One CS has developed and is actively disseminating a low cost ecological latrine model which has achieved wide acceptability.¹⁰³ Household latrine construction does not fit easily into

¹⁰² Ibid.

¹⁰³ See Paul Hebert, *Rapid Assessment of CRS Experience with Arborloos in East Africa*, CRS Baltimore, MD, May 2010. Arborloo slabs, which cost roughly \$6-7 to manufacture, are still considered too costly to be

the PSNP PW model, except as a benefit provided to households receiving Direct Support, where assistance with labor at household level is permitted. Title II funding has not been available for sanitation. It is nevertheless important to encourage this kind of innovation through training and demonstration.

Increases in coverage of improved water supplies are shown in Table 4.17. Reported access to a protected source has increased by 123% since the start of the program, with current levels at over 61%. Some observations based on field work and discussions can be made about work in progress:

- Current water development projects have left a significant amount of unmet need;
- Some CSs have successfully combined other donor funding with MYAP resources in an integrated programming;
- Hygiene and sanitation have been very small components in PSNP PW planning;
- Most interventions in hygiene and sanitation, like those in health, need to be implemented on a population or user base, rather than strictly among PSNP beneficiaries; this complicates their integration into MYAP implementation of PSNP under Title II funding; and
- Where water projects have been implemented, CSs have maintained high standards of local management, in most cases successfully mobilizing communities to form water users' groups. This has been an important area of community capacity building.

Impacts

Improved household hygiene, including latrine use, can be expected to have an impact through declining rates of water-related disease. Households were asked about latrine use and hand washing practices.

Table 7.9. Percentage of Households Reporting They Have a Toilet

CS	No.	%	Total
CARE-MYAP	354	63.4	558
CARE-PAP	10	8.9	112
CRS	380	56.5	673
FH	420	75.0	560
REST	555	82.8	670
SCUK-MYAP	556	55.3	1,006
SCUK-PAP	11	3.3	335
SCUS	169	30.2	560
Total	2,455	54.9	4,474

Among sampled households having latrines, over 50% had latrines with 'shade', presumably a structure and roof of some kind, but 34% had 'open' or 'rudimentary' pits. Maintenance of latrines, as assessed by interviewers, also varied, as shown below, with almost one third of observed latrines found to be dirty.

Table 7.10. Condition of Latrine [by Observation]

CS	Currently Used/Clean	Currently Used/Dirty	Not Currently Used	Could Not Observe	Total HHs
CARE-MYAP	42.1	46.0	3.1	6.8	354
CARE-PAP	80.0	10.0	-	-	10
CRS	49.5	41.8	2.9	1.8	380
FH	68.8	21.9	1.0	5.5	420
REST	43.2	48.3	-	-	555
SCUK-MYAP	77.3	14.6	2.9	1.1	556
SCUK-PAP	72.7	9.1	18.2	-	11
SCUS	58.6	24.9	4.7	10.7	169
Total	57.5	32.9	2.1	3.2	2,455

Hand washing was assessed through an open ended question in which HHs were asked to name situations where hand washing is important. More than 76% of respondents were able to name at least two correct instances. Respondents were also asked how they washed their hands. Those who mentioned use of soap or ash were considered correct. Responses are shown below. These response patterns suggest that while health teaching on situations calling for hand washing is well understood, the necessity of using soap or ash may not have been communicated effectively in many areas. As with latrine ownership, the gap between respondents in MYAP and some PAP areas (Afar Region) appear to be high. This is probably indicative of lack of water, cultural factors and the relatively short time since initiation of the PAP program.

Table 7.11. Percentage of Households Mentioning Use of Soap or Ash for Hand Washing

CS	No.	%	Total
CARE-MYAP	359	64.3	558
CARE-PAP	20	17.9	112
CRS	415	61.7	673
FH	167	29.8	560
REST	144	21.5	670
SCUK-MYAP	323	32.1	1,006
SCUK-PAP	28	8.4	335
SCUS	352	62.9	560
Total	1,808	40.4	4,474

7.3. Program Impact: Child Nutritional Status

The nutritional status of children under five, especially rates of stunting, is considered a key indicator in food security programs. It is, however, affected by many variables in addition to availability of and access to food. Some of these, including health knowledge, care practices and hygiene and sanitation, are discussed above. In Ethiopia child nutritional status has been an important food security indicator at

national level and has served at regional and zonal level to signal developing food crises. PSNP includes no specific program components dedicated to meeting child nutritional needs. With the significant expansion of the work of the FMoH, including a large USAID-funded program, Essential Services for Health (ESHE), and major work by UNICEF, many child health needs among PSNP beneficiary households supported by Title II programs were expected to be handled at community level through other US-funded and multilateral programs after 2008.

Changes in Child Nutritional Status from Baseline to Final Evaluation

One indicator of child nutritional status, height for age or stunting, has been observed to change slowly over time, and to be responsive to factors including household access to food. Underweight, weight for age, is also considered a key indicator of food security, while weight for height, or wasting, signals a serious short term deterioration in child nutritional status.

In order to compare data on child nutrition collected during the household survey with those collected at baseline, data sets have been matched to include the 27 woredas covered in both surveys. These data suggest that despite notable gains in vertical health programs such as malaria control, child nutritional status has not significantly improved over the past five years. A total of 1897 children 6 to 59 months of age were identified, weighed and measured during the final household survey. Rates of moderate and severe malnutrition, more than two and more than three standard deviations below the median, for height for age (HfA), stunting, weight for height (WfH), wasting, and weight for age (WfA), underweight, are shown below, and compared with baseline data.

Table 7.12. Stunting, Wasting, and Underweight Among Children 6-59 Months [2010]

Age in Months	Stunting		Wasting		Under Weight	
	< -2 Z %	< -3 Z %	< -2 Z %	< -3 Z %	< -2 Z %	< -3 Z %
6-11.99	19.05	7.14	10.47	0.00	24.18	7.69
12-23.99	41.33	19.19	14.67	0.77	41.73	13.53
24-35.99	50.59	30.18	5.86	0.31	45.18	17.17
36-47.99	45.32	27.78	10.42	2.38	37.90	10.79
48-59.99	45.00	19.44	7.65	1.76	39.89	5.62
Total	44.03	23.87	9.70	1.19	40.00	12.15
95% C.I.	(41.7 - 47.2)	(21.9 - 26.6)	(8.9 - 12.2)	(1.1 - 2.5)	(37.6 - 42.9)	(10.5 - 14.1)
6-23.99	36.43	16.54	12.83	0.53	37.82	12.69

Table 7.13. Stunting, Wasting, and Underweight Among Children 6-59 Months [2005]

Age in Months	Stunting		Wasting		Under Weight	
	< -2 Z %	< -3 Z %	< -2 Z %	< -3 Z %	< -2 Z %	< -3 Z %
6-11.99	25.23	9.01	14.41	4.50	28.83	9.91
12-23.99	44.74	22.81	19.30	2.63	46.20	15.79
24-35.99	41.73	15.99	8.13	1.90	37.94	11.65
36-47.99	49.25	20.10	6.03	1.76	35.93	8.54
48-59.99	44.06	21.88	9.06	0.94	35.63	7.19
Total	43.64	19.29	10.71	2.01	38.12	10.71
95% C.I.	(40.8 - 45.7)	(17.3 - 21.2)	(9.3 - 12.4)	(1.6 - 3.0)	(36.3 - 41.2)	(10.0 - 13.2)
6-23.99	39.44	19.72	16.40	2.97	40.14	14.31

A comparison of confidence intervals indicates that there has been no significant change in levels of malnutrition among children in the Title II program area from 2005 to 2010.¹⁰⁴ Children in the sample population show high levels of moderate to severe malnutrition. Over 44% of all children are stunted. This is considered indicative of long term food security; effects of poor diet typically appear before two years of age, as they have done here. In this population, stunting appears at 12 months, when children are likely to be moving from breastfeeding to a weaning diet. Wasting was found among 9.7% of children in program areas in 2010, as compared with a level of 10.71% at baseline, showing no significant change. Wasting declines sharply at 24 months, when children are able to cope better nutritionally on an adult diet, but rates remain high. Levels of moderate wasting (WfH <-2 Z) of 10% or higher are considered to signal a potential food security emergency, and the rates shown here should be considered very high.

These levels of malnutrition may relate to the limitations of health and nutrition outreach activities in this programming environment. They may also reflect health-related behaviors - a pattern of early weaning due to short intervals between pregnancies – resulting from poor birth spacing. This survey, like the baseline, was carried out at the peak of the post-harvest ‘hungry’ season, when child malnutrition, particularly wasting (which is subject to short term food deficiencies) would be at its highest during the year. Underweight, which measures both longer and shorter term malnutrition, was estimated at 40%. At baseline it was assessed at 38.12%, again showing no significant change over the life of the program.

Nutritional Status of Children in MYAP and PAP Programs

The full results, for all children sampled in 2010, are shown below, by age and by Region, allowing for broad comparisons of children in MYAP and PAP areas.

¹⁰⁴ Data were analyzed using the NCHS/WHO growth standards in order to allow for comparisons with data collected at baseline. .

Table 7.14. Stunting, Wasting, and Underweight Among Children 6-59 Months [2010- 40 Woredas]

Age in Months	Stunting		Wasting		Underweight	
	< -2 Z %	< -3 Z %	< -2 Z %	< -3 Z %	< -2 Z %	< -3 Z %
6-11.99	18.75	7.03	13.95	0.78	24.64	10.14
12-23.99	44.44	20.67	16.03	1.36	44.30	15.54
24-35.99	49.70	30.54	8.54	1.04	45.44	17.66
36-47.99	48.62	27.56	9.07	1.81	40.94	10.92
48-59.99	46.24	21.05	8.66	1.18	41.67	7.20
Total	45.53	24.47	10.71	1.33	41.77	13.19
95% CI	(43.5 - 48.0)	(22.7 - 26.6)	(10.0 - 12.8)	(1.4 - 2.6)	(39.6 - 44.1)	(11.7 - 14.8)
6-23.99	37.88	17.35	14.52	1.29	39.02	14.11

It can be seen that the nutritional status of children across the current Title II program area [40 woredas] is also very similar to the situation in 2005, at the start of the program, and to that among children measured in 2010 in the original program area. The breakdown of nutritional status by Region in the current program area shows some differentiation among Regions, as would be expected. The high levels of wasting shown in Afar – which are significantly higher than all other Regions - should be assessed with caution. The sample size is small and the validity of standard anthropometric methods in pastoral communities is currently under review in Ethiopia.¹⁰⁵

¹⁰⁵ See Myatt, Mark and Arabella Duffield, *Weight-for-height and MUAC for estimating the prevalence of acute undernutrition? A review of survey data collected between September 1992 and October 2006*. University College London and Save the Children UK, 22nd October 2007, and Mark Myatt, “Effect of body shape on weight-for-height and MUAC in Ethiopia: Summary of research” *Field Exchange* Issue 34, October 2008, p.11. <http://fex.enonline.net/34/effect.aspx>. See also *Pastoralist Survey Method in Ethiopia*, [powerpoint] prepared by Anne-Marie Mayer, Consultant to ACF. This presentation describes alternative sampling and anthropometric measurement methods currently being piloted in Ethiopia.

Table 7.15. Rates of Stunting, Wasting, and Underweight, by Age and Regions [2010]

		Stunting		Wasting		Underweight	
		< -2 Z %	< -3 Z %	< -2 Z %	< -3 Z %	< -2 Z %	< -3 Z %
Oromia	6 - 23.99	32.98	15.71	11.58	0.53	33.33	8.96
	Total	45.67	27.50	9.23	1.03	37.36	10.77
	95% C.I.	(41.4 - 49.3)	(24.0 - 31.0.)	(7.7 - 12.3)	(0.7 - 2.6)	(34.1 - 41.7)	(8.6 - 13.5)
Amhara	6 - 23.99	47.80	24.53	14.00	0.67	47.13	19.11
	Total	49.56	25.31	11.13	1.28	45.55	14.06
	95% C.I.	(45.9 - 53.9)	(22.6 - 29.6)	(9.8 - 14.8)	(0.9 - 3.0)	(42.1 - 50.1)	(11.8 - 17.5)
Somali and Borena	6 - 23.99	23.38	14.29	12.33	0.00	24.66	6.85
	Total	36.89	21.78	10.55	0.92	42.92	13.70
	95% C.I.	(32.0 - 44.2)	(16.9 - 27.3)	(7.2 - 14.1)	(0.5 - 3.4)	(35.5 - 48.0.)	(9.2 - 17.8)
Tigray	6 - 23.99	40.79	9.21	13.89	1.39	43.84	10.96
	Total	43.91	18.26	8.65	0.48	40.83	10.55
	95% C.I.	(38.5 - 50.9)	(14.2 - 24.0)	(5.6 - 12.8)	(0.2 - 3.1.)	(34.5 - 47.1)	(7.1 - 15.1)
Afar	6 - 23.99	41.94	17.74	28.81	6.78	47.14	28.57
	Total	45.09	23.12	17.26	4.17	44.56	20.73
	95% C.I.	(37.7 - 52.0)	(17.2 - 29.3.)	(14.2 - 25.5)	(4.1 - 11.5)	(36.7 - 50.4)	(15.2 - 26.3)
Total	6 - 23.99	37.88	17.35	14.52	1.29	39.02	14.11
	Total	45.53	24.47	10.71	1.33	41.77	13.19

These data do not differ very much from the results of the national baseline survey carried out in 2009, which showed rates of HfA [stunting] <-2 SD of 37.6%; WfH [wasting] <-2 SD of 11.7% and WfA [underweight] <-2 SD of 33.9%.¹⁰⁶

Findings and Conclusions

CSs have added value to the household nutritional impacts of reliable food supplies through extensive activities to promote child health and nutrition. They have focused on low cost community based programs, collaborating closely with local and Federal MoH staff. PW funds have been used for health post construction, and appropriate health teaching materials have been produced and disseminated.

Despite well designed child health programs, implemented by experienced staff, child nutritional status has remained low throughout the five year Title II program. National programs to prevent malaria and increase rates of immunization have probably increased sound health behaviors and preventive practices, but the impact of these programs has not been seen in improved child nutritional status in program areas. There are several reasons for this. Where child care and feeding and child spacing practices have a strong effect on child nutrition, reliable access to food in the household through PSNP commodity transfers may not be sufficient to bring about better nutritional outcomes for children 6-59 months.

Limitations on resources for health outreach, reported by all CSs, may also be a factor, as would limited access to potable water among more than one third of program HHs, and sub-optimum hygiene practices. The requirement reported by CS staff that health outreach programs be based on the principle of targeting the sub-set

¹⁰⁶ Ethiopian Health and Nutrition Research Institute, *Draft Report on Baseline Survey for National Nutrition Program, Ethiopia, 2009/10.*

of households in a community who are beneficiaries of PSNP, rather than following a population/community-based model, may also reduce impact, as the most effective child health programs depend on reaching a critical mass of knowledge, beliefs and practices among community groups. It is clear that more information is needed on causes of poor child nutrition, as well as a programming context with resources adequate to support activities directed at those factors.

7.4. Household Dietary Diversity

Increased dietary diversity is both a desirable outcome in any food security program and is highly associated with important nutritional outcomes, including improved birth outcomes and better nutrition in early childhood, increased consumption of high quality (animal source) protein, increased caloric intake and increased hemoglobin. For these reasons, it is used by USAID as an indicator in Title II MYAP program monitoring and evaluation.¹⁰⁷ Dietary diversity was measured in both the baseline and final surveys, following the standard methodology.¹⁰⁸ Samples drawn from comparable populations are shown below at baseline and final survey.

Table 7.16. Average Household Dietary Diversity Score by Number of Food Types per Household, 2010 (27 Woredas)

Food Types	CARE	CRS	SCUK	FH	REST	SCUS	Total	Sex of HOH	
								MHH	FHH
1-2	2.00	2.00	1.93	2.00	2.00	1.89	1.94	1.93	1.96
3-4	3.75	3.75	3.50	3.53	3.77	3.41	3.59	3.62	3.55
5-6	5.49	5.55	5.34	5.27	5.26	5.52	5.38	5.41	5.32
Over 6	7.59	8.16	7.19	7.29	7.31	8.13	7.89	7.92	7.78
Total	5.67	6.54	4.03	4.20	4.74	5.57	5.00	5.21	4.63

Table 7.17. Average Household Dietary Diversity Score by Number of Food Types per Household, 2005 (27 Woredas)

Food Types	CARE	CRS	SCUK	FH	REST	SCUS	Total	Sex of HOH	
								MHH	FHH
1-2	1.80	1.39	1.95	1.72	1.83	1.75	1.66	1.64	1.75
3-4	3.37	3.35	3.11	3.51	3.23	3.63	3.33	3.33	3.34
5-6	5.30	5.25	5.28	5.25	5.22	5.30	5.26	5.28	5.21
Over 6	7.40	7.57	7.89	7.56	7.71	7.21	7.55	7.53	7.60
Total	3.05	2.53	3.11	3.76	3.42	4.21	3.35	3.35	3.36

Household dietary diversity was also shown by terciles, indicating the spread between normal consumption among the highest and lowest thirds of the population. Reported mean consumption has increased significantly in the lower terciles since the baseline survey. As both surveys were undertaken at the peak of the pre-harvest hungry

¹⁰⁷ Swindale, Anne, and Paula Bilinsky. *Household Dietary Diversity Score (HDDS) for Measurement of Household Food Access: Indicator Guide (v.2)*. Washington, D.C.: Food and Nutrition Technical Assistance Project, Academy for Educational Development, 2006.

¹⁰⁸ Swindale and Bilinsky, pp.4-5.

period, this suggests a strong positive change, particularly among the lowest tercile.¹⁰⁹ who reported consuming an average of just over two different food groups at baseline, and now report consuming more than three.

Table 7.18. Average Household Dietary Diversity Score by Tercile, 2010 (27 Woredas)

Tercile	CARE	CRS	SCUK	FH	REST	SCUS	Total
Lowest	3.73	4.45	2.88	2.91	3.71	3.05	3.41
Middle	5.46	6.42	4.00	3.98	4.97	5.50	5.03
Highest	7.56	8.88	5.58	5.44	5.75	8.11	6.65
Total	5.67	6.54	4.03	4.20	4.74	5.57	5.00

Table 7.19. Average Household Dietary Diversity Score by Tercile, 2005 (27 Woredas)

Tercile	CARE	CRS	SCUK	FH	REST	SCUS	Total
Lowest	1.80	1.00	1.95	2.41	1.83	2.73	2.00
Middle	3.00	2.51	3.00	4.00	3.00	4.00	3.15
Highest	4.65	4.77	4.97	5.63	4.61	5.52	5.04
Total	3.05	2.53	3.11	3.76	3.42	4.21	3.35

A second indicator of dietary quality was included in the household survey. Households were asked whether their diet had changed since the start of the project. Given the reported improvement in diversity, the responses shown below suggest widespread improvement.

Table 7.20. Reported Change in Household Diet

CS	No		Yes	
	No.	%	No.	%
CARE	46	7.0	614	93.0
CRS	117	17.5	552	82.5
SCUK	483	36.2	852	63.8
FH	99	17.8	457	82.2
REST	108	16.2	558	83.8
SCUS	105	18.8	454	81.2
Total	958	21.6	3,487	78.4

Among regions, only households in Afar reported levels of positive change lower than 80% .

¹⁰⁹ Due to scheduling pressures, interviews were conducted on two days which followed traditional feast days in Ethiopia: New Year's and Idd el Fitr. Ramadan, which fell largely in September, is also considered a period when extra or special foods are consumed at Iftar, the meal which breaks the fast. Interviewers were trained to ask households about usual consumption rather than the previous day's consumption in all cases where household meals may have been affected by higher than usual consumption patterns.

8. PASTORAL AREA PILOT PROGRAMS

Three Cooperating Sponsors, Save the Children UK, Save the Children US and CARE have been implementing pilot PSNP programs in pastoral communities of Somali and Afar Regions and in one pastoral woreda of Oromia. These programs build on the CSs' pre-existing program activities and extensive experience of working in lowland communities in Ethiopia and elsewhere.

There is a history of interest in the adaptation of safety net interventions to pastoralist areas in Ethiopia. It is estimated that 8% of Ethiopia's population live in lowland areas; of these about two thirds are considered to have a predominantly pastoral livelihood system.¹¹⁰ It has been recognized that making permanent improvements in food security may be a gradual process in these communities, but essential. These environments are undergoing rapid change, as grazing land and water become more scarce, climate change appears to be increasing the frequency of droughts and the Horn of Africa is affected by regional and local conflicts over scarce resources. In the adaptation of pastoral programming to the PSNP, these Cooperating Sponsors were recruited as implementing partners and encouraged to identify and test alternatives to implementation methods in use in agricultural communities.

Save the Children US had worked in Somali Region for over five years when their initial pastoral livelihood support program, the Safety Net Approach for Pastoralists (SNAP), was introduced in 2005 in three of the current five woredas, working with a partner, the Pastoralist Concern Association of Ethiopia (PCAE – now known as PCA). It included additional resources for livelihood development under the USAID-funded Support to the Productive Safety Net (SPSNP) program. SNAP included many elements found in the follow on PSNP – PAP programs funded by USAID in April of 2008 in five pastoralist woredas in southern Ethiopia and four in Afar Region. All of these programs included a strong emphasis on documenting and assessing experience with innovations, with a view to structuring guidance on pastoral safety net programming nationally. Since 2008, CARE, SCUK and SCUS have piloted PSNP PAP programs under Title II in nine woredas.

Under the PSNP, PAP programs have five overlapping objectives:

1. Building Community Assets
2. Protection of household assets
3. Improving community resilience to shocks
4. Building government and community capacity
5. Generating lessons on alternative approaches and procedures

These are carried out through commodity transfers, public works activities, capacity building with local officials and communities, support to livelihoods, health and hygiene, and creation of mechanisms for sharing experience. Program implementation and impacts will be discussed in the context of these objectives

¹¹⁰ *Designing and Implementing*, p. 83

8.1. Commodity Transfers

Program Implementation

The distribution of commodities on a regular and timely basis is a key means of protecting household assets [Objective 2], by filling a resource gap during the hunger season and in response to climatic or other adverse events. Adequate resource levels strengthen community capacity to deal with shocks. The effectiveness of the public works component depends on the perception of fairness of targeting, while appropriate targeting fulfils the mandate to reduce food insecurity in HHs able to contribute labor.

Targeting and Resource Levels

This is one of the operational areas where PAP programs have met special challenges. The history of large scale relief distributions in pastoral areas have left a legacy of expectation of universal relief coverage. CSs have developed and tested targeting methods with a strong emphasis on the role of the community in identification of food insecure households. Initial PSNP beneficiary lists used pre-existing relief rolls, which had expanded during the SNAP era up to 2007. In both Afar and Somali regions, as numbers of relief beneficiaries were reduced and PW labor was introduced, community based targeting was used to strengthen community understanding of PSNP and to increase the transparency of the targeting process. Community values based targeting, using shared values to inform the wealth ranking process in homogeneous areas, and triangulation, reaching agreement on beneficiary households across more diverse peri-urban communities, were tested and adapted to PAP woredas.

A recent evaluation of SCUS's work in Somali Region pointed out that community elders are also effectively used in the targeting process, to resolve conflicts before they reach the formal appeal stage.¹¹¹ In pastoral communities, resources are typically shared across and within households, challenging the principle of distribution to individual beneficiaries in PSNP, complicating targeting and diluting resources at household level.

A further more serious challenge is posed by the growing poverty of pastoral areas. With average household livestock holdings declining over the past decade¹¹², and increased frequency of droughts, the population unable to provide twelve months of food self sufficiency is believed to be increasing.

A further challenge, beyond the control of implementing CSs, was posed by frequent changes in beneficiary numbers by local authorities. Given the lack of storage capacity and the difficult logistical situation, an increase in beneficiaries - as occurred in Afar Region in 2009 - could compromise other activities. In other woredas reductions in numbers required re-targeting. Commodity storage and handling have been difficult at times during the PAP implementation. Increases in amounts to be distributed required construction of warehouses and installation of Rubb halls in Afar. Extreme weather conditions blocked road access to at least two program offices in Afar, in one case for a month, during the August 2010 floods.

¹¹¹ Richards and Teshome, p.15.

¹¹² Richards and Teshome, p. 39.

In Afar, the proportion of Direct Support beneficiaries, those receiving rations without a public works labor requirement, has been much higher than 20%, the proportion in effect in most programs, and this has further complicated efforts of program staff to create an environment in which able bodied household members expect to fulfil labor requirements. Reports from Afar, supported by discussions with staff, also mention the expectations created by the presence of ongoing relief programs with full coverage and no PW requirement in neighboring woredas that have not yet been brought into the PSNP.

Scheduling and Timeliness

CSs have been able to distribute 100% commodities in PAP areas. Distribution schedules, including duration and frequency, have varied widely within and across programs. Including use of contingency mechanisms, the durations of commodity distributions have varied from 4 to 7 months. This flexibility has been important in responding to crises, including the drought of 2006, the food crisis of 2008 and the irregular rainfall of 2009, but it has complicated planning and implementation. In at least one case the presence of ethnic conflict in Afar required re-targeting, with accompanying distribution delays. Receipt of commodities has also been delayed, and CSs are required to deal with situations where they are coordinating JEOP emergency distributions, Government distribution and Title II distribution under PSNP in the same locations.

In an effort to accommodate economic activities tied to the early (Belg) rainfall cycle in these dry areas, distributions may be made earlier, in September, followed by a break, resuming in March, or may run from March through September. Patterns of commodity transfer have been adjusted throughout the life of the program.

Program Impacts

The comparison of months of food sufficiency between the start of the PSNP and this year is possible only for SCUS, who were working in three woredas in the current target area in 2005. As Table 4.5 above shows, there has been no significant change in the duration of food sufficiency in SCUS program areas over the life of the program. Reported changes in livestock holdings, another indication of food sufficiency in a pastoral environment, are shown below for the current year for major livestock types. This data also suggests that livestock assets have not improved over the past year in pastoral areas, and may have declined. Given the adverse economic and climatic conditions in 2008/ 2009, as well as the longer term trend toward pastoral decline, this is not surprising.¹¹³

¹¹³ An impact evaluation focused on SCUS program areas in May 2010 concluded data on asset protection to be “ambiguous”. Richards and Teshome, p. 37.

Table 8.1. Livestock Owned Now Versus a Year Ago for PAP Areas*

Livestock Type	CARE-PAP		SCUK-PAP		SCUS	
	Now	Year Ago	Now	Year Ago	Now	Year Ago
Cattle	4.0	6.0	7.7	8.9	2.9	5.0
Shoat	14.3	21.5	22.5	37.5	14.1	22.0
Camels	2.2	2.4	1.4	1.8	1.1	1.1
Equines	1.0	1.3	0.6	0.7	0.7	0.8
Chickens	0.0	0.0	0.1	0.1	0.9	0.8

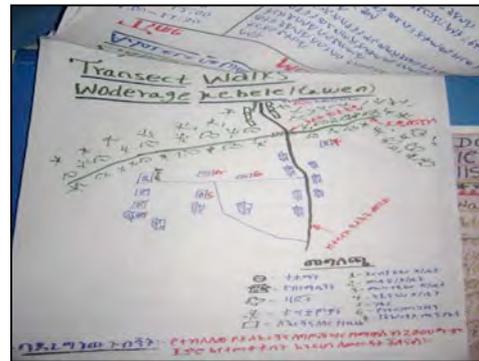
* Responses based on recall.

8.2. Public Works Labor

Program Implementation

Labor based public works (LBPW) are the primary means through which PSNP builds community assets. They have proven challenging in several ways for CSs implementing in pastoral areas. It is now recognized that pastoral areas comprise at least three distinct sub-communities: agro-pastoralists who practice farming alongside livestock rearing, in some cases in riverine areas; ex-pastoralists, groups who have ‘dropped out’ of the pastoral livelihood system, usually as a result of acute poverty; and those who continue to maintain a predominantly pastoral livelihood system and lifestyle.

In this complex socio-economic environment, the identification of public works projects to build community assets that will ‘buffer’ against asset depletion in times of stress in pastoral areas requires adaptation to the needs of all groups. In Somali Region and Arero Woreda SCUS has introduced the process of Community Based Action Planning (CAP) to facilitate project identification and maximize transparency. In Afar CARE has carried out exercises in Appreciative Inquiry, a community based methodology for identification of resources and needs. Both processes include community asset mapping to prepare for identification of PW projects.



Community map created during Appreciative Enquiry exercise.

The use of these participatory methodologies are reported to have strengthened commitment to the labor process and increased the sustainability of these projects.

Three categories of public works activity which are actively promoted in CS programs have been shown to be appropriate and effective: water sources, rangeland enclosure and social infrastructure.

Water Sources

These meet the needs of all three livelihood groups. Improved water supplies have been implemented at several different levels, ranging from improvement of small scale local ponds to development or rehabilitation of boreholes, rehabilitation of traditional irrigation systems in riverine pastoral communities and construction of

large scale *birkas*- cement lined rainwater catchment tanks. Provisions for livestock watering are usually included in any household water improvement. The focus on water projects recognizes the centrality of improved access to water for health and economic change, a priority confirmed in discussions with community groups and CS staff. Where improvements to water supplies can affordably be made within the PW component of PSNP, they are given high priority.

Community management and capacity, both technical and social, are critical to the success of water projects in pastoral societies, and have been built by CSs through the provision of staff support to training for management and use of water supplies. Water users are organized into user groups, establishing by-laws and determining the levels of community fees for each source. Some, but not all water projects have effective local committees and are financially self sufficient.

In Afar, waterpoint development was accompanied by training in Integrated Water Resource Management (IWRM), covering both technical aspects of site selection and maintenance and sanitation and hygiene for water and sanitation committee members, for Kebele Food Security Task Force (KFSTF) members and woreda technical staff.

Issues of access - particularly for non-PSNP communities, and of technical quality, have arisen in connection with PW water projects in PAP areas. Communal norms of sharing of scarce resources, usually based on reciprocal access, affect these projects, making it difficult to establish a maintenance model based on responsibility shared among an exclusive user group.

CSs have been able to provide needed technical support to projects; in Afar, a SCUK headquarters water expert was called to visit a pastoral program area and to assess project structures when local technical expertise was insufficient.

In developing and improving potable household water sources, CSs have dealt with cultural norms in relation to water use by working with communities on negotiating compromises over design to maximize hygienic use standards.¹¹⁴ Health, sanitation and hygiene teaching have been integrated into household water development by all CSs. This process has required adaptation to low levels of formal schooling and literacy. Data on latrine use and hand washing shown above (Tables 7.9 and 7.11) give an clear indication of the limited progress in adoption of improved hygiene practices in PAP program areas.

Sustainability

Overgrazing at new or expanded water points poses one of the biggest risks to the sustainability of improved water sources in pastoral areas. The recent evaluation of the program in Somali Region found evidence of heavy grazing around new water points and changes in livestock migration routes¹¹⁵ influenced by availability of water.

¹¹⁴ In a CARE project, community members did not want a well to be capped; improved standards of use to avoid contamination were agreed on as an alternative to capping.

¹¹⁵ Richards and Teshome, p. 20.

Rangeland Enclosure and Regeneration

A second important public works initiative has been the enclosure and upgrading of rangeland. With increasing human and livestock populations, land for grazing and animal feed have become scarce resources. Rangeland enclosure is a sustainable means of expanding this resource base, providing a means of livelihood support for the growing group of impoverished pastoralists. It also forms part of a larger strategy to improve natural resource management through soil and water conservation, where increased appropriate ground cover reduces erosion and improves moisture retention.

Enclosure had been carried out through a community planning process covering hundreds of hectares of land in Afar and several thousand hectares in Somali Region. Invasive species have been cleared and, over time, indigenous flora have regenerated with plentiful growth of forage. Either traditional forage grass is used on a 'cut and carry' basis, with household allocation determined through community planning or a regenerated area opened to controlled grazing. One CS estimates that production can be increased on a 20 ha. plot from 1 ton/ha. of dry matter to 3-4 tons per annum¹¹⁶ through appropriate management.

Sustainability

This will depend on the willingness and ability of communities to provide voluntary labor and forego use of enclosed areas while they are regenerating. Like water sources, rangelands are governed through community decision making. In some areas, particularly Afar and Arero, conflict with neighboring groups over access to grazing may threaten the long term sustainability of renewed areas.

Social Infrastructure

A third area of public works development important to community asset building in pastoral areas is social infrastructure: construction and upgrading of schools, health posts, access roads, housing for teachers and DAs, and other structures.

Given the high rates of turnover of government staff and the difficulty of recruiting officers to work in the more remote pastoral areas reported by field teams and CS staff, infrastructure and housing are important incentives. Improved access to schools increases girls' enrolment. In more remote areas schools may take the form of alternative basic education facilities (ABE), implemented by SCUK and SCUS, which provide training in basic skills on a flexible timetable, enabling children in pastoralist households and those needing to contribute family labor to obtain basic educational skills.

Program Impacts

Direct impacts on health, income or community resiliency of improved community assets are difficult to measure. The most important benefits of improved household water supplies are improved health and time saved in collecting water. In the household survey, health and time savings were the two most frequently named benefits of improved water supplies in all program areas.

All households were also asked to identify their most important water sources before and after implementation of the PSNP. Data are shown in Table 4.17 above, for

¹¹⁶ This process is described in the CARE PAP *Annual Results Report* for 2010, p. 10.

SCUS. Among sampled households in SCUS areas, about half now have access to protected water sources; among these, about 70% reported having had access to a protected source before the PSNP project.

Improved access to water increases the potential for increasing income through livestock development as well as enabling irrigated agricultural production. As in highland areas, the development of irrigated agriculture among riverine agro-pastoralist groups may have the effect of promoting rapid progress toward graduation through increased income, but numbers of HHs benefiting from this activity are limited.¹¹⁷ Reported access to irrigation sources among sampled households is shown below for PAP programs.

Table 8.2. Households with Irrigation Access, PAP Areas

CS	No.	%	Total HHs
CARE-PAP	14	12.5	112
SCUK-PAP	25	7.5	335
SCUS	36	6.4	560

As with improved water supplies, the economic impact of increased access to forage and grazing through rangeland enclosure is difficult to measure.

Development of social infrastructure is highly valued, particularly educational facilities. While it is too early to assess the impact of increased access to schools, more than 30% of all sampled households in the SCUS area reported a significant benefit from development of schools; this proportion was higher than for any other type of infrastructure.

Ongoing challenges in all PW activities have been lack of skills in basic construction and conservation among community members, and, in some cases, culturally based reluctance to engage in physical labor. CSs have invested extra time in sensitization and training in all locations.

The table below is illustrative of the range of public works activities implemented in PAP area. It is not comprehensive.

¹¹⁷ Support to irrigation development has been focused on households already settled with access to riverine land. Many of these are “Somali Bantu”, migrants from areas of Somalia originally settled by agricultural groups.

Table 8.3. Selected Community Public Works in PAP Areas

2009-2010 *			
PW Activity	CARE-PAP	SCUK-PAP	SCUS
Traditional wells rehabilitation	7	-	14
Pond development	-	37	-
Pond rehabilitation	-	-	12
Shallow well devel/rehab	5	-	6
Birka rehabilitation	-	-	4
Hand dug well	5	9	6
Irrigated land	-	30 ha	-
Water tank/ school	-	-	13
Area closure	71 ha	197 ha	2364 ha
Improved grazing	-	-	1000 ha
Bush clearing	-	240 ha	2867 ha
Access road construction	70 km	-	610 km
Access road maintenance	79.5 km	297.8 km	310 km

*: Includes some activities initiated in 2008

8.3. Livelihood Support

Protection of household assets, community resilience and capacity building [PAP Objectives 2, 3, and 4] are also promoted through livelihood support. These activities depend on effective implementation of public works activities, training and some material support. They focus on areas where experience already exists, and vary among livelihood sub-groups.

Program Implementation

Livestock and Agriculture-Based Livelihoods

Improvement of pasturage and increased access to water for livestock have enabled some households to maintain larger and healthier herds. Community members and CS staff reported that livestock marketing, a key component of this strategy, has been constrained in recent years by social, political and economic conditions beyond the scope of PSNP.¹¹⁸

Support to small scale irrigation groups has also increased livelihood options and enabled some households to increase their incomes through sales of agricultural products and animals, as discussed in CS reporting.

Small Scale Trade

Assistance to small scale trading groups, primarily operated by women, originated in Somali Region under the SPSNP program. A recent evaluation of this work described a high demand for and rapid uptake of participation in these groups. They have been particularly appropriate among semi-urban populations. Trading activity by women is culturally acceptable and long established in Somali society, but the scale of these activities is quite small, and opportunities to add value to traded products are limited.

¹¹⁸ These include regional conflict in the Horn of Africa and bans on cross border trade due to livestock disease. These factors have been analyzed in a numerous studies of regional conditions in the Horn of Africa.

Groups depend heavily on subsidized inputs, including equipment, for such enterprises as grain mills. The savings and credit group model has also been effective in these environments and small numbers of groups have been formed in Somali Region. Basic literacy training has been provided to women, as well as some business training.

CS staff are interested in diversifying arid land-based agricultural activities and have mentioned the collection and sale of natural products such as incense as one possibility. Marketing of this product is, however, complex and poorly documented.¹¹⁹

8.4. Government and Community Capacity Building

This objective is fulfilled through extensive training activities by all three CSs. In addition to those areas mentioned –small enterprise, water use, sanitation and hygiene, management of water sources, organization of savings and credit groups, and commodity management – CSs have trained in rangeland management in conjunction with Melkasa Agricultural Research Center.

Capacity building with government has been an important component of pastoral programming, but it has been limited by the lack of technically qualified Government staff, especially at DA level, where the full numbers are not present in the field. CSs have trained government staff in PASS software, although unreliable power supplies have made computer use almost impossible in some locations. Cross visits to successful project communities and to REST activities for WESTFs and KFSTFs and community members have been implemented by CARE, and Disaster Risk Management (DRM) training has been provided to Government and project staff by SCUK; this promotes preparedness for emergencies such as the 2010 floods. Community Asset Management Committees have been established by CARE to strengthen sustainability of newly developed assets.

CSs have developed cadres of health and nutrition volunteers, supporting PW development, especially in water and sanitation. In one area, Direct Support beneficiaries have been trained for dissemination of health and nutrition teaching.

8.5. Sharing of Lessons Learned

One of the key objectives of these pilot programs is the generation of lessons on PSNP implementation-“alternative approaches and procedures”- in the context of pastoral societies.

CSs have made major contributions to pastoral and PSNP programming through their participation in the PAP. CSs implementing the PAP are members in Addis of the MoARD’s Pastoral Task Force and have contributed to pastoral guidelines for PSNP, including piloting of Risk Management approaches. Programs in both Somali and Afar Regions have worked with several other pastoral development projects, including the Pastoral Livelihood Initiative projects funded through USAID/OFDA as well as JEOP, providing emergency food aid to supplement PSNP. Lessons learned

¹¹⁹ There is a regional market in the Horn of Africa for locally processed incense, which is sold throughout South Central Zone of Somalia and in northeastern Kenya (Mandera), as well as in Addis.

are disseminated through the Pastoral Task Force, in EDAC meetings, and through their publication in CS reports.

Conclusions

Three CSs are carrying out effective work implementing major elements of the PSNP in the difficult conditions in Ethiopia's pastoral areas. Commodity management and distribution has adapted to frequent changes, both in planning parameters (mandated beneficiary numbers) and in the natural environment (emergency conditions).

Coverage of activities designed to strengthen community assets and to protect household assets through the promotion of economic self sufficiency, is still quite limited. While provision of commodities is not always perceived by communities as being sufficient, commodity transfers cover a far larger population than community assets and support to livelihoods. Given the variation in climatic conditions, the growing population and the shrinking resource base, the long term goal of graduation, as defined by 12 months of food self sufficiency, is not within reach for most PSNP pastoral area beneficiaries.

FINDINGS AND RECOMMENDATIONS

Summary

Cooperating Sponsors have brought significant added value to implementation of the Productive Safety Net Program in 40 woredas through their collective experience and expertise in food security and development programs.

Objective 1: Improved Food Security Status of Chronically Food Insecure Households

Findings:

- 1.1 During the past five years Cooperating Sponsors have effectively implemented the Productive Safety Net Program in a challenging operating environment, characterized by unanticipated fluctuations in the national food security situation.
- 1.2 Commodity distributions and other resource transfers have been carried out efficiently; CSs have been responsive to unanticipated changes in beneficiary numbers, locations and types and have extended commodity resources effectively to meet unforeseen needs.
- 1.3 Demand for food resources has consistently exceeded available supplies, as price inflation and local market and agricultural conditions have continued to raise the value of the food basket.
- 1.4 CSs have collaborated well with woreda and kebele level staff and authorities, particularly food security task forces and Development Agents; this collaboration has increased their capacity in areas directly related to implementation of the PSNP.
- 1.5 Effective management of commodity resource transfers has buffered the effects of drought and economic pressures during the period 2005 – 2010; beneficiary households reported an increase in the average number of months of household food sufficiency between 2005 and 2010.
- 1.6 CSs working in pastoral areas have been able to exercise flexibility in scheduling of public works labor and commodity transfers to accommodate differing climatic and livelihood cycles.
- 1.7 Improved household diet as measured through dietary diversity has also been shown for the period 2005 – 2010.
- 1.8 CSs have worked with local communities to identify and plan for public works projects, using innovative community based methods that strengthen community capacities.
- 1.9 Where disagreements have arisen with woreda level authorities in the course of planning, CSs have in most cases been able to mediate between communities and authorities and to move projects forward.
- 1.10 The Community Based Participatory Watershed Development approach to selection and implementation of public works projects has been environmentally, socially and economically effective; soil and water conservation activities carried out under this approach have resulted in significant measurable improvements in the environment, particularly in northern Ethiopia.
- 1.11 CSs working with pastoral communities have been able to identify and mobilize communities to implement integrated soil and water based public

works projects which meet felt needs and contribute both to household and community assets.

- 1.12 There is some evidence of a decline in socio-economic conditions in pastoral communities over the past five years; the PSNP and related activities have maintained a stable level of access to food, but livelihood security is threatened by economic, demographic and climatic change.

Recommendations:

- 1.1 CSs should engage with donors and with regional authorities on strategic planning to deal with the ongoing pressure on food resources; this will be particularly critical in 2012, given the global rise in commodity prices in 2011.¹²⁰
- 1.2 CSs should strengthen coordination to reduce obstacles to timely food transfers. These efforts may include closer collaboration with donors and regional authorities on strengthening the capacity of local authorities to fulfil reporting requirements which form part of the transfer process.
- 1.3 In areas where significant progress has now been made in geographic coverage through CBPWD, CSs will need to establish long term maintenance systems for infrastructure, and to consider development or intensification of public works activities focused on household level livelihood security, such as improved small scale rainwater catchment systems and on-farm SWC.
- 1.4 CSs implementing Title II activities in pastoral communities should continue to use maximum flexibility in scheduling of transfers and in design of PW activities.

Objective 2: Improved and Protected Household Assets and Livelihoods in Targeted Areas

Findings:

- 2.1 CSs have carried out interventions which increased household production, incomes and assets among PSNP beneficiary households served by the program.
- 2.2 CSs have added value to livelihood support programs under the PSNP and related programs through their range of experience and technical skills.
- 2.3 Household assets, used here as an indirect measure of improved livelihood security, appear to have increased in value in some Regions and declined slightly in others during the life of the project.
- 2.4 Coverage of livelihood support activities in Title II areas has been limited in comparison with the PSNP beneficiary population covered through commodity transfers; all CSs have reported constraints due to a shortage of funding for the implementation of these activities, particularly after 2008.
- 2.5 Livelihood support interventions implemented between 2005 and 2010 have covered a broad range of activities with differential impacts on different groups within the PSNP beneficiary population; among the most effective in reaching households with limited resources have been savings and credit groups, development of shallow wells and rainwater micro catchments, and utilization of communal lands by the landless.

¹²⁰ See <http://www.wfp.org/content/cost-feeding-worlds-poor-leaps>

- 2.6 Small scale irrigation, while cost effective in increasing and diversifying agricultural production at household level, has been targeted in some cases at groups which include a high proportion of households who are food secure, and fall outside the PSNP beneficiary population.
- 2.7 Under current rates of observable progress, and given global economic and climatic trends, a relatively small proportion of PSNP beneficiary households can be expected to attain a level of assets which qualifies them for graduation by 2014.

Recommendations:

- 2.1 To achieve maximum impact CSs need to systematically strive for close coordination of project components, particularly public works-based natural resource conservation activities and livelihood support, to maximize use of resources and extent of coverage.
- 2.2 CSs should consider identifying specific livelihood strategies designed to reach different income groups within the PSNP beneficiary population and establishing targets for their implementation. This should include efforts to identify indicators to demonstrate and assess progress toward graduation at household level which can be measured at a reasonable cost and effort.
- 2.3 Studies of PSNP beneficiary households have shown that most households will require access to more than one source of livelihood assistance (credit, ‘packages’) to move toward graduation; in order to achieve the maximum impact of the PSNP, planning for the next phase, through 2014, should include provisions for access to increased funding for livelihood support.

Objective 3: Community Resilience to Shocks is Enhanced and Vulnerability is Reduced

Finding:

- 3.1. Community-based early warning systems are well established and utilized in three CS program areas. Their functionality may be limited in some cases by limited articulation with the woreda-based national early warning system.

Recommendation:

- 3.1. CSs who have not yet established strong community based early warning systems should move ahead with this activity.

Objective 4: Community Health and Nutrition Status is Improved

Findings:

- 4.1 CSs have provided health and nutrition education and outreach to beneficiary communities despite severely limited resources after 2008.
- 4.2 CSs have coordinated effectively with the Ministry of Health at all levels to implement community based health activities.
- 4.3 CSs have made efforts to improve access to potable water, with accompanying teaching in hygiene and sanitation, but there is still unmet need for water development. Resources available under PSNP PW budgets have not been adequate to meet these needs. While CSs have obtained funding for their work in water and sanitation through other non-Title II sources, additional resources continue to be needed to close the gap in water access.

- 4.4 Child nutritional status, a key food security impact indicator, has not changed since the start of the program in 2005.

Recommendations:

- 4.1 Given the progress made by the Ministry of Health in other early childhood health interventions and the failure of child nutritional status to improve, CSs should consider carrying out behavior change communication (BCC)-based research to identify what specific gaps in knowledge and practice may be holding back progress in improving child nutritional status.
- 4.2 Outreach in child health and nutrition, hygiene and sanitation should be provided at community level; efforts to restrict participation in community based health outreach to PSNP beneficiary households will limit the impact of these programs on all households.

OVERALL RECOMMENDATIONS:

1. In order to achieve the maximum food security impact of the PSNP, planning for the next phase, through 2014, should include provisions for adequate funding for livelihood support and health/nutrition/sanitation activities.
2. CSs should engage in strategic planning to consider the way ahead if significant levels of graduation among beneficiary households are not achievable by the end of this phase of the PSNP in 2014; exit strategy scenarios should be mapped out.
3. CSs should strengthen inter-agency technical collaboration in areas where one or more agencies have exceptional programming strength and experience; these include village level savings and credit mechanisms; agricultural innovation; soil and water conservation and water harvesting; low cost sanitation; community based planning and targeting; and community based maternal and child health outreach, among others.

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Appendix 16: CRS/Ethiopia MYAP Performance Monitoring Plan

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